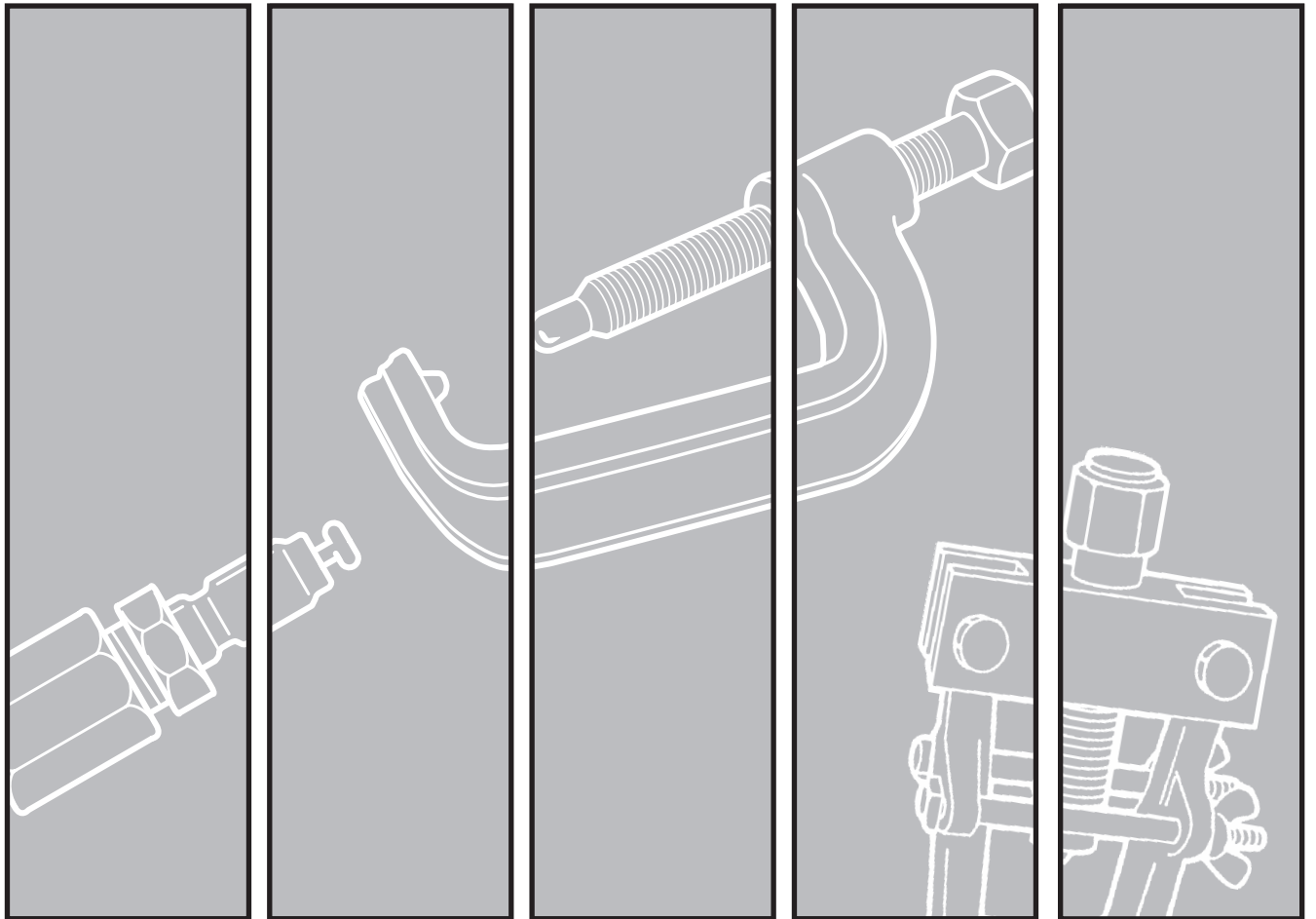




MECHANICAL PARTS CATALOG



TOOL NUMBER INDEX

Tool No.	Page	Tool No.	Page	Tool No.	Page	Tool No.	Page	Tool No.	Page
205-D036	52	1166	9	4752	23	7134	37	7532	48
518	2	1170	9	4754	23	7135A	37	7535	48
522	2	1171	9	4756	23	7136	38	7539	48
525	2	1172	9	5020	24	7148	38	7577	48
679	2	1173	9	5021	24	7155A	38	7588A	49
680	2	1174	9	5022	24	7180	38	7591	49
898A	2	1176	10	5023	24	7185	38	7597	49
927	3	1177	10	5024	24	7206	38	7598	49
938	3	1178	10	5028	24	7208A	38	7599	49
939	3	1179	10	5039	25	7209	39	7626	49
981	3	1182	10	5040	25	7211	39	7628	49
1020	4	1184	10	5041	25	7213	39	7629	50
1021	4	1189	11	5042	25	7215	39	7632	50
1022	4	1200	11	5043	25	7236	39	7634	50
1023	4	1201	11	5048	26	7245	39	7638	50
1024	4	1202	11	5049	26	7246	39	7639	50
1025	4	1203	11	5051	26	7248	40	7640	50
1026	4	1204	12	5052	26	7249	40	7641	50
1027	4	1205	12	5055	26	7262	40	7644	50
1028	4	1266	12	5056	26	7272	40	7665	50
1031	4	1722	12	5062	26	7273	40	7666	51
1035	4	1724	12	5063	26	7292A	40	7667	51
1036	4	1805	13	5064	26	7293A	40	7670	51
1037	4	1806	13	5071	26	7294	40	7676	51
1038	4	1812	13	5901	27	7307	41	7677	51
1039	5	1822	14	6284	27	7308	41	7703	51
1040	5	4240	14	6292	27	7309	41	7704	51
1041	5	4241	14	6293	27	7310	41	7771	52
1042	5	4324	14	6294	27	7311	41	7790	52
1043	5	4489	15	6299	28	7314	41	7791	52
1044	5	4492	15	6492	28	7315	41	7794	52
1045	5	4503	15	6494	28	7318	42	7799	53
1046	5	4504	15	6496	28	7319	42	7809	53
1047	5	4505	15	6503	29	7374	42	7815	53
1048	5	4507	15	6504	29	7392	42	7816	53
1049	5	4508	15	6505	29	7393	42	7822A	53
1050	5	4512	16	6506	29	7394	42	7826	53
1057	6	4513	16	6507	29	7400	42	7830A	53
1058	6	4518	16	6508	30	7401	42	7840	54
1060	5	4520	16	6516	30	7402	43	7851	54
1061	5	4528	16	6517	30	7402M	43	7852	54
1062	6	4529	17	6519	31	7403	43	7853	54
1063	6	4530	17	6525	31	7413	43	7874	54
1064	5	4531	17	6530	31	7426	43	7876	54
1065	5	4533	18	6538	31	7427	43	7885	54
1066	5	4534	18	6930	32	7428	43	7886	55
1067	5	4535	18	6985	32	7429	44	7889	55
1070	6	4536	18	7005	32	7430	44	7890	55
1071	6	4542	18	7020	32	7435	44	7894	55
1072	7	4543	19	7024	32	7436	44	7902	55
1073	7	4546	19	7028	32	7437	44	7911	55
1074	7	4547	19	7029	33	7438	44	7912	55
1075	7	4549	19	7031A	33	7440	44	7913	55
1076	7	4550	19	7034	33	7441	44	7916	56
1077	7	4551	19	7045B	33	7442	44	7918	56
1080	7	4552	19	7057	33	7443	44	7919	56
1121	7	4559	20	7069A	34	7448	45	7920	56
1122	7	4572	20	7070A	34	7454	45	7924A	56
1123	7	4581	20	7071	34	7455	45	7927A	56
1124	7	4585	20	7075	34	7458	45	7942A	56
1126	7	4600	20	7082B	35	7461	45	7996	56
1127	8	4603	21	7084	35	7462	45	7998	57
1128	8	4604	21	7085	35	7464	46	8031	57
1129	8	4605	21	7091	35	7470	46	27793	57
1130	8	4606	21	7104	35	7472	46	27794	57-58
1150	8	4607	21	7106	36	7488A	46	27795	58
1151	8	4608	21	7108	36	7490	47	27796	58
1152	8	4609	22	7109	36	7491C	47	27797	58-59
1153	8	4645	22	7117	36	7503	47	42615	59
1154	8	4650	22	7118	36	7504	47	205776	59
1155	8	4651	22	7119	37	7505	47	208675	59
1156	8	4673	22	7120A	37	7506	47	302340	60
1157	9	4681	23	7120B	37	7507	48	305811	60
1158	9	4711	23	7121	37	7509	48	309277	60
1165	9	4726	23	7122R	37	7515	48	J-22517-C	60

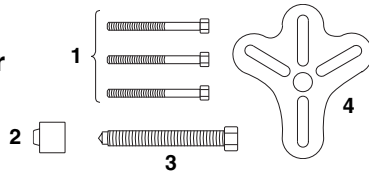
**FOR PRICE INFORMATION
SEE OTC's MASTER PRICE LIST**

Tool No.	Page	Tool No.	Page	Tool No.	Page	Tool No.	Page	Tool No.	Page
Old/New Part Nos. Cross Ref. 61-62									

§ Discontinued. Some service parts may be available.

No. 518

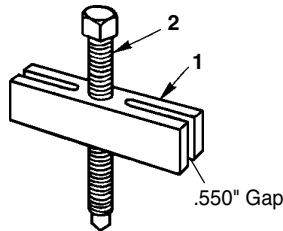
Flange-type Puller



Item No.	Service Part No.	Description
1	10059	Hex Hd. Cap Screw, $\frac{3}{8}$ -24 x 3" (3 reqd.)
1	10060	Hex Hd. Cap Screw, $\frac{3}{8}$ -16 x 3" (3 reqd.)
2	26342	Special Plug (shaft protector)
3	24833	Forcing Screw
4	512888	Puller Flange

No. 522

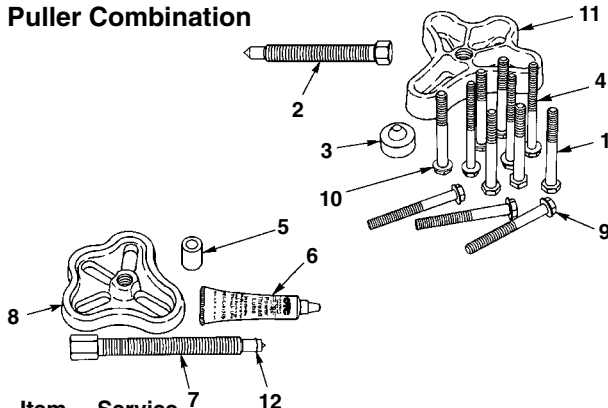
Gear & Pulley Puller



Item No.	Service Part No.	Description
1	22186	Cross Block, 8.25" Long
2	34703	Forcing Screw, $\frac{3}{4}$ -16 x 11.4"

No. 525

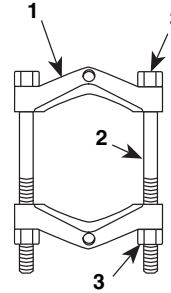
Flange-type Puller Combination



Item No.	Service Part No.	Description
1	10059	Hex Head Cap Screw, $\frac{3}{8}$ -24 x 3"
2	24833	Forcing Screw, $\frac{5}{8}$ -18 x 5"
3	26342	Special Plug (shaft protector)
4	209950	Flange Head Cap Screw, $\frac{3}{8}$ -16 x 3 $\frac{1}{2}$ "
5	209802	Collar
6	39448	Oil
7	304828	Forcing Screw, $\frac{7}{16}$ -20 x 5"
8	208170	Flange
9	209951	Flange Head Cap Screw, $\frac{5}{16}$ -18 x 3 $\frac{1}{2}$ "
10	209952	Flange Head Cap Screw, $\frac{5}{16}$ -24 x 3 $\frac{1}{2}$ "
11	32843	Puller Flange
12	209803	O-ring

No. 679

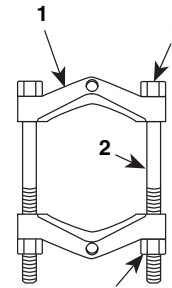
V-Belt Pulley Pulling Attachment



Item No.	Service Part No.	Description
1	26763	Block
2	26762	Stud, $\frac{1}{2}$ -20 x 7 $\frac{1}{2}$ "
3	10210	Hex Nut (4 reqd.)

No. 680

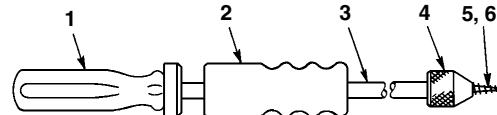
Pulley Pulling Attachment



Item No.	Service Part No.	Description
1	31385	Block
2	24828	Stud, $\frac{3}{4}$ -16 x 14"
3	10215	Hex Nut (4 reqd.)

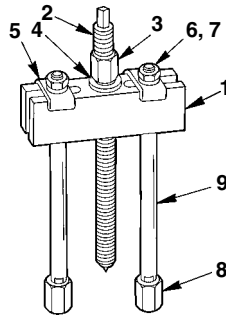
No. 898A

Body & Fender Dent Puller



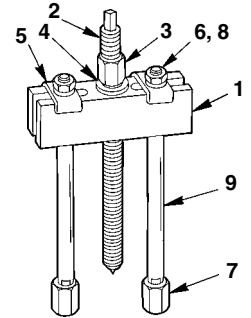
Item No.	Service Part No.	Description
1	N4000	Plastic Handle
2	21949	Hammer
3	21951	Shank
4	21953	Retainer
5	10241	Lock Washer
6	11200	Screw

No. 927
10-Ton Push Puller



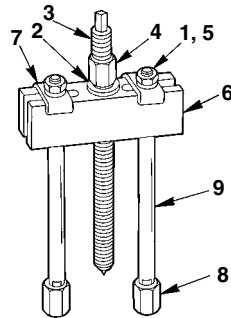
Item No.	Service Part No.	Description
1	33483	Cross Block
2	24835	Forcing Screw
3	24836	Forcing Screw Nut
4	24837	Forcing Screw Washer
5	24838	Sliding Plate
6	24839	Leg Washer
7	10210	Leg Hex Nut
8	24827	Leg End
9	1100	6 ³ / ₄ " Legs (pr.)
-	24840	6 ³ / ₄ " Leg (1 only)
-	1101	15 ³ / ₄ " Legs (pr.)
-	25934	15 ³ / ₄ " Leg (1 only)
-	1102	11 ³ / ₄ " Legs (pr.)
-	25935	11 ³ / ₄ " Leg (1 only)
-	1103	4 ³ / ₄ " Legs (pr.)
-	25936	4 ³ / ₄ " Leg (1 only)
-	104819	Instruction Sheet

No. 939
30-Ton Push Puller



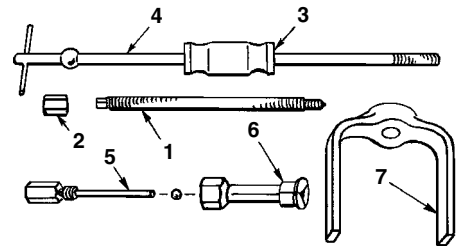
Item No.	Service Part No.	Description
1	33038	Cross Block
2	303961	Forcing Screw
3	208586	Forcing Nut
4	208587	Thrust Washer
5	28353	Sliding Plate
6	24824	Leg Washer
7	28390	Leg End
8	10220	Leg Nut
9	1109	8" Legs (pr.)
-	32992	8" Leg (1 only)
-	1110	18" Legs (pr.)
-	32991	18" Leg (1 only)
-	1111	28" Legs (pr.)
-	32998	28" Leg (1 only)
-	104819	Instruction Sheet

No. 938
17¹/₂-Ton Push Puller



Item No.	Service Part No.	Description
1	24826	Leg Washer
2	24824	Thrust Washer
3	24822	Forcing Screw
4	19528	Forcing Screw Hex Nut
5	10215	Hex Nut
6	32127	Block
7	24825	Sliding Plate
8	24827	Leg Cap
-	1104	16 ¹ / ₂ " Legs (pr.)
-	32135	16 ¹ / ₂ " Leg (1 only)
-	1105	22 ¹ / ₂ " Legs (pr.)
-	32964	22 ¹ / ₂ " Leg (1 only)
9	1106	9 ¹ / ₂ " Legs (pr.)
-	32126	9 ¹ / ₂ " Leg (1 only)
-	1107	4 ¹ / ₂ " Legs (pr.)
-	32132	4 ¹ / ₂ " Leg (1 only)
-	1108	30" Legs (pr.)
-	32968	30" Leg (1 only)
-	104819	Instruction Sheet

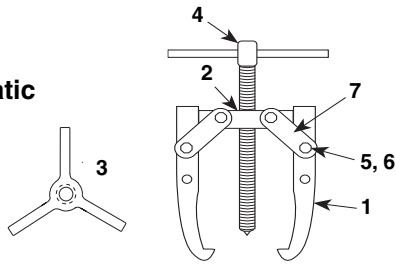
No. 981
Blind Hole Puller Set



Item No.	Service Part No.	Description
1	24835	Forcing Screw
2	24836	Forcing Screw Nut
3	22185	2 ¹ / ₂ Lb. Hammer
4	208627	Shank and Tee Bar Assembly
5	28250	Actuator Pin, 1/8" Dia.
5	28253	Actuator Pin, 3/16" Dia.
5	28256	Actuator Pin, 1/2" Dia.
6	33856	Collet, 5/16"
6	33857	Collet, 3/8"
6	33858	Collet, 7/16"
6	33859	Collet, 1/2"
6	33860	Collet, 5/8"
6	33861	Collet, 3/4"
6	33862	Collet, 7/8"
6	33863	Collet, 1-1/4"
6	33864	Collet, 1 1/4-1 1/2"
6	33865	Collet, 1 1/2-1 3/4"
7	41331	Bridge
-	28323-GY8	Metal Storage Box
-	104994	Parts List

**No. 1020
1021**

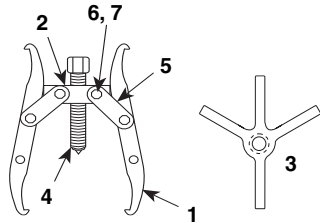
**1-Ton Grip-O-Matic
Puller**



Item No.	Service Part No.	Description
1	21908	Jaw, 2 ¹ / ₁₆ " (1 only)
2	27592	2-Way Head (1020)
3	27475	3-Way Head (1021)
4	207029	Forcing Screw
5	21917	Hex Head Cap Screw
6	10197	Steel Hex Nut
7	27764	Strap

**No. 1022
1023**

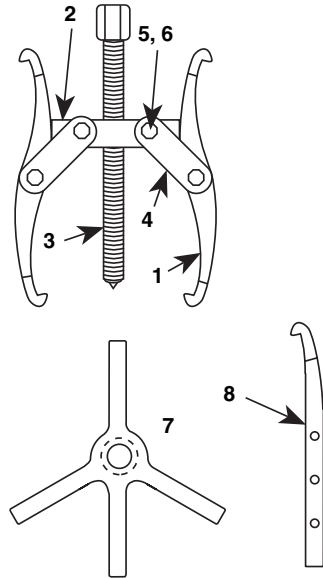
**2-Ton Grip-O-Matic
Puller**



Item No.	Service Part No.	Description
1	43661	Jaw, 4 ¹ / ₁₆ " (1 only)
2	27476	2-Way Head (1022)
3	33423	2/3-Way Head (1023)
4	22006	Forcing Screw, 3/8-24 x 4 ⁷ / ₈ "
5	22007	Strap
6	22008	Hex Head Cap Screw
7	10382	Hex Jam Nut

**No. 1035
1036
1037
1038**

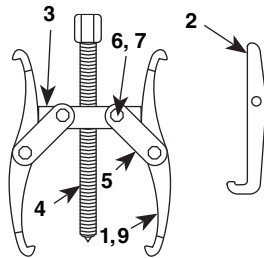
7-Ton Grip-O-Matic Puller



Item No.	Service Part No.	Description
1	44082	8 ¹ / ₂ " Reversible Jaw for 1035, 1037
2	27759	Forged Head for 1035, 1036
3	33398	Forcing Screw, 1 ¹ / ₁₆ -18 x 9"
4	22018	Strap
5	22016	Hex Head Cap Screw
6	10386	Hex Jam Nut
7	44993	2/3-Way Head for 1037, 1038
8	43892	10 ¹ / ₄ " Long Jaw for 1036, 1038

**No. 1024
1025
1026
1027**

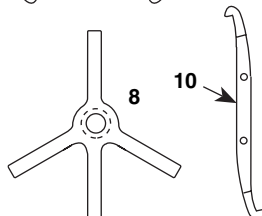
**5-Ton Grip-O-Matic
Puller**



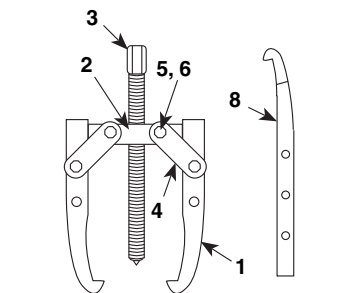
Item No.	Service Part No.	Description
1	44591	Reversible Jaw for 1024, 1026, 4 ⁷ / ₈ " (1 only)
2	22023	Carrier Bearing Jaw for 1028, 4 ⁷ / ₈ "
3	39959	Forged Head for 1024, 1025, 1028, 1031
4	33397	Forcing Screw, 9/16-20 x 6 ³ / ₄ "
5	22025	Strap
6	22021	Hex Head Cap Screw
7	10384	Hex Jam Nut
8	39942	2/3-Way Head for 1026, 1027
9	26481	Carrier Bearing Jaw for 1031, 4 ⁷ / ₈ " (1 only)
10	43940	Reversible Jaw for 1025, 1027, 6 ¹ / ₂ " (1 only)

**No. 1028
1031**

**Differential Bearing
Puller**

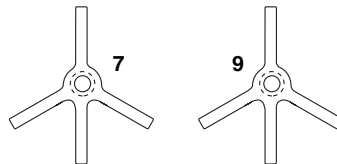


No. 1039
1040
1041
1042
13-Ton Grip-O-Matic
Puller



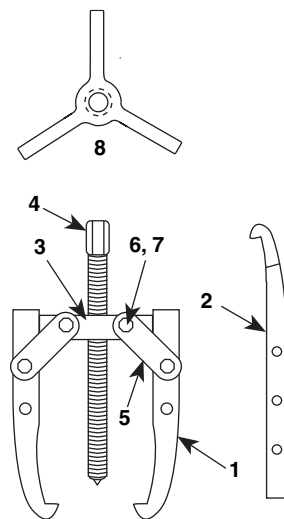
Item No.	Service Part No.	Description
1	43906	13" Jaw for 1039, 1041
2	33295	Forged Head for 1039, 1040
3	33399	Forcing Screw, $1\frac{3}{16}$ -16 x $12\frac{1}{2}$ "
4	22028	Strap
5	10388	Hex Jam Nut
6	22029	Hex Head Cap Screw
7	41195	2/3-Way Head for 1041, 1042
8	30902	Jaw, $17\frac{1}{8}$ " Long for 1040, 1042, 1060, 1061
9	41563	2/3-Way Head for 1060, 1061
-	34602	Pusher Adapter for 1060, 1061
-	4105	10-Ton Ram for 1061

No. 1060 §
1061 §
10-Ton Grip-O-Matic
Puller



Note: 1061 is 1060 with a 4105.

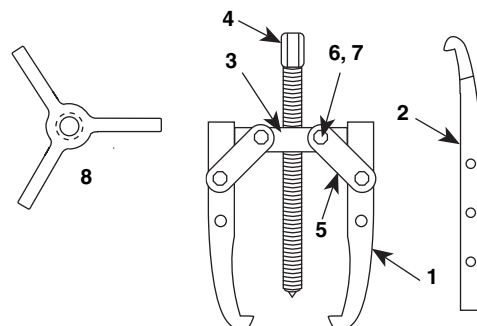
No. 1043
1044
1045
1046
1064
1065
1066
1067
17 1/2-Ton Grip-O-Matic
Puller



Item No.	Service Part No.	Description
1	30945	$17\frac{3}{4}$ " Jaw for 1043, 1045
2	30949	$21\frac{1}{2}$ " Long Jaw for 1044, 1046, 1064, 1066
3	33292	Forged Head for 1043, 1044
4	33290	Forcing Screw, 1-14 x $13\frac{3}{4}$ "
5	22034	Strap
6	22035	Hex Head Cap Screw
7	10392	Hex Jam Nut
8	41196	3-Way Head for 1045, 1046
-	41224	2-Way Head for 1064
-	41254	Hydraulic 3-Way Head for 1066

Note: 1065 consists of 1064 Puller, 24814 Adjusting Crank, 32118 Ram Adjusting Screw, 4120 17 1/2-Ton Ram.
1067 consists of 1066 Puller, 24814 Adjusting Crank, 32118 Ram Adjusting Screw, 4120 17 1/2-Ton Ram.

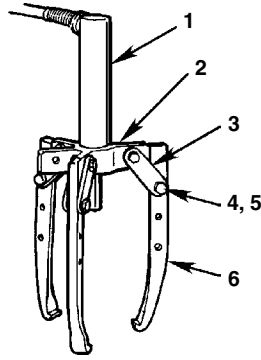
No. 1047
1048
1049
1050
25-Ton Grip-O-Matic
Puller



Item No.	Service Part No.	Description
1	40303	$18\frac{3}{4}$ " Jaw for 1047, 1049
2	40305	$25\frac{1}{4}$ " Long Jaw for 1048, 1050
3	33433	Forged Head for 1047, 1048
4	33432	Forcing Screw, $1\frac{1}{4}$ -12 x $15\frac{15}{16}$ "
5	30966	Strap
6	22045	Hex Head Cap Screw
7	10394	Hex Jam Nut
8	41198	3-Way Head for 1049, 1050

No. 1057 §
1058 §

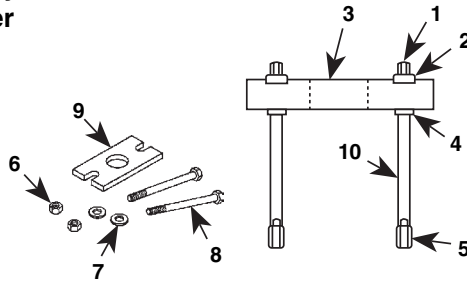
**5-Ton Hydraulic
Grip-O-Matic Puller**



Item No.	Service Part No.	Description
1	420004	5-ton Ram Assembly for 1058
2	47997	2/3-Way Head
3	22018	Strap
4	22016	Hex Head Cap Screw
5	10386	Hex Jam Nut
6	43892	Long Jaw
-	309874	Pushing Adapter for 1058
-	309875	Pushing Adapter for 1058

No. 1062
1063

**17 1/2-Ton Hydraulic
Push-Puller**



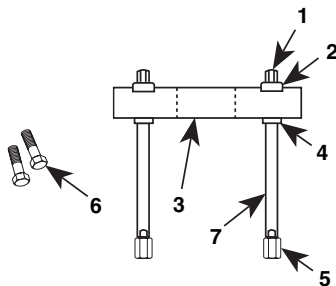
5	24827	Leg Cap
6	10201	5/16-18 Hex Nut
7	10257	Washer for 5/16" Bolt
8	214480	Cap Screw, 5/16-18 x 3 3/4"
9	308244	Plate
10	1104	16 1/2" Legs (pr.)
-	32135	16 1/2" Leg (1 only)
-	1105	22 1/2" Legs (pr.)
-	32964	22 1/2" Leg (1 only)
-	1106	9 1/2" Legs (pr.)
-	32126	9 1/2" Leg (1 only)
-	1107	4 1/2" Legs (pr.)
-	32132	4 1/2" Leg (1 only)
-	1108	30" Legs (pr.)
-	32968	30" Leg (1 only)

Item No.	Service Part No.	Description
1	10215	Hex Nut
2	24825	Sliding Plate
3	32127	Cross Block
4	24826	Leg Washer

Note: 1063 consists of 1062 Push-Puller, 24814 Adjusting Crank, 32118 Ram Adjusting Screw, 4120 17 1/2-Ton Ram.

No. 1070
1071

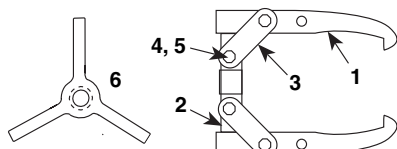
**30-Ton Hydraulic
Push-Puller**



1	10220	Hex Nut
2	28353	Sliding Plate
3	33039	Cross Block
4	24824	Leg Washer
5	28390	Leg Cap
6	10070	Cap Screw, 7/16-20 x 2"
7	1110	18" Legs (pr.)
-	32991	18" Leg (1 only)
-	1111	28" Legs (pr.)
-	32998	28" Leg (1 only)
-	1109	8" Legs (pr.)
-	32992	8" Leg (1 only)

Note: 1071 consists of 1070 Push-Puller, 27198 Adjusting Crank, 34758 Ram Adjusting Screw, 4121 30-Ton Power Twin Ram and Coupler.

No. 1072
1073
1074
1075



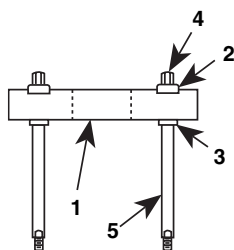
30-Ton Hydraulic Grip-O-Matic Puller

Item No.	Service Part No.	Description
1	40312	Jaw, 30 ³ / ₄ " Long
2	41226	2-Way Head for 1072
3	30976	Strap
4	22052	Cap Screw
5	22053	Hex Nut
6	50462	3-Way Head for 1074

Note: 1073 consists of 1072 puller, 27198 Adjusting Crank, 34758 Ram Adjusting Screw, 4121 30-Ton Power Twin Ram and Coupler.
1075 consists of 1074 puller, 27198 Adjusting Crank, 34758 Ram Adjusting Screw, 4121 30-Ton Power Twin Ram and Coupler.

No. 1076
1077 §

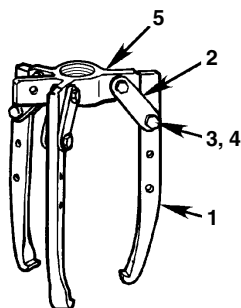
50-Ton Hydraulic Push Puller



Item No.	Service Part No.	Description
1	50503	Cross Block
2	33785	Upper Sliding Plate
3	28163	Leg Washer
4	10224	1 ¹ / ₄ " N.F. Hex Nut
5	1112	24" Legs (pr.)
-	33004	24" Leg (1 only)
-	1113	34" Legs (pr.)
-	33005	34" Leg (1 only)

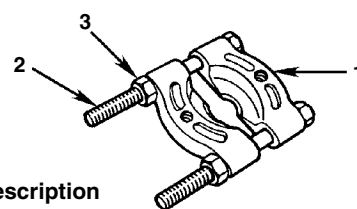
Note: 1077 includes 29595 Adjusting Crank, 32698 Ram Adjusting Screw, 4122 50-Ton Ram.

No. 1080
50-Ton Hydraulic Grip-O-Matic Puller



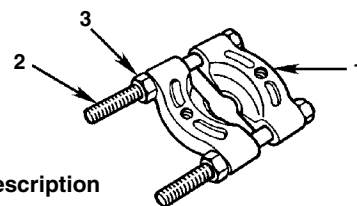
Item No.	Service Part No.	Description
1	30994	Jaw, 43" Long
2	30993	Strap
3	22089	Hex Head Cap Screw
4	10220	Hex Nut
5	50460	3-Way Head

No. 1121
Bearing Splitter



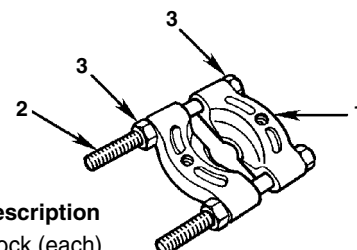
Item No.	Service Part No.	Description
1	26654	Block (each)
2	10042	Cap Screw, ⁵ / ₁₆ -24 x 3"
3	10203	Hex Nut

No. 1122
Bearing Splitter



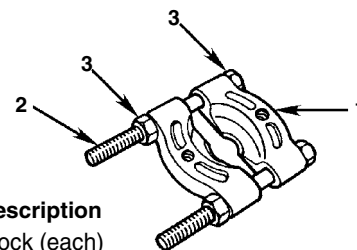
Item No.	Service Part No.	Description
1	26651	Block (each)
2	24831	Cap Screw, ⁷ / ₁₆ -20 x 4 ¹ / ₂ "
3	10207	Hex Nut

No. 1123
Bearing Splitter



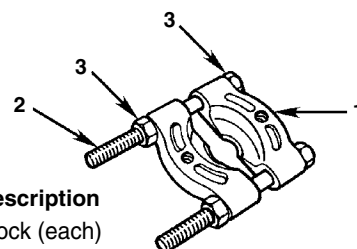
Item No.	Service Part No.	Description
1	32957	Block (each)
2	23333	Stud, ⁵ / ₈ -18 x 8 ¹ / ₂ "
3	10213	Hex Nut (4 reqd.)

No. 1124
Bearing Splitter



Item No.	Service Part No.	Description
1	32951	Block (each)
2	24829	9 ¹ / ₂ " Stud, ³ / ₄ -16 x 10 ⁷ / ₈ "
3	10215	Hex Nut (4 reqd.)

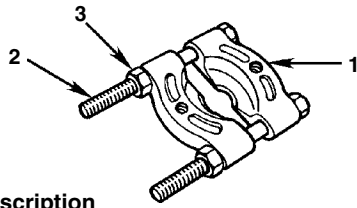
No. 1126
Bearing Splitter



Item No.	Service Part No.	Description
1	33486	Block (each)
2	26639	Stud, ⁷ / ₈ -14 x 14"
3	10218	Hex Nut (4 reqd.)

No. 1127

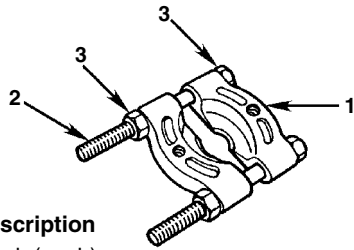
Bearing Splitter



Item No.	Service Part No.	Description
1	32959	Block (each)
2	23757	Bolt, 1 ¹ / ₈ -12 x 20" Long
3	214550	Hex Nut (4 reqd.)

No. 1128

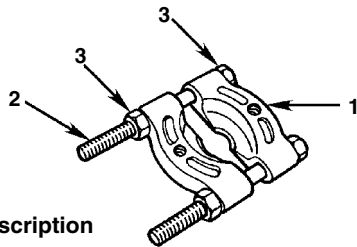
Bearing Splitter



Item No.	Service Part No.	Description
1	50855	Block (each)
2	26640	Stud, 1 ¹ / ₂ -12 x 21"
3	10226	1 ¹ / ₂ " N.F. Hex Nut (4 reqd.)
-	30944	Pulling Tee

No. 1129

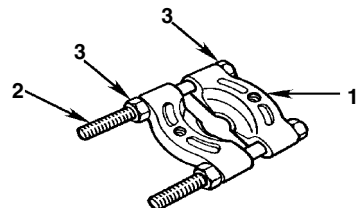
Bearing Splitter



Item No.	Service Part No.	Description
1	32961	Block (each)
2	23329	Stud, 1 ³ / ₄ -12 x 27 ¹ / ₂ "
3	23330	1 ³ / ₄ " N.F. Hex Nut (4 reqd.)
-	31037	Pulling Tee

No. 1130

Bearing Splitter



Item No.	Service Part No.	Description
1	32951	Block (each)
2	24828	13" Stud, 3/4-16 x 14 ¹ / ₈ "
3	10215	Hex Nut (4 reqd.)

No. 1150

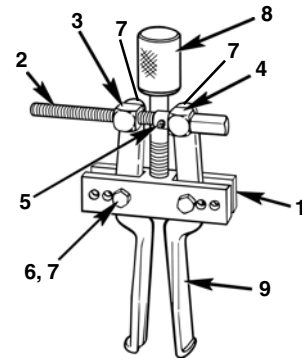
1151

1152

1153

1154

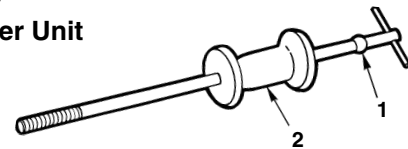
Internal Pulling Attachment



Item No.	Service Part No.	Description
1	33482	Slotted Block
2	24846	Adjusting Screw
3	24847	Tapped Swivel
4	24848	Plain Swivel
5	11560	Roll Pin
6	10054	Hex Head Cap Screw
7	10386	Hex Jam Nut
8	24850	1"-14 Reducing Adapter for 1150, 1151, 1153
8	24864	1"-8 Swivel Adapter for 1154
9	32136	Jaw, 5 ¹ / ₂ " Reach (1 only) for 1151
9	32137	Jaw, 4" Reach (1 only) for 1150, 1152, 1154
9	32139	Jaw, 2 ¹ / ₄ " Reach (1 only) for 1153

No. 1155

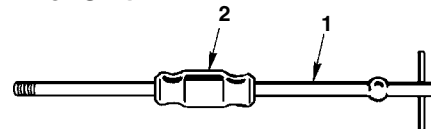
Slide Hammer Unit



Item No.	Service Part No.	Description
1	208627	Shank and Tee Bar Assembly
2	34331	5 Lb. Hammer
-	104820	Parts List

No. 1156

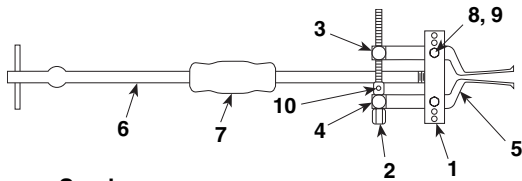
Slide Hammer Unit



Item No.	Service Part No.	Description
1	208627	Shank and Tee Bar Assembly
2	22185	2 ¹ / ₂ Lb. Hammer
-	104820	Parts List

**No. 1157
1158**

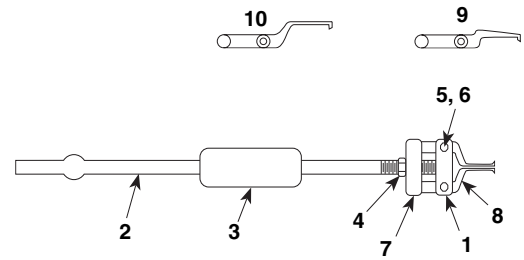
**Slide Hammer Puller
with Cup Pulling Attachment**



Item No.	Service Part No.	Description
1	33482	Slotted Block
2	24846	Adjusting Screw, 1/4 x 6.345
3	24847	Tapped Swivel
4	24848	Plain Swivel
5	32137	4" Clearance Jaw
6	208627	Shank & Tee Bar Assembly
7	22185	2 1/2 Lb. Hammer for 1157
7	34331	5 Lb. Hammer for 1158
8	10054	Hex Head Cap Screw
9	10386	Hex Jam Nut
10	11560	Roll Pin
-	104820	Parts List

**No. 1170
1171
1172**

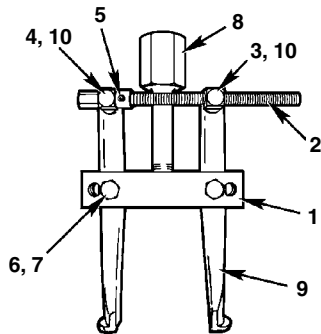
Pilot Bearing Puller



Item No.	Service Part No.	Description
1	27044	Cross Block
2	28382	Shank
3	28381	Hammer
4	10390	Adjusting Nut
5	10014	Hex Head Cap Screw
6	10382	Hex Jam Nut
7	201952	Adjusting Bar
8	29185	Jaw for 1170, 3/4" Reach
9	29189	Jaw for 1171, 1" Reach
10	29187	Jaw for 1172, 1 3/4" Reach

**No. 1165
1166**

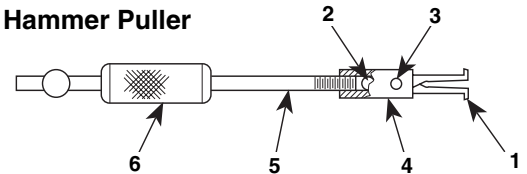
Internal Pulling Attachment



Item No.	Service Part No.	Description
1	33084	Slotted Block
2	33001	Adjusting Screw, 5/8 - 18 UNF-2A
3	27051	Tapped Swivel
4	27052	Plain Swivel
5	10896	Roll Pin
6	10105	Hex Head Cap Screw
7	10394	Hex Jam Nut
8	33578	Adapter, 1 1/2"-12, for 1165
8	38662	Adapter, 1 1/4"-7, for 1166
9	33083	Puller Jaw
10	10390	1/2" S.A.E. Jam Nut

**No. 1173
1174**

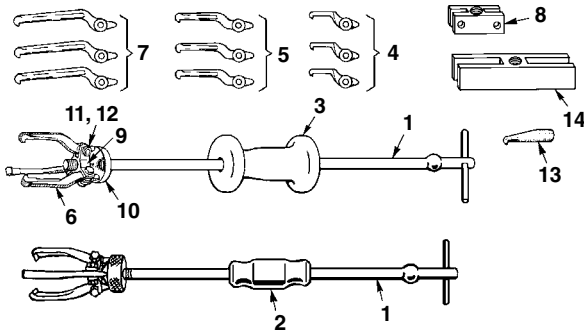
Slide Hammer Puller



Item No.	Service Part No.	Description
1	43372	Puller Jaw
2	14472	Ball
3	14473	Pin
4	37016	Body
5	28382	Shank for 1173
6	28381	Hammer for 1173

**No. 1176
1177
1178**

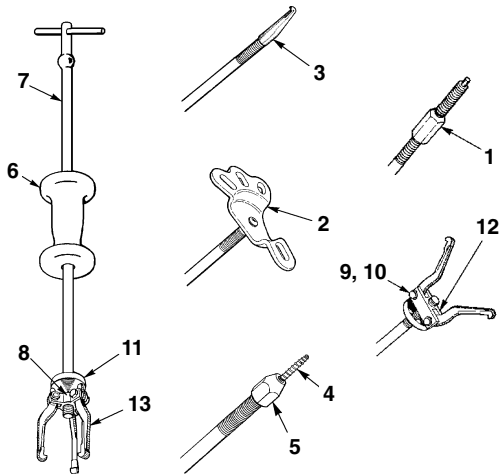
Reversible Jaw Slide Hammer Puller



Item No.	Service Part No.	Description
1	208627	Shank & Tee Bar Assembly
2	22185	2½ Lb. Hammer for 1176, 1178
3	34331	5 Lb. Hammer for 1177
4	32054	Pilot Brg. Jaw for 1178, 1¼" Reach
5	34698	Jaw, 2" Reach
6	44195	Jaw for 1178, 3" Reach
7	44148	Long Jaw for 1178, 5" Reach
8	27241	2-Way Cross Block Head
9	24544	3-Way Cross Block Head
10	24545	Adjusting Cone
11	22021	Hex Head Cap Screw
12	10384	Hex Jam Nut, 5/16-24
13	27315	Seal Hook for 1178
14	36578	Cross Block for 1178
-	104820	Parts List

No. 1179

8-Way Slide Hammer

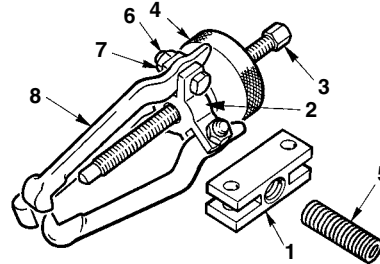


Item No.	Service Part No.	Description
1	205378	Grip Wrench Adapter
2	7372	Pulling Adapter
3	27315	Seal Hook
4	104427	Self-Tapping Screw
5	205399	Retainer
6	34331	5 Lb. Hammer
7	208627	Shank and Tee Bar Assembly
8	24544	3-Way Cross Head
9	10384	Hex Jam Nut, 5/16-24
10	22021	Hex Head Cap Screw, 5/16-24 x 1¼"
11	24545	Adjusting Cone
12	27241	2-Way Cross Block Head
13	34698	Puller Jaw
-	104820	Parts List

No. 1182

1184

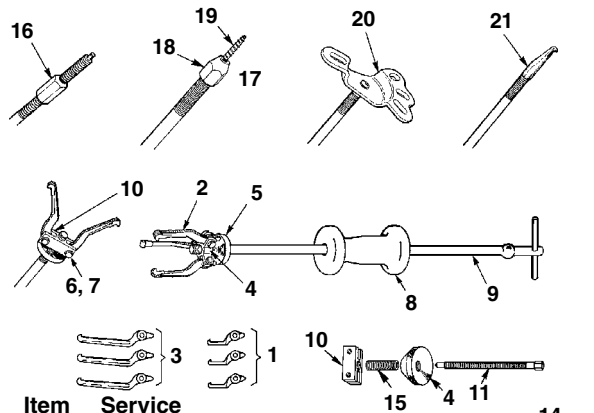
Cone-Type Puller



Item No.	Service Part No.	Description
1	27241	2-Way Cross Block Head
2	24544	Puller Head
3	309321	Forcing Screw, 7/16 - 20 x 6½"
4	24545	Adjusting Cone
5	215895	Sleeve, 5/8 - 18
6	22021	Hex Head Cap Screw, 5/16-24 x 1¼"
7	10384	Hex Jam Nut, 5/16-24
8	44195	Jaw
-	44148	Jaw (1182 only)

No. 1189

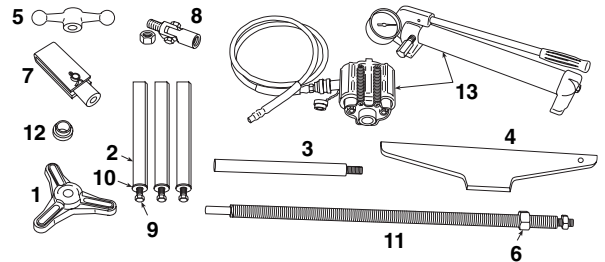
10-Way Slide Hammer Puller



Item No.	Service Part No.	Description
1	32054	2 ³ / ₈ " Jaw (each)
2	34698	3 ³ / ₄ " Jaw (each)
3	44148	6 ¹ / ₂ " Jaw (each)
4	24544	3-Way Puller Head
5	24545	Adjusting Cone
6	10384	Hex Jam Nut, ⁵ / ₁₆ -24
7	22021	Hex Head Cap Screw, ⁵ / ₁₆ -24 x 1 ¹ / ₈ "
8	34331	5 Lb. Hammer
9	208627	Shank and Tee Bar Assembly
10	27241	Cross Block
11	309321	Forcing Screw, ⁷ / ₁₆ -20 x 6.5"
12	47407	Puller Head
13	10394	Hex Jam Nut, ⁵ / ₈ -18
14	24833	Forcing Screw, ⁵ / ₈ -18 x 5"
15	215895	Sleeve
16	205378	Grip Wrench Adapter
17	205377	Dent Puller (consists of Nos. 18 & 19)
18	205399	Retainer
19	104427	Self-Tapping Screw, ¹ / ₄ " x 2"
20	7372	Puller Adapter
21	27315	Seal Hook
-	104820	Instruction Sheet

No. 1201 1202 1203

17¹/₂-Ton Hydraulic Sleeve Puller

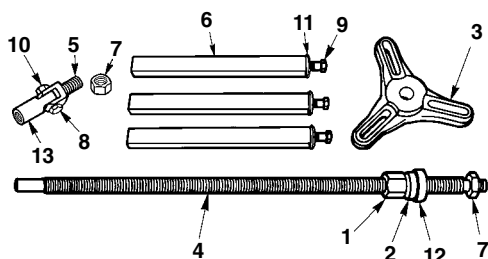


Item No.	Service Part No.	Description
1	37592	3-Way Head
2	27908	13" Riser Block (1 only)
3	33769	Screw Extension
4	41291	Installing Bar
5	302482	Speed Nut
6	10221	Hex Safety Nut
7	302340	Yoke Assembly for 1201
8	208675	Swivel Assembly
9	10088	Hex Head Cap Screw, ¹ / ₂ -13 x 2.00
10	10586	Flat Washer
11	32976	Pulling Screw
12	21714	Insert
13	4180	Hydraulic Pump/Ram Assy. for 1202
-	33768	Sleeve Installing Adapter
-	104856	Parts List

Note: 1201 consists only of 302340 Yoke Assembly, 33769 Screw Extension, 41291 Installing Bar, and 104856 Parts List.

No. 1200

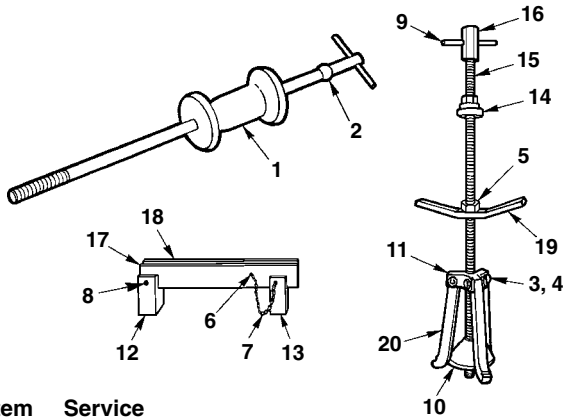
Manual Sleeve Puller Remover



Item No.	Service Part No.	Description
1	22205	Hex Nut, 1"-8 UNC
2	24824	Thrust Washer (1.032)
3	37592	3-Way Head
4	32976	Forcing Screw
5	27914	Swivel
6	27908	13" Riser Block (each)
7	12121	Hex Nut, ³ / ₄ -10 UNC
8	27912	Cap Screw, ¹ / ₂ -20
9	10088	Cap Screw, ¹ / ₂ -13
10	10390	Hex Jam Nut, ¹ / ₂ "
11	10586	Washer
12	11466	Thrust Bearing
13	33538	Swivel Adapter
-	104856	Parts List

**No. 1204
1205**

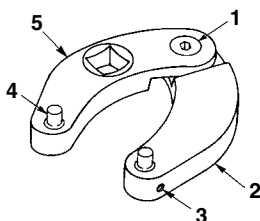
Universal Wet-Type Sleeve Puller



Item No.	Service Part No.	Description
1	34331	5 Lb. Slide Hammer for 1205
2	208627	Shank and Tee Bar Assembly for 1205
3	22016	Hex Head Cap Screw
4	10386	Hex Jam Nut, $\frac{3}{8}$ -24
5	10395	Hex Jam Nut, $\frac{5}{8}$ -11
6	10576	Round Head Drive Screw
7	12092	Safety Chain
8	12096	Roll Pin, $\frac{1}{4}$ " Dia., 2" Long
9	14252	Roll Pin, $\frac{1}{4}$ " Dia., $3\frac{1}{2}$ " Long
10	28637	Cone
11	28638	3-Way Head
12	28698	Leg
13	28699	Leg
14	28700	Nut and Bearing Assembly
15	34126	Forcing Screw
16	34127	Adapter
17	34172	Plate
18	34173	Plate
19	34174	Locking Bar
20	41396	Jaw (1 only)
-	104842	Instruction Sheet

No. 1266

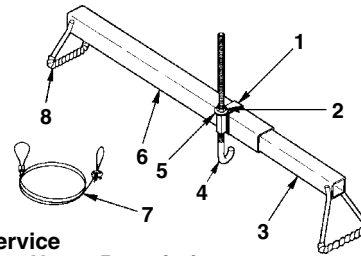
Adjustable Gland Nut Wrench



Item No.	Service Part No.	Description
1	19660	Flat Head Socket Screw
2	38710	Arm
3	10133	Set Screw
4	204928	Pin
5	43437	Arm

No. 1722

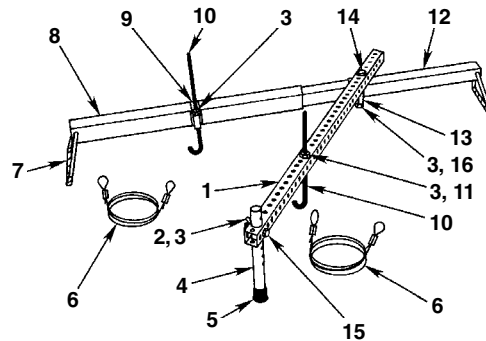
500 Lb. Capacity Transverse Engine Support Bar



Item No.	Service Part No.	Description
1	210188	Slide
2	10206	Steel UNC Hex Nut, $\frac{7}{16}$ -14
3	43587	Support Arm
4	39006	Hook
5	13339	Washer
6	45628	Support Arm
7	39009	Sling
8	211090	Sleeve Protector
-	102506	Parts List

No. 1724

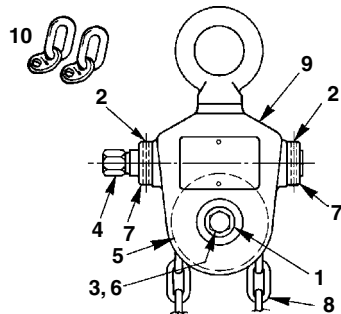
700 Lb. Capacity 3-Bar Engine Support



Item No.	Service Part No.	Description
1	308005	Pivot Support Arm
2	208608	Wing Nut
3	13339	Washer
4	308004	Pivot Support Leg
5	214067	Rubber Cap
6	39009	Cable
7	211090	Protective Sleeve
8	45628	Support Arm
9	210188	Slide
10	39006	Hook
11	10206	Hex Nut, $\frac{7}{16}$ -14
12	43587	Support Arm
13	214057	Slide
14	206050	Cap Screw, M10 x 1.5 x 110 mm
15	10057	Hex Head Cap Screw, $\frac{3}{8}$ -16 x 2"
16	19412	Hex Nut, M10 x 1.5
-	102506	Parts List
-	105194	Parts List

No. 1805

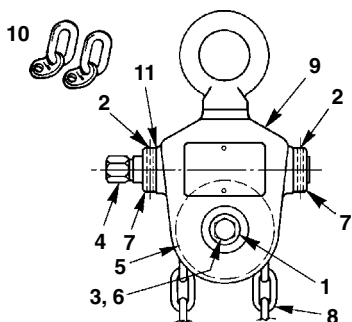
2,000 Lb. Capacity Load-Rotor® Positioning Sling



Item No.	Service Part No.	Description
1	10258	Washer
2	10973	Roll Pin
3	211185	Hex Head Cap Screw
4	23524	Worm
5	23525	Chain Block
6	211184	Pin
7	23728	Collar
8	31609	Chain Assembly
9	31627	Frame
10	24247	Lifting Bracket
-	102748	Parts List

No. 1806

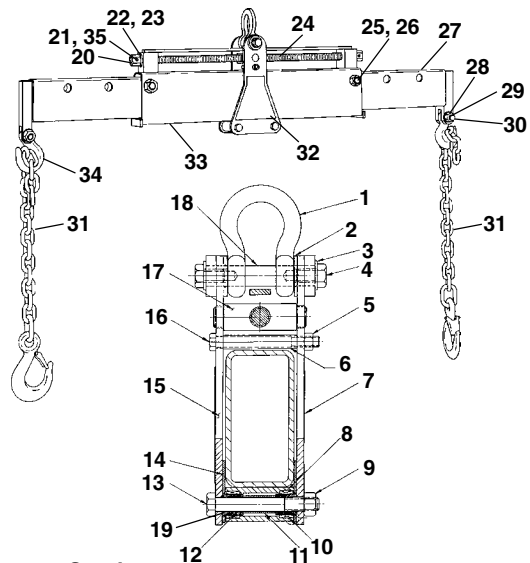
4,000 Lb. Capacity Load-Rotor® Positioning Sling



Item No.	Service Part No.	Description
1	13324	Washer
2	10973	Roll Pin
3	211187	Hex Head Cap Screw
4	31803	Worm
5	40569	Chain Block
6	211186	Pin
7	23728	Collar
8	31800	Chain Assembly
9	40568	Frame
10	24247	Lifting Bracket
11	214046	Shim Spacer
-	102748	Parts List

No. 1812

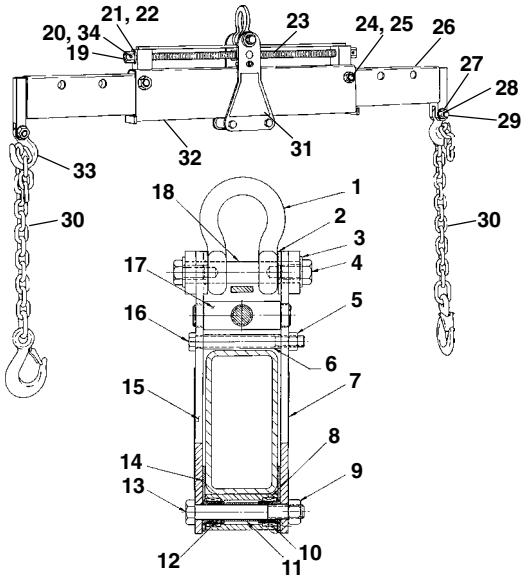
6,000 Lb. Capacity Load-Rotor® Load Leveler



Item No.	Service Part No.	Description
1	206679	Anchor Shackle
2	12330	Washer (for 3/4" bolt)
3	12004	Washer (for 1/2" bolt)
4	10075	Hex Hd. Cap Screw, 1/2-13 x 3/4" Lg.
5	10204	Hex Nu, 3/8-16
6	206678	Spacer
7	11281	Trade Name Decal
8	302240	Roller
9	15013	Locknut (1/2-13; torque to 25-30 ft. lbs.)
10	209692	Needle Bearing
11	206680	Spacer
12	206681	Inner Bearing Race
13	13894	Hex Hd. Cap Screw, 1/2-13 x 3/4" Lg.
14	302225	Wear Pad
15	44240	Side Plate
16	14493	Hex Hd. Cap Screw, 3/8-16 x 3/4" Lg.
17	302244	Screw Block
18	302242	Pin
19	10303	O-ring, 7/8 x 3/4 x 1/16
20	206675	Nut
21	10585	Roll Pin
22	206746	Thrust Bearing
23	16209	Thrust Washer
24	302241	Screw
25	16726	Hex Hd. Cap Screw, 3/4-10 x 3-1/4" Lg.
26	10216	Hex Nut (3/4-10)
27	44242	Inner Tube
28	13324	Washer (for 5/8" bolt)
29	10213	Hex Nut (5/8-18)
30	22045	Hex Hd. Cap Screw, 5/8-18 x 2-1/2" Lg.
31	302941	Chain & Safety Hook
32	302284	Warning Decal
33	51726-WH2	Main Tube
34	16051	Eye Grab Hook
35	10481	Roll Pin
-	216819	Made in USA Decal
-	304524	Capacity Decal
-	102424	Parts List and Operating Instructions

No. 1822

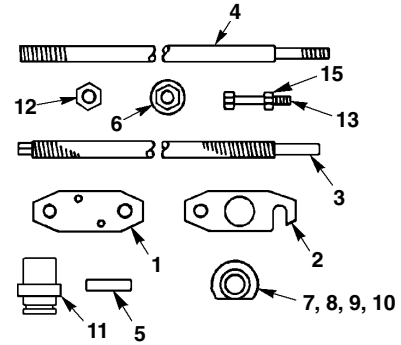
10,000 Lb. Capacity Load-Rotor® Load Leveler



Item No.	Service Part No.	Description
1	208112	Anchor Shackle
2	208149	Spacer (for 3/4" bolt)
3	12004	Washer (for 1/2" bolt)
4	10075	Hex Hd. Cap Screw, 1/2-13 x 3/4" Lg.
5	207255	Hex Nut, 1/2-13
6	208110	Spacer
7	524674	Trade Name Decal
8	303452	Roller
9	12726	Locknut, 5/8-18; torque to 25-30 ft. lbs.
10	208087	Needle Bearing
11	208111	Spacer
12	208088	Inner Bearing Race
13	10465	Hex Hd. Cap Screw, 5/8-18 x 4 1/2" Lg.
14	303451	Wear Pad
15	52015	Side Plate
16	10094	Hex Hd. Cap Screw, 1/2-13 x 4 1/2" Lg.
17	44937	Screw Block
18	303450	Pin
19	206675	Nut
20	10585	Roll Pin
21	206746	Thrust Bearing
22	16209	Thrust Washer
23	303449	Screw
24	19340	Hex Hd. Cap Screw, 3/4-10 x 4" Lg.
25	10216	Hex Nut, 3/4-10
26	52013	Inner Tube (includes items 9, 10, 11, & 15)
27	13324	Washer (for 5/8" bolt)
28	10213	Hex Nut, 5/8-18
29	22045	Hex Hd. Cap Screw, 5/8-18 x 2 1/2" Lg.
30	302249	Chain & Safety Hook
31	303471	Warning Decal
32	61039-WH2	Main Tube
33	16051	Eye Grab Hook
34	10481	Roll Pin
—	304525	Capacity Decal
—	524675	Parts List/Operating Instructions

No. 4240 4241

30-Ton King Pin / Brake Anchor Pin Pusher

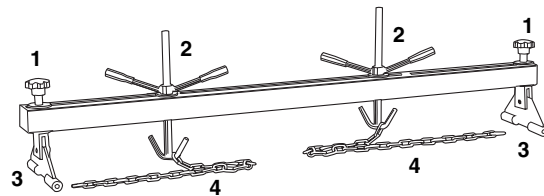


Item No.	Service Part No.	Description
1	43103	Ram Mounting Plate
2	43104	King Pin Pusher Head
3	34195	Forcing Screw
4	34193	Leg (2 reqd.)
5	28709	Pin
6	28714	Special Nut (2 reqd.)
7	34202	Bushing to 1"
8	34201	Bushing to 1 1/4"
9	34200	Bushing to 1 1/2"
10	34199	Bushng to 1 3/4"
11	29424	Anchor Pin Adapter
12	10220	Hex Nut, 1"-14 (3 reqd.)
13	10206	Hex Head Cap Screw, 7/16"-14 x 3"
15	12718	Full Hex Nut, 7/16-14
—	309962	Bushing, 1 1/4 x 3 1/2" Long
—	102488	Parts List

Note: 4240 also includes 25599 Hose Half Coupler, 36886 Hose Assembly, 4002 Hydraulic Hand Pump, 4121 Power Twin Ram.

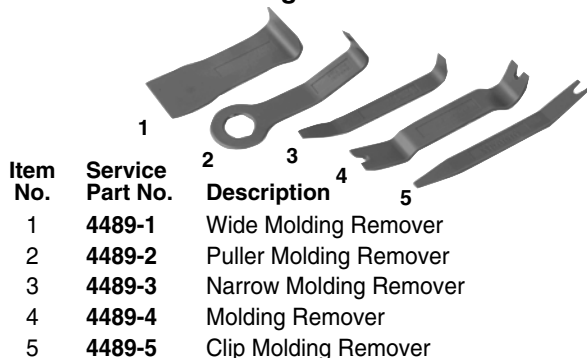
No. 4324

Engine Support Bar



Item No.	Service Part No.	Description
1	517326	Knob with Washer
2	517329	Adjustable Hook Assembly
3	517327	Standing Bracket with Rubber Feet
4	517325	Chain
—	107339	Parts List

No. 4489
5 Piece Interior Molding Remover



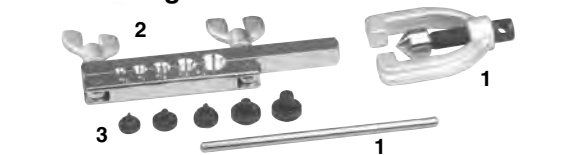
Item No.	Service Part No.	Description
1	4489-1	Wide Molding Remover
2	4489-2	Puller Molding Remover
3	4489-3	Narrow Molding Remover
4	4489-4	Molding Remover
5	4489-5	Clip Molding Remover

No. 4492
4 Piece E-Clip Tool



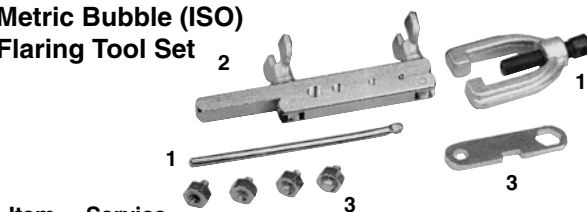
Item No.	Service Part No.	Description
1	4492-1	Handle
2	4492-2	Blade Replacement Set

No. 4503
Double Flaring Tool Set



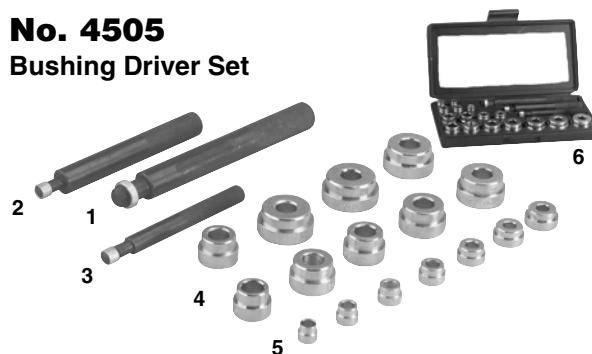
Item No.	Service Part No.	Description
1	4503-1	Yoke/Screw Assembly (including handle)
2	4503-2	Flaring Bar Assembly
3	4503-3	Set of Five Adapters 3/16", 1/4", 5/16", 3/8", and 1/2"

No. 4504
Metric Bubble (ISO)
Flaring Tool Set



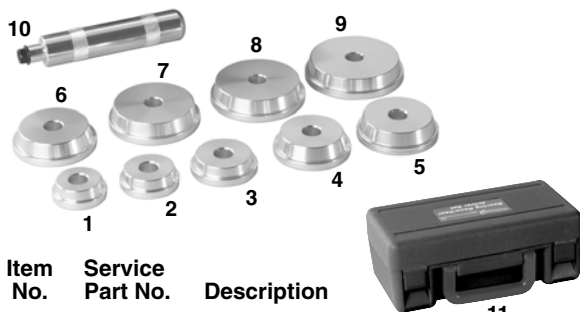
Item No.	Service Part No.	Description
1	4503-1	Yoke/Screw Assembly (including handle)
2	4503-2	Flaring Bar Assembly
3	4503-3	Gauge/Wrench and Four Adapters 4.75 mm (3/16"), 6 mm, 8 mm, and 10 mm

No. 4505
Bushing Driver Set



Item No.	Service Part No.	Description
1	4505-1	Large Driver Handle with Nut
2	4505-2	Medium Driver Handle with Nut
3	4505-3	Small Driver Handle with Nut
4	4505-4	Nine Bushing Adapters 47/64" to 13/8"; Use with 4505-1
5	4505-5	Seven Bushing Adapters 3/8" to 13/16"; Use with 4505-2 or 4505-3
6	—	Carrying Case (Check for availability)

No. 4507
Bearing Race and Seal Driver



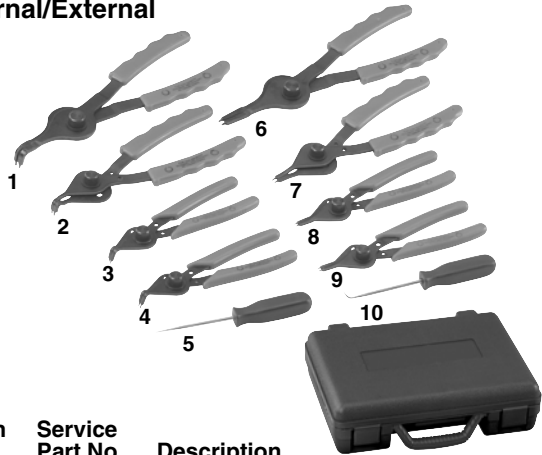
Item No.	Service Part No.	Description
1	4507-1	1.565" Driver
2	4507-2	1.750" Driver
3	4507-3	1.965" Driver
4	4507-4	2.325" Driver
5	4507-5	2.470" Driver
6	4507-6	2.555" Driver
7	4507-7	2.830" Driver
8	4507-8	2.995" Driver
9	4507-9	3.180" Driver
10	4507-10	Driver Handle with Bolt
11	—	Carrying Case (Check for availability)

No. 4508
Seal Remover



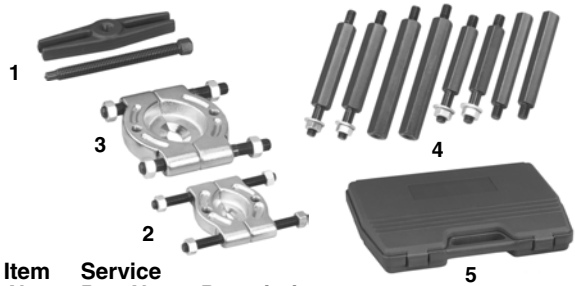
Item No.	Service Part No.	Description
1	4508-1	Blade

No. 4512
Snap Ring Pliers Set
Internal/External



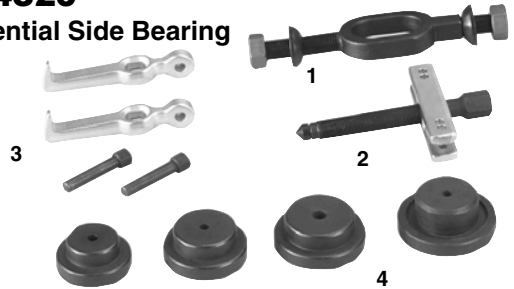
Item No.	Service Part No.	Description
1	4512-8	.038" Tip - 90° Pliers
2	4512-6	.047" Tip - 90° Pliers
3	4512-4	.070" Tip - 90° Pliers
4	4512-2	.090" Tip - 90° Pliers
5	4512-9	Straight Tip Pick
6	4512-7	.038" Tip - Straight Pliers
7	4512-5	.047" Tip - Straight Pliers
8	4512-3	.070" Tip - Straight Pliers
9	4512-1	.090" Tip - Straight Pliers
10	4512-10	90° Tip Pick
11	—	Carrying Case (Check for availability)

No. 4518
5-Ton Bar-Type Puller/Bearing Splitter Set



Item No.	Service Part No.	Description
1	4518-1	5" Pull Cross-bar/Forcing Screw, 6 ¹ / ₂ "
2	4518-3	Large Bearing Splitter
3	4518-2	Small Bearing Splitter
4	4518-4	Push-Puller Leg Set
5	—	Carrying Case (Check for availability)

No. 4520
Differential Side Bearing Puller



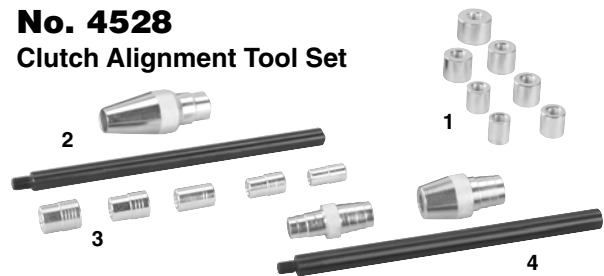
Item No.	Service Part No.	Description
1	4520-3	Puller Jaws Retaining Yoke
2	4520-1	Forcing Screw/Cross Block Assembly
3	4520-2	Puller Jaw/Pins (2)
4	4520-4	Puller Jaw Adapter Set 1 ⁵ / ₁₆ "-1 ¹¹ / ₃₂ " dia. 1 ¹ / ₈ "-1 ¹ / ₂ " dia. 1 ¹ / ₄ "-1 ⁵ / ₈ " dia. 1 ¹ / ₈ "-1 ³ / ₄ " dia.

No. 4513
Heavy-Duty Snap Ring Plier Set



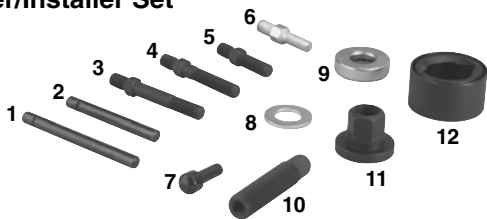
Item No.	Service Part No.	Description
1	4513-1	Internal Pliers (3 ¹ / ₁₆ " to 6 ¹ / ₄ " snap rings)
2	4513-2	External Pliers (3 ¹ / ₂ " to 6 ¹ / ₂ " snap rings)
3	4513-3	Straight Tip, .12" (3 mm)
4	4415-4	45° Tip, .12" (3mm)
5	4415-5	90° Tip, .12" (3 mm)
6	4415-6	Four Tip Retaining Screws
7	—	Carrying Case (Check for availability)

No. 4528
Clutch Alignment Tool Set



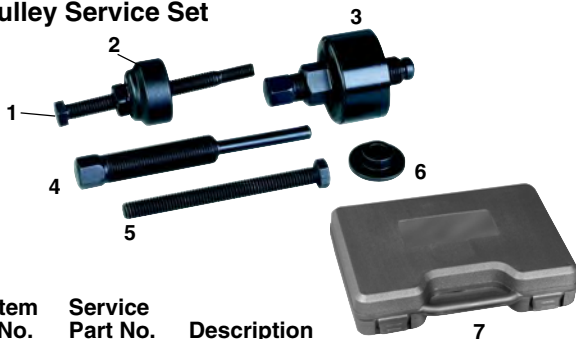
Item No.	Service Part No.	Description
1	4528-1	7 SAE Pilot Adapters
2	4528-2	SAE Alignment Shaft with Aligner
3	4528-3	5 Metric Pilot Adapters
4	4528-4	Metric Alignment Shaft with 2 Aligners

No. 4529
**Power Steering/Alternator Pulley
Puller/Installer Set**



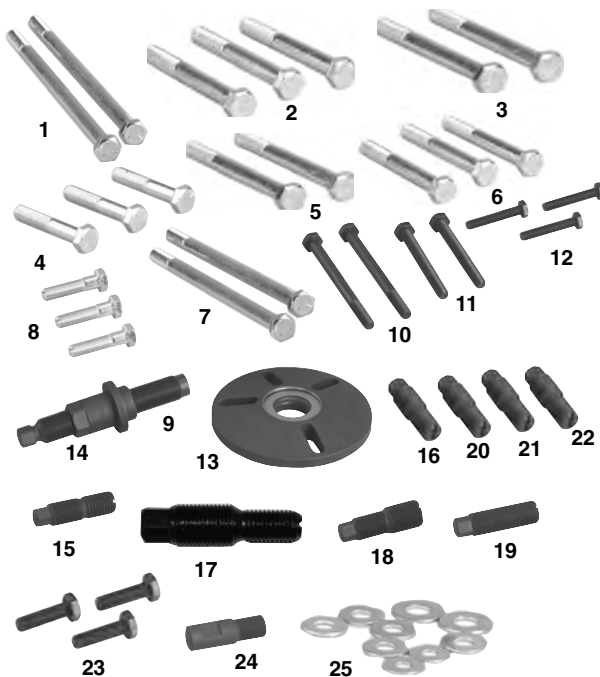
Item No.	Service Part No.	Description
1	4529-7	Remover Pin (GM Quad 4 engines)
2	4529-8	Remover Pin (GM 3.1L, 3100, and 3400 V-6 Engines)
3	4529-9	Installer Screw (GM Quad 4 Engines)
4	4529-10	Installer Screw (GM 3.1L, 3100, 3400 V-6 Engines)
5	4529-11	Installer Screw (Used on Most Vehicles)
6	4529-12	Installer Screw (Ford Modular V-8 Engines)
7	4529-4	Remover Pin (Used on Most Vehicles)
8	4529-6	Washer (For Installing)
9	4529-5	Thrust Bearing (For Installing)
10	4529-3	Installer/Remover Forcing Screw
11	4529-1	Installer/Remover Nut
12	4529-2	Remover/Assembly, 2-piece Jaws and Sleeve

No. 4530
**Power Steering Pump
Pulley Service Set**



Item No.	Service Part No.	Description
1	312347	Forcing Screw, 8 mm x 1.25
2	312346	Special Nut
3	7185	Pump/Alternator Pulley Remover (Consists of: 208703 Sleeve, 304108 Collet Half, 304107 Nut, 27445 Forcing Screw Assembly)
4	7104	GM Pump Pulley Removal Screw (Consists of: 27445 Forcing Screw, 10378 Steel Ball, 310901 Long Nose Cone, and 10266 O-ring)
5	217946	Hex Head Cap Screw, 3/8 - 16 x 4"
6	7931	Chrysler Pump Pulley Spacer
7	—	Carrying Case (Check for availability)

No. 4531
Harmonic Balancer Puller/Installer Set



Item No.	Service Part No.	Description
1	4531-1	Cap Screw Set, 5/16 x 6
2	4531-2	Cap Screw Set, 5/16 x 3 1/2
3	4531-3	Cap Screw Set, 5/16 x 3
4	4531-4	Cap Screw Set, 3/8 x 1 1/2
5	4531-5	Cap Screw Set, 1/4 x 2 1/2
6	4531-6	Cap Screw Set, 3/8 x 3
7	4531-7	Cap Screw Set, 3/8 x 4 1/2
8	4531-8	Cap Screw Set, 3/8 x 2
9	4531-9	Puller Screw
10	4531-10	Cap Screw Set, M8 x 90
11	4531-11	Cap Screw Set, M8 x 65
12	4531-12	Cap Screw Set, M8 x 45
13	4531-13	Puller Flange
14	4531-14	Puller Body
15	4531-16	Adapter, M16 x 2.0
16	4531-17	Adapter, M14 x 1.5
17	4531-18	Adapter, M12 x 1.5
18	4531-19	3/4 Adapter
19	4531-20	5/8 Adapter
20	4531-21	9/16 Adapter
21	4531-22	1/2 Adapter
22	4531-23	7/16 Adapter
23	4531-24	Cap Screw Set, M10 x 35
24	4531-25	Centering Adapter
25	4531-26	Washer Set

No. 4533
GM Strut Tool



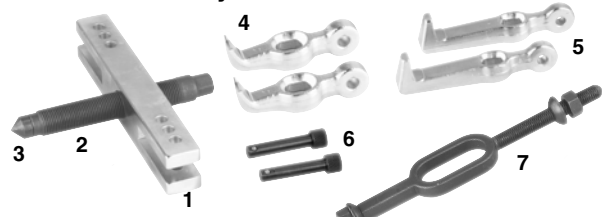
Item No.	Service Part No.	Description
1	4533-2	Handle Driver
2	4533-1	Socket

No. 4534
Multipurpose Bearing & Pulley Puller Set



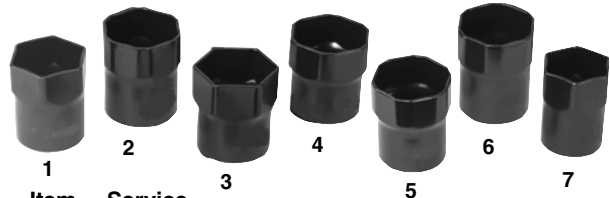
Item No.	Service Part No.	Description
1	4534-1	Puller Block (Small)
2	4534-2	2-piece Jaw Set (Medium)
3	4534-3	Forcing Screw (Long)
4	4534-4	Adjusting Yoke (Small)
5	4534-5	Washer and Bolt Set
6	—	Carrying Case (Check for availability)

No. 4536
A/C Clutch Pulley Puller Set



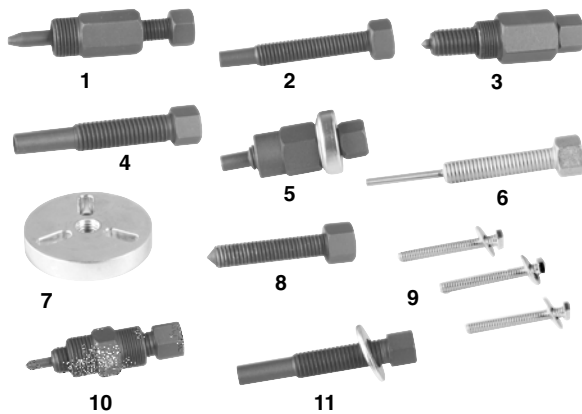
Item No.	Service Part No.	Description
1	4536-1	Puller Block
2	4536-2	Forcing Screw
3	4536-3	Live Center Tip
4	4536-4	2-piece Short Jaw Set
5	4536-5	2-piece Long Jaw Set
6	4526-6	2-piece Detent Pin
7	4536-7	Adjusting Yoke

No. 4542
7-Piece Wheel/Bearing Locknut Socket Set



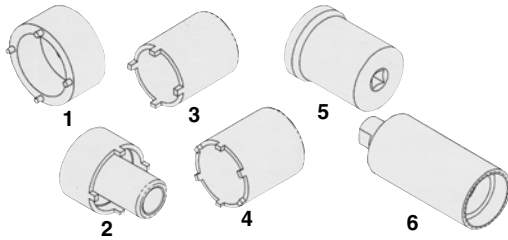
Item No.	Service Part No.	Description
1	519097-1	2 ³ / ₈ " Hex Locknut Socket
2	519097-2	2 ⁹ / ₁₆ " Round Hex Locknut Socket
3	519097-3	2 ¹ / ₂ " Hex Locknut Socket
4	519097-4	2 ³ / ₄ " Round Hex Locknut Socket
5	519097-5	2 ¹ / ₂ " Round Hex Locknut Socket
6	519097-6	2 ³ / ₈ " Round Hex Locknut Socket
7	519097-7	55 mm Locknut Socket

No. 4535
A/C Clutch Hub Remover/Installer Set



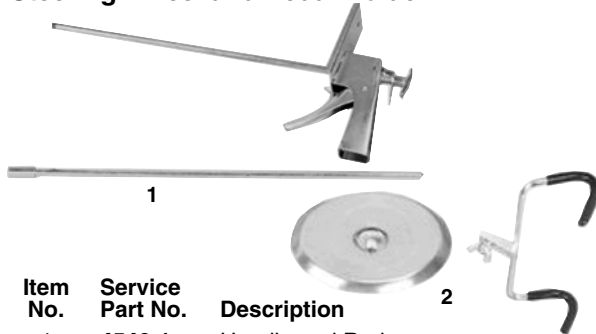
Item No.	Service Part No.	Description
1	4535-1	Nut and Forcing Screw Assembly
2	4535-2	Forcing Screw
3	4535-3	Nut/Forcing Screw Assembly
4	4535-4	Forcing Screw
5	4535-5	Nut/Forcing Screw/Bearing Assembly
6	4535-6	Forcing Screw
7	4535-7	Remover Plate
8	4537-8	Forcing Screw
9	4538-9	3-piece Screw/Washer Set
10	4535-10	Nut/Forcing Screw Assembly
11	4535-11	Forcing Screw Washer Assembly

No. 4543
4-Wheel Drive Spindle Nut Socket Set



Item No.	Service Part No.	Description
1	4543-1	Toyota Locknut Socket
2	4543-2	Ford Locknut Socket
3	4543-3	Ford Locknut Socket
4	4543-4	GM Locknut Socket
5	4543-5	Ford Locknut Socket
6	4543-6	Spindle Remover Adapter

No. 4546
Steering Wheel and Pedal Holder



Item No.	Service Part No.	Description
1	4546-1	Handle and Rod
2	4546-2	Steering Wheel and Pedal Holder

No. 4547
Front Wheel Drive Axle Nut Socket Set



Item No.	Service Part No.	Description
1	4547-29	29 mm Socket
2	4547-30	30 mm Socket
3	4547-32	32 mm Socket
4	4547-34	34 mm Socket
5	4547-35	35 mm Socket
6	4547-36	36 mm Socket
7	4547-38	38 mm Socket

No. 4549
Upholstery Tools



Item No.	Service Part No.	Description
1	4549-3	Large Panel Clip Tool
2	4549-2	Small Panel Clip Tool
3	4549-1	9" Door Clip Tool

No. 4550
3-Piece Scraper Set



Item No.	Service Part No.	Description
1	4550-1	2" Straight Blade
2	4550-2	1 1/4" Straight Blade
3	4550-3	1 1/4" Bent Blade

No. 4551
Small Door Panel and Upholstery Tools



Item No.	Service Part No.	Description
1	4551-1	U Panel Clip Tool
2	4551-2	V Panel Clip Tool

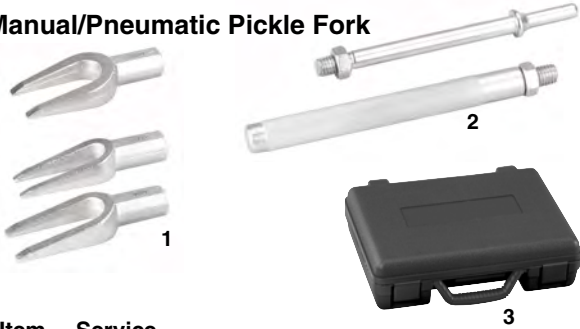
No. 4552
Putty Knife



Item No.	Service Part No.	Description
1	4552-1	Large Putty Knife
2	4552-2	Medium Putty Knife
3	4552-3	Small Putty Knife

No. 4559

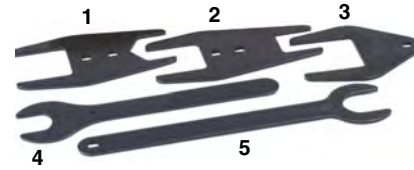
Manual/Pneumatic Pickle Fork



Item No.	Service Part No.	Description
1	4559-1	Pickle Fork Replacement Set
2	4559-2	Pickle Fork Driver Set
3	—	Carrying Case (Check for availability)

No. 4585

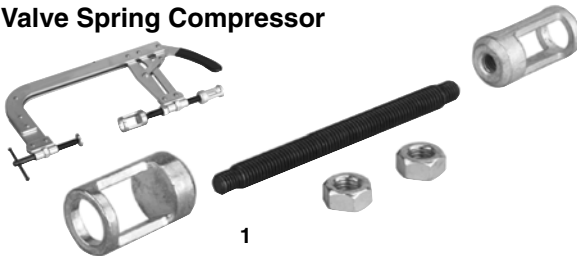
Five-piece Fan Clutch Wrench



Item No.	Service Part No.	Description
1	4585-5	Holding, 76 mm (3") & 68 mm (2 ¹¹ / ₁₆ ") Wrench
2	4585-4	Turning Wrench, 40 mm (1 ¹ / ₂ ")
3	4585-3	Holding Wrench, 72 mm (2 ¹³ / ₁₆ ") & 54 mm (2 ¹ / ₈ ")
4	4585-2	Holding Wrench, 83 mm (3 ¹ / ₄ ")
5	4585-1	Turning Wrench, 48 mm (1 ⁷ / ₁₆ ")

No. 4572

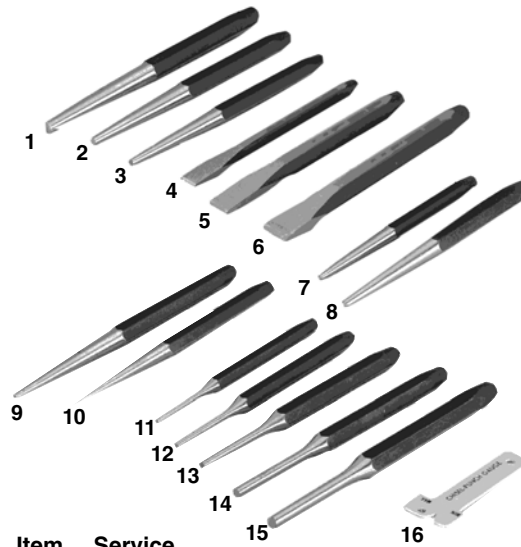
Valve Spring Compressor



Item No.	Service Part No.	Description
1	4572-1	Valve Spring Adapters, Screw, and Nuts

No. 4600

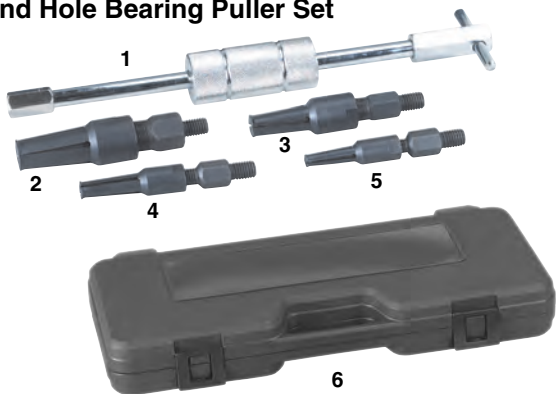
16 Piece Punch and Chisel Set



Item No.	Service Part No.	Description
1	4600-15	Taper Punch, 1/4 x 6 ³ / ₄
2	4600-14	Taper Punch, 3/16 x 6 ¹ / ₄
3	4600-13	Taper Punch, 5/32 x 6
4	4600-3	Cold Chisel, 3/8 x 5 ¹ / ₂
5	4600-2	Cold Chisel, 1/2 x 6
6	4600-1	Cold Chisel, 5/8 x 6 ¹ / ₂
7	4600-4	Center Punch, 3/16 x 8
8	4600-5	Center Punch, 1/8 x 5
9	4600-12	Taper Punch, 1/8 x 5 ³ / ₄
10	4600-11	Taper Punch, 3/32 x 5 ¹ / ₄
11	4600-10	Pin Punch, 3/32 x 4 ¹ / ₄
12	4600-9	Pin Punch, 1/8 x 4 ³ / ₄
13	4600-8	Pin Punch, 5/32 x 5
14	4600-7	Pin Punch, 3/16 x 5 ¹ / ₄
15	4600-6	Pin Punch, 1/4 x 5 ³ / ₄
16	4600-16	Chisel Gauge

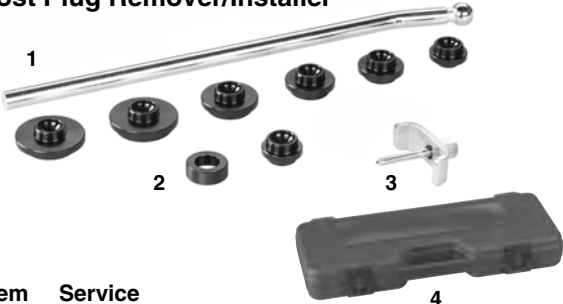
No. 4581

Blind Hole Bearing Puller Set



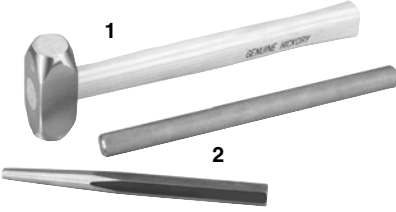
Item No.	Service Part No.	Description
1	4581-5	Slide Hammer Assembly
2	4581-4	1 ¹ / ₄ " Collet / Pin Assembly
3	4581-3	1" Collet / Pin Assembly
4	4581-2	3/4" Collet / Pin Assembly
5	4581-1	1/2" Collet / Pin Assembly
6	—	Carrying Case (Check for availability)

No. 4603
Frost Plug Remover/Installer



Item No.	Service Part No.	Description
1	4603-1	Installer Handle
2	4603-3	Disc Set
3	4603-2	Remover
4	—	Carrying Case (Check for availability)

No. 4606
Hammer/Punch Set



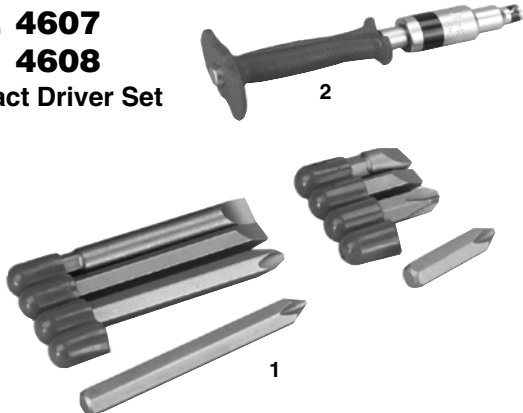
Item No.	Service Part No.	Description
1	4606-1	Hammer
2	4602	2-Piece Brass Punch Set

No. 4604
Frost Plug Installer



Item No.	Service Part No.	Description
1	4604-1	Driver
2	4604-2	Disc Set
4	—	Carrying Case (Check for availability)

No. 4607
4608
Impact Driver Set



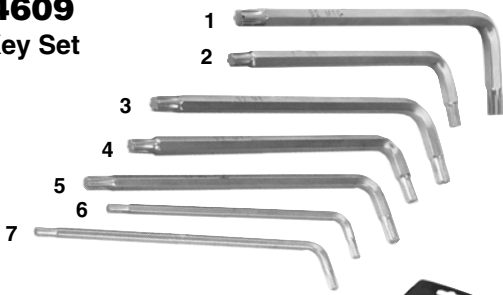
Item No.	Service Part No.	Description
1	4607-1	8 Bits, (Consists of: Two No. 2 Phillips bits: 1 ³ / ₈ " long with ⁵ / ₁₆ " hex and 3 ¹ / ₈ " long with ⁵ / ₁₆ " hex Two No. 3 Phillips bits: 1 ³ / ₈ " long with ⁵ / ₁₆ " hex and 3 ¹ / ₈ " long with ⁵ / ₁₆ " hex One each of the following: ⁵ / ₁₆ " wide x 1 ³ / ₈ " long with ⁵ / ₁₆ " hex slotted bit; ⁵ / ₁₆ " wide x 3 ¹ / ₈ " long with ⁵ / ₁₆ " hex slotted bit; ³ / ₈ " wide x 1 ³ / ₈ " long with ⁵ / ₁₆ " hex slotted bit; ³ / ₈ " wide x 3 ¹ / ₈ " long with ⁵ / ₁₆ " hex slotted bit)
2	—	Not replaceable

No. 4605
Punch/Chisel Set



Item No.	Service Part No.	Description
1	4605-1	Drive Handle
2	4605-9	1/4" Taper Punch
3	4605-12	1/8" Center Punch
4	4605-13	3/16" Center Punch
5	4605-11	1/4" Pin Punch
6	4605-10	3/16" Pin Punch
7	4605-8	1/8" Taper Punch
8	4605-2	1/2" Wide Flat Chisel
9	4605-3	5/8" Wide Flat Chisel
10	4605-7	1/4" Cape Chisel
11	4605-4	3/4" Wide Flat Chisel
12	4605-6	1" Wide Flat Chisel
13	4605-5	7/8" Wide Flat Chisel

No. 4609
Ribe Key Set



Item No.	Service Part No.	Description
1	4609-1	M10 Ribe Key
2	4609-2	M9 Ribe Key
3	4609-3	M8 Ribe Key
4	4609-4	M7 Ribe Key
5	4609-5	M6 Ribe Key
6	4609-6	M5 Ribe Key
7	4609-7	M4 Ribe Key



No. 4651
Screw Extractor Set



Item No.	Service Part No.	Description
1	4651-1	Drill Set
2	4651-2	Guide Set
3	4651-3	Extractor Set
4	—	Carrying Case (Check for availability)

No. 4645
Serpentine Belt Tool



Item No.	Service Part No.	Description
1	4645-1	Handle, long extension, short extension and a bolt
2	4645-2	Sockets (18 mm, 16 mm, 15 mm, 14 mm, 13 mm, 1/2" square drive, 3/8" square drive. Open end: 15 mm, 14 mm, and 13 mm)
3	—	Carrying Case (Check for availability)

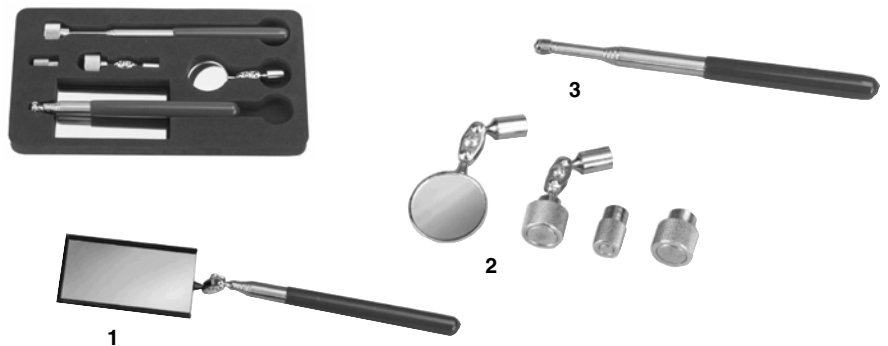
No. 4673
Sending Unit/Sensor Tool



Item No.	Service Part No.	Description
1	4673-1	29 mm Socket
2	4673-2	7/8" Socket
3	4673-3	27 mm Socket
4	4673-4	7/8" Socket (Narrow slot)
5	4673-5	1 1/16" Socket
6	4673-6	22 mm Socket
7	4673-7	7/8" Socket (Short)
8	—	Carrying Case (Check for availability)

No. 4650
Mirror and Magnet Set

Item No.	Service Part No.	Description
1	4650-1	Mirror and handle
2	4650-2	Magnets and mirror
3	4650-3	Handle



No. 4681
Pulley Remove and Installer



Item No.	Service Part No.	Description
1	4681-2	Forcing Screw and Bearings
2	4681-1	Pulley Body

No. 4754
Pulley Holder and Fan Clutch



Item No.	Service Part No.	Description
1	4754-1	Pin, Dia. 11 mm / 16 mm
2	4754-2	Pin, Dia. 8 mm / 11 mm
3	4754-3	Pin, Dia. 10 mm / 12 mm
4	4754-4	Pin, Dia. 6 mm / 10 mm
5	4754-5	Knurled Nut
6	—	Carrying Case (Check for Availability)
7	—	Handle (Not Replaceable)

No. 4711
Deluxe Radio and Antenna Service Kit



Item No.	Service Part No.	Description
1	4711-1	Antenna Sockets and Wrench Kit
2	4411-2	Radio Socket Kit

No. 4756
Autobody Chisel Parts



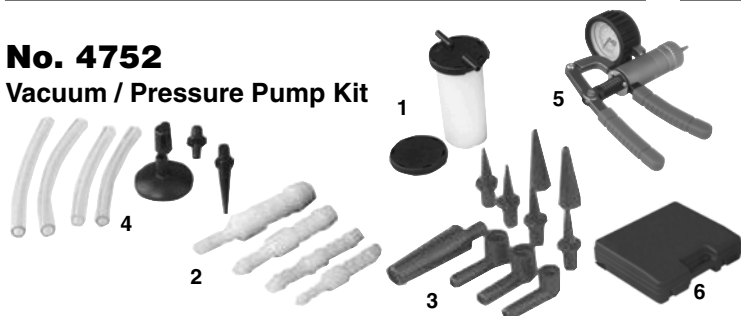
Item No.	Service Part No.	Description
1	4756-1	Small Curve Tool
2	4756-2	Cross Curve Tool
3	4756-3	Rounded Ball Peen Tool
4	4756-4	One-sided Flat Blade Tool
5	4756-5	Curve Blade Tool
6	4756-6	Pointed Ball Peen Tool
7	4756-7	Angle Face Tool
8	4756-8	Flat Blade Tool
9	4756-9	Square Face Tool
10	4756-10	Angle Groove Tool
11	4756-11	Round Face Tool
12	—	Carrying Case (Check for Availability)
13	4605-1	Handle

No. 4726
Circlip Tool Tips



Item No.	Service Part No.	Description
1	4726-1	Eight Tips
2	—	Snap Ring Tool (Not Replaceable)

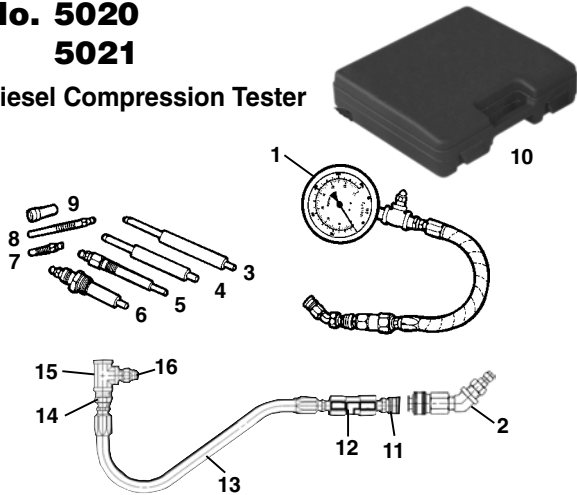
No. 4752
Vacuum / Pressure Pump Kit



Item No.	Service Part No.	Description
1	4752-1	Plastic Bottle and Lid
2	4752-2	Inserts
3	4752-3	Inserts
4	4752-4	Inserts and Hoses
5	—	Pump (Not Replaceable)
6	—	Carrying Case (Check for Availability)

**No. 5020
5021**

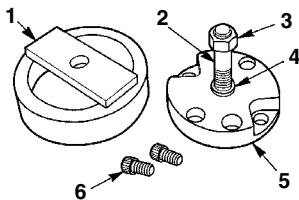
Diesel Compression Tester



Item No.	Service Part No.	Description
1	45549	Compression Tester
2	217720	Quick Coupler Fitting
3	310810	Compression Test Adapter
4	310840	Compression Test Adapter
5	47484	Compression Test Adapter
6	217791	B-Engine Injector Adapter
7	310832	Glow Plug Adapter
8	308472	Glow Plug Adapter
9	SKW40412	6 Pt., 3/8 Drive Socket Glow Plug
10	308343	Carrying Case
11	209751	Quick Coupler, Socket Half
12	209750	Check Valve
13	209762	12" Compression Hose With 1/8 NPTF Male Ends
14	206324	Straight Fitting
15	214802	Tee Fitting
16	209749	Bleed Valve
-	48570	Inside Lid Decal
-	62337	Carrying Case Foam Insert

No. 5022

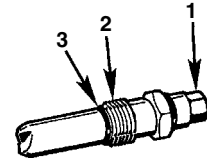
Oil Seal / Wear Ring Installer



Item No.	Service Part No.	Description
1	04-149-3-2B	Wear Sleeve and Seal Adapter
2	11536	Socket Head Cap Screw
3	10215	Hex Nut
4	24837	Forcing Screw Washer
5	04-149-3-1A	Attaching Plate
6	17265	Screw, 5/8-18 x 1

No. 5023

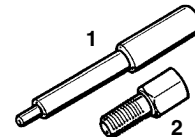
Diesel Injector Seat Cleaner



Item No.	Service Part No.	Description
1	45172	Nozzle Seat Reamer
2	208392	Threaded Sleeve
3	10302	O-ring

No. 5024

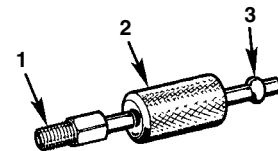
**Navistar Injector Sleeve
Remover / Installer**



Item No.	Service Part No.	Description
1	ZTSE2534A	Nozzle Sleeve Installer
2	ZTSE2587A	Nozzle Sleeve Remover

No. 5028

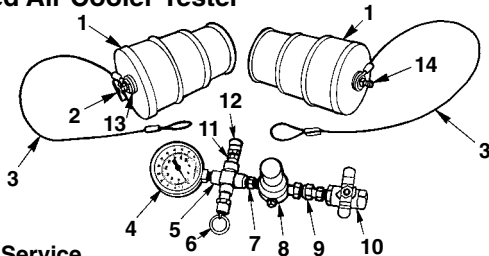
Slide Hammer Puller



Item No.	Service Part No.	Description
1	206437	Reducing Adapter
2	208911	Hammer
3	208912	Shank

No. 5039

Charged Air Cooler Tester

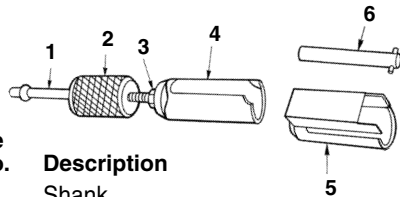


Item No.	Service Part No.	Description
1	48997	Hose Adapter
2	220194	Drain Cock Valve

3	311895	Sling
4	310526	0-60 PSI Pressure Gauge
5	208118	Cross Fitting
6	219326	Pressure Relief Valve
7	16494	Hex Nipple
8	311751	Air Regulator
9	220193	Straight Restrictor Fitting
10	215787	Ball Valve
11	206324	Fitting
12	209751	Quick Coupler Socket
13	10231	Wrought Washer, 3/8"
14	206843	Plug Half Quick Coupler
15	105768	Instruction Sheet

No. 5040

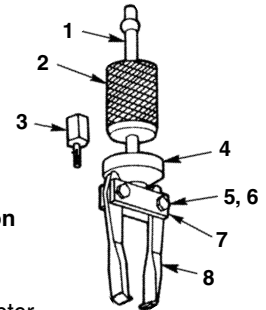
Cummins Injector Remover / Installer



Item No.	Service Part No.	Description
1	312328	Shank
2	219779	Hammer
3	10210	Hex Nut, 1/2-20 UNF
4	219758	Installer (L10 Celect)
5	312013	Installer (N14 Celect)
6	312012	Pin-Type Puller Adapter
-	307382	Carrying Case
-	43135	Carrying Case Foam Insert

No. 5042

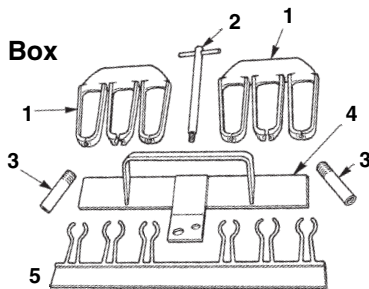
Cummins Injector Puller



Item No.	Service Part No.	Description
1	312328	Shank
2	219779	Hammer
3	219778	Puller Adapter
4	220196	Adjusting Cone
5	22021	Hex Head Cap Screw
6	10384	Hex Jam Nut, 5/16-24
7	312327	Cross Block
8	49289	Puller Jaw
-	307382	Carrying Case
-	43135	Carrying Case Foam Insert

No. 5041

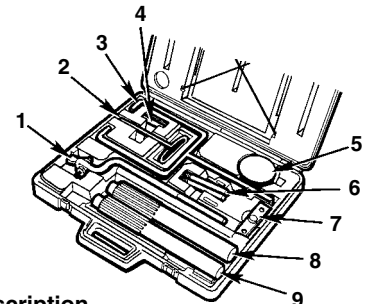
Cummins Rocker Box Setting Tool



Item No.	Service Part No.	Description
1	312420	Push Tube Guide
2	312418	Tee Handle
3	220266	Guide Pin
4	53919	Mounting Plate
5	312419	Push Tube Guide
-	12368	Cap Screw
-	105829	Parts List

No. 5043

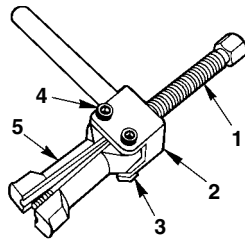
Clutch Service Set



Item No.	Service Part No.	Description
1	7028	Adjusting Wrench
2	213015	Hex Key Wrench
3	5046	Clutch Release Tool
4	213013	Guide Pins, 3/8-16
5	5045	Drive Pin Installing Tool
6	213014	Guide Pins, 7/16-14
7	5044	Clutch Adjusting Tool
8	7074A	Truck Clutch Alignment Tool, 2"
9	7073A	Truck Clutch Alignment Tool, 1 3/4"
-	105617	Parts List
-	308344	Carrying Case
-	18745	Carrying Case Foam Insert

**No. 5048
5049**

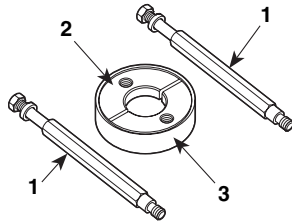
**Flywheel Pilot Bearing
Puller**



Item No.	Service Part No.	Description
1	312548	Forcing Screw
2	312549	Puller Body
3	10199	Hex Nut, 1/4-20
4	10022	Screw
5	312551	Puller Jaw for 5048
5	312552	Puller Jaw for 5049

No. 5051

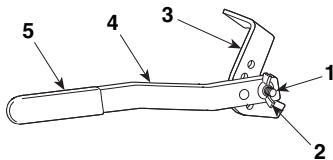
**Eaton® / Fuller®
Bearing Puller Set**



Item No.	Service Part No.	Description
1	313579	Leg
2	440089	Collet Half
3	221645	Sleeve

No. 5052

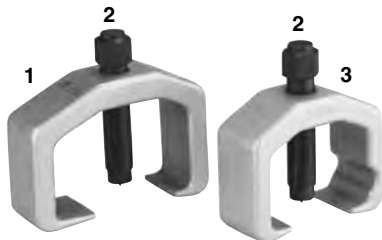
Slack Check



Item No.	Service Part No.	Description
1	220001	Carriage Bolt
2	13024	Wing Nut, 1/4-20
3	49225	Slack Adjuster Head
4	312174	Handle
5	14564	Handle Grip

**No. 5055
5056**

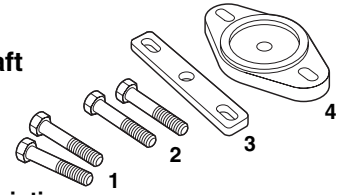
**Slack Adjuster
Puller**



Item No.	Service Part No.	Description
1	49704	Slack Adjuster Puller for 5055
2	26619	Forcing Screw
3	49702	Slack Adjuster Puller for 5056

No. 5062

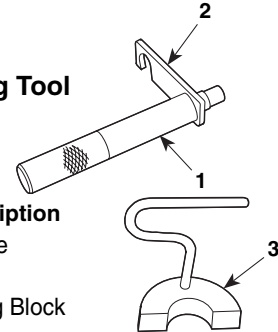
**Auxiliary Countershaft
Shim Tool**



Item No.	Service Part No.	Description
1	19834	Hex Head Cap Screw, 3/8-16 x 2.75"
2	212336	Hex Head Cap Screw, Metric, 12 mm - 1.75 x 70 mm Long
3	313580	Plate
4	440090	Shim Gauge

No. 5063

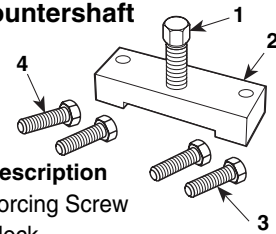
Eaton® / Fuller® Timing Tool



Item No.	Service Part No.	Description
1	313643	Handle
2	313642	Plate
3	313644	Timing Block

No. 5064

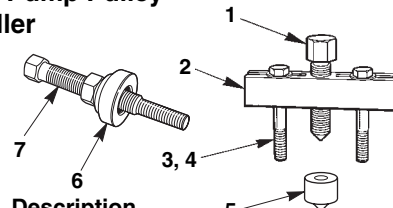
**Eaton® / Fuller® Countershaft
Pushing Tool**



Item No.	Service Part No.	Description
1	24426	Forcing Screw
2	440091	Block
3	217871	Hex Head Cap Screw
4	216295	Hex Head Cap Screw, Metric

No. 5071

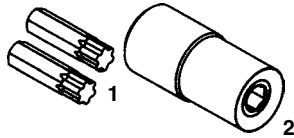
**Cummins Water Pump Pulley
Remover / Installer**



Item No.	Service Part No.	Description
1	221895	Forcing Screw, Remover
2	26603	Cross Block
3	15317	Cap Screw
4	10257	Bolt Washer, 5/16"
5	8052	Shaft Protector
6	28746	Body Assembly
7	313847	Forcing Screw, Installer

No. 5901

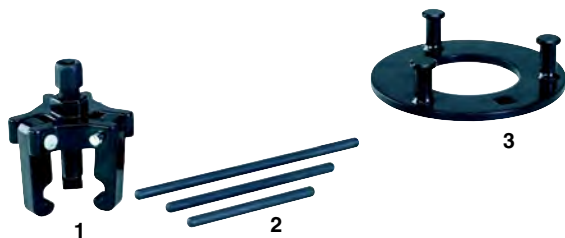
Seat Belt Bolt Removal Tool



Item No.	Service Part No.	Description
1	520463	T47 Torx Bit
2	517923	Bit Holder

No. 6284

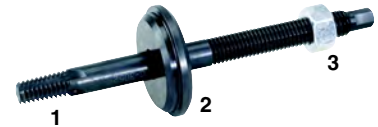
GM/Chrysler Harmonic Balancer Puller and Holding Ring Set



Item No.	Service Part No.	Description
1	6267	Puller Set (includes 3-jaw puller, 3 forcing rods, and a 3/8" square drive forcing screw)
2	516638	Forcing Rods (3)
3	6495	Holding Tool
-	514822	Carrying Case
-	107368	Instruction Sheet

No. 6292

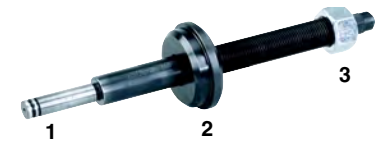
Bushing Puller



Item No.	Service Part No.	Description
1	MLR-SP-1192A	Screw
2	MLR-SP-1193	Adapter
3	10211	Hex Nut, 9/16-12 UNC

No. 6293

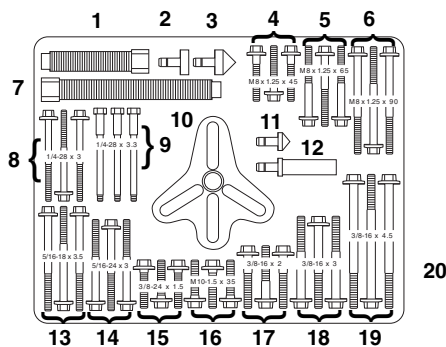
Bushing Installer/Reamer



Item No.	Service Part No.	Description
1	MLR-SP-1199A	Screw
2	MLR-SP-1200	Adapter
3	10215	Hex Nut

No. 6294

Master Bolt Grip Set



Item No.	Service Part No.	Description
1	511039	Forcing Screw, 3/4" Short
2	511038	Adapter (Short)
3	511034	Center, Large

4	511028	Washer Head Bolt, M8 x 1.25 x 45 mm
5	511031	Washer Head Bolt, M8 x 1.25 x 65 mm
6	511027	Washer Head Bolt, M8 x 1.25 x 90 mm
7	511036	Forcing Screw, 3/4"
8	511030	Washer Head Bolt, 1/4 - 28 UNF x 3"
9	222191	Screw, Special
10	511035	Flange, 3/4" Puller
11	511037	Center, Small
12	511033	Adapter, Long
13	511040	Washer Head Bolt, 5/16 -18 UNC x 3.5"
14	511032	Washer Head Bolt, 5/16 -24 UNF x 3"
15	511041	Washer Head Bolt, 3/8 -24 UNF x 1.5"
16	511045	Washer Head Bolt, M10 x 1.5 x 35 mm
17	511042	Washer Head Bolt, 3/8 -16 UNC x 2.0"
18	511043	Washer Head Bolt, 3/8 -16 UNC x 3.0"
19	511044	Washer Head Bolt, 3/8 -16 UNC x 4.5"
20	514232	Plastic Tray
-	107206	Parts List

No. 6299

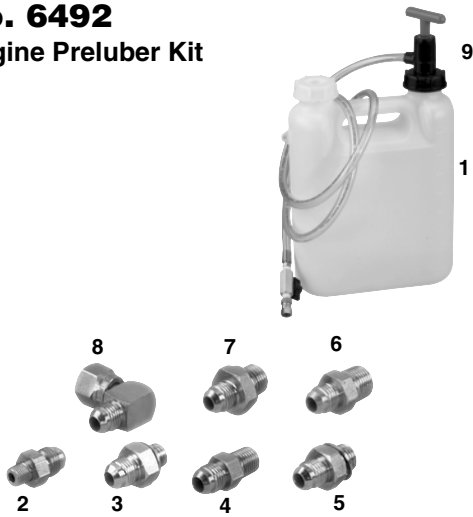
Ball Joint/Tie Rod Service Set



Item No.	Service Part No.	Description
1	514046	Carrying Case
2	6534	Shock Link/Tie Rod Separator, 16 x 11/16"
3	6535	Ball Joint Separator, 16 x 15/16"
4	6532	GM Pitman Arm Remover, 11 3/4 x 1 5/8"
5	6533	Separator Tool, 11 5/8 x 1 7/16"
6	6531	Pitman Arm Separator, 11 x 1 1/8"

No. 6492

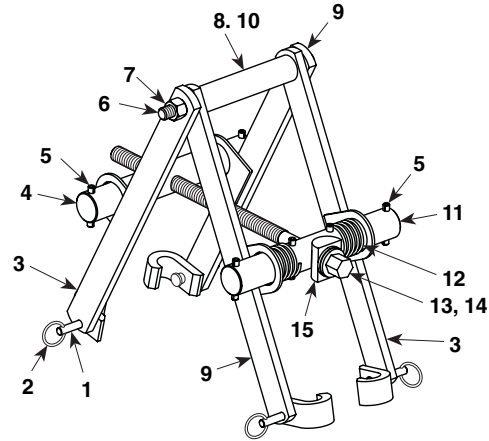
Engine Preluber Kit



Item No.	Service Part No.	Description
1	509063	Engine Preluber Tank
2	509372	Fitting, .125 NPT
3	509373	Fitting, .25 NPT x .562 JIC
4	219433	Straight Fitting
5	509375	O-ring Fitting, M16 x 1.5
6	509376	O-ring Fitting, M12 x 1.75
7	11628	Straight Fitting
8	205965	90 Degree Elbow Fitting
9	509371	Hand Pump
-	J-36316-A	Universal Storage Pouch
-	511798	Instruction Sheet

No. 6494

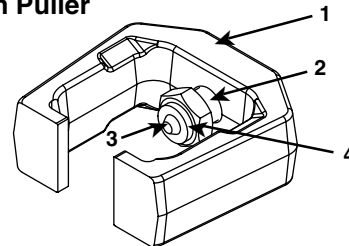
Clamshell Strut Spring Compressor



Item No.	Service Part No.	Description
1	217183	Clevis Pin, 1 3/4" Long
2	213876	Split Ring
3	516238	Short Hook Frame
4	310334	Threaded Trunnion
5	11955	Slotted Spring Pin, 1/4 x 1 3/4"
6	217610	Hex Head Cap Screw, 1/2-13 x 7 1/2"
7	15013	Locknut, 1/2-13
8	217180-BL2	Round Spacer
9	516237	Long Hook Frame
10	217182	Compression Spring
11	513310	Plain Trunnion
12	217181	Compression Spring
13	310336	Forcing Screw
14	215842	Thrust Bearing Washer
15	5133311	Pivot Adapter
-	217186	Warning Decal
-	107300	Parts List

No. 6496

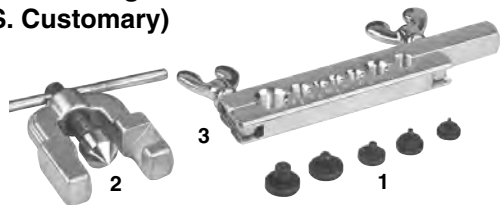
Pitman Arm Puller



Item No.	Service Part No.	Description
1	518684-1	Puller Frame
2	518684-2	Puller Screw
3	518684-3	Center Swivel
4	211053	Packing O-ring
-	521173	Operating Instruction Sheet

No. 6503

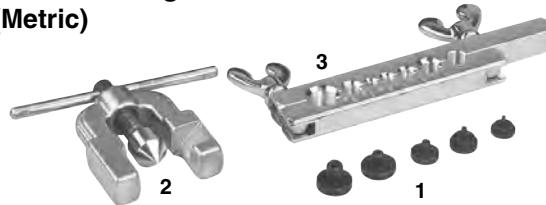
**Double Flaring Tool
(U.S. Customary)**



Item No.	Service Part No.	Description
1	6503-1	Adapter Set
2	6503-2	Yoke/Screw Handle Assembly
3	6503-3	Flaring Bar Assembly

No. 6506

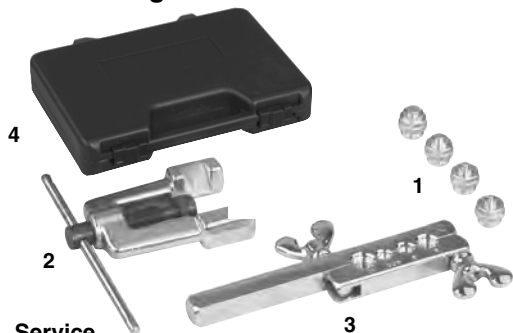
**Double Flaring Tool
(Metric)**



Item No.	Service Part No.	Description
1	6506-1	Adapter Set
2	6506-2	Yoke/Screw Handle Assembly
3	6506-3	Flaring Bar Assembly

No. 6504

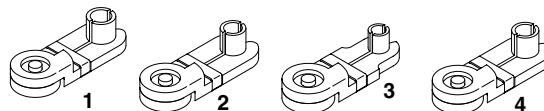
ISO Bubble Flaring Tool



Item No.	Service Part No.	Description
1	6504-1	Adapter Set (4)
2	6504-2	Fuel Line Tool, 5/16" Red
3	6504-3	Fuel Line Tool, 1/4" Black
4	—	Carrying Case (Check for Availability)

No. 6507

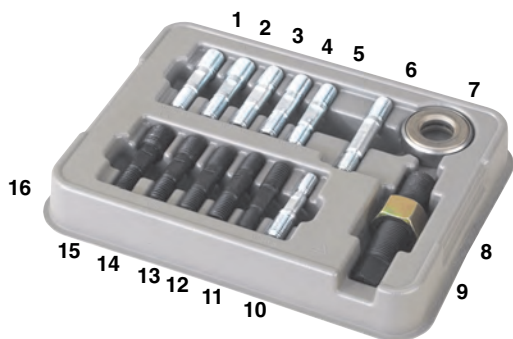
Four-Piece Disconnect Tool



Item No.	Service Part No.	Description
1	518582	Fuel Line Tool, 3/8" Gold
2	518583	Fuel Line Tool, 5/16" Red
3	518584	Fuel Line Tool, 1/4" Black
4	519159	Transmission Oil Line Tool, Blue

No. 6505

Four-Piece Disconnect Tool

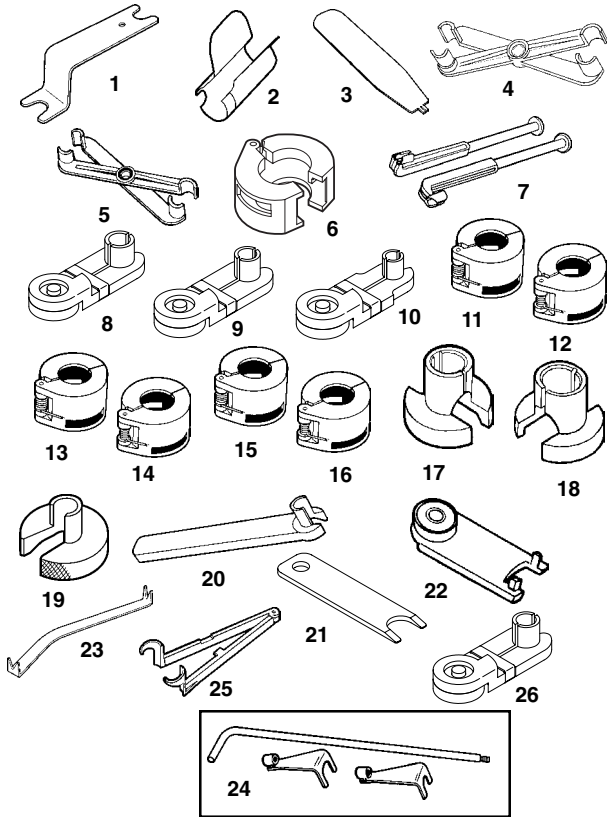


Item No.	Service Part No.	Description
1	511064	Adapter, M10 x 1.5
2	511050	Adapter, M12 x 1.5
3	511051	Adapter, M12 x 1.75

4	511052	Adapter, M14 x 1.5
5	511053	Adapter, M14 x 2.0
6	511054	Adapter, M26 x 1.5
7	Rs-25100	#608 Thrust Bearing
	-300	
8	19780	Hex Nut
9	511057	Forcing Screw
10	511055	Adapter, M16 x 2.0
11	511063	Adapter, 3/4-16
12	511062	Adapter, 5/8-18
13	511061	Adapter, 9/16-18
14	511060	Adapter, 1/2-20
15	511059	Adapter, 7/16-20
16	514008	Carrying Case
—	107205	Instruction Sheet

No. 6508

Master Disconnect Kit



Item No.	Service Part No.	Description
1	440384	GM Hydraulic Clutch Line Tool
2	440486	GM Transmission Oil Cooler Line Tool
3	501153	Toyota A/C Tool
4	511410	Fuel Line Disconnect Tool
5	511413	Fuel Line Tool
6	518092	Heater Hose Tool
7	518158	Fuel Line Tool Set
8	518582	Fuel Line Tool, 3/8" Gold
9	518583	Fuel Line Tool, 5/16" Red
10	518584	Fuel Line Tool, 1/4" Black
11	518896	Fuel Line Tool, 3/8" Yellow
12	518897	A/C Spring Lock Coupling, 5/8" Black
13	518898	A/C Spring Lock Coupling, 1/2" Blue
14	518899	Fuel Line Tool, 1/2" Green
15	518900	A/C Spring Lock Coupling, 3/8" Red
16	518901	A/C Spring Lock Coupling, 3/4" White
17	519067	Fuel Line Tool, 5/16"
18	519068	Fuel Line Tool, 3/8"
19	519151	Quick Disconnect Tool
20	519152	Oil Cooler Line Tool
21	519153	Clutch Coupling Tool
22	519154	Fuel Line Coupling Tool
23	519155	Chrysler Fuel Line Tool
24	519156	Ford Heater Hose Tool Set
25	519157	GM Heater Line Quick Connect Separator
26	519159	Transmission Oil Line Tool, Blue

No. 6516

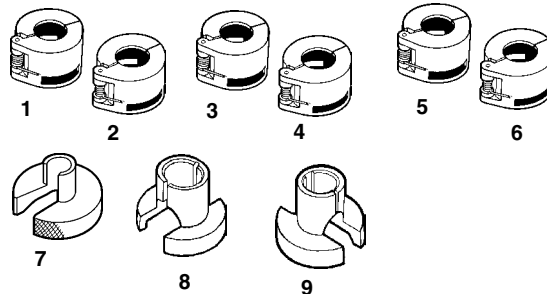
Brake Tool Set



Item No.	Service Part No.	Description
1	519223	Carrying Case
2	519196-4	Brake Spring Pliers
3	519196-3	Brake Spring Removal Tool
4	519196-5	Brake Return Spring Removal Tool
5	519196-2	Brake Adjusting Spoon
6	519196-6	Brake Adjusting Spoon
7	519196-8	Mini Brake Adjusting Spoon
8	519196-7	Brake Spring Removal Tool (3/4" and 13/16" dia. spring)
9	519196-1	Brake Spring Removal Tool (5/8" dia. spring)

No. 6517

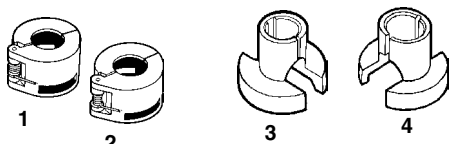
Nine-Piece Disconnect Set



Item No.	Service Part No.	Description
1	518896	Fuel Line Tool, 3/8" Yellow
2	518897	A/C Spring Lock Coupling, 5/8" Black
3	518898	A/C Spring Lock Coupling, 1/2" Blue
4	518899	Fuel Line Tool, 1/2" Green
5	518900	A/C Spring Lock Coupling, 3/8" Red
6	518901	A/C Spring Lock Coupling, 3/4" White
7	519151	Quick Disconnect Tool
8	519068	Fuel Line Tool, 3/8"
9	519067	Fuel Line Tool, 5/16"

No. 6519

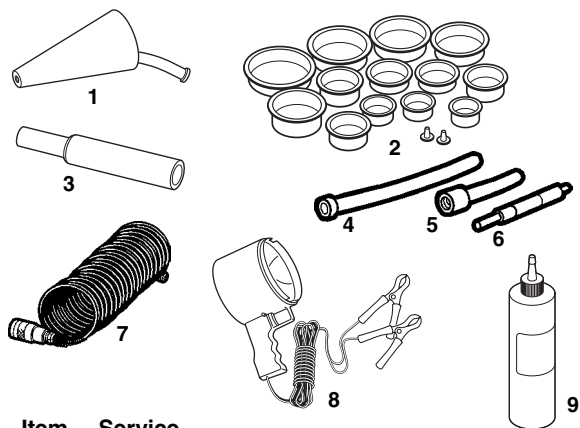
Fuel Line Disconnect Tool Set



Item No.	Service Part No.	Description
1	518896	Fuel Line Tool, 3/8" Yellow
2	518899	Fuel Line Tool, 1/2" Green
3	519067	Fuel Line Tool, 5/16"
4	519068	Fuel Line Tool, 3/8"

No. 6525

LeakMaster Evaporative Emissions System Tester



Item No.	Service Part No.	Description
1	CEA-01	Exhaust Cone 3 1/2" dia.
2	CEA-02	Cap Plug Kit
3	CEA-03	Smoke Diffuser Adapter
4	CEA-04	EVAP Service Port Adapter
5	CEA-042	Ford EVAP Service Port Adapter
6	CEA-049	Schrader Valve Removal/Install. Tool
7	CEA-041	Nitrogen Coiled Hose, 25'
8	HS-400AC	Halogen Spotlight
9	P-0716-UV	Smoke-Producing Solution
-	SR00	Water Trap Filter
-	107360	Instruction Manual

No. 6530

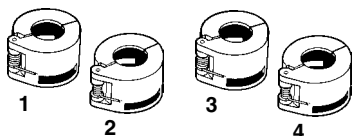
Ball Joint Super Set



Item No.	Service Part No.	Description
1	7248	C-Frame Press (consists of 1 ea.: forcing screw; 14472 steel ball; 10273 o-ring; 29501 plug; 41925 c-frame)
2	305227	Installing Adapter
3	305228	Removing Adapter
4	29503	Receiving Tube
5	29504	Receiving Tube
6	29505	Receiving Tube
7	39976	Receiving Cup
8	313444	Ball Joint Remover
9	222305	Receiving Tube
10	222306	Receiving Tube
11	314425	Receiving Cup
12	314426	Removing Adapter
13	222304	Receiving Tube
14	204508	Receiving Cup
15	222307	Receiving Tube
16	313969	Installing Cup
17	38355	Installing Cup
18	314427	Receiving Cup
19	314392	Live Center Forcing Screw Plug
20	313967	Remover Cup
21	38354	Receiving Cup
22	313970	Installer
23	313968	Remover
24	314428	Installing Adapter
25	514480	Storage Case (Check for availability)
-	517920	Parts List

No. 6538

A/C Spring Lock Coupling Tools

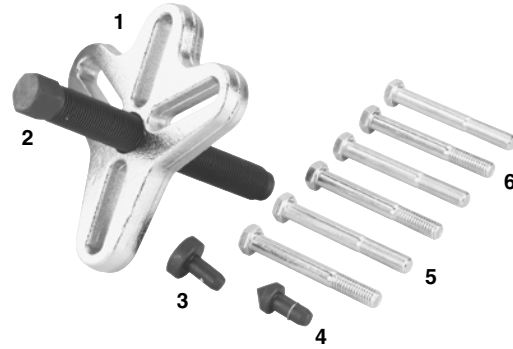


Item No.	Service Part No.	Description
1	518897	A/C Spring Lock Coupling, 5/8" Black
2	518898	A/C Spring Lock Coupling, 1/2" Blue
3	518900	A/C Spring Lock Coupling, 3/8" Red
4	518901	A/C Spring Lock Coupling, 3/4" White

No. 6930

Flange Puller

Item No.	Service Part No.	Description
1	511035	3/4" Flange Puller
2	511036	3/4" Forcing Screw
3	511038	Short Adapter
4	511037	Small Center
5	10059	Hex Head Cap Screws (3) (3/8 - 24 UNF x 3.0)
6	10060	Hex Head Cap Screws (3) (3/8 - 16 UNC x 3.0)



No. 6985

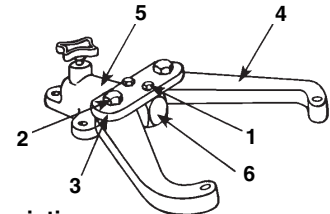
Mercedes/BMW Fan Clutch Tool



Item No.	Service Part No.	Description
1	6985-1	Replacement Tool
2	6985-2	Replacement Tool
3	6985-3	Replacement Tool (36 mm)
4	6985-4	Replacement Tool
5	6985-5	Replacement Tool (32 mm)
6	6985-6	Replacement Tool
7	6985-7	Replacement Tool
8	—	Carrying Case (Check for Availability)

No. 7020

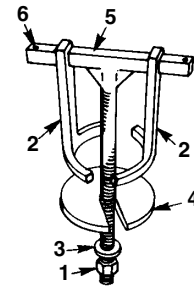
Bench-Mounted Holding Fixture



Item No.	Service Part No.	Description
1	10080	Hex Head Cap Screw
2	10099	Hex Head Cap Screw
3	28890	Strap
4	34310-BL2	Arm
5	34607	Base
6	34309	Pivot
—	104978	Parts List

No. 7024

Clutch Spring Compressor

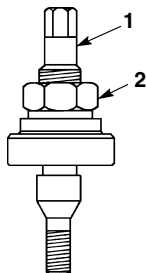


Item No.	Service Part No.	Description
1	10209	Hex Nut
2	31784	Jaw
3	12004	Washer
4	302281	Washer
5	31782	Center Tee
6	10578	Round Head Drive Screw, 6 x .25"

No. 7005

Power Steering Pump Pulley Replacer

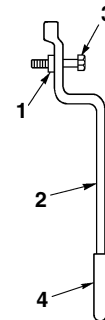
Item No.	Service Part No.	Description
1	34221	Screw
2	28746	Nut Body Assembly



No. 7028

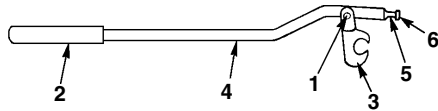
Clutch Adjusting Wrench

Item No.	Service Part No.	Description
1	29765	Spacer
2	34856	Wrench
3	14817	Cap Screw
4	210345	Handle Grip



No. 7029

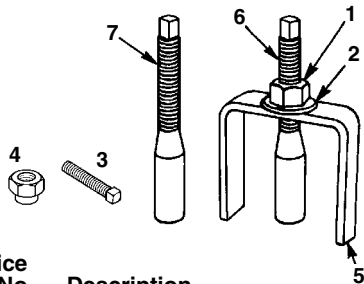
Caster / Camber Wrench



Item No.	Service Part No.	Description
1	11916	Roll Pin
2	210345	Handle Grip
3	23810	Hook
4	41666	Handle
5	29624	Nose
6	12131	Set Screw

No. 7031A

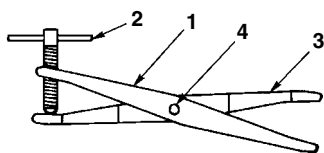
Steering Wheel Lock Plate Remover



Item No.	Service Part No.	Description
1	10211	Hex Nut, 9/16-12
2	14869	Washer, 9/16" S.A.E.
3	19551	Set Screw
4	204789	Adapter
5	29835	Bridge Bar
6	29836	Special Screw
7	38650	Metric Screw

No. 7034

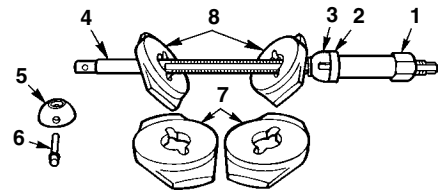
Disc Brake Pad Spreader



Item No.	Service Part No.	Description
1	35071	Spreader Half, Tapped
2	200108	Screw Assembly
3	35070	Spreader Half, Plain
4	15072	Button Head Cap Screw, 1/4-20 x 5/8"

No. 7045B

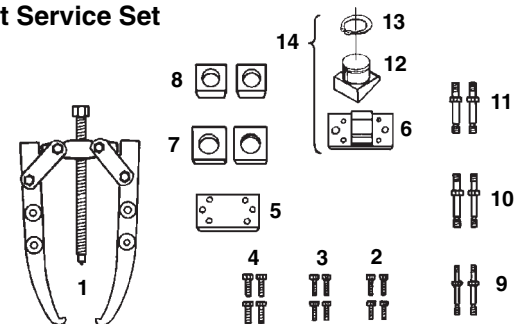
Front Coil Spring Compressor



Item No.	Service Part No.	Description
1	37666	Barrel Nut
2	211206	Thrust Bearing
3	311835	Lower Ball
4	49169	Forcing Screw
5	37731	Upper Ball
6	204444	Pin
7	42912-BK2	Support Plate, Large
8	42913-BK2	Support Plate, Small
-	105809	Parts List

No. 7057

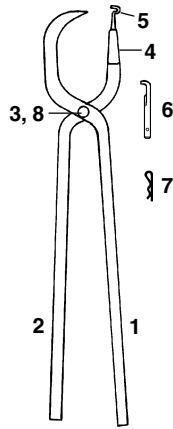
U-Joint Service Set



Item No.	Service Part No.	Description
1	1036	Puller (See No. 1036 for separate parts.)
2	16140	Cap Screw, 5/16-24
3	16141	Cap Screw, 3/8-24
4	16142	Cap Screw, 7/16-20
5	36143	Bridge Plate
6	36149	Side Plate (1 only)
7	201456	Journal Cap (1 only)
8	201457	Journal Cap (1 only)
9	201464	Leg, 3/8-24
10	201465	Leg, 5/16-24
11	201466	Leg, 7/16-20
12	201455	Swivel Plug
13	11999	Retaining Ring
14	201533	Side Plate Assembly (consists of Nos. 6, 12, 13)
-	10204	Hex Nut (1 only)
-	201534	Storage Box
-	18745	Storage Box Foam Pad
-	16143	Parts List

No. 7069A

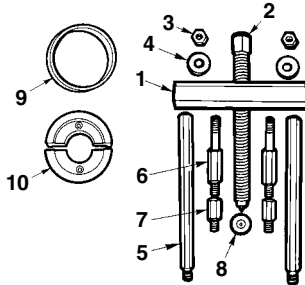
Heavy-Duty Truck Brake Spring Plier



Item No.	Service Part No.	Description
1	42546	Jaw Half
2	40561	Jaw Half
3	12724	Jam Nut
4	11587	Roll Pin
5	202621	Tip
6	204140	Tip
7	18290	Hair Pin
8	219500	Cap Screw

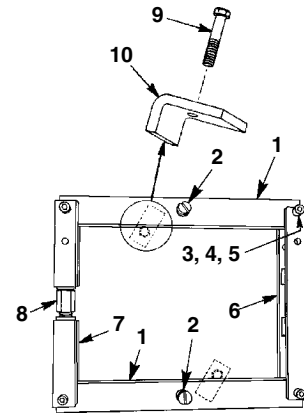
No. 7070A

Truck Transmission Bearing Service Set



Item No.	Service Part No.	Description
1	42542	Cross Block
2	34703	Forcing Screw
3	10208	Hex Nut, 1/2-13 (1 only)
4	12004	Washer, 1/2" S.A.E. (1 only)
5	310553	Long Leg (1 only)
6	310552	Short Leg (1 only)
7	202893	Adapter (1 only)
8	202916	Step Plate
9	202894	Sleeve
10	48387	Collet Half
-	105596	Parts List

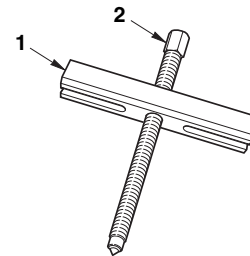
No. 7071 Differential Housing Spreader



Item No.	Service Part No.	Description
1	37050	Bolster
2	203006	Bearing Pin
3	12004	Washer, 17/32" I.D.
4	10208	Hex Nut, 1/2-13
5	12560	Socket Head Cap Screw, 1/2-13 x 2 1/2"
6	37047	Leg Weldment
7	37051	Spreader Assembly (includes 37048 Clevis; 37049 Tapped Clevis; 16209 Thrust Bearing Race; 11902 Retaining Ring.)
8	203005	Clevis Screw (included with Spreader)
9	10057	Cap Screw, 3/8-16 x 2"
10	207683	Bracket
-	104672	Parts List

No. 7075

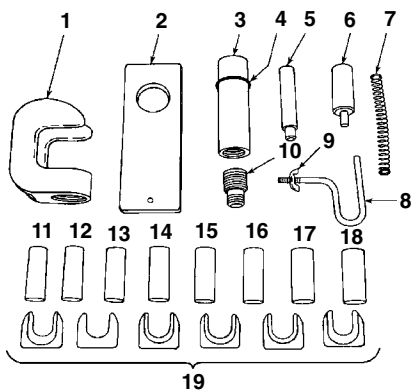
Transmission Output Shaft End Yoke Remover



Item No.	Service Part No.	Description
1	42542	Cross Block
2	34703	Forcing Screw

No. 7082B §

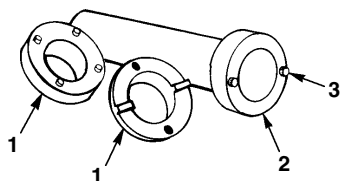
Automotive Piston Pin Remover / Installer Set



Item No.	Service Part No.	Description
1	302186	Anvil
2	17929	Base
3	17931-B	Tube Guide
4	17945	Retaining Ring
5	17935	Driver
6	17932-B	Body Guide
7	17934	Spring
8	302224	Rear Support
9	10589	Wing Nut
10	17930-B	Threaded Plug
11	17940	Pin Guide
12	17936	Pin Guide
13	17937	Pin Guide
14	17938	Pin Guide
15	17939	Pin Guide
16	17941	Pin Guide
17	17942	Pin Guide
18	18729	Pin Guide
19	39889	Insert 1
19	39890	Insert 2
19	39888	Insert 3
19	39886	Insert 4
19	39887	Insert 5
19	39922	Insert 6
-	60835	Plastic Case
-	104609	Parts List

No. 7084

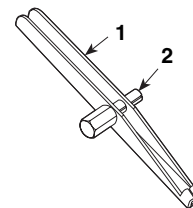
Transmission Input Shaft Tool



Item No.	Service Part No.	Description
1	43199	Spanner Wrench Adapter
2	43195	Spanner Wrench
3	13720	Groove Pin

No. 7085

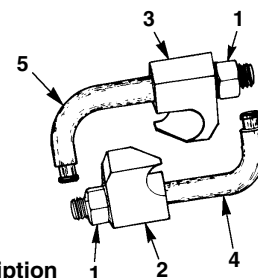
Dust Boot Clamp Installer



Item No.	Service Part No.	Description
1	18864	Dust Boot Clamp Installer
2	220040	Pin
-	18865	Instruction Sheet

No. 7091

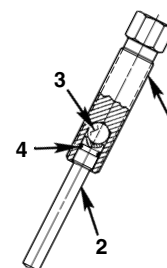
Ford Caster / Camber Alignment Tool



Item No.	Service Part No.	Description
1	10208	Hex Nut
2	43359	Left Body
3	43360	Right Body
4	38532	Hook
5	38533	Hook

No. 7104

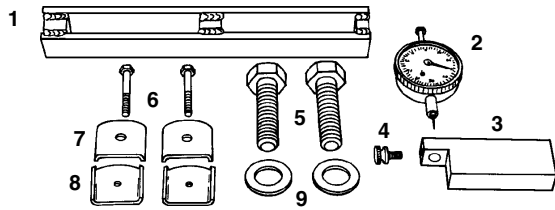
GM Power Steering Pump Pulley Removal Screw



Item No.	Service Part No.	Description
1	27445	Forcing Screw
2	310901	Long Nose Cone
3	10378	Steel Ball
4	10266	O-ring

No. 7106

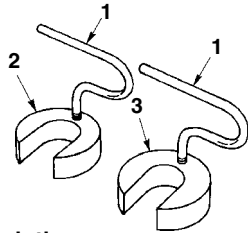
Cylinder Liner Height Gauge w/ Hold-Down Bar



Item No.	Service Part No.	Description
1	39431	Clamping Bar
2	205655	Dial Indicator
3	39432	Gauge Bar
4	205715	Thumb Screw
5	205702	Hex Head Cap Screw, $11/16-16$ UN-2A
6	10024	Hex Head Cap Screw, $1/4-20 \times 13/4$ "
7	205653	Drilled Spacer
8	205652	Tapped Spacer
9	24826	Washer
-	307382	Carrying Case
-	43513	Carrying Case Foam Insert
-	102370	Parts List

No. 7108

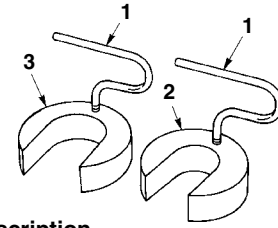
Transmission Timing Block Tool



Item No.	Service Part No.	Description
1	302224	Rear Support
2	7108-1	Transmission Timing Block Tool (includes #302224)
3	7108-2	Transmission Timing Block Tool (includes #302224)

No. 7109

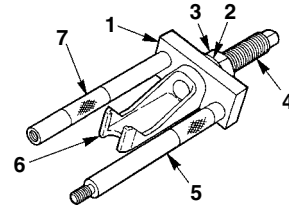
Transmission Timing Block Tool



Item No.	Service Part No.	Description
1	302224	Rear Support
2	7109-1	Transmission Timing Block Tool (includes #302224)
3	7109-2	Transmission Timing Block Tool (includes #302224)

No. 7117

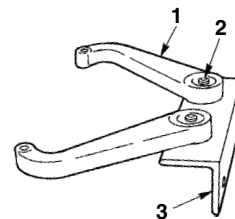
Caterpillar Fuel Injector Nozzle Puller



Item No.	Service Part No.	Description
1	206508	Plate
2	14597	Bearing Race
3	10213	Hex Nut
4	39992	Screw
5	39989	Leg
6	39993	Puller Jaw
7	39990	Leg

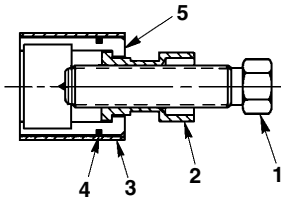
No. 7118

Transmission Adapter Kit



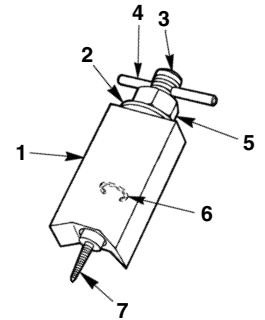
Item No.	Service Part No.	Description
1	34310-BL2	Arm
2	10083	Hex Head Cap Screw, $1/2-13 \times 11/2$ "
3	43883	Angle
-	10099	Hex Head Cap Screw, $5/8-11 \times 11/2$ "
-	10208	Hex Nut, $1/2-13$
-	102383	Operating Instructions

No. 7119
Compressor Drive Gear Coupling Puller



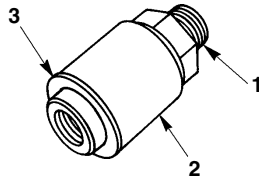
Item No.	Service Part No.	Description
1	39972	Forcing Screw
2	39973	Nut
3	206420	Tube
4	15125	O-ring
5	39971	Collet Half

No. 7122R
Ford Lock Pin Remover



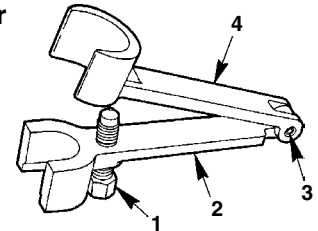
Item No.	Service Part No.	Description
1	302767	Bridge
2	10257	Washer
3	302766	Forcing Screw
4	13554	Slotted Spring Pin
5	10203	Hex Nut
6	18761	Retaining Ring
7	37907	Remover Tip

No. 7120A
Drive Pulley Installer



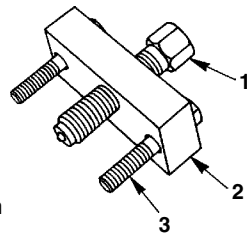
Item No.	Service Part No.	Description
1	39978	Forcing Screw
2	39979	Nut
3	206431	Thrust Bearing Washer

No. 7134 §
C.V. Joint Separator



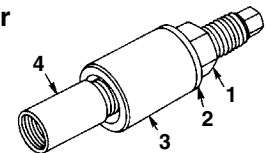
Item No.	Service Part No.	Description
1	205422	Screw
2	43996	Spreader Half
3	11916	Roll Pin
4	39725	Spreader Half

No. 7120B
Drive Pulley Remover



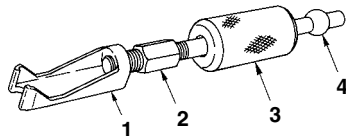
Item No.	Service Part No.	Description
1	24426	Screw
2	39975	Cross Block
3	206422	Hex Head Cap Screw

No. 7135A
FWD Front Hub Installer



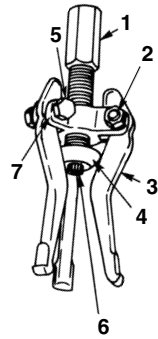
Item No.	Service Part No.	Description
1	12121	Hex Nut, 3/4-10
2	12330	Washer
3	207968	Sleeve
4	303374	Screw

No. 7121
Fuel Injector
Nozzle Puller



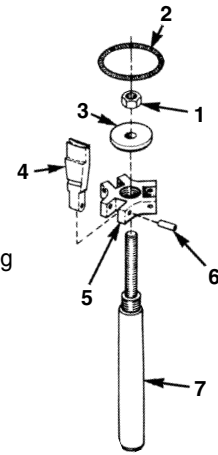
Item No.	Service Part No.	Description
1	39993	Puller Jaw
2	206437	Reducing Adapter
3	208911	Hammer
4	208912	Shank

No. 7136
Bearing Cup Remover



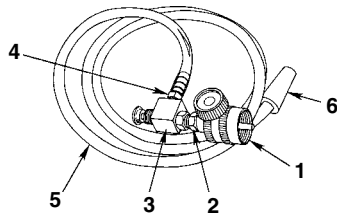
Item No.	Service Part No.	Description
1	203662	Forcing Screw
2	10384	Hex Jam Nut
3	37554	Puller Jaw
4	27299	Cone Expander
5	22021	Hex Head Cap Screw
6	13334	Shoulder Screw
7	24544	Puller Head

No. 7180
Universal Bearing Cup Installer



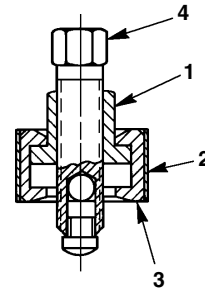
Item No.	Service Part No.	Description
1	10213	Hex Nut, 5/8-18
2	207561	Extension Spring
3	210583	Expander
4	52038	Jaw
5	305130	3-Way Head
6	209624	Pin
7	305129	Handle
-	104916	Parts List

No. 7148
Propane Enrichment Kit



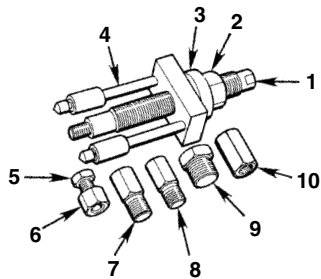
Item No.	Service Part No.	Description
1	15912	Tank Valve
2	310831	Straight Adapter
3	15914	Poppet Valve
4	15913	Barbed Fitting, 1/8 NPTM-1/4
5	15028	Plastic Tubing
6	201186	Plug

No. 7185
Power Steering Pump / Alternator Pulley Remover



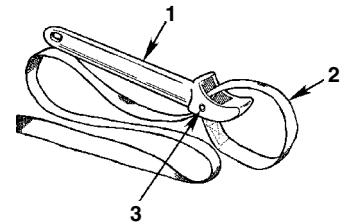
Item No.	Service Part No.	Description
1	304107	Nut
2	208703	Sleeve
3	304108	Collet Half
4	27447	Forcing Screw

No. 7155A
Mack Fuel Injector Nozzle Puller



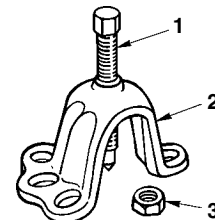
Item No.	Service Part No.	Description
1	303903	Forcing Screw, M10 x 1.0mm
2	10216	Nut, 3/4-10
3	12702	Thrust Bearing
4	208403	Bridge
5	10047	Cap Screw, 3/4-10
6	208642	Adapter
7	208533	Adapter, M14 x .5mm
8	208534	Adapter, 1/2-20
9	208535	Adapter, M20 x .75mm
10	215751	Adapter, M14 x 1.5mm
-	14701	Plastic Case
-	104721	Parts List

No. 7206
Multi-Purpose Strap Wrench



Item No.	Service Part No.	Description
1	45742	Handle
2	305085	Strap
3	210749	Slotted Spring Pin

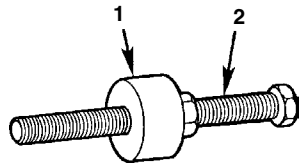
No. 7208A
Front Hub Installer and Puller



Item No.	Service Part No.	Description
1	24833	Forcing Screw
2	520968	Front Hub Remover
3	10394	Jam Nut

No. 7209

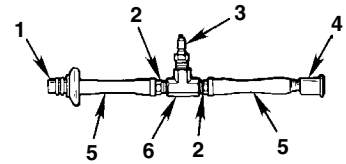
GM Power Steering Pump Pulley Installer



Item No.	Service Part No.	Description
1	312346	Nut
2	217946	Cap Screw, 3/8-16 x 4"

No. 7236

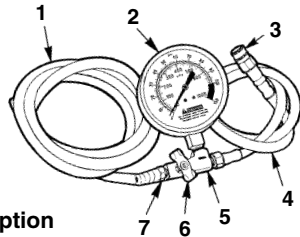
Spring Lock Coupling Adapter



Item No.	Service Part No.	Description
1	212769	Spring Lock Coupler, Male
2	212802	Barbed Hose Fitting
3	206877	Coupler Plug
4	212755	Spring Lock Coupler, Female
5	212801	Hose (2 pcs., 2 1/4" Long)
6	12165	Pipe Tee

No. 7211

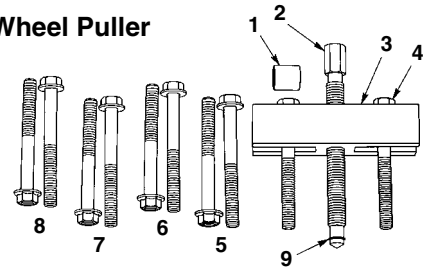
Gauge & Hose Assembly



Item No.	Service Part No.	Description
1	15028	Flexible Tubing
2	309124	0-100 PSI Pressure Gauge
3	206878	Coupler Socket
4	211398	Pressure Hose
5	19463	Tee Fitting
6	208389	Valve
7	15913	Barbed Hose Fitting

No. 7245

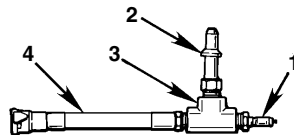
Steering Wheel Puller



Item No.	Service Part No.	Description
1	209802	Collar
2	304828	Forcing Screw
3	304855	Cross Block
4	209950	Hex Flange Head Screw, 3/8-16 x 3 1/2" (1 only, 2 reqd.)
5	209951	Hex Flange Head Screw, 5/16-18 x 3 1/2" (1 only, 2 reqd.)
6	209952	Hex Flange Head Screw, 5/16-24 x 3 1/2" (1 only, 2 reqd.)
7	209953	Hex Flange Head Screw, M8-1.25 x 90mm (1 only, 2 reqd.)
8	218177	Hex Flange Head Screw, 5/16-18 x 4" (1 only, 2 reqd.)
9	209803	O-ring

No. 7213

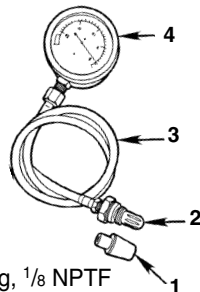
In-Line Adapter



Item No.	Service Part No.	Description
1	206877	Coupler Plug
2	440519	Fitting
3	12165	Pipe Tee
4	212155	Hose with Fittings

No. 7215

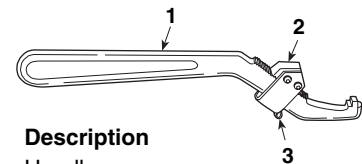
Exhaust Back Pressure Gauge



Item No.	Service Part No.	Description
1	211474	Rubber Plug
2	212339	Manifold Adapter
3	306508	Hose
4	306509	Pressure Gauge
-	214675	Barbed Hose Fitting, 1/8 NPTF
-	14680	90° Street Elbow
-	105909	Instruction Sheet

No. 7246

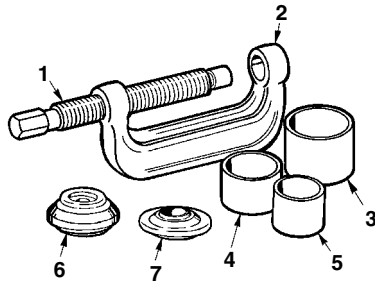
Adjustable Spanner Wrench



Item No.	Service Part No.	Description
1	31634	Handle
2	23750	Adjusting Block
3	23753	Check Spring

**No. 7248
7249**

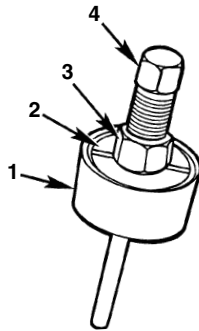
**Ball Joint
Service Tools**



Item No.	Service Part No.	Description
1	222395	Forcing Screw Assembly (consists of 37703 Forcing Screw, 29501 Plug, 14472 5/8" Dia. Steel Ball, 10273 O-ring.)
2	41925	C-Frame
3	29503	Receiving Tube, 3" O.D., 2 ³ / ₄ " I.D.
4	29504	Receiving Tube, 2 ¹ / ₂ " O.D., 2 ¹ / ₄ " I.D.
5	29505	Receiving Tube, 2" O.D., 1 ³ / ₄ " I.D.
6	305228	Removing Adapter
7	305227	Installing Adapter
-	104950	Parts List

No. 7262

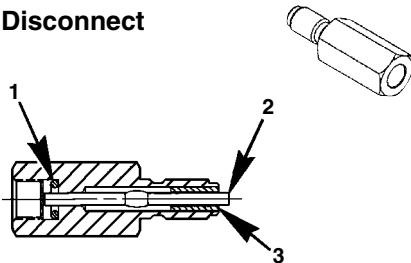
**GM Power Steering Pump
Pulley Remover**



Item No.	Service Part No.	Description
1	208703	Sleeve
2	304108	Collet Half
3	304107	Nut
4	27445	Forcing Screw

No. 7272

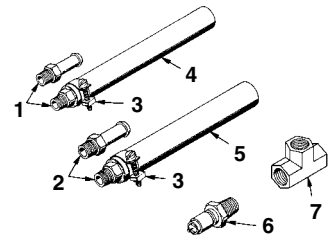
**EFI Quick Disconnect
Fitting**



Item No.	Service Part No.	Description
1	15023	O-ring
2	213261	Activator Pin
3	16832	Slotted Spring Pin

No. 7273

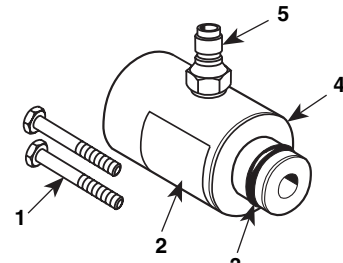
Pressure Adapter



Item No.	Service Part No.	Description
1	213721	Carburetor Fuel Fitting (5/16" Hose)
2	213722	Carburetor Fuel Fitting (3/8" Hose)
3	213720	Hose Clamp
4	211473	Hose, 5/16" I.D., 4" Long
5	213719	Hose, 3/8" I.D., 4" Long
6	206877	Coupler Plug
7	12165	Tee Fitting (1/8 NPTF)
-	106177	Parts List

**No. 7292A
7293A**

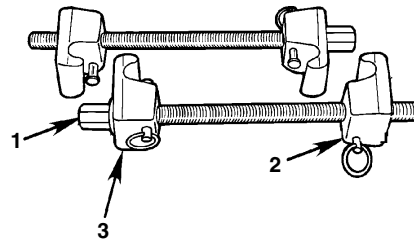
**Quick Disconnect
Fitting**



Item No.	Service Part No.	Description
1	210420	Metric Hex Head Cap Screw
2	210192	Warning Decal
3	18974	O-ring for 7292A
3	18996	O-ring for 7293A
4	48767	Fuel Pressure Test Adapter for 7292A
4	48768	Fuel Pressure Test Adapter for 7293A
5	206877	Coupler Plug
-	105927	Parts List

No. 7294

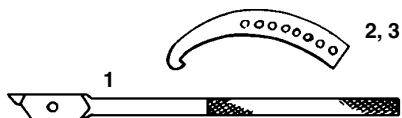
MacPherson Strut Spring Hook Compressor



Item No.	Service Part No.	Description
1	7294-3	Forcing Screw and Thrust Bearing Washer
2	7294-1	Threaded Hook and Clevis Pin
3	7294-2	Hook and Clevis Pin

**No. 7307
7308**

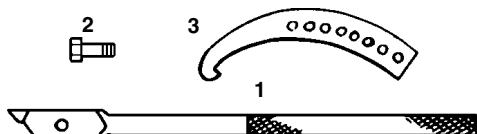
Adjustable Hook Spanner Wrench



Item No.	Service Part No.	Description
1	38012	Forged Handle
2	44502	Jaw
3	41617	Jaw for 7308
4	200017	Pivot Pin Body
5	200018	Pivot Pin Screw
6	200019	Pivot Pin Washer

No. 7309

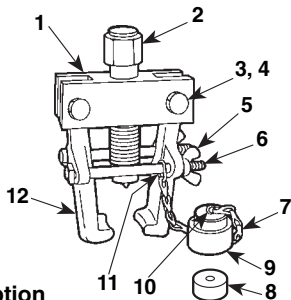
Heavy-Duty Adjustable Spanner



Item No.	Service Part No.	Description
1	37813	Forged Handle
2	208602	Cap Screw
3	41617	Jaw

No. 7310

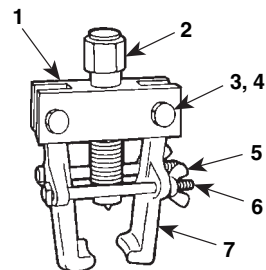
Pitman Arm Puller



Item No.	Service Part No.	Description
1	39131	Cross Block
2	26619	Forcing Screw
3	10069	Hex Head Cap Screw
4	10388	Hex Jam Nut
5	10590	Wing Nut, 5/16-18
6	13338	Hex Head Cap Screw
7	10473	Sash Chain
8	205862	Shaft Protector
9	205863	Shaft Protector
10	10573	Cotter Pin
11	10462	Hog Ring #3
12	208910	Puller Jaw

No. 7311

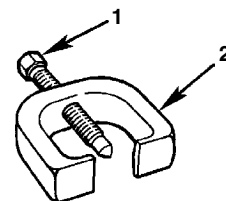
Pitman Arm Puller



Item No.	Service Part No.	Description
1	201110	Block
2	23609	Screw
3	10388	Hex Jam Nut
4	22029	Hex Head Cap Screw
5	10590	Wing Nut, 5/16-18
6	10043	Hex Head Cap Screw
7	38430	Puller Jaw

No. 7314

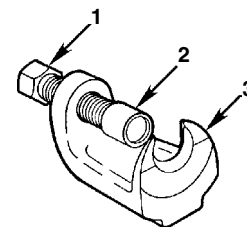
Pitman Arm Puller



Item No.	Service Part No.	Description
1	24833	Forcing Screw
2	305972	Puller

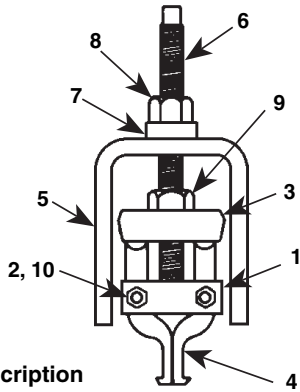
No. 7315

Universal Tie Rod End Remover



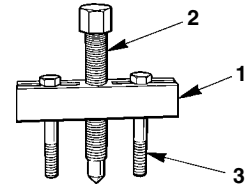
Item No.	Service Part No.	Description
1	304238	Forcing Screw
2	209390	Cap
3	45495	Body
-	10300	O-ring

**No. 7318
7319**
Pilot Bearing Puller



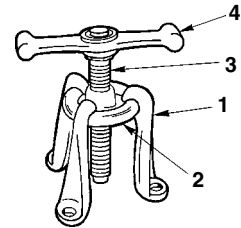
Item No.	Service Part No.	Description
1	27044	Cross Block
2	10014	Cap Screw
3	201952	Adjusting Yoke
4	29185	Jaw for 7318, 1/2" to 1 1/2" Spread
4	29189	Jaw for 7319, 7/8" to 2" Spread
5	35033	Puller Bridge
6	200063	Forcing Screw
7	24839	Washer
8	10210	Hex Nut, 1/2-20
9	10390	Hex Jam Nut, 1/2"
10	10382	Hex Jam Nut

No. 7393
Gear & Pulley Puller



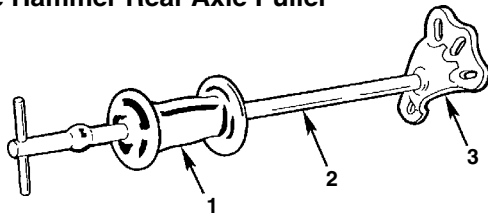
Item No.	Service Part No.	Description
1	26603	Cross Block
2	24833	Forcing Screw, 5 1/2"
3	10060	Cap Screw, 3/8 NC (1 only)

No. 7394
Universal Hub Puller



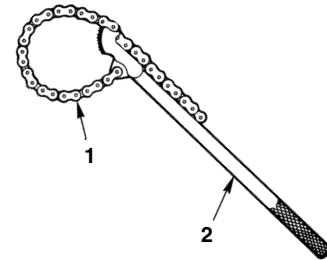
Item No.	Service Part No.	Description
1	32937	Puller Leg
2	32939	Center Hub
3	32940	Forcing Screw, 1-14 x 9" Long
4	32942	Striking Wrench

No. 7374
Slide Hammer Rear Axle Puller



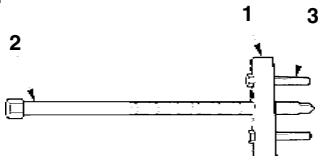
Item No.	Service Part No.	Description
1	34331	Hammer
2	208627	Shank and Tee Bar Assembly
3	7372	Pulling Adapter Plate

**No. 7400
7401**
Ratcheting Chain Wrench



Item No.	Service Part No.	Description
1	13905	16" Chain for 7400
1	11608	24" Chain for 7401
2	51033	Handle for 7400
2	33118	Handle for 7401
-	17154	Handle Grip for 7400

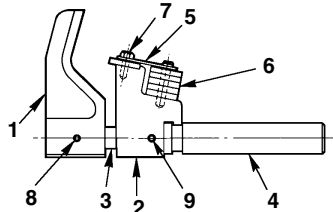
No. 7392
Gear & Pulley Puller



Item No.	Service Part No.	Description
1	26603	Cross Block
2	24832	Forcing Screw, 13"
3	10060	Cap Screw, 3/8 NC (1 only, 2 reqd.)

**No. 7402
7402M**

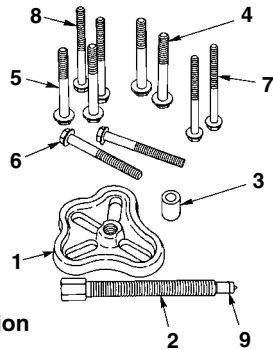
Universal Outside Thread Chaser



Item No.	Service Part No.	Description
1	46107	V-Pad
2	52518	Post
3	25512	Screw
4	25509	Handle
5	25510	Strap
6	8090	8-10-12-14 Pitch Die for 7402
6	8091	16-18-20-24 Pitch Die for 7402
6	8092	11-11½ Pitch Die for 7402
6	8093	4-5 Pitch Die for 7402
6	8094	6-7 Pitch Die for 7402
6	8095	7½-9 Pitch Die for 7402
6	8096	1 mm–1.75 mm Pitch Die for 7402M
6	8097	2 mm–3.5 mm Pitch Die for 7402M
6	8098	4 mm Pitch Die for 7402M
7	10027	Hex Head Cap Screw
8	10585	Roll Pin, 1"
9	12828	Roll Pin, ¼ x ¾

No. 7403

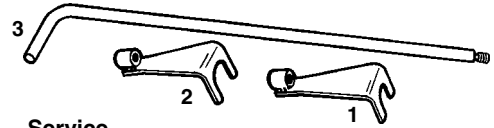
Steering Wheel / Pulley / Flywheel Puller



Item No.	Service Part No.	Description
1	208170	Flange
2	304828	Forcing Screw
3	209802	Collar
4	209950	Hex Flange Head Cap Screw ¾–16 x 3½
5	209951	Hex Flange Head Cap Screw ⅝–16 x 3½
6	209952	Hex Flange Head Cap Screw ⅝–16–24 x 3½
7	218177	Hex Flange Head Cap Screw ⅝–16–18 x 4
8	209953	Hex Flange Head Cap Screw M8 x 1.25 x 90mm
9	209803	O-ring

No. 7413

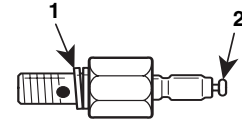
Ford / Chrysler Heater Hose Disconnect Tool



Item No.	Service Part No.	Description
1	7413-1	⅝" Heater Hose Connection Remover
2	7413-2	¾" Heater Hose Connection Remover
3	7413-3	Handle

No. 7426

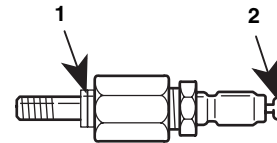
Quick Disconnect Banjo Fitting



Item No.	Service Part No.	Description
1	215278	Sealing Ring Washer
2	215806	Shrader Valve Core

No. 7427

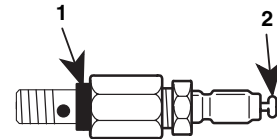
Quick Disconnect Banjo Fitting



Item No.	Service Part No.	Description
1	215280	Sealing Ring Washer
2	215806	Shrader Valve Core

No. 7428

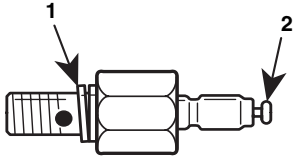
Quick Disconnect Banjo Fitting



Item No.	Service Part No.	Description
1	215282	Sealing Ring Washer
2	215806	Shrader Valve Core

No. 7429

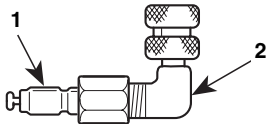
Quick Disconnect Banjo Fitting



Item No.	Service Part No.	Description
1	215278	Sealing Ring Washer
2	215806	Shrader Valve Core

No. 7430

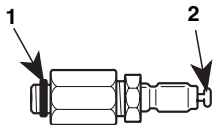
Quick Disconnect 90° Elbow Fitting



Item No.	Service Part No.	Description
1	212156	Quick-Plug Coupler
2	215284	Elbow Adapter Fitting, 1/8 NPT

No. 7435§

Quick Disconnect Fitting



Item No.	Service Part No.	Description
1	215742	O-ring
2	215806	Shrader Valve Core

No. 7436§

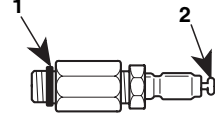
Quick Disconnect Fitting



Item No.	Service Part No.	Description
1	215742	O-ring
2	215806	Shrader Valve Core

No. 7437

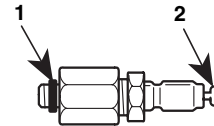
Quick Disconnect Fitting



Item No.	Service Part No.	Description
1	19088	O-ring
2	215806	Shrader Valve Core

No. 7438

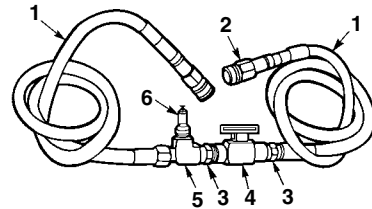
Quick Disconnect Fitting



Item No.	Service Part No.	Description
1	11437	O-ring
2	215806	Shrader Valve Core

No. 7440

CIS Fuel Line Adapter



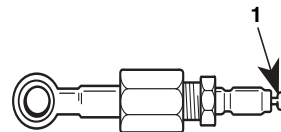
Item No.	Service Part No.	Description
1	211398	Pressure Hose
2	206878	Coupler Socket
3	12169	Hex Nipple, 1/8 NPT
4	214114	Plug Valve
5	19463	Tee Fitting
6	206877	Coupler Plug

No. 7441

7442

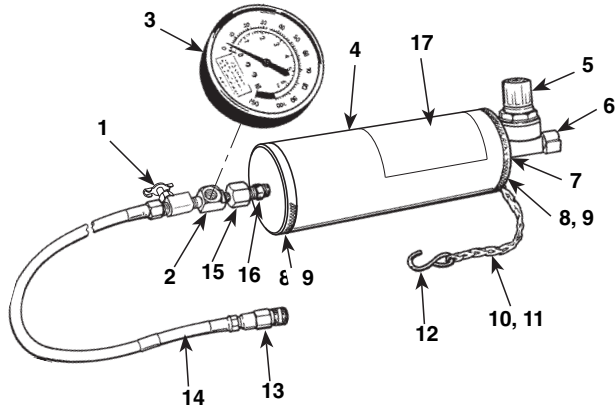
7443

Banjo Fitting



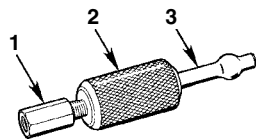
Item No.	Service Part No.	Description
1	215806	Shrader Valve Core

No. 7448
Canister-Type Fuel Injector Cleaner



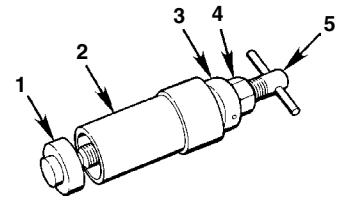
Item No.	Service Part No.	Description
1	208389	Valve
2	19463	Tee Fitting
3	313575	Pressure Gauge (0-100 PSI / 0-7 BAR)
4	47955	Cylinder Body
5	213299	Air Regulator
6	15373	90° Elbow Fitting
7	16494	Straight Fitting, 1/4 NPTF
8	309796	Cylinder Cap (1 only, 2 reqd.)
9	213209	O-ring (1 only, 2 reqd.)
10	10473	Sash Chain, 67/8" long
11	213876	Split Ring
12	15665	"S" Hook
13	206878	Coupler Socket
14	306905	Hose (1/8 NPTF x 6' long) with Fitting
15	17022	Straight Fitting
16	216297	Check Valve
17	313576	Decal
-	107340	Parts List
-	106103	Instruction Manual

No. 7454
Navistar® Fuel Injector Nozzle Puller



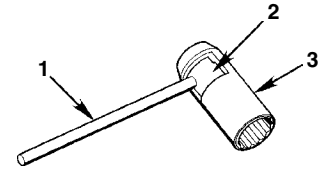
Item No.	Service Part No.	Description
1	215844	Adapter
2	208911	Hammer
3	208912	Shank

No. 7455
Fuel Injector Nozzle Puller / Installer



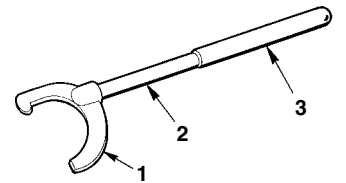
Item No.	Service Part No.	Description
1	215752	Installation Gauge
2	215753	Tube
3	15427	Bearing
4	10213	Nut
5	309144	Forcing Screw
-	14701	Plastic Case

No. 7458
Bosch Nozzle Socket



Item No.	Service Part No.	Description
1	201278	Handle Assembly
2	201276	Inner Socket
3	201275	Outer Socket

No. 7461
Fuel Injection Pump Rotating Tool



Item No.	Service Part No.	Description
1	208399	Jaw
2	208398	Handle
3	11945	Handle Grip

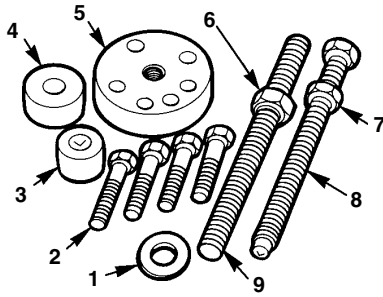
No. 7462
Hydraulic Brake Spring Remover / Installer



Item No.	Service Part No.	Description
1	309350	Handle
2	215922	Plate

No. 7464

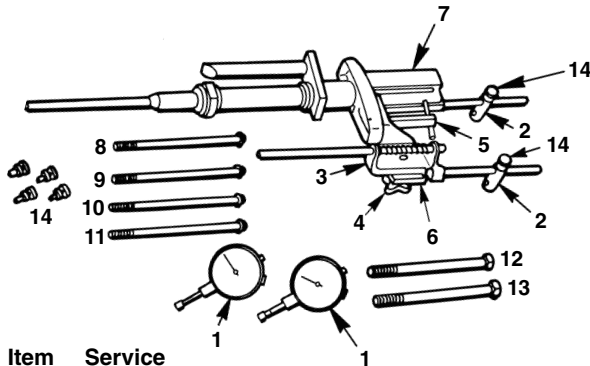
Chrysler Crankshaft Pulley Remover / Installer



Item No.	Service Part No.	Description
1	15513	Thrust Race
2	211993	Cap Screw, M8 x 1.25 x 35 mm (1 only)
3	217294	Shaft Protector
4	217295	Drive Plate
5	310430	Puller Plate
6	18911	Hex Nut
7	19412	Hex Nut
8	217293	Special Hex Cap Screw
9	216232	Threaded Rod

No. 7470

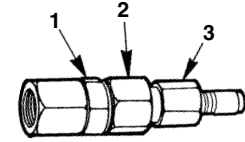
Cummins Diesel Injector Timing Tool Set



Item No.	Service Part No.	Description
1	308171	Dial Indicator Gauge (1 only)
2	214633	Dial Indicator Support (1 only)
3	47116	Push Tube Plunger Bracket
4	214632	Push Tube Plunger Knob
5	308394	Locking Nut
6	53091	Center Support Bracket
7	61798	Bracket
8	215342	Cap Screw, M8 x 1.25 x 150 mm
9	215343	Cap Screw, 5/16-18 x 6"
10	215344	Cap Screw, 3/8-16 x 6"
11	215345	Cap Screw, 3/8-24 x 6"
12	215346	Cap Screw, 1/2-13 x 6"
13	215347	Cap Screw, 1/2-20 x 6"
-	61744	Storage Case
-	105277	Parts List

No. 7472

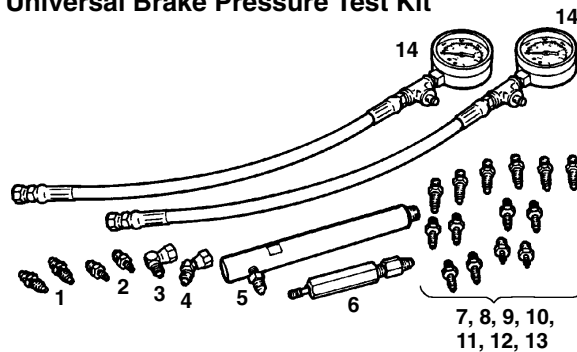
Conversion Adapter



Item No.	Service Part No.	Description
1	218214	Straight Fitting
2	210416	Straight Fitting
3	212156	Quick-Plug Coupler

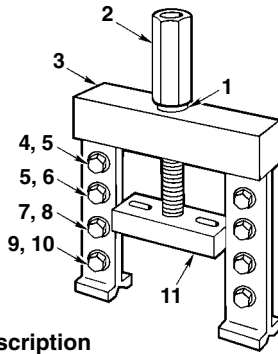
No. 7488A

Universal Brake Pressure Test Kit



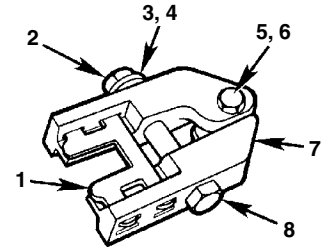
Item No.	Service Part No.	Description
1	48854	Straight Fitting (7/16-20 UNF 37° Flare to 7/16-20 UNF 45° Flare)
2	48855	Straight Fitting (7/16-20 UNF 37° Flare to M7 x 1.0 45° Flare)
3	16867	90° Elbow Fitting (37° Flare Male to 37° Flare Female Swivel)
4	16868	45° Elbow Fitting (37° Flare Male to 37° Flare Female Swivel)
5	311102	Teves Adapter
6	311096	Anti-Lock Pressure Adapter
7	48678	Straight Fitting (7/16-20 UNF 37° Flare to M8 x 1.25 37° Flare)
8	48674	Straight Fitting (7/16-20 UNF 37° Flare to 1/4-28 UNF 37° Flare)
9	48676	Straight Fitting (7/16-20 UNF 37° Flare to 5/16-24 UNF 37° Flare)
10	48675	Straight Fitting (7/16-20 UNF 37° Flare to 3/8-24 UNF 37° Flare)
11	48673	Straight Fitting (7/16-20 UNF 37° Flare to 7/16-24 UNS 37° Flare)
12	48679	Bleeder Adapter (7/16-20 UNF 37° Flare to M10 x 1.0 45° Flare)
13	48677	Straight Fitting (7/16-20 UNF 37° Flare to M10 x 1.5 37° Flare)
14	7486	Gauge Assembly, 0-3000 PSI (1 only)
-	105719	Parts List
-	105760	Technician Reference Guide

No. 7490
U-Joint Tool



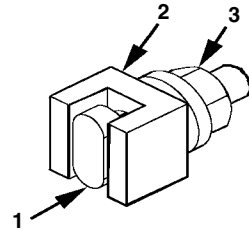
Item No.	Service Part No.	Description
1	24837	Forcing Screw Washer
2	216773	Forcing Screw Nut (3/4 - 16)
3	48063	Bridge
4	211993	Cap Screw, M8 x 1.25 x 35mm, Gr. 10.9
5	10257	Flat Washer for 5/16" Bolt
6	216775	Cap Screw, 5/16-24 x 1 1/2, Grade 8
7	216776	Cap Screw, 3/8-24 x 1 1/2, Grade 8
8	10258	Flat Washer for 3/8" Bolt
9	216792	Cap Screw, 7/16-20 x 1 1/2, Grade 8
10	13339	Flat Washer for 7/16" Bolt
11	310010	Screw and Bar Assembly
-	216774	Screw Holder
-	105334	Parts List

No. 7504
Inner Tie Rod
Crimper Tool



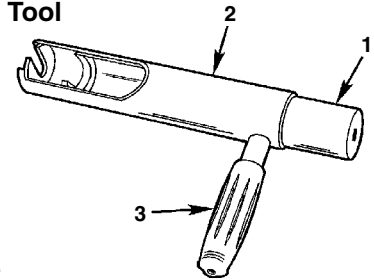
Item No.	Service Part No.	Description
1	310429	Guide Plate
2	215654	Nut, 1/2-13 UNC, Grade 8
3	15513	Thrust Bearing Washer
4	217285	Hex Washer
5	10055	Cap Screw, 3/8-16 x 1 1/2
6	12013	Locknut, 3/8-16
7	48305	Crimper
8	18213	Cap Screw, 1/2-13 x 3 1/2
-	105584	Instruction Sheet

No. 7491C
GM Upper Control Arm
Knock-Out Tool



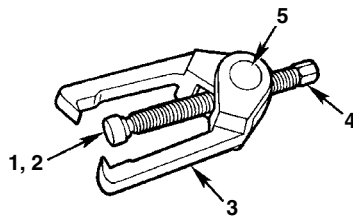
Item No.	Service Part No.	Description
1	506142	Forcing Screw
2	506143	Bridge
3	506141	Spherical Flange Nut

No. 7505
Inner Tie Rod Tool



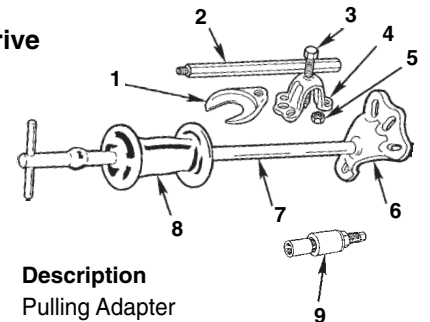
Item No.	Service Part No.	Description
1	48309	Inside Tube Wrench
2	48310	Outside Tube Wrench
3	11390	Handle Grip
-	105585	Instruction Sheet

No. 7503
Outer Tie Rod
Remover



Item No.	Service Part No.	Description
1	310484	Forcing Screw Tip
2	215219	Retaining Ring (not shown)
3	48332	Tie Rod Remover Jaw
4	308884	Forcing Screw
5	217325	Pivot Pin

No. 7506
Front Wheel Drive
Service Set

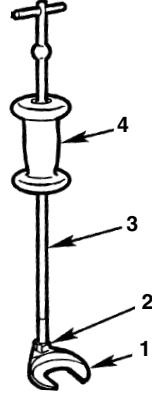


Item No.	Service Part No.	Description
1	306284	Pulling Adapter
2	7508	Extension
3	24833	Forcing Screw
4	47407	Puller Head
5	10394	Nut, 5/8-18
6	7372	Pulling Adapter Plate
7	208627	Shank and Tee Bar Assembly
8	34331	Hammer
9	7135A	Front Hub Installer

**No. 7507
7509**

Inner C.V. Joint Puller

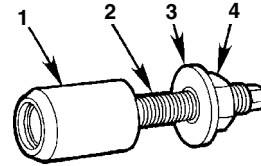
Item No.	Service Part No.	Description
1	306284	Puller Adapter
2	10394	Jam Nut, 5/8-18
3	208627	Shank and Tee Bar Assembly (7509)
4	34331	5 Lb. Hammer (7509)



No. 7535

Subaru Front Axle Shaft Installer

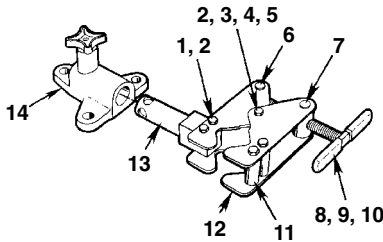
Item No.	Service Part No.	Description
1	216878	Sleeve
2	309750	Forcing Screw
3	12330	Washer
4	12121	Hex Nut, 3/4-10 UNC



No. 7515§

Roto and Bar Mount Vise

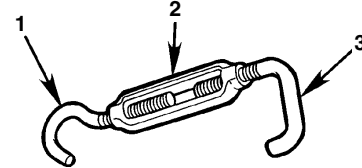
Item No.	Service Part No.	Description
1	17243	Cap Screw, 3/8-16 x 2 1/2
2	12013	Locknut, 3/8-16
3	13201	Cap Screw, 3/8-16 x 2 3/4
4	10258	Washer
5	215818	Short Spacer
6	309245	Pivot Screw
7	215815	Pivot Screw
8	309229	Adjusting Screw Assembly
9	10207	Nut
10	14223	Nut, 7/16-20
11	215817	Long Spacer
12	47736	Claw Plate
13	47737	Pivot
14	34607	Base Assembly
-	105273	Parts List



No. 7539

GM F-Body Camber Adjusting Tool

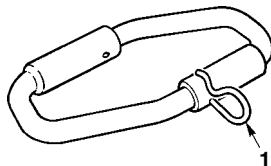
Item No.	Service Part No.	Description
1	216338	Hook Bolt
2	216337	Turnbuckle
3	309788	Hook



No. 7532

**Strut Compressor
Bridge Accessory**

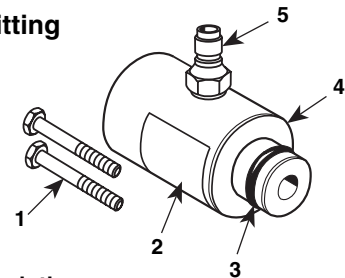
Item No.	Service Part No.	Description
1	220241	Special Hair Pin
-	105832	Instruction Sheet



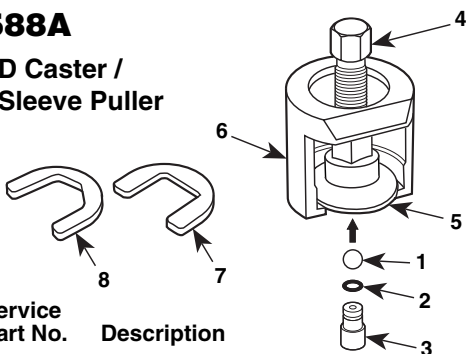
No. 7577

Quick Disconnect Fitting

Item No.	Service Part No.	Description
1	14513	Hex Head Cap Screw, M6 x 1.0 x 50 mm
2	210192	Warning Decal
3	18996	O-ring
4	47447	Fuel Pressure Test Adapter
5	206877	Coupler Plug
-	105927	Instruction Sheet

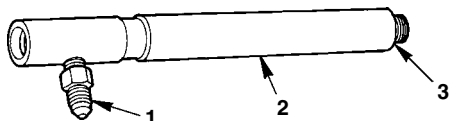


No. 7588A
Ford 4WD Caster /
Camber Sleeve Puller



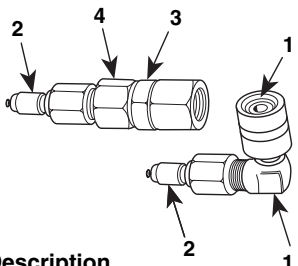
Item No.	Service Part No.	Description
1	10378	Metal Ball
2	10266	O-ring
3	219327	Screw Tip
4	27445	Forcing Screw
5	311573	Swivel Nut
6	311575	Bushing Adapter
7	218990	Horseshoe Clip (.970)
8	221476	Horseshoe Clip (1.110)
-	106014	Parts List

No. 7591
Teves / Delco ABS Pressure Fitting



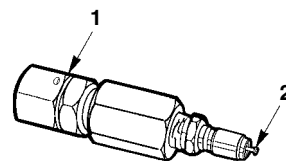
Item No.	Service Part No.	Description
311102 includes the following:		
1	16819	Adapter Fitting
2	48682	Adapter
3	218397	O-ring Packing

No. 7597
Conversion Adapter Kit



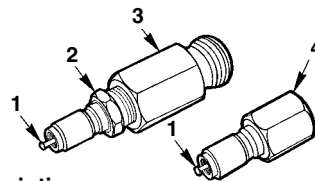
Item No.	Service Part No.	Description
1	215285	90° Elbow Fitting
2	212156	Quick Coupler
3	218214	Straight Fitting
4	210416	Straight Fitting

No. 7598§
Conversion Adapter



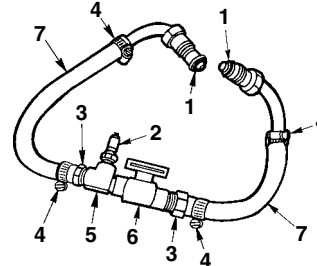
Item No.	Service Part No.	Description
440512 includes the following:		
1	214053	Straight Fitting
2	215806	Schrader Valve Core

No. 7599§
Conversion Adapter



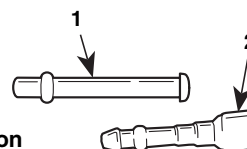
Item No.	Service Part No.	Description
1	215806	Schrader Valve Core
2	206877	Coupler Plug
3	310670	Quick-Disconnect Fitting (includes 206877)
4	212156	Quick-Plug Coupler

No. 7626
TBI Fuel Line Adapter



Item No.	Service Part No.	Description
1	18974	O-ring
2	206877	Coupler Plug
3	213721	Carburetor Fuel Fitting
4	210331	Hose Clamp
5	19463	Tee Fitting
6	214114	Plug Valve
7	211473	Pressure Hose

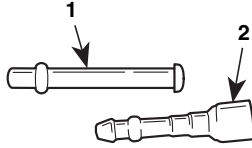
No. 7628
5/16" Special Fitting Set



Item No.	Service Part No.	Description
1	216812	Special Fitting
2	216263	Special Fitting

No. 7629

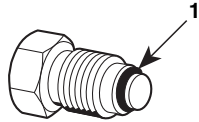
3/8" Special Fitting Set



Item No.	Service Part No.	Description
1	216811	Special Fitting
2	216810	Special Fitting

No. 7632

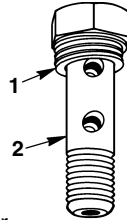
Fuel Return Line Plug



Item No.	Service Part No.	Description
1	11438	Viton O-ring

No. 7634

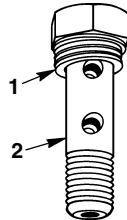
EFI Pressure Test Adapter



Item No.	Service Part No.	Description
1	215280	Sealing Ring Washer
2	310094	Banjo Bolt, M8 x 1.0

No. 7638

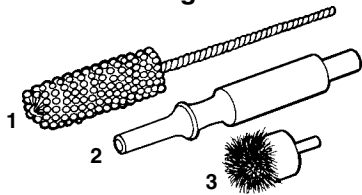
EFI Pressure Test Adapter



Item No.	Service Part No.	Description
1	215278	Sealing Ring Washer
2	314751	Double Banjo Bolt

No. 7639

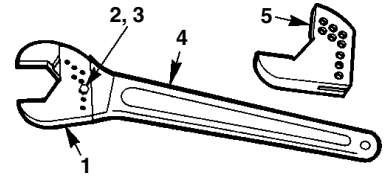
GM W-Body Brake Bushing Service Set



Item No.	Service Part No.	Description
1	219387	Caliper Retaining Bore Hone
2	49012	Brake Caliper Bushing Remover
3	219386	Caliper Bushing Seal Groove Brush

No. 7640

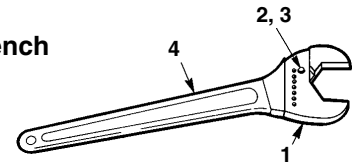
24" Adjustable Wrench



Item No.	Service Part No.	Description
1	48403	Machined Jaw (17/16" to 25/16" adjustment)
2	10388	Hex Jam Nut
3	22953	Cap Screw
4	48395	Handle Assembly
5	48400	Machined Jaw (optional), 13/8" to 27/8" adjustment

No. 7641

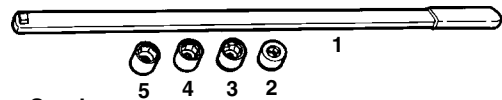
36" Adjustable Wrench



Item No.	Service Part No.	Description
1	48412	Machined Jaw (23/4" to 43/4" adjustment)
2	10388	Hex Jam Nut
3	23518	Cap Screw
4	53642	Handle Assembly

No. 7644

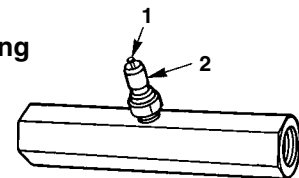
Serpentine Belt Service Tool



Item No.	Service Part No.	Description
1	218509	Long Handle Wrench
2	311210	13 mm Socket
3	311209	15 mm Socket
4	311208	16 mm Socket
5	311207	18 mm Socket

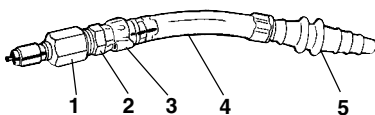
No. 7665

GM TBI Fuel Line Fitting



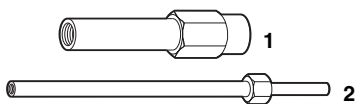
Item No.	Service Part No.	Description
1	215806	Shrader Valve Core
2	218336	Straight Fitting
-	106378	Instruction Sheet

No. 7666
Decarbonizing Adapter



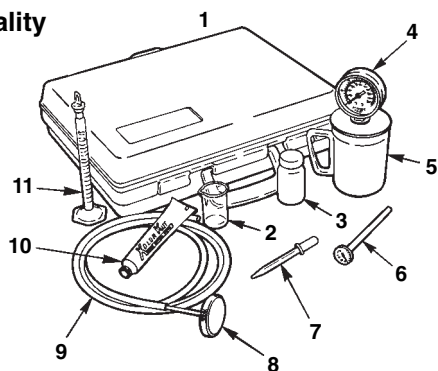
Item No.	Service Part No.	Description
1	212156	Quick-Plug Coupler
2	15913	Barb Fitting, 1/8 NPTM to 1/4
3	210954	Hose Clamp
4	JDG115	Hose, 120" Long
5	220479	Straight Hose Connector Fitting

No. 7667
GM Computer-Controlled Carburetor Tools



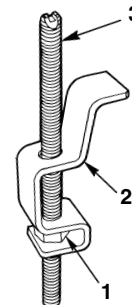
Item No.	Service Part No.	Description
1	220437	7mm / 10mm Double-D Carburetor Tool
2	220436	2mm Double-D / 2.5mm Hex Carburetor Tool

No. 7670
Gasoline Quality Testing Kit



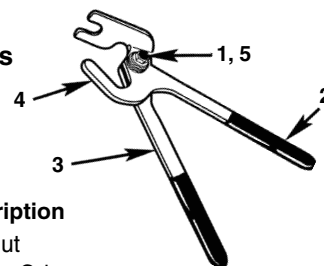
Item No.	Service Part No.	Description
1	14713	Plastic Case
2	218278	Beaker
3	218277	Plastic Bottle
4	311068	Gas Vapor Tester
5	218274	Thermal Mug
6	ROB10569	Thermometer
7	218280	Pipette
8	311073	Flexible Probe
9	218312	Nylon Tubing
10	218275	Water Detection Paste
11	218279	Graduated Cylinder
-	48680	Instruction Decal

No. 7676
Alignment Assist Tool



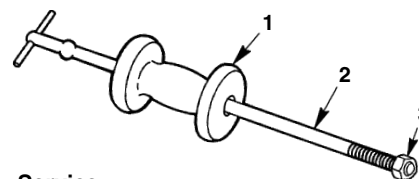
Item No.	Service Part No.	Description
1	10217	Nut, 3/4-10
2	311792	Screw Bracket
3	311791	Adjusting Screw
-	105811	Parts List

No. 7677
Exhaust Hanger Pliers



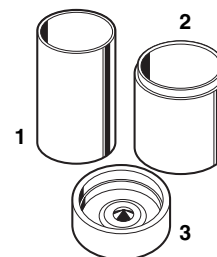
Item No.	Service Part No.	Description
1	13116	Locknut
2	14564	Handle Grip
3	49073	Drive Plier Handle
4	53856	Support Plier Handle
5	10416	Socket Head Shoulder Screw

No. 7703
Ten Pound Slide Hammer Puller



Item No.	Service Part No.	Description
1	312297	10 Lb. Hammer
2	312296	Shank and Tee Bar Assembly
3	10394	Hex Jam Nut

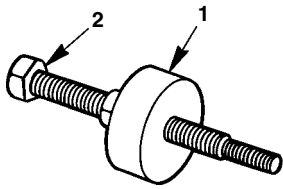
No. 7704
4WD Ball Joint Service Tools



Item No.	Service Part No.	Description
1	38355	Installing Cup
2	38354	Receiving Cup
3	204508	Receiving Cup
-	105816	Parts List

No. 7771

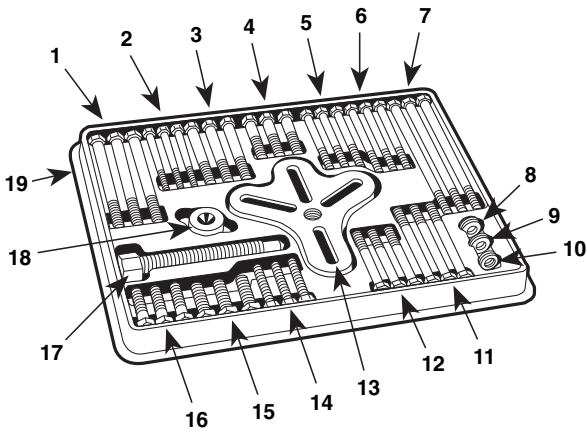
Ford Power Steering Pump Pulley Installer



Item No.	Service Part No.	Description
1	312346	Special Nut
2	312347	Forcing Screw

No. 7790

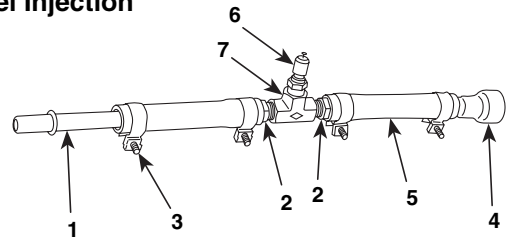
Flange-Type Puller Set



Item No.	Service Part No.	Description
1	12407	Hex Head Cap Screw, 3/8-16 x 4 1/2
2	216795	Hex Head Cap Screw, 1/4-28 x 3
3	10060	Hex Head Cap Screw, 3/8-16 x 3
4	10057	Hex Head Cap Screw, 3/8-16 x 2
5	10042	Hex Head Cap Screw, 5/16-24 x 3
6	10043	Hex Head Cap Screw, 5/16-18 x 3 1/2
7	215349	Hex Head Cap Screw, 5/16-18 x 6
8	10258	Plain Washer, 3/8"
9	10229	Washer, 1/4"
10	10257	Bolt Washer, 5/16"
11	213232	Hex Hd. Cap Screw, M8 x 1.25 x 90mm
12	220113	Hex Hd. Cap Screw, M8 x 1.25 x 65mm
13	512888	Flange Puller
14	214170	Hex Hd. Cap Screw, M8 x 1.25 x 45mm
15	206158	Cap Screw
16	10054	Hex Head Cap Screw, 3/8-24 x 1 1/2
17	24833	Forcing Screw
18	26342	Shaft Protector
19	54327	Plastic Tray

No. 7791

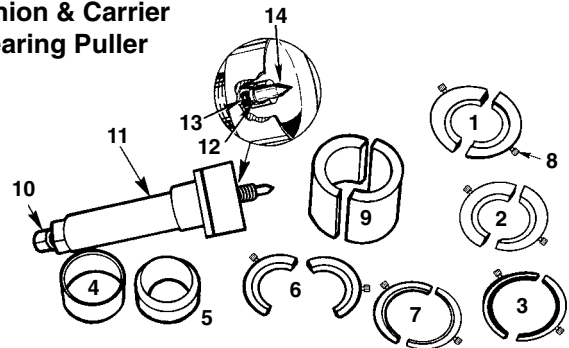
GM Fuel Injection Fitting



Item No.	Service Part No.	Description
1	216811	Special Fitting
2	213722	Carburetor Fuel Fitting, 3/8"
3	213720	Hose Clamp
4	216810	Special Fitting
5	213719	Hose, 3/8" I.D.
6	206877	Coupler Plug
7	12165	Tee Fitting, 1/8" NPTF
-	106033	Parts List

No. 7794

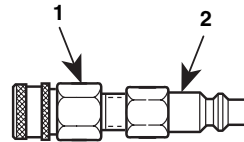
(205-D036) Pinion & Carrier Bearing Puller



Item No.	Service Part No.	Description
1	44800	Collet Half
2	44802	Collet Half
3	45145	Collet Half
4	303174	Insert
5	303173	Insert
6	44801	Collet Half
7	44803	Collet Half
8	17965	Cap Screw, #8-32 x 1/4" Long
9	44797	Collet Half
10	303171	Screw
11	303167	Tube
12	10268	O-ring
13	12547	Steel Ball, 7/16"
14	303170	Point
-	104656	Parts List

No. 7799

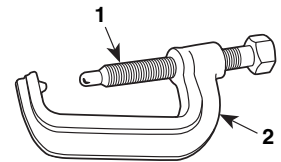
Fuel Injection Fitting Conversion Adapter



Item No.	Service Part No.	Description
1	212191	Coupler Socket
2	19520	Coupler Plug

No. 7822A

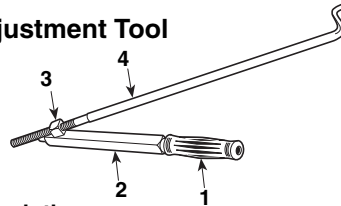
GM Torsion Bar Tool



Item No.	Service Part No.	Description
1	J-22517-3	Pressing Screw
2	J-42393-1	Frame Body

No. 7809

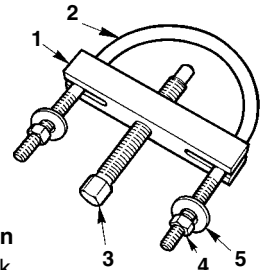
Saturn Rear Toe Adjustment Tool



Item No.	Service Part No.	Description
1	11610	Handle Grip
2	310396	Handle
3	24847	Tapped Swivel
4	310397	Rod
-	105948	Instruction Sheet

No. 7826

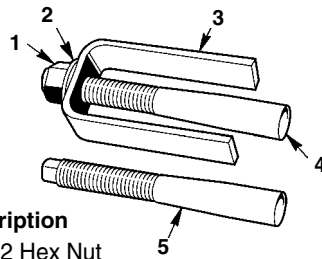
Ford Truck Torsion Bar Tool



Item No.	Service Part No.	Description
1	313670	Cross Block
2	313669	"U" Bolt
3	24833	Forcing Screw
4	221703	Hex Nut
5	10232	Plain Type A Washer
-	106070	Instruction Sheet

No. 7815

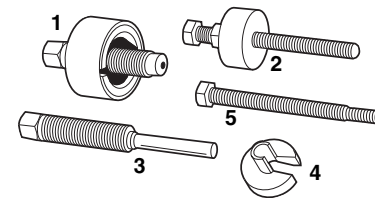
Steering Wheel Lock Plate Remover



Item No.	Service Part No.	Description
1	10211	9/16-12 Hex Nut
2	14869	S.A.E. Washer
3	313024	Bridge
4	313275	M14 x 1.5 Screw
5	313276	9/16-18 Screw

No. 7830A

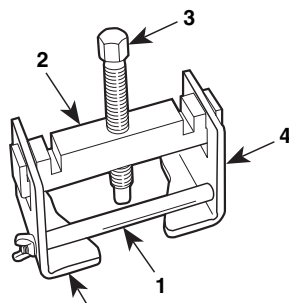
Power Steering Pump Pulley Remover / Installer Set



Item No.	Service Part No.	Description
1	7185	Power Steering Pump / Alternator Pulley Remover (see No. 7185 for parts)
2	7209	GM Power Steering Pump Pulley Installer (see No. 7209 for parts)
3	7104	GM Power Steering Pump Pulley Remover Forcing Screw (see No. 7104 for parts)
4	7244	Quick Disconnect Tool
5	312347	Forcing Screw

No. 7816

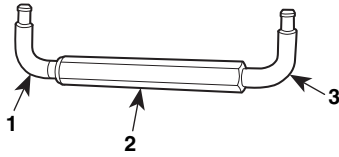
Ford Torsion Bar Adjustment Tool



Item No.	Service Part No.	Description
1	202-204	Spacer
2	204-207	Bar
3	204-208	Forcing Screw
4	204-209	Adapter Plate
5	204-210	Adapter Plate
-	105963	Parts List

No. 7840

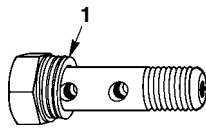
GM Caster / Camber Adjusting Wrench



Item No.	Service Part No.	Description
1	313429	Hook, Left Hand Threads
2	313708	Body
3	313428	Hook, Right Hand Threads
-	105984	Instruction Sheet

No. 7851

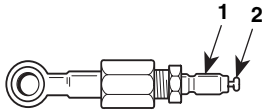
Banjo Bolt



Item No.	Service Part No.	Description
1	221712	Sealing Ring Washer

No. 7852

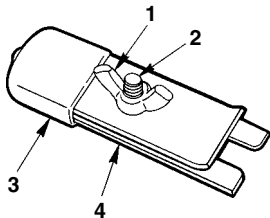
Quick-Disconnect Fuel Injection Banjo Fitting



Item No.	Service Part No.	Description
1	440642	Special Fitting
2	215806	Shradder Valve Core

No. 7853

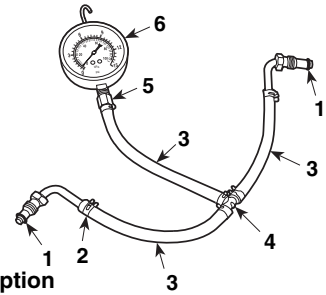
Proportioning Valve Depressor for ABS Brake Systems



Item No.	Service Part No.	Description
1	13024	1/4-20 Steel Wing Nut
2	RS-2100-6	Carriage Bolt
3	RS-23100-586	Plastisol Grip
4	J-39177-1	Clip

No. 7874

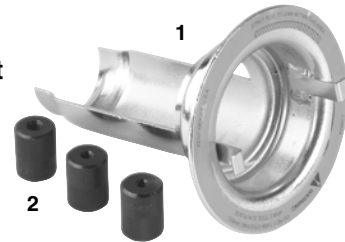
GM TBI Low Pressure Gauge Assembly



Item No.	Service Part No.	Description
1	18974	Viton O-ring
2	213720	Hose Clamp
3	213719	Pressure Hose
4	221551	Barbed Tee
5	213734	Barbed Hose Fitting
6	440047-1	0-15 PSI Pressure Gauge
-	218165	Warning Decal

No. 7876

GM W-Body Strut Retaining Tool



Item No.	Service Part No.	Description
1	J-38844-1	Strut Retaining Tool
2	J-38844-2	Nut

No. 7885

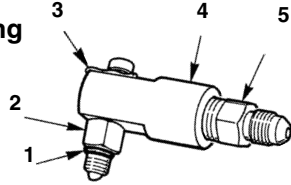
Fan Clutch Wrenches and Case



Item No.	Service Part No.	Description
1	513900	Case
2	513739	1 7/16" Fan Clutch Wrench
3	413742	1 7/16" Fan Clutch Wrench
4	513745	1 9/16" Fan Clutch Wrench
5	513746	2 3/8" GM Fan Clutch Wrench
6	513744	1 7/8" Fan Clutch Nut Wrench
7	513740	2 13/16" Fan Hub Wrench
8	513738	2 1/8" Fan Clutch Pulley Wrench
9	513743	3 1/4" Fan Pulley Holding Wrench
10	513741	2 1/4" Fan Clutch Pulley Wrench
11	513747	3" Fan Clutch Pulley Holding Wrench

No. 7886

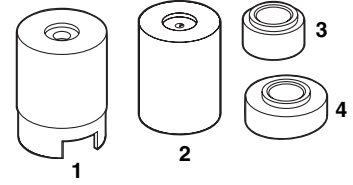
Bendix 10 ABS Fitting



Item No.	Service Part No.	Description
1	218339	O-ring
2	MLR-6491A-1	Adapter
3	MLR-6491A-3	External Cotter Hair Pin
4	MLR-7212A3	Fitting
5	16779	Straight Adapter
-	17716	O-ring
-	106043	Instruction Sheet

No. 7894

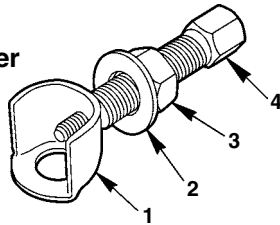
Upper / Lower Ball Joint Adapter Set



Item No.	Service Part No.	Description
1	313967	Remover Cup
2	313969	Installer Cup
3	313968	Remover
4	313970	Installer
-	106084	Parts List

No. 7889

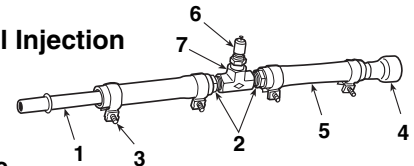
Pivot Pin Remover



Item No.	Service Part No.	Description
1	J-21854-1	Remover
2	10257	Washer, 5/16"
3	10203	Hex Nut
4	J-21179-5	Screw

No. 7902

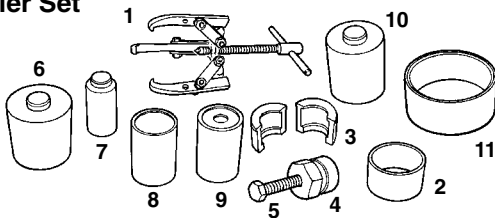
Chrysler Fuel Injection Fitting



Item No.	Service Part No.	Description
1	216812	Special Fitting
2	213721	5/16" Carburetor Fuel Fitting
3	213720	Hose Clamp
4	218388	Special Fitting
5	211473	Hose, 5/16" I.D.
6	206877	Coupler Plug
7	12165	1/8 NPTF Tee Fitting
-	106105	Parts List

No. 7890

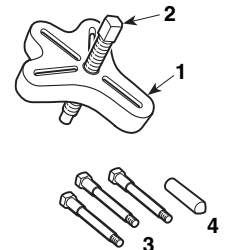
Delco CS Alternator Bearing Remover / Installer Set



Item No.	Service Part No.	Description
1	1021	3-Jaw Puller (see 1021 for parts)
2	221887	Sleeve
3	221889	Collet Half
4	221888	Special Nut
5	207999	Hex Head Cap Screw
6	221884	Bearing Installer
7	221882	Bearing Remover
8	221886	Bearing Installer
9	221885	Bearing Installer
10	221883	Bearing Installer
11	221881	Tube
-	106066	Parts List

**No. 7911
7912**

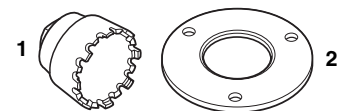
GM Crankshaft Balancer Puller & Adapters



Item No.	Service Part No.	Description
1	512888	Flange Puller (7912)
2	24833	Forcing Screw (7912)
3	222191	Special Screw (1 only, 3 reqd.)
4	222213	Screw Extension

No. 7913

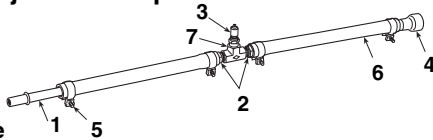
Front Wheel Bearing Locknut Socket



Item No.	Service Part No.	Description
1	J-42119-1	Wrench
2	J-42119-2	Wrench Plate

No. 7916

Dodge Fuel Injection Adapter



Item No.	Service Part No.	Description
1	314290	Special Fitting
2	213722	Fuel Fitting
3	206877	Coupler Plug
4	216810	Special Fitting
5	213720	Hose Clamp
6	213719	Pressure Hose
7	12165	Tee Fitting
-	106144	Parts List

No. 7918

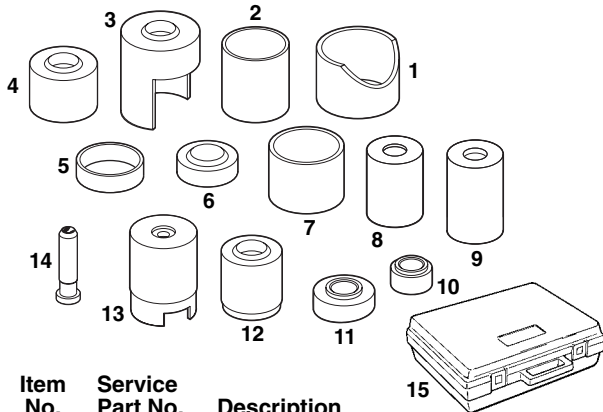
Master Ball Joint Adapter Set (includes all parts listed)

No. 7919

Ford Ball Joint Adapter Set

No. 7920

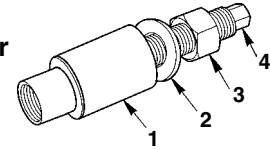
GM Lower Ball Joint Adapter Set



Item No.	Service Part No.	Description
1	222306	Receiving Tube (included in 7920)
2	222305	Receiving Tube (included in 7919)
3	313444	Ball Joint Remover (included in 7919)
4	39976	Receiving Cup (included in 7919)
5	222304	Receiving Tube (included in 7919)
6	204508	Receiving Cup (included in 7919, 7920)
7	222307	Receiving Tube (Included in 7920)
8	313969	Installing Cup
9	38355	Installing Cup
10	313968	Remover (included in 7919)
11	313970	Installer
12	38354	Receiving Cup
13	313967	Remover Cup
14	314392	Live Center Forcing Screw Plug
15	514479	Carrying Case
-	106141	Parts List for 7918
-	106136	Parts List for 7919
-	106137	Parts List for 7920

No. 7924A

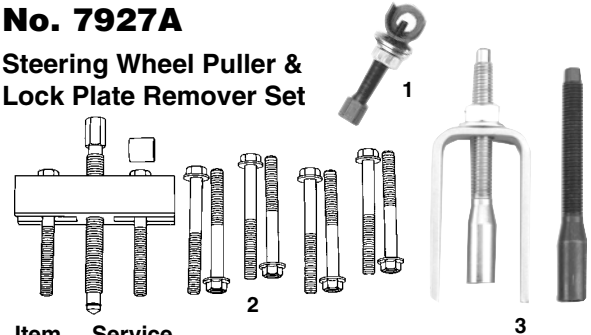
Ford Front Hub Installer



Item No.	Service Part No.	Description
1	207968	Sleeve
2	12330	3/4" Washer
3	12121	3/4-10 Hex Nut
4	314288	22mm x 1.5 Special Screw

No. 7927A

Steering Wheel Puller & Lock Plate Remover Set



Item No.	Service Part No.	Description
1	7889	Steering Pivot Pin Remover (see No. 7889 for parts)
2	7245	Steering Wheel Puller (see No. 7249 for parts)
3	7815	Steering Wheel Lock Plate Remover (see No. 7815 for parts)

No. 7942A

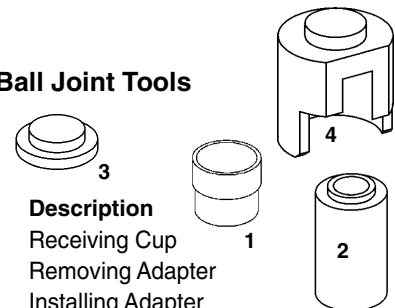
Hub Resurfacing Pads



Item No.	Service Part No.	Description
1	J-42450-9	Disc Holder
2	222548	Sanding Pads (5 Pack)

No. 7996

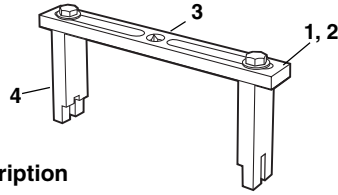
Honda Lower Ball Joint Tools



Item No.	Service Part No.	Description
1	314425	Receiving Cup
2	314426	Removing Adapter
3	314428	Installing Adapter
4	314427	Receiving Cup
-	106192	Instruction Sheet

No. 7998

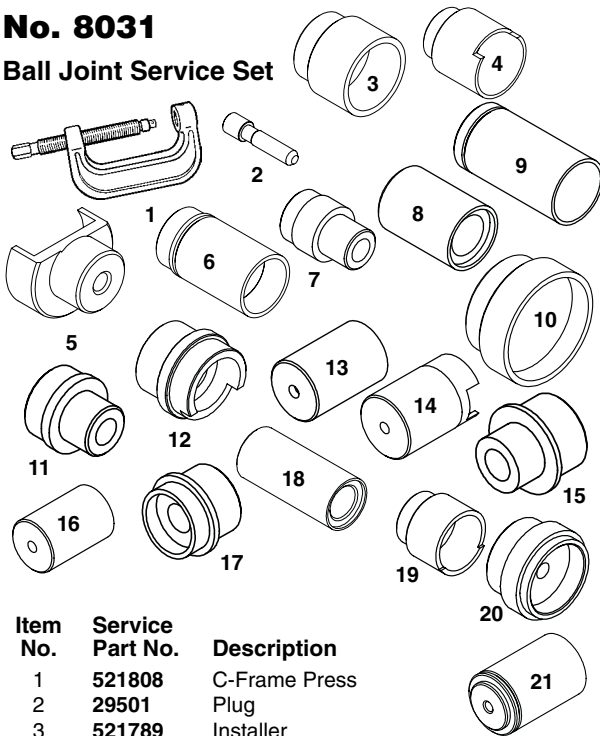
Chrysler Fuel Pump Module Spanner Wrench



Item No.	Service Part No.	Description
1	11573	Hex Head Cap Screw (2 req.)
2	10257	5/16" Bolt Washer (2 req.)
3	312723	Bar
4	312724	Leg (2 req.)
—	106193	Instruction Sheet

No. 8031

Ball Joint Service Set



Item No.	Service Part No.	Description
1	521808	C-Frame Press
2	29501	Plug
3	521789	Installer
4	521790	Receiver Cup / Remover
5	521791	Remover / Installer
6	521792	Installer Cup
7	521793	Remover
8	521794	Installer
9	521795	Remover Cup
10	521796	Receiver Cup
11	521797	Remover
12	521798	Receiver
13	521799	Installer
14	521800	Remover / Installer
15	521801	Remover / Installer
16	521802	Remover / Installer
17	521803	Remover / Installer
18	521804	Receiver
19	521805	Receiver
20	521806	Installer
21	521807	Receiver Cup
—	522074	Inside Lid Decal
—	521718	Storage Case
—	517921	Parts List

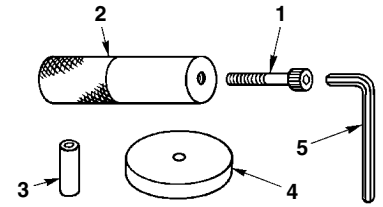
No. 27793

27794

27795

27796

27797



Driver Tools

Set 27793

Item No.	Service Part No.	Description
1	10012	1/4-20 x 7/8" Socket Head Cap Screw
1	10020	1/4-20 x 1 1/4" Socket Head Cap Screw
1	10854	1/4-20 x 1 3/4" Socket Head Cap Screw
1	12001	1/4-20 x 2 1/4" Socket Head Cap Screw
1	10855	1/4-20 x 2 3/4" Socket Head Cap Screw
2	27487	3/4" Handle
4	27493	5/8" Dia. Disc
4	27495	3/4" Dia. Disc
4	27497	7/8" Dia. Disc
4	27499	1" Dia. Disc
4	27501	1 1/8" Dia. Disc
4	27503	1 1/4" Dia. Disc
4	27505	1 3/8" Dia. Disc
4	27507	1 1/2" Dia. Disc
4	27509	1 5/8" Dia. Disc
4	27511	1 3/4" Dia. Disc
4	27513	1 7/8" Dia. Disc
4	27515	2" Dia. Disc
5	15770-6	Hex Key
—	14744	Parts List

Set 27794

Item No.	Service Part No.	Description
1	10012	1/4-20 x 7/8" Socket Head Cap Screw
1	10020	1/4-20 x 1 1/4" Socket Head Cap Screw
1	10854	1/4-20 x 1 3/4" Socket Head Cap Screw
1	12001	1/4-20 x 2 1/4" Socket Head Cap Screw
1	10855	1/4-20 x 2 3/4" Socket Head Cap Screw
2	27487	3/4" Handle (5" Long)
2	27488	1 1/4" Handle (6" Long)
3	27490	Extension Tube
4	27491	1/2" Dia. Disc
4	27492	9/16" Dia. Disc
4	27493	5/8" Dia. Disc
4	27494	1 1/16" Dia. Disc
4	27495	3/4" Dia. Disc
4	27496	13/16" Dia. Disc
4	27497	7/8" Dia. Disc
4	27498	15/16" Dia. Disc
4	27499	1" Dia. Disc
4	27500	1 1/16" Dia. Disc
4	27501	1 1/8" Dia. Disc
4	27502	1 3/16" Dia. Disc
4	27503	1 1/4" Dia. Disc
4	27504	1 5/16" Dia. Disc
4	27505	1 3/8" Dia. Disc
4	27506	1 7/16" Dia. Disc
4	27507	1 1/2" Dia. Disc
4	27508	1 9/16" Dia. Disc

4	27509	1 ⁵ / ₈ " Dia. Disc
4	27510	1 ¹¹ / ₁₆ " Dia. Disc
4	27511	1 ³ / ₄ " Dia. Disc
4	27512	1 ¹³ / ₁₆ " Dia. Disc
4	27513	1 ⁷ / ₈ " Dia. Disc
4	27514	1 ¹⁵ / ₁₆ " Dia. Disc
4	27515	2" Dia. Disc
4	27516	2 ¹ / ₁₆ " Dia. Disc
4	27517	2 ¹ / ₈ " Dia. Disc
4	27518	2 ³ / ₁₆ " Dia. Disc
4	27519	2 ¹ / ₄ " Dia. Disc
4	27520	2 ⁵ / ₁₆ " Dia. Disc
4	27521	2 ³ / ₈ " Dia. Disc
4	27522	2 ⁷ / ₁₆ " Dia. Disc
4	27523	2 ¹ / ₂ " Dia. Disc
4	27524	2 ⁹ / ₁₆ " Dia. Disc
4	27525	2 ⁵ / ₈ " Dia. Disc
4	27526	2 ¹¹ / ₁₆ " Dia. Disc
4	27527	2 ³ / ₄ " Dia. Disc
4	27528	2 ¹³ / ₁₆ " Dia. Disc
4	27529	2 ⁷ / ₈ " Dia. Disc
4	27530	2 ¹⁵ / ₁₆ " Dia. Disc
4	27531	3" Dia. Disc
5	15770-6	Hex Key
-	13676	Instruction Sheet
-	14744	Instruction Decal

Set 27795

Item No.	Service Part No.	Description
1	10012	1/4-20 x 7/8" Socket Head Cap Screw
1	10020	1/4-20 x 1 1/4" Socket Head Cap Screw
1	10854	1/4-20 x 1 3/4" Socket Head Cap Screw
1	12001	1/4-20 x 2 1/4" Socket Head Cap Screw
1	10855	1/4-20 x 2 3/4" Socket Head Cap Screw
2	27489	1 5/8" Handle (6" Long)
4	27532	3 1/16" Dia. Disc
4	27533	3 1/8" Dia. Disc
4	27534	3 3/16" Dia. Disc
4	27535	3 1/4" Dia. Disc
4	27536	3 5/16" Dia. Disc
4	27537	3 3/8" Dia. Disc
4	27538	3 7/16" Dia. Disc
4	27539	3 1/2" Dia. Disc
4	27540	3 9/16" Dia. Disc
4	27541	3 5/8" Dia. Disc
4	27542	3 11/16" Dia. Disc
4	27543	3 3/4" Dia. Disc
4	27544	3 13/16" Dia. Disc
4	27545	3 7/8" Dia. Disc
4	27546	3 15/16" Dia. Disc
4	27547	4" Dia. Disc
4	27548	4 1/16" Dia. Disc
4	27549	4 1/8" Dia. Disc
4	27550	4 3/16" Dia. Disc
4	27551	4 1/4" Dia. Disc
4	27552	4 5/16" Dia. Disc
4	27553	4 3/8" Dia. Disc
4	27554	4 7/16" Dia. Disc
4	27555	4 1/2" Dia. Disc
5	15770-6	Hex Key
-	13676	Instruction Sheet
-	14744	Instruction Decal

Set 27796

Item No.	Service Part No.	Description
1	10012	1/4-20 x 7/8" Socket Head Cap Screw
1	10020	1/4-20 x 1 1/4" Socket Head Cap Screw
1	10854	1/4-20 x 1 3/4" Socket Head Cap Screw
1	12001	1/4-20 x 2 1/4" Socket Head Cap Screw
1	10855	1/4-20 x 2 3/4" Socket Head Cap Screw
2	27488	1 1/4" Handle
4	27515	2" Dia. Disc
4	27516	2 1/16" Dia. Disc
4	27517	2 1/8" Dia. Disc
4	27518	2 3/16" Dia. Disc
4	27519	2 1/4" Dia. Disc
4	27520	2 5/16" Dia. Disc
4	27521	2 3/8" Dia. Disc
4	27522	2 7/16" Dia. Disc
4	27523	2 1/2" Dia. Disc
4	27524	2 9/16" Dia. Disc
4	27525	2 5/8" Dia. Disc
4	27526	2 11/16" Dia. Disc
4	27527	2 3/4" Dia. Disc
4	27528	2 13/16" Dia. Disc
4	27529	2 7/8" Dia. Disc
4	27530	2 15/16" Dia. Disc
4	27531	3" Dia. Disc
4	27532	3 1/16" Dia. Disc
4	27533	3 1/8" Dia. Disc
4	27534	3 3/16" Dia. Disc
4	27535	3 1/4" Dia. Disc
4	27536	3 5/16" Dia. Disc
4	27537	3 3/8" Dia. Disc
4	27538	3 7/16" Dia. Disc
4	27539	3 1/2" Dia. Disc
5	15770-6	Hex Key
-	13676	Instruction Sheet
-	14744	Instruction Decal

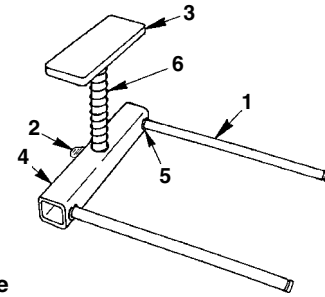
Master Set 27797

Item No.	Service Part No.	Description
1	10012	1/4-20 x 7/8" Socket Head Cap Screw
1	10020	1/4-20 x 1 1/4" Socket Head Cap Screw
1	10854	1/4-20 x 1 3/4" Socket Head Cap Screw
1	12001	1/4-20 x 2 1/4" Socket Head Cap Screw
1	10855	1/4-20 x 2 3/4" Socket Head Cap Screw
2	27487	3/4" Handle
2	27488	1 1/4" Handle
2	27489	1 5/8" Handle
3	27490	Extension Tube
4	27491	1/2" Dia. Disc
4	27492	9/16" Dia. Disc
4	27493	5/8" Dia. Disc
4	27494	11/16" Dia. Disc
4	27495	3/4" Dia. Disc
4	27496	13/16" Dia. Disc
4	27497	7/8" Dia. Disc
4	27498	15/16" Dia. Disc
4	27499	1" Dia. Disc

4	27500	1 ¹ / ₁₆ " Dia. Disc
4	27501	1 ¹ / ₈ " Dia. Disc
4	27502	1 ³ / ₁₆ " Dia. Disc
4	27503	1 ¹ / ₄ " Dia. Disc
4	27504	1 ⁵ / ₁₆ " Dia. Disc
4	27505	1 ³ / ₈ " Dia. Disc
4	27506	1 ⁷ / ₁₆ " Dia. Disc
4	27507	1 ¹ / ₂ " Dia. Disc
4	27508	1 ⁹ / ₁₆ " Dia. Disc
4	27509	1 ⁵ / ₈ " Dia. Disc
4	27510	1 ¹¹ / ₁₆ " Dia. Disc
4	27511	1 ³ / ₄ " Dia. Disc
4	27512	1 ¹³ / ₁₆ " Dia. Disc
4	27513	1 ⁷ / ₈ " Dia. Disc
4	27514	1 ¹⁵ / ₁₆ " Dia. Disc
4	27515	2" Dia. Disc
4	27516	2 ¹ / ₁₆ " Dia. Disc
4	27517	2 ¹ / ₈ " Dia. Disc
4	27518	2 ³ / ₁₆ " Dia. Disc
4	27519	2 ¹ / ₄ " Dia. Disc
4	27520	2 ⁵ / ₁₆ " Dia. Disc
4	27521	2 ³ / ₈ " Dia. Disc
4	27522	2 ⁷ / ₁₆ " Dia. Disc
4	27523	2 ¹ / ₂ " Dia. Disc
4	27524	2 ⁹ / ₁₆ " Dia. Disc
4	27525	2 ⁵ / ₈ " Dia. Disc
4	27526	2 ¹¹ / ₁₆ " Dia. Disc
4	27527	2 ³ / ₄ " Dia. Disc
4	27528	2 ¹³ / ₁₆ " Dia. Disc
4	27529	2 ⁷ / ₈ " Dia. Disc
4	27530	2 ¹⁵ / ₁₆ " Dia. Disc
4	27531	3" Dia. Disc
4	27532	3 ¹ / ₁₆ " Dia. Disc
4	27533	3 ¹ / ₈ " Dia. Disc
4	27534	3 ³ / ₁₆ " Dia. Disc
4	27535	3 ¹ / ₄ " Dia. Disc
4	27536	3 ⁵ / ₁₆ " Dia. Disc
4	27537	3 ³ / ₈ " Dia. Disc
4	27538	3 ⁷ / ₁₆ " Dia. Disc
4	27539	3 ¹ / ₂ " Dia. Disc
4	27540	3 ⁹ / ₁₆ " Dia. Disc
4	27541	3 ⁵ / ₈ " Dia. Disc
4	27542	3 ¹¹ / ₁₆ " Dia. Disc
4	27543	3 ³ / ₄ " Dia. Disc
4	27544	3 ¹³ / ₁₆ " Dia. Disc
4	27545	3 ⁷ / ₈ " Dia. Disc
4	27546	3 ¹⁵ / ₁₆ " Dia. Disc
4	27547	4" Dia. Disc
4	27548	4 ¹ / ₁₆ " Dia. Disc
4	27549	4 ¹ / ₈ " Dia. Disc
4	27550	4 ³ / ₁₆ " Dia. Disc
4	27551	4 ¹ / ₄ " Dia. Disc
4	27552	4 ⁵ / ₁₆ " Dia. Disc
4	27553	4 ³ / ₈ " Dia. Disc
4	27554	4 ⁷ / ₁₆ " Dia. Disc
4	27555	4 ¹ / ₂ " Dia. Disc
5	15770-6	Hex Key
-	13676	Instruction Sheet
-	14744	Instruction Decal

No. 42615

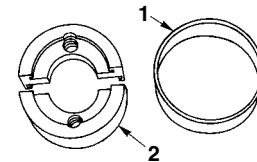
Drum Leveling Assembly



Item No.	Service Part No.	Description
1	37153	Shaft
2	17010	Thumb Screw
3	37157	Leveler Pad
4	42614	Tube
5	11581	Retaining Ring
6	17015	Compression Spring

No. 205776

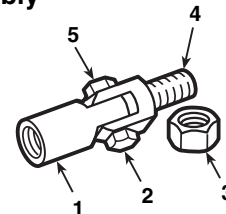
Fuller® Bearing Puller Set



Item No.	Service Part No.	Description
1	39546	Sleeve
2	43868	Collet Half

No. 208675

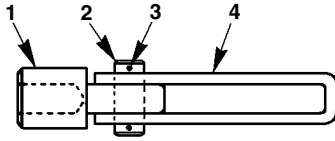
Swivel Assembly



Item No.	Service Part No.	Description
1	33538	Swivel Adapter
2	27912	Cap Screw
3	12121	3/4-10 Hex Nut
4	27914	Swivel
5	10390	Hex Jam Nut

No. 302340

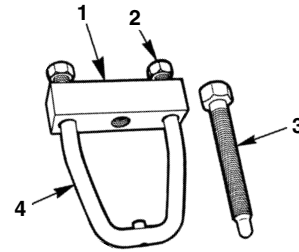
Yoke Assembly



Item No.	Service Part No.	Description
1	33768	Adapter
2	205771	Hinge Pin
3	10573	Cotter Pin
4	208674	Yoke Sleeve

No. J-22517-C

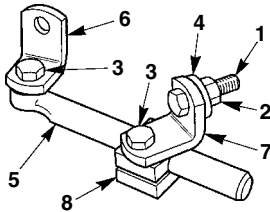
GM Torsion Bar Unloader



Item No.	Service Part No.	Description
1	J-22517-8	Plate
2	10213	Hex Nut
3	J-22517-3	Pressing Screw
4	J-22517-7	"U" Bolt

No. 305811

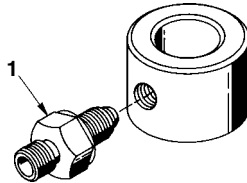
AdjustaGrip® Mounting Arm



Item No.	Service Part No.	Description
1	10085	Hex Head Cap Screw
2	10208	Hex Nut
3	11622	Hex Head Cap Screw
4	11640	Washer
5	23032	Adjusting Arm
6	23037	Angle Bracket
7	211527	Bracket
8	305809	Block
-	11618	Instruction Tag

No. 309277

Diesel Injector Nozzle Test Adapter



Item No.	Service Part No.	Description
1	38279	Straight Adapter
-	102583	Instruction Sheet

OLD / NEW PART NUMBER CROSS REFERENCE LIST

Old No.	New No.	Old No.	New No.	Old No.	New No.	Old No.	New No.
515	7392	927-D	1103	943-C-1	32139	959-1	37016
515-1	26603	927-D-1	25936	943-D-16	38662	960	1176
515-5	26342	930-B	1104	943-E	1154	960-1	34698
515-A	7393	930-B-1	32135	943-R	1155	960-2	27241
515-S	24832	930-C	1105	943-S	1156	960-3	24544
515-T	24833	930-C-1	32964	943-S1	208627	960-4	24545
518-1	32843	930-D	1106	943-S3	22185	960-B	1177
518-5	26342	930-D-1	32126	943-S4	34331	970	1200
522-1	22186	930-E	1107	943-S12	208627	970-A	37592
522-2	34703	930-E-1	32132	943-T	1157	970-C-1	27914
679-1	26763	930-F	1108	943-U	1158	970-D-3	27908
679-2	26762	930-F-1	32968	947	1165	970-H-1	12121
680-1	31385	938-1	32127	947-1	33083	970-HY	1202
827-1	32937	938-2	24822	947-2	33084	970-J-1	27912
827-2	32939	938-3	19528	947-3	33001	973	1203
827-3	32940	938-4	24824	947-4	27051	973-2	33769
827-A	32942	938-5	24825	947-5	27052	973-3	33768
827-B	7394	938-6	24826	947-10	33578	973-4	208674
887-1	51033	938-7	24827	947-E	1166	973-5A	205771
887-A	13905	938-HY	1062	949-1/2	1121	973-6	41291
887-D	7400	939-1/2-HY	1076	949-1/2-1	26654	973-8	302482
888	7401	939-1/2-1-B	50503	950	1122	973-11	33538
888-1	33118	939-1/2-5	33785	950-1	26651	973-R	302340
888-A	11608	939-1/2-5-B	28163	950-3	24831	973-S	208675
896-A	8090	939-1/2-A	1112	951	1123	974	1204
896-B	8091	939-1/2-A-1	33004	951-1	32957	974-A	1205
896-C	8092	939-1/2-B	1113	952	1124	1000	1020
896-E	8093	939-1/2-B-1	33005	952-1	32951	1000-1/2-L	1022
896-F	8094	939-1	33038	952-A	1130	1000-1/2-L-1	43661
896-G	8095	939-1-B	33039	952-D	1126	1000-1/2-L-2	27476
896-H	8096	939-2	303961	952-D-1	33486	1000-1/2-L-3	22006
896-J	8097	939-3	208586	953	1127	1000-1/2-L-4	22007
896-K	8098	939-4	208587	953-1	32959	1000-1/2-L-5	22008
897-1	206803	939-5	28353	953-C	1128	1000-1	21908
897-2A	52518	939-7	28390	953-C-1	50855	1000-2	27592
897-4A	25509	939-A	1109	953-C-5	30944	1000-3	207029
897-8	25510	939-A-1	32992	953-D	1129	1000-4	27764
897-A	7402	939-B	1110	953-D-1	32961	1000-5	21917
915-1	208170	939-B-1	32991	953-D-4	23330	1001	1024
915-2	304828	939-C	1111	953-D-5	31037	1001-1	44591
915-A	7403	939-C-1	32998	954	1170	1001-1-B	22023
927-1	33483	943	1150	954-2	27044	1001-4	22025
927-2	24835	943-2	33482	954-8	28382	1001-5	22021
927-3	24836	943-3	24846	954-10	28381	1001-7	39959
927-4	24837	943-4	24847	954-B	1171	1001-B	33397
927-5	24838	943-5	24848	954-C	1172	1001-C	1028
927-6	24839	943-10	24850	955-2	27044	1001-D	1031
927-A	1100	943-15	24864	955-13	29185	1001-L	1025
927-A-1	24840	943-A	1151	955-14	29187	1001-L-1	43940
927-B	1101	943-A-1	32136	956-2	27044	1002	1035
927-B-1	25934	943-B	1152	956-A-13	29189	1002-1	44082
927-C	1102	943-B-1	32137	957	1173	1002-4	22018
927-C-1	25935	943-C	1153	959	1174	1002-5	22016

OLD / NEW PART NUMBER CROSS REFERENCE LIST





Old No.	New No.	Old No.	New No.	Old No.	New No.	Old No.	New No.
1002-7	27759	1013-1/2-L	1046	CW36	7401	Y-399-1A	43103
1002-8	33398	1013-1/2-LY	1066	GPP14L	7392	Y-399-2A	43104
1002-L	1036	1013-A	1041	GPP14S	7393	Y-399-3	34195
1002-L-1	43892	1013-A-7	41195	GPP27	522	Y-399-4	34193
1003	1039	1013-A-L	1042	HC-642	7310	Y-399-5	28709
1003-1/2	1043	1014	1049	HC-642-1	208910	Y-399-7	28714
1003-1/2-1	30945	1014-7	41198	HC-642-2	39131	Y-399-8	34202
1003-1/2-2-H	41224	1014-L	1050	HC-642-3	26619	Y-399-9	34201
1003-1/2-4	22034	1015-2-H	50462	HC-642-4	205863	Y-399-10	34200
1003-1/2-5	22035	1015-LY	1074	HC-642-A	205862	Y-399-11	34199
1003-1/2-7	33292	1016-2-H	50460	HC-643	7311	Y-399-12	29424
1003-1/2-8	33290	1016-LY	1080	MD-955	7318	Y-399-A	4240
1003-1/2-L	1044	4692-3	34703	MD-956	7319	Y-695-3	22205
1003-1/2-L-1	30949	7025	7248	MD-956-B1	35033		
1003-1/2-LY	1064	7025-A	7249	MD-956-B2	200063		
1003-1	43906	7081	7248	OA-36-3	23518		
1003-4	22028	19690	209950	PH172J	1064		
1003-5	22029	19691	209951	PH173J	1066		
1003-7	33295	19692	209952	PH302J	1072		
1003-8	33399	23034	305809	PH303J	1074		
1003-L	1040	23035	305809	PH503J	1080		
1003-L-1	30902	23380	211527	PM12	1020		
1004	1047	26497	209802	PM13	1021		
1004-1	40303	AP1	1121	PM22	1022		
1004-4	30966	AP2	1122	PM23C	1023		
1004-5	22045	AP4	1123	PM52	1024		
1004-7	33433	AP5	1124	PM52L	1025		
1004-8	33432	AP6	679	PM53C	1026		
1004-L	1048	AP8	1126	PM53CL	1027		
1004-L-1	40305	AP9	1130	PM72	1035		
1005-2-H	41226	AP10	680	PM72L	1036		
1005-4	30976	AP12	1128	PM73C	1037		
1005-5	22052	AP13	1127	PM73CL	1038		
1005-6	22053	AP16	1129	PM132	1039		
1005-L-1	40312	APH6	1154	PM132L	1040		
1005-LY	1072	APH9	1166	PM133C	1041		
1006-4	30993	APP5	1153	PM133CL	1042		
1006-5	22089	APP6	1150	PM172	1043		
1006-L-1	30994	APP7	1151	PM172L	1044		
1010	1021	APP9	1165	PM173	1045		
1010-1/2-A-2	33423	BPS10	981	PM173L	1046		
1010-1/2-LA	1023	CT-684	7307	PM252	1047		
1010-2	27475	CT-685	7308	PM252L	1048		
1011-1	43940	CT-685-1	38012	PM253	1049		
1011-A	1026	CT-685-2	44502	PM253L	1050		
1011-A-7	39942	CT-685-3	41617	PP10	927		
1011-A-L	1027	CT-685-4A	200017	PP17	938		
1012-A	1037	CT-685-4B	200018	PP30	939		
1012-A-7	44993	CT-685-4C	200019	PPH17J	1062		
1012-A-L	1038	CT-686	7309	PPH50J	1076		
1013-1/2	1045	CT-686-1	37813	SS-8	1179		
1013-1/2-2-H	41224	CT-686-2	208602	TC424	7402		
1013-1/2-7	41196	CW14	7400	Y-399	4241		



GM SERVICE TOOLS

ENGINE, TRANSMISSION, INTERIOR, AXLE,
BRAKES, ELECTRICAL & BODY SERVICE



	Category	P/N	Description	Application	Features and Benefits
	Axle	6723	Inner Pinion Bearing Race Installer	1998-2006 Suburban, Tahoe	Installs inner pinion bearing race to desired position (Similar to J-45870 & J-8092)
	Axle	6712	Axle Seal Protector	2011-Later	Protects axle seal from being cut or nicked, both of which can cause immediate or eventual leaks (Similar to J-44394-A)
	Body	5267	Lift Pad Adapters	All	Used to properly lift the vehicle with a hoist (Similar to J-43625)
	Brakes	5089	Air Brake Line Release Tools	2003-later Medium Duty trucks	Separate connectors on the P/S system and EGR coolers without damage (Similar to J-45666 & J-42971)
	Electrical	6945	Parasitic Draw Switch	All	Used with an amp meter to isolate parasitic amperage draws (Similar to J-38758)
	Engine	6691	Camshaft Retaining Tool Set	2.8L/3.0L/3.6L	Lock the camshafts together at TDC to keep them from turning while setting timing (Similar to EN-48383)
	Engine	6556	Fuel Sender Lock Ring Wrench	2003-2011 Cadillac CTS/SRX/STS	Fits the newly designed 4 1/2" lock ring, which requires high torque to loosen and tighten (Similar to J-45747)
	Engine	6706	Injector Rail Assembly Remover	2007-2014 GDI	Safely remove GDI fuel rails (Similar to EN-49248)
	Engine	6742	Crankshaft Seal Installer	2011-2013 Aveo/Cruze/Sonic/Volt	Safely installs front crankshaft seal (Similar to KM-960)
	Engine	6677	Timing Chain Retainer	2011-Later 2.0L/2.4L Ecotech	Retain the timing chain and lower sprocket positions while servicing the upper sprockets, camshafts, valve springs, or valve seals (Similar to EN-48749)
	Engine	6759	Flywheel Holding Tool	2013-2014 2.0L & 2.5L	Holds the flywheel in place for servicing the balancer or flywheel bolts (Similar to EN-50792)
	Engine	6758	Front Crank Seal Installer	2013-2014 2.0L & 2.5L	Allows for the installation of front crank seal without the removal of the cover (Similar to EN-50820 & EN48034)

	Category	P/N	Description	Application	Features and Benefits
	Engine	6746	Timing Chain Holding Tool	2013-2014 2.0L & 2.5L	Retains the timing chain position relative to the crankshaft position (Similar to EN-50656)
	Engine	6745	Camshaft Actuator Locking Tool	2013-2014 2.0L & 2.5L	Holds camshaft actuator in place to safely remove/install actuator bolt (Similar to EN-50793)
	Engine	6744	Tensioner Retaining Pin	2013-2014 2.0L & 2.5L	Relieves the tension on the timing chain tensioner for camshaft, actuator, and timing chain service (Similar to EN-50837)
	Engine	6707	Injector Seal Installer Adapters	2013-Later 4.3L V6, 5.3L V8 or 6.2L V8	Correctly install the injector seals for leak-free operation (Similar to EN-51105)
	Engine	6708	Injector Retaining Clip Replacer	2013-Later 4.3L V6, 5.3L V8 or 6.2L V8	Removes or installs the injector retaining clips without over-spreading to ensure proper retention of the injector to the rail (Similar to EN-51097)
	Engine	6710	Fuel Pump Installation Gauge	2013-Later 4.3L V6, 5.3L V8 or 6.2L V8	Verifies that the camshaft fuel pump lobe is at base circle position before installing the high pressure fuel pump (Similar to EN-51092)
	Engine	6788	Pan Seal Cutter	All	Pressed into the sealant and struck with a hammer in order to cut through the oil pan seals (Similar to J-37228)
	Engine	6553	Connecting Rod Guides	All	Protects the crankshaft bearing surface from damage by nicking or scratching during piston and connecting rod removal or installation (w/ M8x1.0 threads) (Similar to EN-51454)
	Interior	2551	Steering Column Anti-Rotation Pin	2005-Later	Installs into the steering column to keep the steering wheel orientation correct (Similar to J-42640)
	Interior	6644	Door Handle Spring Retainer	2014-Later	Allows for door handle replacement without having to remove the interior door panel (Similar to BO-51363)
	Interior	2550	Key Fob Fixture	All	Allows for quick and safe removal/installation of GM flip key blades (Similar to BO-51098)
	Interior	2549	Cigarette Lighter Socket Remover	All	Remove cigarette lighter socket without damage to socket or dash (Similar to J-42059)

	Category	P/N	Description	Application	Features and Benefits
	Transmission	6715	Torque Converter Seal Installer	1990-2011 FWD Automatic Transmission	Installs torque converter seals without damage (Similar to J-28540-A)
	Transmission	6713	Seal Protector	2013-Later Chevrolet Trax, Buick Encore	Protects transfer case Intermediate Drive Shaft (IDS) seal from splines of the IDS during shaft removal or installation (Similar to DT-50937)
	Transmission	6714	Input Shaft Seal Installer	2013-Later Chevrolet Trax, Buick Encore	Installs input shaft seal & side extension housing seals to proper depth (Similar to DT-50840 & J-8092)
	Transmission	6702	Transmission Adapter Plate Bushing Replacer	2013-Later Chevrolet Trax, Buick Encore	Replaces the mount bushing on the transmission adapter plate (Similar to DT-50839 & CH-50342)
	Transmission	6716	Shift Rail Seal Installer	2013-Later Manual Transmission (Tremec TR 3160)	Installs the shift seal on the Tremec TR 3160 transmission to the proper depth to ensure optimal seal life (Similar to DT-51077)
	Transmission	6743	Pump Seal Installer Set	2014-Later	Protects, installs and sizes the torque convertor fluid seal ring into the stator support during unit overhaul (Similar to DT-51191)
	Transmission	6724	Trans Mainshaft Bearing and Gear Installer	2014-Later Corvette (Manual)	Prevent damage to components and are necessary as the transmission assembly (Similar to DT-51076 & DT-51076-10)
	Transmission	7040	Trans Case Holding Fixture	All	Adjustable design for adapting to many different transmission case configurations as well as other components (Similar to J-36842)



DETROIT DIESEL ENGINE TOOLS

KEEPING TRUCKS ON THE ROAD WITH
FASTER PM, INSPECTIONS AND SERVICE



Detroit Diesel engine tools	Tool	Application	Use
	5869 Fuel System Priming Pump	All	Pressurizes the fuel system after service. Required to bleed air from the system and provide correct fuel pressure. Similar to J-4791
	5869-1 Fuel System Coupler Fitting	Detroit Diesel S60, MBE900, MBE4000	Connects to compu-check quick-connect fitting. Similar to J-47912-QC
	4853 Piston Ring Compressor	All	Universal piston ring compressor fits most piston rings. Adjustable from 2.125" to 5.0" piston rings. Similar to J-8037
	5877 Injector Cup R/I Tool	Detroit Diesel S60, MBE900, MBE4000	Two-tool set for screw-in stainless steel cups. Eases removal and installation of injector cups. Similar to J-46904 and J-48824
	5879 Poppet Disassembly Tool	Detroit Diesel engines	Aids disassembly of poppet valves with 2-prong spanner style end. Similar to J-36452-B
	5884 Cam Gear Retaining Tool	Detroit Diesel S60	Holds cam gear during cam gear bolt R&I. Secures to gear case with access cover bolts. Similar to J-35652-B
	5886 Fuel Injector Torque Adapter	Detroit Diesel DD13 and DD15	Eases R&I of injector feed tubes. Unique design for clearance on injector tube nuts and can be used to properly torque injector tubes during installation. Similar to J-48770
	5883 Crankshaft Alignment Tool	Detroit Diesel S60	Places No. 1 cylinder at TDC during camshaft timing inspection and service. Ensures crankshaft is aligned properly. Similar to J-45947
	5883-1 Crankshaft Alignment Tool	Detroit Diesel S60	Replacement tip for 5883 crankshaft alignment tool.
	5875 Cylinder Liner Remover	Detroit Diesel S60 12.7L with EGR; MTU S2000	Expands in the cylinder to pull liners from 5.0" to 5.75" inner diameter. Uses thrust bearings on expander and bridge nuts for friction-free operation. Similar to J-45876
	5874 Cylinder Liner Installer	Detroit Diesel S60	Drive screw and plate forces cylinder liner into correct position. Attaches to engine with three cylinder head bolts. Similar to J-35597-A
	5882 Cam gear Alignment Tool	Detroit Diesel S60	Properly aligns the cam gear during camshaft assembly installation. Special pin fits into the cam timing hole for correct alignment. Similar to J-45946
	5872 Compression Gauge	Detroit Diesel S60I two cycle 53, 71, 92 and 149	Heavy-duty compression gauge with push-button release valve and quick-connect coupler. 0-1150 psi and 0-8000 kPa range. Similar to J-6692-B
	5876 Injector Remover	Detroit Diesel S60	Removes seated injectors correctly. Thrust bearing under puller nut ensures smooth operation and removal. Similar to J-47372



HEAVY-DUTY SOLUTIONS

FORGED FROM 100 YEARS OF
RELENTLESS INNOVATION



DIESEL COMPRESSION TESTERS HEAVY DUTY TOOLS & EQUIPMENT



3642 12V-24V Truck Circuit Tester

Product Features:

- Works on 12-24 volt systems.
- Features 7" stainless steel probe.
- 24' coil cord.
- Extra large clamp.

3903 24' jumper leads

From headlight to taillight, this extra long test lead stretches to over 24 feet in length.

Constructed from high quality polyurethane, high visibility coil cord test lead has superior memory retention and resistance to grease and oil.



3673 Diesel Glow Plug Tester

Glow Plug Tester provides fault detection thru LED's for a quick analysis; Short Circuit, Over Current, Normal Operation, Open Circuit/ Under Current.

- Glow Plug Tester allows for testing without removing glow plug from engine.
- Powers the glow plug to test the plug in it's operating state.
- Much more accurate test than a cold resistance test, which can miss short circuits.
- Tester uses a current measurement to accurately determine proper operation and check for short circuits.



3674 Diesel Fuel Pressure Tester

- Simple one wire connectivity to the fuel pressure sensor signal wire. Designed for diesel engines that have a fuel pressure sensor reading used by vehicle computer.
- Displays pressure in PSI or BAR.
- Range 0-22,000 PSI (0-1500 BAR).
- Read diesel fuel pressure in vehicle.
- No fittings required.
- Readings alternate between current and max pressure.

Use with OTC's No. 3398 to find clogged/dirty fuel injectors.

Pinpoints worn power steering pumps or racks.

PSI reading for hydrostatic drives and high pressure hydraulics.

Finds blocked intake ports and plugged catalytic converters.

Checks transmission cooler efficiency and catalytic converter temperatures.

No need to have fuel or transmission hoses inside vehicle during a road test.
No makeshift taping of gauges to the windshield.

Multi-Application Digital Pressure and Temperature Analyzer

Combining the functions of vacuum, oil pressure, hydraulic system pressure, fuel pressure, transmission pressure, compression, and air conditioning—all in one!

3492

Heavy-duty digital pressure/temperature analyzer with four pressure input receptacles and protective boot. Set includes: No. 3491-02 (5,000 psi) transducer, No. 3491-13 20' cable, No. 3500-05 bead-type temperature probe, assorted fittings, No. 3491-31 plastic storage case, instruction manual.

Diesel Compression Tester with Adapters

This easy-to-use compression tester is designed for light- and medium-duty diesel engines equipped with glow plugs. A dual-reading gauge, featuring a push-button release valve, measures compression to 1000 PSI and 7000 kPa. The hose end has quick disconnect fittings. The tester comes with glow plug and nozzle adapters in a handy storage case.

Tester services these engines:

- Cummins B and C
- Navistar DT466/DT360
- Ford/Navistar 6.9L & 7.3L
- Detroit 6.2L & 6.5L
- Hino diesel and Mitsubishi Fuso truck engines

5020 – Diesel compression tester with adapters

5021 – Universal diesel engine compression gauge

304802 – Replacement gauge

Replacement Adapters (available separately)

47484 – Hino diesel truck engines with 12 mm x 1.25 thread

209633 – Ford 6.6L & 7.8L diesels

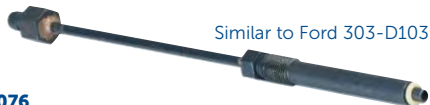
217791 – Cummins B 3.9L 4 cyl. & 5.9L 6 cyl. '89-'98

308472 – Mitsubishi Fuso truck 4D & 6D engines with 10 mm x 1.25 thread

310810 – Cummins C 8.3L 6 cyl. '88-'96

310832 – Ford/Navistar 6.9L & 7.3L, Detroit 6.2L & 6.5L with 10 mm x 1.0 thread

310840 – Navistar DT466/DT360



Similar to Ford 303-D103

6076

Ford Diesel Compression Test Adapter

- Use with OTC No. 5021 diesel engine compression gauge.
- Remove glow plug; this adapter is used to connect the No. 5021 gauge to perform a compression test.
- Application: 1994-2003 Ford vans and pickups with 7.3L direct-injected turbocharged (DIT) diesel engine.



"Min/Max" pinpoints:

- Fuel restrictions
- Plugged filters
- Weak fuel pumps
- Transmission pressure spikes

"Delta Zero" monitors fuel pressure dropcaused by faulty check valves.

Displays readings in BAR for checking European specs.

See Scope/Meter accessories for temp probes.

Permits comparison of ABS brake pressures at each wheel.



Accessory:

3491-01 – 500 psi transducer

3491-02 – 5,000 psi transducer. Required for ABS and power steering pressure readings.

3491-03 – 10,000 psi transducer.

(Note: For No. 3492 only.) **3491-11 – 6' cable,** **3491-12 – 12' cable,** **3491-13 – 20' cable.**



5020

Similar to Ford 303-D091 (D93T-6000-A)



5021

Similar to Ford 303-D092 (D93T-6000-B)



Similar to Ford 303-757

6660

Ford Diesel Compression Test Adapter

- Use with OTC No. 5021 diesel engine compression gauge.
- Works on 2003-2006 Ford vans and trucks—with 6.0L diesel engines.



6005A Glow Plug Remover

Set includes 10 mm and 12 mm split nuts, three spacers (3/16", 1/4", and 5/16"), plastic storage/organizer case and instructions. The 10 mm split nut will work on Ford 6.9L and 7.3L diesels; GM 6.2L, and 6.5L diesels; and various diesels in import vehicles. The 12 mm split nut works on various diesels in import vehicles, plus many agricultural and construction diesel applications.



6088 Ford 5-pin Connector Harness for Glow Plug Testing

- Provides an easy way to check glow plug resistance without having to remove the valve cover of 1994-98 Ford trucks and vans with 7.3L DIT (direct-injected turbocharged) diesel engines.
- Used with any standard digital volt ohmmeter to check glow plug resistance.

Similar to Ford 303-625



6595 Ford High Pressure Oil Line Disconnect Tool

- Use to disconnect the high pressure oil line from the cylinder head.
- Works on 1998-2003 Ford vans and trucks with 7.3L direct-injected, turbo-charged (DIT) diesel engines.



7835 Ford Rear Main Oil Seal Kit

- Works on 1994-2003 7.3L diesel engine in Ford 3/4- and 1-ton trucks.
- A complete kit with the tools you need to correctly remove and install the rear main oil seal and wear ring on the crankshaft.
- Eliminates makeshift methods of seal removal and installation that could damage the new seal or crankshaft.



GM Duramax Injector Pullers

- Designed to pull injectors on a GM Duramax 6.6L engines.

6778 - From 2001 - 2004, Similar to J-44639.

6779 - From 2005 - 2011, Similar to J-46594.

6754 Diesel Fuel Pressure Gauge

- Designed to test fuel pressure on GM Duramax diesel engines.
- Similar to J-44638.



5060 Detroit Diesel Injector Socket

Used on GM 6.2L and 6.5L engines. This 30 mm socket ensures proper fit during nozzle removal and installation. The 3/8" square drive and 7/8" hex permit easy access in tight quarters, and prevent damage to nozzle and related components.



Similar to Ford No. 303-491/No. 303-492

6067 Ford Injector Remover / Installer Kit

- Removes and installs injectors without damaging the injector or cylinder head.

Application: 1994-2003 Ford 3/4- and 1-ton trucks, Super Duty trucks, and vans with 7.3L direct-injected turbocharged (DIT) diesel engine.



Similar to Miller 8318

6069 Cummins Diesel Fuel Injector Remover Kit

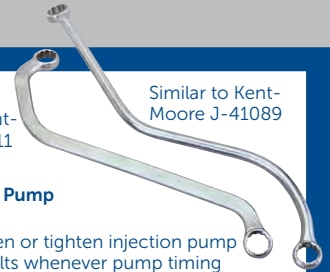
Kit contains a fuel injector connector tube remover and fuel injector puller. The fuel injector connector tube must be removed before removal of the injector, or both will be damaged.

Application: 1998-1/2-2002 Dodge pickups and vans with 5.9L 24-valve Cummins diesel turbo engine.

Similar to Kent-Moore J-41711

6087 GM Injection Pump Wrench Set

- Use to loosen or tighten injection pump retaining bolts whenever pump timing adjustment or pump service is required. Services 1996-1999 GM full-size 2- and 4-wheel drive trucks, vans, and Suburbans with 6.5L diesel engine.
- Two specially bent wrenches are needed, due to the location of the throttle, cruise control, T.V. cable bracket, cooling system crossover pipe and bracket, and the thermostat housing on vans and pickups.
- Wrenches are 15 mm, 12-point, double box-end type.



Similar to Kent-Moore J-41089



Designed for the diesel truck market, this tool will work for just about any injector you need to remove for service or replacement.

6752 - Fuel Injector Storage Rack with Protective Cups

Compartment are marked to help keep the injectors organized by the cylinder they came from in order to keep the injector calibration in sync with the vehicles ECM. Similar to Ford No. 303-D113.

6753 - Protector Cups

A set of eight replacement cups for 6752 Fuel injector storage rack. Similar to Ford No. 303-D115.

6749 Diesel Engine Barring Socket

- Designed to rotate engine on a Mack E7 and Cat 3208.
- Similar to J-38587-A.



7471A Cummins Engine Barring Tool

Insert the tool into the flywheel housing until it engages the ring gear, then attach a 1/2" square drive ratchet or breaker bar and turn. The tool's load-bearing collar provides friction-free operation while rotating the tool in the housing.

- Works on Cummins B and C series diesel engines and 5.9L liter diesels used in Dodge pickups.



OIL FILTER WRENCHES HEAVY DUTY TOOLS & EQUIPMENT



7248 C-Frame Press

The C-Frame used in conjunction with OTC Ball Joint Adapters. Can also be used for removing/installing; universal joints with needle bearings, pressed in wheel studs, and brake anchor pins on heavy-duty vehicles. Suitable for general pressing operations.

6935 U-Joint Service Adapter

For use with the 7248 C-Frame to service the u-joints found on Dana 60 4WD front drive axles.

Application:

- 1977-1991 Chevrolet and GMC 1 Ton
- 1975-2010 Dodge ¾ & 1 Ton
- 2000-2002 Ford Excursion
- 1999-2010 F250
- 1985-2010 F350
- 1999-2008 F450
- 1999-2004 F550



Heavy-Duty Oil Filter Wrenches

Features a 1/2" wide steel band that can stand up to the high torque needed to remove filters from trucks, tractors, and other heavy equipment.

- Use with a 1/2" drive ratchet or breaker bar.

- 4555** – Heavy-Duty Oil Filter Wrench for filter dia. of 4-1/8" to 4-21/32" (104 mm to 118 mm).
- 4556** – Heavy-Duty Oil Filter Wrench for filter dia. of 4-21/32" to 5-5/32" (118 mm to 131 mm).
- 4557** – Heavy-Duty Oil Filter Wrench for filter dia. of 5-5/32" to 5-21/32" (131 mm to 144 mm).



Adjustable Oil Filter Pliers

Forged jaws with sure-grip teeth grab the filter for easy removal. Slip-joint ratchet and lock mechanism allows a secure grip on filters.

4560 – Small Adjustable Oil Filter Pliers. Plier is 13-1/2" long and fits filters ranging from 2-1/4" to 5" (57 mm to 127 mm) in diameter.

4561 – Large Adjustable Oil Filter Pliers. Plier is 18" long and fits filters ranging from 3-3/4" to 7" (95 mm to 178 mm) in diameter.

4562 – Adjustable Oil Filter Pliers Set. Includes both the No. 4560 and No. 4561 listed above.

4513 Heavy-Duty Snap Ring Pliers Set (2 piece)

- Heat treated steel "circlip" pliers for large equipment repair.
- Replaceable tips and spring ratchet locking mechanism to securely hold against snap ring tension.
- Internal pliers' capacity 3-1/16" to 6-1/4" (78 mm to 159 mm) snap rings.
- External pliers' capacity 3-1/2" to 6-1/2" (89 mm to 165 mm) snap rings.
- Blow-molded storage case includes extra sets of replaceable tips.
- Overall length 16"; handle length 12-1/2".

4513 includes:

Tool No.	Description	Tool No.	Description
4513-1	Internal snap ring pliers	4513-4	(2) .12" (3 mm) 45° tips
4513-2	External snap ring pliers	4513-5	(2) .12" (3 mm) 90° tips
4513-3	(2) .12" (3 mm) straight tip	4513-6	4 tip retaining screws



Retaining Ring Pliers

7300 – Internal, straight tip retaining ring pliers. 16" long.

7301 – External, straight tip retaining ring pliers. 16" long. See page 116 for replacement tips.



7300
Internal tip



7301
External tip

Giant Adjustable Wrenches

The really big jobs call for really big tools. These wrenches will handle 42 bolt sizes from 1-3/8" to 4-3/4". Together, both wrenches weigh just 41 lbs., but can replace over 1,000 lbs. of fixed-size wrenches.

7640 – Giant adjustable wrench. Rated to withstand 2,000 ft. lbs. of torque. Nut/bolt size 1-3/8" to 2-7/8". Increments of Jaw adjustment 1/8", length 24". Head thickness 7/8".

7641 – Giant adjustable wrench. Rated to withstand 5,000 ft. lbs. of torque. Nut/bolt size 2-3/4" to 4-3/4". Increments of Jaw adjustment 1/8", length 36". Head thickness 1-1/8".



7463 Gland Nut Wrench

This wrench is fully adjustable to fit hydraulic cylinders on vehicles having gland nuts from 1" to 3-3/4" in diameter. It also reverses to work on either 1/4" or 7/32" pinholes.

- Accommodates a 1/2" drive ratchet.

215128 – Replacement pin.



1266 Adjustable Gland Nut Wrench

Here's a wrench designed to fit hydraulic cylinders on most farm and construction equipment. It fits gland nuts from 2" to 6" diameter pin to pin. Includes reversible pins, sizes 1/4" and 5/16" diameter.

- Accommodates a 3/4" drive ratchet or breaker bar.



204928 – Replacement pin.

Similar to Ford D79L-6731-A

7062A Universal Filter Wrench

This filter wrench will stand up to the job of removing nearly any spin-on filter (up to 6"). Universal design permits use on most vehicles. The tough 2" wide nylon strap holds firmly. The more leverage applied, the tighter it grips.

- Accommodates a 3/8" drive ratchet.



5961HD Heavy-Duty Drain Plug Pro™

For Agricultural, Commercial, and Heavy-Duty Vehicle Applications

- Remove fluid drain plugs without touching the plug or hot fluids!

- NO touching HOT plugs.
- NO HOT fluids on hands.
- Removable attachment permits use with common 3/8" square drive sockets. Great for starting bolts in hard-to-reach places.

Just magnetically attach heavy-duty drainplug pro™ to pre-loosened drain plugs and rotate to remove.

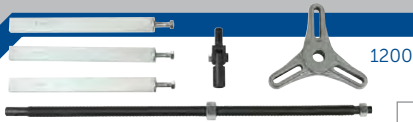
- Magnetic attachment for internal 1/2" square drive drain plugs.
- Magnetic attachment for large drain plugs.



5028 Slide Hammer Puller

Just 8-1/2" long to fit into tight spots, but its 1-1/2 pound hammer gives you a little extra muscle for stubborn jobs. It's perfect for pulling injector nozzles. The shank is threaded 1/2" – 20 and has a 5/8" – 18 threaded adapter included. Works with many OTC pulling attachments.





Sleeve Puller / Installer Sets

These sets work on a wide array of truck, bus, and tractor engines, as well as those in other vehicles. They'll handle wet and dry sleeves – and you won't need to remove head studs. Save time, effort, and money.

- Choice of two sets: manual or 17-1/2 ton hydraulic powered.
- Wide range of adapter plates available to fit most engines.

1200 Manual Sleeve Puller Set

This manually operated, screw-powered device removes cylinder sleeves from most truck, bus, and tractor engines. Adapter plates (not included in the set) accommodate a wide range of bore sizes. See application chart on next page. The puller enables one technician to handle sleeve-pulling tasks.

Not recommended for Mack engines (use No. 1202 set).

1201 Installing Conversion Kit for 1200 Set

Permits the No. 1200 sleeve puller to handle both removing and installing operations. Use plate Nos. 1253–1256 for installing, and plate Nos. 1219–1250 for removing. Plates are not included with kit.



Sleeve puller plate application chart

The puller plates listed here work with manual and 17-1/2 ton hydraulic sleeve pullers	Bore Dia.	Plate No.
J.I. CASE – 207 Diesel	4"	1227
CATERPILLAR – 1673C; 1674; 3304; 3306; D330C; D333C; D334, D326, D337	4-3/4" 5-1/8"	1240 1246
CUMMINS – V Series 903 NT855	5-1/2"	1250
H & NH	4-7/8"	1242
GENERAL MOTORS – 53 Series	3-7/8"	1225
71 Series	4-1/4"	1232
INT'L HARVESTER – C-221, C-263	3-9/16"	1221
D-166, D-188, D-236, D-282, C-248, D-248, D-310, D-358, D-155	3-11/16"	1222
D-179, D-206, D-239	3-7/8"	1225
C-281, D-281, D-361	4-1/8"	1230
D-691, D-461	4-3/4"	1240
D-407	4-5/16"	1233
JOHN DEERE – 4-270, 6-404	4-1/4"	1232
6-531	4-3/4"	1240
6-619	5.12"	1246
8-955	5.512"	1250
MACK – END(T) 673, 675, 676	4-7/8"	1243
672	4-7/8"	1242
END (T) 711, 707	5"	1245
PERKINS – AD3.152, AG3.152, AD4.203	3.6"	1219
AG4.212, A4.236, AG4.236, A6.354, A6.3541, ATC6.3541, AT6.354, AT6.3541	3-7/8"	1223

Universal puller for wet-type sleeves, see 1205.



24824 Thrust washer

37592 Three-way head

27908 13" risers (3 required)

22205 Forcing nut

208675 Swivel assembly

10088 Cap screws, hex hd. (3)

10586 Flat washers (3)

11466 Thrust bearing

32976 Pulling screw



1202 shown



No. 1201	Description
33769	Screw extension
41291	Installing bar
302340	Yoke assembly

4180

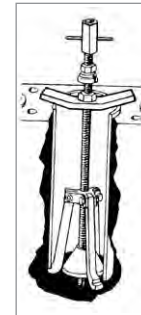
17-1/2 Ton Hydraulic Sleeve Puller Set

Removes and installs sleeves of many makes and models of trucks, buses, and tractors. See chart at left and on next page.

1202 – 17-1/2 ton hydraulic sleeve puller set.

1203 – Sleeve puller without hydraulic assembly.

No. 1202	Description (includes 1203 and 4180)
37592	Three-way head
33769	Screw extension
302482	Speed nut
302340	Yoke assembly
10088	Cap screws, hex hd (3)
32976	Pulling screw
4180	Hyd. ram/pump assy.
27908	13" risers (3 req'd)
41291	Installing bar
10221	Hex safety nut
208675	Swivel assembly
10586	Flat washers (3)
21714	Insert



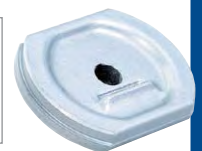
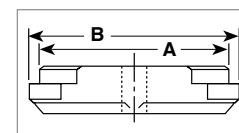
1205 Universal Puller for Wet-Type Sleeves

This tool will remove cylinder sleeves faster than ordinary pullers because it requires very little setup time. Cone adjustment positions the puller jaws quickly, locking bar is tightened. To aid in breaking "frozen" sleeves loose, adjustable bridge is positioned on the cylinder block and the bearing-mounted forcing nut is tightened. Next, bridge is removed and slide hammer assembly is attached. With a few sharp hammer blows, sleeve is pulled. In most cases, job time will average less than two minutes per cylinder. The puller features a 5 lb. slide hammer to help bust loose even the most stubborn sleeves.

- Special adapters are unnecessary.
- Adjustable jaws fit sleeves 3" to 6-1/2" in diameter.

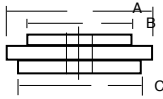
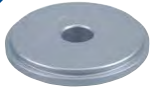
Sleeve Removal Plates

Designed to work with set Nos. 1200, 1202, and 1203, these removal plates fit the full spectrum of cylinder sleeve sizes. Determine engine bore size ("A" dimension) and O.D. of sleeve to be pulled ("B" dimension). Then consult chart to the right.



Bore Inches	A I.D. +.010 -.000	B I.D. +.010 -.000	OTC Plate Number
3.600"	3.585	3.657	1219
3-9/16"	3.547	3.663	1221
3-11/16"	3.671	3.792	1222
3-7/8"	3.840	4.047	1223
3-7/8"	3.859	4.093	1225
4"	3.984	4.218	1227
4-1/8"	4.109	4.229	1230
4-1/4"	4.235	4.470	1232
4-5/16"	4.302	4.450	1233
4-3/4"	4.734	5.171	1240
4-7/8"	4.860	4.980	1242
4-7/8"	4.860	5.045	1243
5"	4.977	5.120	1245
5-1/8"	5.093	5.593	1246
5-1/2"	5.484	5.718	1250

HEAVY DUTY TOOLS HEAVY DUTY TOOLS & EQUIPMENT



Sleeve Installation Plates

Each of these dry-sleeve installation plates covers a range of bore sizes. Their reversible design makes both sides usable. The plates work with our manual or 17-1/2 ton hydraulic puller/ installers.

(Nos. 1200, 1202, and 1203). Check chart at below to ensure correct sleeve selection.

Fits Sleeves From	A	B	C	No.
3-3/16" to 3-7/16"	3-7/8"	3.171"	3.421"	1252
3-9/16" to 3-7/8"	4-1/4"	3.546"	3.859"	1253
4-1/8" to 4-3/8"	4-3/4"	4.109"	4.359"	1254
4-3/8" to 4-3/4"	5-1/4"	4.390"	4.734"	1255
4-13/16" to 5-3/4"	6-3/8"	4.797"	5.734"	1256



5022 Oil Seal and Wear Ring Installer

This two-piece tool makes the difficult job of correctly installing the rear crankshaft seal and wear ring on most Navistar DT-360 and DT-466 engines thru 1996 an easy task. Bolt the adapter to the crankshaft and wrench the component home.

- Eliminates damage to seals or wear ring that can occur when driving them into place.



7106 Cylinder Liner Height Gauge with Hold-Down Bar

This set lets you meet those exacting specifications necessary for optimum diesel engine performance. It accurately measures cylinder bore flatness and depth. The hold-down bar correctly seats the liner for accurate measurement of liner protrusion. The easy-to-read dial is in .001 inch graduations, 1.000" range.



7161 Cummins Engine Turning Tool

This tool makes easy work of manually rotating a Cummins 855 cubic inch engine. It's essential hardware when you're bringing pistons to top dead center to adjust injector timing.

5039 Charged Air Cooler Tester

This is the easy way to find air leaks in the charged air cooler systems used on class 7 & 8 truck engines. The tester features a large 2-1/2", 0-60 PSI pressure gauge, regulator and relief valve, and two safety cables. It also has quick disconnect air fittings that attach to a 3", 3-1/2", or 4" cooler hose.



5071 Cummins Water Pump Pulley Tool

This heavy-duty tool is designed to remove or install water pump pulleys on Cummins L10 and M11 engines, 1991 and newer. The installer has a rugged thrust bearing that allows for friction-free pulley installation without damaging pump components.



7119 Compressor Drive-Gear Coupling Puller

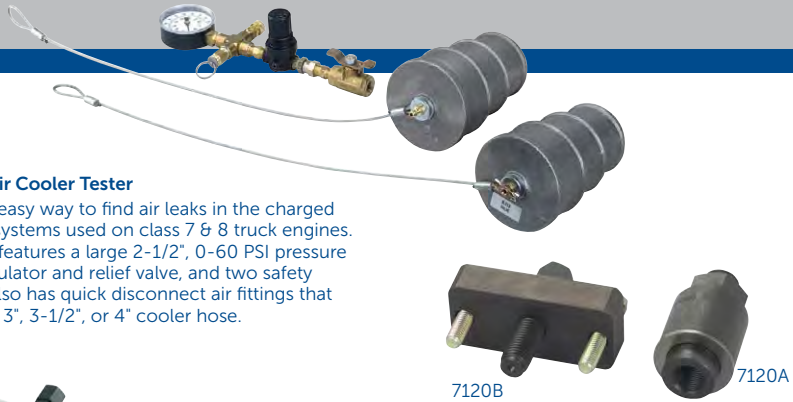
Here's the solution for removing the coupling from the Cummins Compact and Bendix air compressors found on many Cummins 855 cubic inch engines. The split collet design fits over the coupling, and mechanical force does the work.

- Works on compressors with 1-3/4" O.D. shaft.



7470 Cummins Diesel Injector Timing Kit

Measures static timing on Cummins J, K, N, NH, V-12, N-14, and L-10 series diesel engines. With this tool you can determine the injector push tube travel in relation to piston travel. Tool is installed with one dial indicator in the injector bore and the other on the injector push tube. Turn the engine over manually to find top dead center. By checking the gauges, you can determine if timing is within factory specifications, then make adjustments to the cam followers.



7120 Cummins Drive-Pulley Tool Set

This two-piece set is designed to remove and install the drive pulley on Cummins NH and NTC 855 cubic inch engines. The 7120B remover simply bolts into the tapped holes for pulling. The 7120A installer threads onto the pulley accessory drive shaft for easy installation.

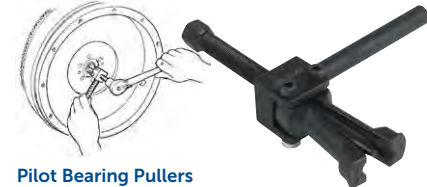
- 7120A** – Drive-pulley installer.
- 7120B** – Drive-pulley remover.



5044 Self-Adjusting Clutch Rotating Tool

This handy tool replaces the self-adjuster mechanism on Spicer self-adjusting clutches, allowing you to manually adjust them with a wrench or socket.

- 3/4" hex drive.



Pilot Bearing Pullers

These tools make quick work of pulling stubborn, rusted pilot bearings. No. 5048 fits 1-1/4" I.D. bearings, and No. 5049 fits 1" I.D. bearings. The puller's forcing screw expands the jaws inside the bearing and simultaneously pushes against the crankshaft.

- 5048** – Pilot bearing puller for 1-1/4" I.D.
- 5049** – Pilot bearing puller for 1" I.D.



7028 Clutch-Adjusting Wrench

This clutch-adjusting wrench will solve the difficult, time-consuming job of internally adjusting heavy-duty Spicer clutches. Using this wrench is much quicker and easier than makeshift methods such as pry bars, which often result in component damage, poor job performance, or extra downtime.

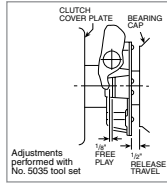


Similar to Ford 308-D008 (D93L-4201-A)

5035 Truck Clutch Adjustment Set

The gauges in this set enable you to check the adjustment of pull-type, heavy-duty clutches, ensuring their correct operation. One gauge checks the amount of free play between the yoke and the bearing's wear pad. The other gauge lets you determine the amount of travel between the release bearing and transmission bearing cap.

- Release bearing travel gauge.
- Clutch pedal free play gauge.



Adjustments performed with No. 5035 tool set



5190A Heavy-Duty U-Joint Puller

The ideal tool for disassembling drivelines.

- May be used with up to a one-inch impact wrench.
- Quickly and easily removes sealed U-joint cups without the need for hammering or heat.
- Will not damage the driveshaft, yoke, bearing cups, or joints.
- Fits practically all Class 7 and 8 trucks, including: Spicer driveline 1610, 1710, 1760, 1810, 1880 Spicer SPL 140, 170, and 250 "Life Series" Meritor (Rockwell) 16N, 17N, 18N, 1710 Meritor RPL 20 and 25 "Permalube" Series.



5192 Heavy-Duty Bearing Cup Installer

Quickly and easily installs bearing cups on bolt-retained universal joints. Fits series 1610 to 1880 and nearly all other heavy-duty truck and machine type u-joints with bolt-retained bearing cups.

- Automatically aligns bearing cups during installation.
- Eliminates the possibility of damage to the needle bearing.

Similar to Ford 308-D009 (D93L7025-A)

Truck Clutch Alignment Shafts

These 10-spline clutch alignment shafts are available in the three most popular sizes: 1-1/2", 1-3/4", 2" O.D., and are designed for use on heavy-duty single, two-plate, push/pull, manual, and self-adjust clutches. The shafts are constructed of lightweight fiberglass-reinforced nylon that won't hang up in clutch disc splines. Yet, they're rugged and will easily support the weight of heavy pressure plates.



5070 – Truck clutch alignment shaft. 1-1/2" O.D., 30 mm pilot.

7072A – Truck clutch alignment shaft. 1-1/2" O.D., 1" pilot, 10 splines, 3.25" long. Similar to Ford 308-D001 (D79T-7550-A).

7073A – Truck clutch alignment shaft. 1-3/4" O.D., 1-1/4" pilot, spline 3.75" long. Similar to Ford 308-D002 (D79T-7550-B).

7074A – Truck clutch alignment shaft. 2" O.D., 1-1/4" pilot. 10 splines, 3.6" long. Similar to Ford 308-D003 (D79T-7550-C).

7480 – Truck clutch alignment shaft. 1-3/4" O.D., 1" pilot. Similar to Ford 308-D010 (D93T-7550-A).

5029 – Clutch alignment shaft. 2" O.D., 1-1/4" pilot. 10 splines, 7.3" long. Similar to Ford 308-D011 (D93T-7550-B).

5030 – Clutch alignment shaft. 1-3/4" O.D., 1-1/4" pilot, spline 7.375" long. Similar to Ford 308-D012 (D93T-7550-C).



5191 Heavy-Duty Bearing Cup Installer

Quickly and easily installs bearing cups on Dana/Spicer SPL "Life Series" quick-disconnect universal joints.

- Three individual adapters press bearings to the manufacturer's recommended depths.
- Adapters fit Spicer SPL 140, 170, and 250 series drivelines.



7490 U-Joint Tool

Designed for a 1/2" impact wrench, this U-joint tool removes even the most stubborn U-joints with ease. It's compact and easily set up, making it ideal for service calls. And it can be used at different angles and in tight places, eliminating those damaging makeshift methods. The puller's legs have holes for bolt storage.

- Bolts included: 5/16"-24 x 1-1/2", 3/8"-24 x 1-1/2", 7/16"-20 x 1-1/2", M8-1.25 mm x 35 mm.
- Works on most Dana Spicer and Meritor U-joints – except Spicer's Life series model SPL250X.



5043 Clutch Service Set

Here's an ideal companion set to the clutch handler. Designed for Spicer heavy-duty clutches, the nine tools in this set help with a variety of jobs, from clutch installation and removal to flywheel drive-pin installation to clutch adjustment.

- Includes handy plastic carrying case.

OTC No.	Description
5044*	Self-adjust clutch rotating tool. Rotates adjusting ring.
5045*	Flywheel drive pin installing tool. Aligns and installs drive pins in 14" heavy-duty truck pot-type flywheels.
5046*	Clutch release tool. Removes shipping blocks from between clutch housing and release bearing.
7028*	Adjusting wrench. For internal adjustment of multiple lever and angle-spring clutches.
7073A*	Clutch alignment tool. 1-3/4" O.D. Provides perfect fit to spline of clutch disc.
7074A*	Clutch alignment tool. 2" O.D. Provides perfect fit to spline of clutch disc.
213013	Pair of 3/8" flywheel to clutch guide pins.
213014	Pair of 7/16" flywheel to clutch guide pins.
213015	Hex key Wrench. Removes/installs flywheel drive pin set screws.

* Tool is available separately.

7057 U-Joint Puller

This service tool easily removes stubborn, corroded bearings without damaging U-joint components, even in limited space. The tool applies up to 7 tons of force to separate yoke assemblies and remove bearings. Far superior to sledgehammer methods.

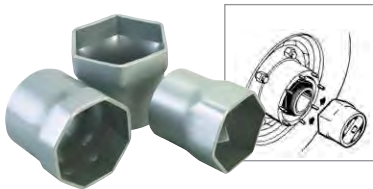
- Works on Meritor 16N, 17N, 18N, and 1710 series U-joints and Spicer 1600/1610 to 1880 series U-joints.
- Includes plastic storage box, No. 1036 2-jaw puller, and instructions.



HEAVY DUTY LOCKNUT SOCKETS HEAVY DUTY TOOLS & EQUIPMENT

Wheel bearing locknuts are easy to remove or install with these specially designed sockets. They're made of high-strength steel and resist rounding out.

NOTE: Sockets are designed for use with 3/4" square-drive manual tools only. Impact tool use voids sockets' warranty.
 1902 – Similar to Ford No. 205-039 (T70T-4252-B)
 1904 – Similar to Ford No. 205-040 (T70T-4252-D)
 1905 – Similar to Ford No. 205-041 (T70T-4252-E)
 1910 – Similar to Ford No. 205-042 (T70T-4252-K)
 1928 – Similar to Ford No. 205-043 (T70T-4252-W)
 Measure from flat to flat to determine size of locknut, then consult chart to find the correct socket.

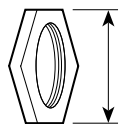


Socket No.	Opening Size	Socket No.	Opening Size	Socket No.	Opening Size	Socket No.	Opening Size
1901	2-3/32" (6 pt.)	1923	2-3/4" (6 pt.)	1924	3-3/8" (8 pt.)	1940	4-1/8" (8 pt.)
1920	2-1/4" (6 pt.)	1937	2-3/4" (8 pt.)	1910	3-1/2" (6 pt.)	1916	4-3/8" (6 pt.)
1902	2-3/8" (6 pt.)	1932	2-7/8" (6 pt.)	1911	3-1/2" (8 pt.)	1917	4-3/8" (8 pt.)
1936*	2-3/8" (6 pt.)	1933	2-7/8" (8 pt.)	1925	3-3/4" (8 pt.)	1938	4-1/2" (8 pt.)
1903	2-3/8" (8 pt.)	1906	3" (6 pt.)	1926	3-3/4" (6 pt.)	1941	4-13/16" (8 pt.)
1921	2-1/2" (6 pt.)	1907	3" (8 pt.)	1927	3-13/16" (8 pt.)	1918	4-7/8" (6 pt.)
1904	2-9/16" (6 pt.)	1934	3-1/8" (6 pt.)	1912	3-7/8" (6 pt.)	1919	4-7/8" (8 pt.)
1905	2-9/16" (8 pt.)	1935	3-1/8" (8 pt.)	1913	3-7/8" (8 pt.)	1939	5-1/4" (6 pt.)
1928*	2-9/16" (6 pt.)	1908	3-1/4" (6 pt.)	1914	4" (6 pt.)	7795	2-1/2" (6 pt.)
1922	2-5/8" (6 pt.)	1909	3-1/4" (8 pt.)	1915	4-1/8" (6 pt.)	7796	2-3/4" (6 pt.)

9850 Truck Wheel Bearing Locknut Sockets (6-pt.)

21 wheel bearing locknut sockets with tool board. **62908** – Display board only.

No.	Qty.	Description
1901	1	Locknut socket (2-3/32")
1902	1	Locknut socket (2-3/8")
1904	1	Locknut socket (2-9/16")
1906	1	Locknut socket (3")
1908	1	Locknut socket (3-1/4")
1910	1	Locknut socket (3-1/2")
1912	1	Locknut socket (3-7/8")
1914	1	Locknut socket (4")
1915	1	Locknut socket (4-1/8")
1916	1	Locknut socket (4-3/8")
1918	1	Locknut socket (4-7/8")
1920	1	Locknut socket (2-1/4")
1921	1	Locknut socket (2-1/2")
1922	1	Locknut socket (2-5/8")
1923	1	Locknut socket (2-3/4")
1926	1	Locknut socket (3-3/4")
1928	1	Locknut socket (2-9/16" rounded)
1932	1	Locknut socket (2-7/8")
1934	1	Locknut socket (3-1/8")
1936	1	Locknut socket (2-3/8" rounded)
1939	1	Locknut socket (5-1/4")



Measure from flat to flat to determine size of locknut, then consult chart to select a socket. Warranty is void if tool is subjected to impact wrench use.



* Fits special "rounded" hex nut found on Dana axles of some Ford trucks.
 * Depth of locknut sockets is 5".

Metric Truck Wheel Bearing Locknut Sockets

Socket No.	Opening Size	Socket No.	Opening Size	Socket No.	Opening Size
1950M	54 mm (6 pt.)	1955M	80 mm (6 pt.)	1962M	100 mm (8 pt.)
1951M	55 mm (6 pt.)	1956M	82 mm (8 pt.)	1959M	106 mm (8 pt.)
1952M	60 mm (6 pt.)	1957M	90 mm (8 pt.)	1960M	110 mm (8 pt.)
1953M	70 mm (6 pt.)	1958M	94 mm (8 pt.)	1961M	120 mm (6 pt.)
1954M	71 mm (6 pt.)				

5059 Hubcap Installer

Truckers like chrome, and many of them accent their truck's drive axle with chrome hubcaps designed to snugly fit around the axle-shaft bolts. Unfortunately for service shops, these hubcaps are often tricky to install without causing damage. That's where our hubcap installer comes in handy. Constructed of high-density polyethylene, this tool guides the cap into place over the axle nuts, protecting it from unwanted and costly dents.



5047 Lug Nut Cap Remover

Chrome-plated lug nut caps found on many heavy-duty trucks and trailers can be tough to remove, and they're easily damaged if you pry them off or use an ordinary cap remover. This tool avoids those problems. It is ruggedly built and features specially coated jaws that won't slip off the caps, no matter how much squeezing force you apply.

- Features cushioned handles.



5047LP Lug Nut Cap Remover Locking Pliers

- Designed to remove lug nut caps found on heavy duty truck and trailers quickly and easily without damage. Caps can be easily damaged by prying or using standard cap removers.
- Locking plier design with specially coated jaws apply maximum grip on the lug nut caps without damage.

9851

Wheel Bearing Locknut Sockets (8 pt.)

18 wheel bearing locknut sockets with tool board.

62909 – Display board only

No.	Qty.	Description
1903	1	Locknut socket (2-3/8")
1905	1	Locknut socket (2-9/16")
1907	1	Locknut socket (3")
1909	1	Locknut socket (3-1/4")
1911	1	Locknut socket (3-1/2")
1913	1	Locknut socket (3-7/8")
1917	1	Locknut socket (4-3/8")
1919	1	Locknut socket (4-7/8")
1924	1	Locknut socket (3-3/8")
1925	1	Locknut socket (3-3/4")
1927	1	Locknut socket (3-13/16")
1929	1	Locknut socket (2-5/8")



No.	Qty.	Description
1930	1	Locknut socket (2-7/8")
1931	1	Locknut socket (3-5/8")
1933	1	Locknut socket (2-7/8")
1935	1	Locknut socket (3-1/8")
1937	1	Locknut socket (2-3/4")
1938	1	Locknut socket (4-1/2")

9852

Wheel Bearing Locknut Sockets

A selection of popular sizes in 6- or 8-point.

62910 – Display board only.

No.	Qty.	Description
1904	1	Locknut socket (2-9/16" hex)
1908	1	Locknut socket (3-1/4" hex)
1909	1	Locknut socket (3-1/4" 8 pt.)
1910	1	Locknut socket (3-1/2" hex)
1913	1	Locknut socket (3-7/8" 8 pt.)
1914	1	Locknut socket (4" hex)
1915	1	Locknut socket (4-1/8" hex)
1921	1	Locknut socket (2-1/2" hex)
1922	1	Locknut socket (2-5/8" hex)



No.	Qty.	Description
1923	1	Locknut socket (2-3/4" hex)
1928	1	Locknut socket (2-9/16" hex rounded)
1932	1	Locknut socket (2-7/8" hex)

9814

Truck Pinion Sockets

We've designed and built these sockets to have the correct clearance for yoke and locknut assemblies on a variety of truck transmissions and differentials. The sockets have 3" of usable depth and are 4" long. Using the right tools saves time and effort, eliminating the need to destroy standard sockets by grinding them down to fit tight pinion clearances.

No. 1981* – Socket only, not included in set.

62911 – Tool Board only

Socket No.	Opening Size	Socket No.	Opening Size
1975	2" (6 pt.)	1980	2-3/4" (6 pt.)
1976	2-1/8" (6 pt.)	1981*	2-1/2" (6 pt.)
1977	2-1/4" (6 pt.)	NOTE: Use sockets with 3/4" square-drive, manually powered handles only. Warranty void if tool is subjected to impact wrench use.	
1978	2-3/8" (6 pt.)		
1979	2-5/8" (6 pt.)		



1944

Budd Wheel Sockets

- Metric sizes for Isuzu, Hino, Mitsubishi Fuso, and import trucks; fit front and rear axle wheels.

- 1-1/2" hex Budd wheel socket for American-made trucks with dual rear wheels.

These sockets work on the import truck Budd wheels. Their extra deep design lets you remove both nut and stud with just the one socket. Usable with a 1" square drive impact wrench.

1944 – Consists of 1945A, 1946A, 1947A, 1948A, and 1949A, in a blow molded organizer case.

1945A – 35 mm hex socket with 17 mm sq.

1946A – 38 mm hex socket with 20 mm sq.

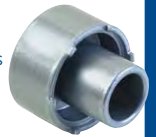
1947A – 41 mm hex socket with 21 mm sq.

1948A – 33 mm hex Budd wheel socket. For Mack Midliners, White Volvo, and other import trucks w/dual rear wheels.

1949A – 1-1/2" hex Budd with 13/16" square wheel socket. For American-made trucks with dual rear wheels.

Tubular Spanner Wrenches

- Six-lug, spanner-type wrenches remove and install rear wheel bearing locknuts. They're built for use with a 3/4" square-drive ratchet or breaker bar.



1929 – Wrench for servicing Chevrolet and GMC 5,200 and 7,200 lb. axles. Socket O.D. is 2-5/8".

1930 – Wrench for servicing Chevrolet and GMC 11,000 to 13,500 lb. axles. Socket O.D. is 2-7/8".

1931 – Wrench for servicing Chevrolet and GMC 15,000 lb. axles; 17,000 lb. 2-spd. axles; 15,000 lb. trailing axles. Socket O.D. is 3-5/8".



Jimmy Bars

We've forged these bars from chrome alloy steel, then heat-treated them to resist bending and breaking.

7166 – 5/8" diameter, 18" long

7167 – 3/4" diameter, 24" long

7168 – 7/8" diameter, 30" long

7420 – 7/8" diameter, 46" long

7421 – 1" diameter, 54" long

STEERING / SUSPENSION TOOLS HEAVY DUTY TOOLS & EQUIPMENT



4240

Kingpin & Brake Anchor Pin Pusher

With this pin remover, hydraulic force and precision tooling replace torch-and-hammer methods for getting the job done quickly and easily. Five special collars and two pins allow this unit to work on both straight and tapered kingpins and accommodates sizes from 7/8" to 2" in diameter and up to 11-1/4" long. The tool delivers 30 tons of hydraulic force to push out even the most corroded kingpins. A job that could consume the better part of a day is done in minutes. The anchor pin can be removed quickly by using the special adapter installed in the pusher's base block and the unit positioned over the brake's spider.

- Works on many models of trucks and buses.
- 27-1/2" high x 8-1/2" wide.
- 30-ton capacity.
- Set includes No. 4002 hydraulic hand pump, No. 9767 hose, No. 9798 hose-half coupler, No. 4121 Power Twin 30-ton ram, and No. 29424 anchor pin adapter.

4240 – Complete kingpin and anchor pin pusher set with hydraulics

4241 – King- and anchor-pin pusher with anchor pin adapter without hydraulics

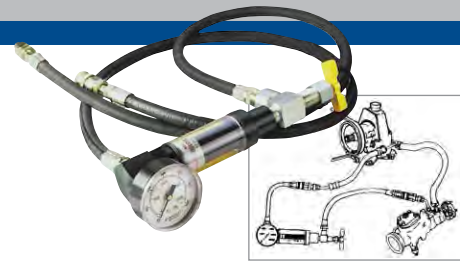
29424 – Anchor pin adapter only



4241



29424



5079

Heavy-Duty Power Steering Pump Analyzer

- There is only one way to troubleshoot problem components in a heavy-duty power steering system: a flow and pressure reading meter. OTC's new No. 5079 measures both: 1 to 10 gallons oil flow and up to 3,000 psi of pressure.
- When connected in line, this universal analyzer will isolate the failed components in just minutes. There is no wasted time as in trial and error methods.
- The set is complete with high pressure hoses, 9/16"-18 standard fittings, and quick disconnect couplers to handle Eaton/Vickers, TRW, Ross, and Shepard power steering systems.

5053 Mack Kingpin Socket

Here is a socket that makes life a little easier for anyone who works on Mack trucks. Designed for 1/2" square drive ratchet or breaker bar, the socket fits the slotted adjusting screw in tapered kingpins used on most Mack front axles (12,000 to 20,000 lbs.).

- Socket O.D. 1.8"



7071 Differential Housing Spreader

Removing and installing differential ring gear assemblies is typically a difficult, time-consuming chore – that is, unless you're using this differential housing spreader. This device uses mechanical screw power to spread the housing. Allowing easy removal of the differential assembly while eliminating damage often caused by makeshift methods.

- Works on Dana axle models 30 through 70.

5065 Tie Rod Socket for Medium-Duty Trucks

Services GM-, Ford-, and Chrysler-built 1-ton 2WD and 4WD trucks. Also works on medium-duty Class 2 through Class 6 trucks. Use with a 1/2" drive impact wrench to easily remove the tie rod ends from the tie rod.

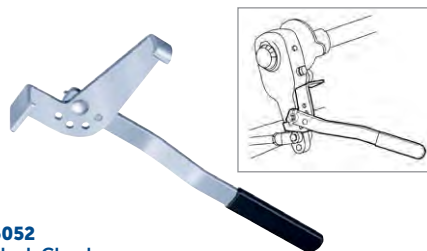
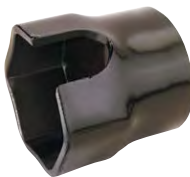
- Socket I.D. 2-1/8"



5068 Truck Tie Rod Socket

Designed to withstand the force of a 3/4" drive impact wrench, this rugged socket makes truck tie-rod end removal quick and simple.

- Works on inner and outer tie rod ends on 12,000 to 16,000 lb. truck axles.
- Socket I.D. 2-3/4"



5052 Slack Check

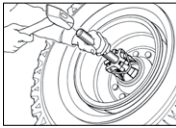
This tool enables you to quickly check the brake adjustment on class 7 and 8 trucks and trailers having S-cam brakes. It features a sturdy, four-position handle to provide the leverage you need at the proper angle.

- Works on manual or automatic slack adjusters.



4295 Wheel Stud Service Kit

- Works on most hubs for installation and removal.
 - All sizes of studs.
- Installation done by pushing on the head, eliminating the need for threaded adapters.
 - Reduces number of adapters required
 - Reduces damage to studs
 - Increases ease of use
- Remove and install 10 studs in only 10-15 minutes (compare to 20-30 minutes for more expensive competitive products).
- Can be powered with an impact wrench, no hydraulic power source required.
- No need to remove hub from vehicle.
- Reduces risk of damage to hubs, studs, and bearings when using tool.
- Weighs only 12 lbs., assembled to remove studs and 14 lbs., assembled to install studs.



7180 Universal Bearing Cup Installer

This handy, adjustable tool is designed to install wheel-bearing cups in a wide range of heavy-duty axles. Simply adjust and lock the jaws to the cup I.D., slip on the new cup, set it in the bore, and drive it in with a hammer. The tool helps eliminate the damage caused by makeshift methods.

- Works on axles from 11,000 to 50,000 lb. capacity.
- Adjusts to fit 3-5/8" to 6-1/2" O.D. bearing cups, which adds up to as many as 30 individual drivers.

52038 – Replacement jaw.

207561 – Replacement retaining spring.



5038 Brake Anchor Pin and Bushing Service Set

With the No. 5038, there's no need to remove the bearing hub assembly just to replace the pins and bushings on 16-1/2" S-cam trailer and tractor "Q" brake systems. Much less complicated and time consuming!

- Special tooling and our C-frame press get you past the hub assembly, so you can do the job quickly and professionally without damaging other parts.
- Includes everything needed for removal and replacement.



5081 S-Cam Air Brake Spring Tool

- Eliminate makeshift, unsafe methods of unhooking and reconnecting retaining springs when replacing brake shoes on heavy-duty tractors and trailers.
- Simply hook the retaining spring loop and press down. Lever action against the axle makes the job a snap!

314548 – Replacement hook kit.



5080 Truck Front Leaf Spring, Pin, and Bushing Service Set

- Delivers 10 tons of hydraulic force to remove and install truck front spring eye bushing assemblies quickly and easily.
- Services bushings with diameters from 1-1/4" through 1-7/8", and pin diameters from 7/8" through 1-1/8". Handles all popular OE and aftermarket components, including Horton pin and bushing assemblies.
- Service bushing assemblies, in many cases, without removing leaf spring hangers and spring assemblies from the vehicle.
- All accessories are included except the hydraulic hand pump and hydraulic hose which must be purchased separately.



5085 Hub Oil Seal Puller

- Eliminates bearing and hub damage that can occur when a punch and hammer is used to remove the seal.
- Extra long 28" handle provides leverage, unique pulling head design quickly and easily removes the seal in one piece.
- Built from the highest quality heat-treated steel.
- Removes hub seals on trailer and truck axles, including truck steering axles.



Slack Adjuster Pullers

These pullers will yank even the most corroded slack adjuster off the S-cam— and do so in just a fraction of the time needed with "heat and beat" methods. Plus, they won't damage components. Both pullers have a rugged forcing screw and cast steel body. Puller No. 5055 fits many manual types, and the No. 5056 works on Rockwell, Haldex, Gunitite, and Bendix automatic adjusters.

5055 – Manual slack adjuster puller.

5056 – Automatic slack adjuster puller.



5054 Air Brake Service Kit

This kit has the tools needed to remove slack adjusters and push-rod clevis pins used in the S-cam brake systems of class 7 and 8 vehicles.

- Works on manual or automatic slack adjusters.
- Includes Nos. 5055 and 5056 slack adjuster pullers, 5057 brake clevis pin press, and a plastic storage case.



5057 Clevis Pin Press

Removing corroded clevis pins from a brake air-chamber push rod can be a maddening and time-consuming task— unless you're using our clevis pin press. This handy screw-operated tool applies the force just where it's needed. The pin is easily removed from its hole without damaging nearby components.



7077 Axle-Stud Cone Pliers

Now you can easily remove the tapered cone from studs used on the rear axles of medium and heavy-duty trucks. This specially designed tool gives you the leverage needed to expand the cone and remove it from the stud for axle wremoval.

BRAKE / TRANSMISSION TOOLS HEAVY DUTY TOOLS & EQUIPMENT



4592 Truck Brake Spring Pliers

- Designed to remove and install the brake shoe return springs on medium-duty and heavy-duty drum brakes.

4592-1 – Replacement tip.



7069A Heavy-Duty Brake Spring Pliers

Save time and effort when removing and installing return springs on the brake shoes of heavy-duty vehicles. This specially designed pliers works for hydraulic wedge-type and "S" cam air brakes. Its 26-1/4" length gives you the leverage to do the job more easily, and the huge jaw opening accommodates even the widest brake shoes.

202621 – Wedge-type replacement tip

204141 – "S" cam replacement tip



Positioned for bearing installation.



Positioned for main shaft timing.



Transmission Timing Block Sets

These sets enable one-man installation of front and rear countershaft bearings on Fuller twin-countershaft transmissions. The set positions the upper countershaft, yet lets you slide it aside to insert the main shaft. When the main shaft is in place and timing marks line up, turn the tool vertically to engage and position the countershaft to main shaft.

7108 – Timing block set for Fuller RTO 610/613 transmissions.

7109 – Timing block set for Fuller RT and RTO 910, 915, 9513, 12509, 12510, 12513, and 12515 transmissions.



5063 Timing Tool

- Designed to support the main-case upper countershaft during transmission assembly and timing.
- Works on Eaton® Fuller® 2 Series Roadranger® transmissions.

Truck Transmission Bearing Service Set

The set is designed to help you remove input shaft bearings and countershaft bearings, in both the main and auxiliary boxes of heavy-duty Fuller transmissions. It will also remove end yokes from 1600/1610-1810 series transmissions. The puller delivers 10 tons of mechanical power—essential force for working on big gearboxes.

- Works on Fuller twin-countershaft transmissions: 125, 600, 660, 900, 9500, 1100, 12500, 12600, 13000, 14600, 15600, and 8600 series, 910-913, 915, and 9513.

7070A – Truck transmission bearing service set

7075 – Transmission output shaft end yoke remover only

7207 – Collet only



7462 Hydraulic Brake Spring Tool

Here's a tool to remove and install the return springs in Lucas Girling hydraulic brake systems. The tool's machined tip cradles the return spring securely, and its sliding fulcrum gives you all the leverage needed to do the job. A knurled handle helps prevent slipping.

- Works on 1984 to current Ford F600, F700, and F800 series having Lucas Girling hydraulic brakes.



Similar to Ford 206-D005 (D90T-2588-A)

5072 Lucas Rear Brake Adjusting Tool

If you're working on a lot of medium-duty hydraulic brake systems, you need our adjusting tool. It enables you to easily adjust Lucas Girling hydraulic brake systems (popular in Ford F700, F800, and F900 series). The tool's offset design and extra handle length get the job done quickly.



205776 Bearing Puller Set

This puller set, designed for use with our No. 7070A transmission service set (sold separately), is designed to remove front countershaft and input shaft bearings on Fuller RT, RTO 610/613 twin countershaft transmissions.



5051 Bearing Puller Set

When teamed with our No. 7070A puller, this puller set will remove front and rear countershaft bearings from the main case of Eaton® Fuller® 2 Series Roadranger® transmissions.

- Includes pulling collet, sleeve, and a pair of puller legs.

5064 Countershaft Pushing Tool

Replacing rear countershaft bearing snap rings in Eaton Fuller transmissions. With this tool, you can easily move the countershaft rearward to expose the snap ring.

- Works on Eaton® Fuller® Roadranger® transmissions (series 2, 5, 6, and 7).



5065 Countershaft Bearing Driver

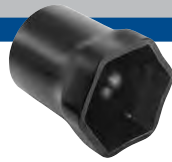
- Eases the task of installing a main-case countershaft bearing.
- Works on Eaton® Fuller® 2 Series Roadranger® transmissions.



5066 Bearing Driver

This tool is designed to install the bearing on 2" diameter input shafts used in Eaton® Fuller® Roadranger® transmissions.





1982M 70 mm Hex Socket

Attach this heavy-duty socket to your 3/4" drive ratchet or breaker bar, and you'll be able to easily remove the end-yoke locknut on Eaton® Fuller® 2 Series Roadranger® transmissions.



5040 Cummins® Injector Remover/ Installer

This is our best tool for removing or installing fuel injectors on Cummins L10 and N14 Celect electronically controlled engines. The large slide hammer and pin-type pulling adapter easily—and safely—handle injector jobs.

- Includes storage case.
- Two installing adapters help prevent damage to an injector's electronic solenoid.



5042 Cummins® Injector Puller

This helpful puller will handle a variety of injectors found in Cummins engines: mechanical L-10, PDT, and PTD top-stop 855NH. Its two-jaw design firmly grips the injector while it is being removed by the slide hammer.

- Includes storage case and special adapter for pulling STC injectors.



5062 Auxiliary Countershaft Shim Tool

When you're working on Eaton® Fuller® 2 Series Roadranger® transmissions, this tool holds the auxiliary countershaft in place while you set the bearing end play.

- Includes a support strap for .100 and .125 shim settings, and metric and standard mounting bolts.



7455 Mack Fuel Injector Nozzle Tool

Here's a handy tool for removing or installing injector nozzles on Mack E-6 4 VH and E-9 4 VH four-valve engines. The puller threads directly into the nozzle holder, and mechanical screw power does the pulling while a cylindrical guide holds the injector steady.

- Includes gauge to ensure correct injector depth during installation.



Cummins® Fuel Injector Puller Adapter

When combined with our No. 5028 injector puller or a slide hammer with a 1/2"–20 threaded shaft, this adapter gives you an easy, damage-free way to remove fuel injectors from Cummins B and C series engines.

217793 – Cummins fuel injector puller adapter for B and C series engines with 12 mm x 1.5 injector threads.

215844 – Cummins fuel injector puller adapter for B and C series engines with 14 mm x 1.5 injector threads.



7117 Caterpillar Fuel Injector Nozzle Puller

We've designed this nozzle puller to remove pencil nozzles on Cat engines. The tool applies straight, even pulling power through a bridge assembly and mechanical forcing screw. The job is done quickly—and without damage.

- Works on Caterpillar 1100/3208 diesel engines.



7121 Fuel Injector Nozzle Puller

We've designed this puller to remove the pencil-type fuel injector nozzles used in many agricultural and construction engines. The slide hammer action gives a straight, even pull without damaging components.

- Works on Case, Caterpillar, GM, John Deere, Waukesha, and White diesel engines.



7458 Bosch Nozzle Socket

Removes or installs injector nozzles. You use the inner socket to hold the nozzle stationary, and the outer socket to loosen or tighten the nozzle's gland nut.

- Works on Bosch KDEL 21 mm injector nozzles used in John Deere engines.



218163 Ford Fuel Injector Puller Adapter

Designed to work with the No. 5028 slide-hammer puller, this adapter removes injectors from Ford 6.6L and 7.8L diesel engines without damage.

- Slide-hammer threads are 1/2" x 20. Threaded end for injector is 14 mm x 1.5.



5024 Injector Sleeve Set

Here are the ideal tools for removing and installing the injector sleeves of International DT466 engines. The removing tool threads onto a slide hammer with 5/8" - 18 threads to remove sleeves quickly. The installer seats new sleeves equally fast, without damage.

Similar to Ford 303-230(T83T-9396-A)



Diesel Fuel Line Wrenches

Fuel line nuts are often hard to reach, but these unique 3/8" square-drive tools solve that problem. With them, you can loosen or tighten fuel lines at the fuel injector nozzle or fuel injection pump without damaging the nut.

7453A – Fuel line wrench, 2.6" long. For International DT466 and 9L diesel engines. Fits 19 mm fuel line nuts.

7460 – Fuel line wrench, 2.6" long. For International 6.9L and 7.3L diesel engines. Fits 5/8" hex nut.



Similar to Ford 303-228 (T83T-9000-C)

7461 Fuel Injector Pump Rotating Tool

Maximum fuel economy requires precise injector timing. The tool securely grips the front of the fuel injection pump so you can rotate it while fine-tuning the system.

- Works on Stanadyne rotary fuel pumps found on International's 6.9 and 7.3 liter engines.

NOZZLE TESTERS HEAVY DUTY TOOLS & EQUIPMENT

4201

Nozzle-Tester Adapter Set

This is our universal adapter set for testing injection nozzles on the most popular automotive, agricultural, and construction diesel engines. The set has 17 adapters that connect to our No. 4200 Nozrater testing unit.

- Includes handy metal storage box.
- 23622— used on 1989–95 Cummins 5.9L, 1983–94 Ford 6.9L and 7.3L.
- 23623— used on 1996–2000 Cummins 5.9L and Navistar 6.6L and 7.8L.



Adapter No.	Description	I.H. Truck	I.H. Farm Construction	John Deere	Oliver & Allis	Waukesha	Case, Ford Tractor, Massey, & Perkins	White	Mack	Caterpillar Pencil Nozzles	Deutz	GM Autos	VW, Audi, & Mercedes Autos	Mercedes & Magaris Truck
36352	Fuel line assembly, 9/16"–18 R.H. thd. with 24° on pipe.	•	•	•	•	•	•	•	•	•	•	•	•	•
23622	Adapter nut, 12 X 1.5 mm internal R.H. thd. to 1/2"–20 internal L.H. thd.	•		•	•	•	•	•			•	•	•	
23623	Adapter nut, 14 X 1.5 mm internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•	•	•	•	•		•		•			•
23624	Adapter nut, 18 X 1.5 mm internal R.H. thd. to 1/2"–20 internal L.H. thd.		•		•	•	•							
201917	Adapter nut, 9/16"–18 internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•	•	•	•	•	•				•		
23626	Adapter nut, 5/8"–18 internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•		•	•	•							
201912	Adapter nut, 3/4"–16 internal R.H. thd. to 1/2"–20 internal					•								
201913	Adapter nut, 9/16"–24 internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•											
23693	Straight adapter, 1/2"–20 external L.H. thd. (Ermeto 24° & 90° seat) to 9/16"–18 external R.H. thd. (E201917°).	•	•	•	•	•	•	•				•		
23692	Straight adapter, 3/8"–24 external R.H. thd. to 9/16"–18 external R.H. thd. (internal Ermeto 24°).	•	•											
23617	90° adapter, 9/16"–18 external R.H. thd. (Ermeto 24°) to 9/16"–18 internal R.H. thd. (Ermeto 24°).	•	•	•	•		•		•		•	•	•	•
23621	Straight adapter, 9/16"–18 external R.H. thd. (Ermeto 24°) to 1/2"–20 external L.H. thd. (60° seat).	•	•	•			•	•	•		•	•	•	•
208370	Banjo adapter, 9/16"–18 external R.H. thd. (24° seat).		•	•										
201916	Adapter, 9/16"–18 external R.H. thd. to 9/16"–18 internal R.H. thd. ferrule.			•										
208369	90° adapter, 9/16"–18 external R.H. thd. to 9/16"–18 internal R.H. thd.	•												
38279	Straight adapter, 14 X 1.5 mm external R.H. thd. (Ermeto 60°) to 9/16"–18 external R.H. thd. (internal Ermeto 24°).			•										
43468	Straight adapter, 1/2"–20 external R.H. thd. (Ermeto 24°) to 9/16"–18 external R.H. thd. (internal Ermeto 24°).							•						
Additional Accessories Available (not included in 4201 Set)														
44026	Straight adapter, 9/16"–18" R.H. thd. (Ermeto 24°) to Caterpillar 1100 & 3200 series pencil nozzle.									•				
201920	Adapter nut, 14 X 1.5 mm external thd. to o"–18 internal R.H. thread													Connects OTC 4200 Nozrater to other fittings used in the industry.



Nozzle Tester Manifold/Adapter Sets

These adapter sets expand our No. 4200 Nozlrater to troubleshoot a wide range of diesel engine injector nozzles.

4202 – Adapters for servicing Audi, GM, Mercedes- Benz, Nissan/Datsun, Toyota, and VW Rabbit diesel engines.

4203 – Manifold/adapter set. Tests Caterpillar high- and low-pressure, capsule-type nozzles, and high-pressure, pencil-type nozzles on 1100 and 3200 series engines. Complete with Nos. 39870 and 206168 adapters, low-pressure gauge (up to 1,000 PSI), cap plug and mounting brackets.

No. 4202 set includes:

Adapter No.	Description	Chevy Chevette & GM 1980 and newer C.A.V. nozzles	GM 1979 & newer pencil nozzles	GM 1978 pencil nozzles	Nissan, Toyota, and VW Rabbit Diesels	Audi & Mercedes-Benz
36352	Fuel line assy., 9/16"-18 R.H. thd. with 24° on pipe.	•	•	•	•	•
23617	90° adapter, 9/16"-18 external R.H. thd. (Ermeto 24°) to 9/16"-18 internal R.H. thd. (Ermeto 24°).	•	•	•	•	•
23621	Straight adapter, 9/16"-18 external R.H. thd. (Ermeto 24°) to 1/2"-20 external L.H. thd. (60° seat).	•	•		•	•
23622	Adapter nut, 12 X 1.5 mm internal R.H. thd. to 1/2"-20 internal L.H. thd.	•			•	•
201917	Adapter nut, 9/16"-18 internal R.H. thd. to 1/2"-20 internal L.H. thd.		•	•		
23693	Straight adapter, 1/2"-20 external L.H. thd. (Ermeto 24° & 90° seat) to 9/16"-18 external R.H. thd. (Ermeto 24°).			•		

4200

Nozlrater Diesel Injector Nozzle Tester

Here is the ultimate tool for diagnosing a number of problems that affect diesel fuel injector nozzles. The Nozlrater tester enables you to check for leakage, pop-off pressure, spray pattern, and chatter. This tool will accommodate a wide range of injectors. We also offer adapters so you can troubleshoot nozzles used in popular automotive, agricultural, and construction engines. Nozlrater features a rugged, lightweight reservoir that holds 7/10 of a gallon of fuel. It is equipped with a replaceable 2-micron filter. The large, dual-scale, high-pressure gauge is protected by a guard and includes an indicator needle to record maximum pressure reached. The tester is light enough to be easily carried for field use. Or you can bench-mount it, using the holes in its base.

• Not designed for Cummins or Detroit injectors.

17169 – Replacement filter.

11565 – Gauge.



Specifications

Overall width	5-3/4"
Overall length (includes handle)	26"
Overall height	11-1/4"
Weight (empty)	15 lbs., 10 oz.
Max. pressure	5000 PSI (350 bar)
Max. reservoir cap.	.692 gal. of diesel fuel (160 cu. in.)
Usable reservoir cap.	.628 gal. of diesel fuel (145 cu. in.)
Outlet port	For 3/8" tube
Gauge	Calibrated 0-5000 PSI (350 bar) Has 3-1/2" dial face with maximum reading indicator needle.
Gauge connection	1/4" NPT internal
Stroke of 1/2" dia. piston	3/4"
Volume per full stroke	.147 cu. in. (2.4 cc)
Intake filter	2 micron

208629

Calibration Fluid

• For use in diesel injection pump testers and injector nozzle testers.

• 1 gallon



Davco Diesel Filter Wrenches

• Found on Caterpillar, Cummins, Detroit Diesel, International, Mack, Mercedes-Benz, Volvo and other engines.

• Durable, stainless steel construction.

• Precise, laser-cut angles.

• Opens vent cap also.

• Soft, ergonomic handle.

6914 – Fits Davco Diesel filter models, 232-233-234.

6915 – Fits Davco Fuel filters 382 & 384.



6916

Duramax Water Sensor Wrench

• Used to remove and install the water sensor on the fuel filter.

• Works on 2001 and Newer 6.6L Duramax Diesel found in Chevrolet and GMC Trucks and Vans.

• 3/8" square drive hole.

OIL FILTER CRUSHERS / FLUID RECEIVERS HEAVY DUTY TOOLS & EQUIPMENT



1821 10-Ton Capacity, Air-operated Automotive Oil Filter Crusher

- Crushes up to four automotive filters (3-7/8" dia. x 9" high) at one time, in approximately 20 seconds. Engineered and built for dependable operation. Covered by OTC Lifetime Marathon Warranty®.
- 100% air operation eliminates electrical connections. Generous size of crushing chamber easily accommodates the largest automotive spin-on filters.
- Includes mounting stand. No wall mounting or time consuming installation required.



1877 25-Ton Capacity Heavy-Duty Oil Filter Crusher

- Handles the big filters (up to 6" dia. and 12-1/2" long) found in trucks, construction equipment, farm implements, etc. May also be used for automotive and light truck filters. It does it all!
- Crushes filters to 1/4 of original size, removing up to 95% of filter's oil capacity. Automatic cycle feature: load the filter, push a button, and walk away.
- Air/hydraulic pump works on standard shop air (requires 9 CFM at 100 psi). Special valving returns ram automatically at the end of each cycle. No electrical connections needed.
- Built-in floor stand (completely assembled). Whole unit requires just 5 square feet of floor space.
- Covered by OTC Lifetime Marathon Warranty®.



1896 25-Ton Capacity High-Speed Heavy-Duty/Automotive Oil Filter Crusher

- Automotive and heavy-duty filters up to 15-1/4" long and 6" diameter are crushed in approximately 8 to 16 seconds. Filters are reduced to 20% of original size, with 95% of residual oil removed.
- Automatic cycle feature lets you load the filter, push a button, and walk away.
- Powered by 2 hp electric/hydraulic pump, 230 volt, 20 amp, 60 cycle, single phase, 3,450 rpm. Has a 2-gallon reservoir.
- Built-in, heavy-duty floor stand with leveling pads is designed to accept a 30-gallon drum for oil drainage. Comes assembled. Covered by OTC Lifetime Marathon Warranty®.

Shipped assembled

Oil Filter Crusher Comparison Chart

No.	Tonnage	Pump	Crushing Time	% Oil Removed	Filter Size	Stand Dimensions
1821	10-ton	Air	20 Seconds	95%	Chamber: 8" x 8" x 9" H.	18-1/2" W x 24" D x 63-1/2" H
1877	25-ton	Air/Hyd.	80 Seconds	95%	6" Dia. - 12-1/2" Long	18-1/2" W x 30" D x 74-1/2" H
1896	25-ton	Elec./Hyd.	16 Seconds	95%	6" Dia. - 15-1/4" Long	27" W x 30" D x 78" H

Note: Crushing times are approximate; crushing times may vary depending on air pressure available, size of filter, type of filter, etc.

Transfer Tankers

- Draining oil from a large displacement engine and getting it to your bulk storage container is a snap with OTC's Transfer Tankers.
- Used oil is collected in a reservoir, and then rolls smoothly on 4" free-wheeling casters to your storage location.
- Pump moves five gallons a minute through the 8-foot transfer hose to the a 15-gallon reservoir.
- Handle is removable for easy storage.
- Screen attached to reservoir allows assembly to be stored on its side.
- Can also be used for transferring antifreeze.

5077A – Low profile Transfer Tanker is only 7-1/2" from floor to top of reservoir. Comes equipped with an electric pump (No. 528093).

5097 – Low profile Transfer Tanker is only 7-1/2" from floor to top of reservoir. Comes equipped with a pneumatic pump (No. 529966).



5077A

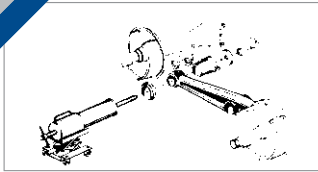


5097



1577 Low Profile Fluid Receiver

- Designed for receiving waste fluid during a wide range of repair jobs.
- Fluid capacity: 7.5 gallons.
- Constructed of polyethylene plastic for heavy-duty use—yet, only weighs 13 pounds.
- Low profile, only 5" high, it easily slides under passenger cars.
- Designed with four casters to provide efficient maneuverability.
- Suitable for cooling system repair jobs—can be used for antifreeze.
- Includes splash screen to prevent spillage and splashing.
- Two-year warranty.



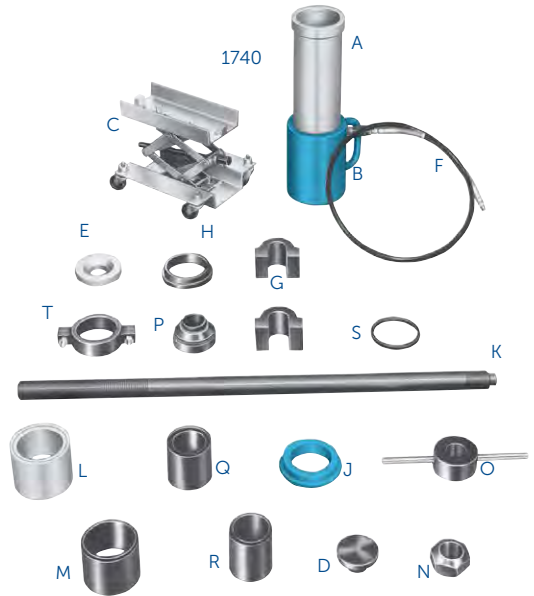
1740 tooling setup for end bushing installation.

**1740
Hendrickson Basic Tooling Set**

This is the basic tooling set for servicing center and end beam bushings. It does not include the hydraulic pump or gauge. If you are already equipped with hydraulics, you can be replacing bushings right away! (Does not include tooling for hanger tube or end plug adapter removal.)

For 340 thru 450 Series Hendrickson Suspensions

Item	No.	Description	Item	No.	Description
A	44119	Receiving tube	L	302026	Installing adapter
B	51678	80-ton cylinder	M	302027	Removing adapter
C	51695	Jack cart	N	302028	Hex nut
D	206457	Press adapter	O	302029	Speed nut
E	206459	Clamp plate	P	302030	Removing adapter
F	9780	Hydraulic hose	Q	302031	Installing adapter
G	302018	Spacer (2)	R	302032	Removing adapter
H	302019	Receiving adapter	S	302401	Spacer ring (3)
J	302021	Receiving adapter	T	42052	Inst. adapter clamp
K	302023	Pulling screw			



**HENDRICKSON SERVICE SETS
WITH HYDRAULICS**

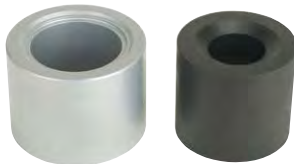
FOR 340 – 450 SERIES HENDRICKSON SUSPENSIONS

**1742
Basic Tooling Set with hydraulics (Hydraulic pump 4031)**

The preferred method for servicing center and end beam bushings. You get the complete No. 1740 basic set, plus OTC's No. 4031 two-stage electric/hydraulic pump with remote hand switch, a No. 9654 pressure gauge, hose half coupler, and 80-ton single-acting ram. (Tooling for hanger tube or end plug adapter removal not included.)

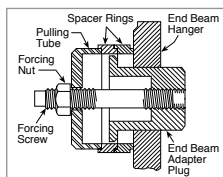
**1741
Basic Tooling Set with hydraulics (Hydraulic pump 4062)**

The method Hendrickson recommends for suspension service. You get the No. 1740 basic set, plus OTC's No. 4062 two-stage electric/hydraulic pump with remote hand switch, a No. 9653 pressure gauge, hose half coupler, and 80-ton single-acting ram. (Tooling for hanger tube or end plug adapter removal not included.)



**1746
R400 Center Bushing Adapter Set**

For R400 series Hendrickson suspensions having center bushing No. 49400 or field service center bushing No. 49600. Used with OTC's No. 1740 suspension tool set, these adapters let you remove and install the new style R400 center bushings on Hendrickson suspensions. Set includes one No. 310248 removing adapter and one No. 310249 installing adapter.



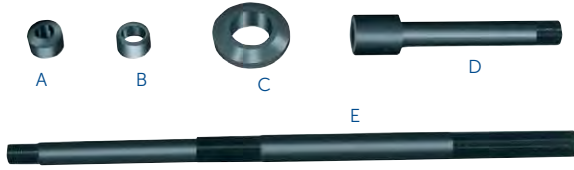
**1745
End Bushing Adapter Puller Set**

Set contains everything needed to remove end bushing adapter plugs in 380 thru 440 series suspensions. The plugs have to be removed prior to end bushing replacement. The set is complete in a handy plastic case. For use with 1740 series tooling sets (order separately).



Item	No.	Description
A	207025	Spacers (3)
B	302592	Screw (7/8"-14)
C	302593	Screw (15/16"-12)
D	207027	Screw
E	207026	Plug gauge
F	207030	Hand tap (7/8"-14)
G	207031	Hand tap (15/16"-12)
H	207039	Nut assembly
I	302595	Receiving cup

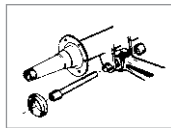
BUSHING SERVICE HEAVY DUTY TOOLS & EQUIPMENT



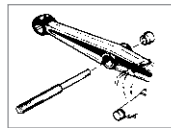
1743 End Bushing Hanger Tube/RU Series Center Bushing Service Set

Required for servicing RU340 series center bushings. The long puller screw is used to remove the beam cross tube. The 1743 also removes end bushing hanger tube assemblies. For use with 1740 tooling (order separately).

Item	No.	Description
A	25417	Nut
B	206455	Removing adapter
C	302015	Receiving adapter
D	302119	Special screw
E	302023	Pulling screw



Hanger tube removal with No. 1743 set.



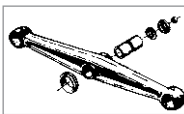
Cross tube removal with No. 1743 set.

1744 Bronze Center Bushing Service Set

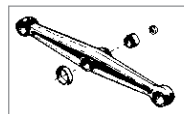
Designed for replacing bronze center bushings on 340, 380, 440, and 460 Hendrickson suspensions. Also installs bronze center bushing grease seals. For use with 1740 series tooling set (order separately).

For 340, 380, 440, & 460 series suspensions.

Item	No.	Description
A	28536	Installing adapter
B	28538	Installing adapter
C	302024	Removing/installing adapter
D	302025	Removing/installing adapter



Installing center bushing with No. 1744 set.



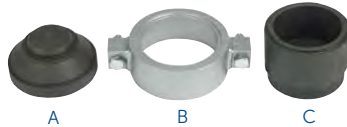
Removing center bushing with No. 1744 set.

1763 Center and End Bushing Service Set

This set is required for bushing service on 500 and 700 series heavy-duty suspensions. It is intended for use with a 100-ton capacity shop press. It allows replacement of center and end bushings.

For 500 & 700 series suspensions. Use with a shop press.

Item	No.	Description	Item	No.	Description
A	208350	Adapter	C	28541	Adapter
B	208349	Adapter clamp			

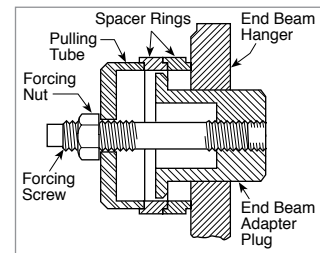
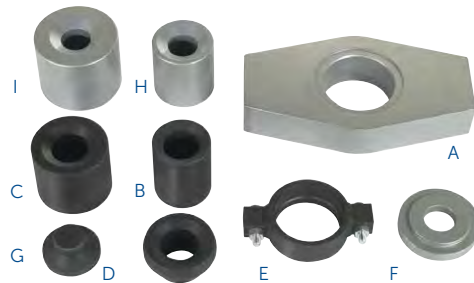


1764 Center and End Bushing Tool Set

This set is the answer for replacing center and end bushings on Hendrickson 340 and 380/440 series suspensions. The 1764 is for use with a 100-ton or larger hydraulic press. The press plate sits on the press bolster to provide a level, cradle-like surface for the beam to rest on during pressing.

For 340 and 380/440 series suspensions. Use with a shop press.

Item No.	Description	Item No.	Description	Item No.	Description
A	51100	Press plate	D	302030	Removing adapter
B	302032	Removing adapter	E	42052	Inst. adapter clamp
C	302031	Installing adapter	F	206459	Clamp plate
			G	206457	Press adapter
			H	302027	Removing adapter
			I	302026	Installing adapter



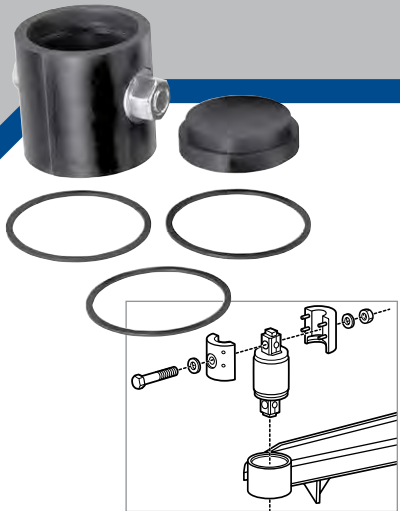
1748 End Bushing Adapter Puller Set for Hendrickson Truck Suspensions

This set contains everything needed to remove end bushing adapter plugs used on 400 series and the larger 460–520 series suspensions. The plugs have to be removed prior to end bushing replacement. The set is complete in a handy plastic case. For use with 1740 series tooling sets (order separately).

For servicing the 400 and larger 460–520 series suspensions.

Item	No.	Description
A	207025	Spacers (3)
B	302592	Screw (7/8"–14)
C	302593	Screw (15/16"–12)
D	207027	Screw
E	207026	Plug gauge
F	207030	Hand tap (7/8"–14)
G	207031	Hand tap (15/16"–12)
H	207039	Nut assembly
I	302595	Receiving cup
J	*221378	Hand tap (M30 x 2)
K	*313342	Screw (M30 x 2)

*For use on 460–520 series adapter plugs (can be purchased separately and used with set No. 1745).



**1757
Hendrickson Bar Pin Adapter Set**

Servicing bar pin end bushings used on Hendrickson equalizing beam tandem truck suspensions requires the use of special tooling. OTC's No. 1757 adapter set is used with the beam removed from the truck, and in conjunction with OTC No. 51100 press plate and a 100-ton hydraulic shop press.

The 1757 set, which replaces the No. 1747 set, includes an adapter for installing bushings in older forged beams as well as the fabricated beams introduced in 1999.

To remove bushings, use OTC's previously introduced No. 302030 removing adapter and No. 206457 press adapter, both of which may be ordered separately. Reinstall bushings following procedures recommended by the suspension manufacturer.

**1767
Hendrickson Primaax Quick Alignment Socket**

- Hendrickson – Approved tool.
- Used to adjust axle alignment on the Primaax air suspension.
- Works on Primaax models 230, 460, and 690 rear suspensions.



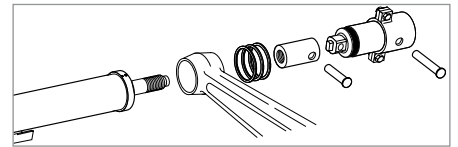
**1768
Hendrickson PRIMAAX® Quick Wrench**

- Hendrickson - Approved tool.
- Used to torque cross tube end cap bolts and longitudinal torque rod top pad bolts.
- Reduces maintenance time by eliminating the need to remove the tires to gain access to the end cap bolt.
- Use with the following Hendrickson PRIMAAX suspensions:
 - Type A - PAX 230/460/690 and FMX 240/480 with 8-1/2" ride height
 - Type B - PAX 230/460/690 with 10" ride height.

**1749
Hendrickson Suspension Bar Pin End Bushing Adapter Set**

Extend your No. 1741 and No. 1742 bushing service equipment sets. You can now remove and install worn end bushings on the Hendrickson new style bar pin end bushings without removing the equalizing beam from the vehicle. The No. 1749 works in conjunction with OTC's No. 1741 and No. 1742 80-ton portable service equipment to do the job quickly, using procedures recommended by the manufacturer.

Item	No.	Description
A	314557	Receiving tube
B	49050	Installer
C	314556	Receiving adapter
D	314558	Pin
E	314559	Pin



Freightliner Rear Suspension Tool

- Removes and installs single-wrapped FAS II Airliner Freightliner Rear Suspension bushings in a fraction of the time of traditional methods.
- Saves an average 45 minutes per bushing (4 per vehicle) on flat rate of 1.5 hours per bushing.
- 15 ton Capacity cylinder

4244 – Freightliner Rear Suspension Tool

4245 – Freightliner Rear Suspension Tool Master Kit includes 2510A Air/Hydraulic Pump.



Hydraulic Flow Testers

50 and 75 GPM hydraulic oil flow testers accurately measure oil flow, temperature, and pressures against manufacturers' specifications.

Troubleshoot hydraulic circuits and isolate faulty components on mobile equipment, machine tools, fork lifts, agricultural and industrial tractors, and equipment (open or closed) hydraulic systems with capabilities up to 75 GPM at pressures to 5,000 PSI. Models include features such as an automatic pressure compensating load valve that lets you increase flow without affecting the pressure settings. Temperature flow and RPM readings are displayed in metric or English, and accurate to within plus or minus 2% of full scale. Each tester is protected by a safety disc, which ruptures automatically if pressures exceed the upper limits.

4221 – 75 GPM hydraulic circuit tester. Comes with two pressure gauges and three 9-volt batteries.

4235 – 50 GPM hydraulic circuit tester with single liquid-filled pressure gauge. Includes two adapter unions for 3/4" NPTF fittings.



4235

THE OTC NEW SERIES OF FLOW METERS

Unparalleled accuracy in testing hydraulic oil flow circuits for vehicles and machinery. All are protected by a durable steel case. Pressure accuracy is at +/- 1.6% of full scale. Due to their standard burst disc protection system, overpressure conditions prevent spillage of hydraulic fluid. All devices accommodate bi-directional flow and are CE marked as appropriate.



4277 50 gpm Mechanical Hydraulic Flow Meter

- Flow Accuracy to +/- 4% of full scale
- Measures flow from 4 to 54 gpm
- Pressure up to 6000 psi
- Fluid filled analog gage that dampens vibration
- Temperatures up to 230 deg F
- Reads flow in one direction
- No batteries required
- Port is 1-5/16" - 12 UN JIC Male
- 12.25" x 4.125" x 4.875"
- 14.5 lbs



4278 100 gpm Digital Hydraulic Flow Meter

- Flow Accuracy to +/- 1% of indicated value
- Measures flow from 2.5 to 100 gpm
- Pressure up to 6000 psi
- Digital display for flow, temperature, analog for pressure
- Temperatures up to 250 deg F
- Reads flow in both directions, pressure on the high side of valve
- Requires 1 9V battery (included)
- Port is 1-5/16" -12UN #16 SAE ORB
- 9.45" x 7.87" x 7.87"
- 14 lbs



4285 100 gpm Digital Hydraulic Flow Test Kit

- Includes OTC 4292 Digital Readout and OTC 4291 Flow Block with Loading Valve
- Flow Accuracy to +/- 1% of indicated value
- Measures flow from 2.5 to 100 gpm
- Pressure up to 6000 psi
- Digital display for flow, temperature, analog for pressure
- Reads flow in both directions, pressure on the high side of valve
- Require 1 9V battery (included)
- Port is 1-5/16" -12UN #16 SAE ORB
- 12.99" x 12.4" x 10.24"
- 17lbs



**4290
16 gpm Flow Block**

- Can be used with Digital Flow Meter Readout OTC 4292 included in OTC 4285 and OTC 4294
- Port is 1-1/16" -12UN #16 SAE ORB
- Flow range from 1 to 16 gpm
- Max pressure 6000 psi



**4291
Flow Block with Loading Valve**

- Can be used with Digital Flow Meter Readout OTC 4292 included in OTC 4285 and OTC 4294
- Knob allows for pressure loading/restriction
- Port is 1-5/16" -12UN #16 SAE ORB
- Flow range from 2 to 100 gpm
- Max pressure 6000 psi



**4294
Deluxe 100 gpm Hydraulic Flow Measurement Set**

- Comprised of OTC 4290, OTC 4291, OTC 4292, Long Cable and Hose Set and Short Cable
- Case included



**4292
Hydraulic Flow Measurement Digital Readout**

- For remote flow measurement by using Flow Blocks OTC 4290 or OTC 4291
- Included in OTC 4285 and OTC 4294
- Digital display for flow, temperature, analog for pressure



**573295
Long Cable and Hose Set**

- 20 feet long
- Flow, Temperature & Pressure



**573296
Short Cable**

- 6 1/2 feet long.
- Flow & Temperature

POWER TRAIN LIFTS / TRANSMISSION JACKS HEAVY DUTY TOOLS & EQUIPMENT



5078 Air-Assisted 2,000 lb. Capacity High-Lift Transmission Jack... or Trucks & Buses

- Foot-operated air pump enables the operator to effortlessly raise the transmission into place.
 - Rugged, heavy wall tubing and oversized base for stability.
 - A dedicated adapter for Allison 500- and 600-series automatic transmissions is included.
 - Covered by OTC Lifetime Marathon Warranty®.
- Specifications:
- | | |
|--------------------------|----------------------------------|
| Min. height is 41-1/2" | Max. side tilt (side/side) – 14° |
| Max. height is 65" | |
| Max. forward tilt – 50° | Leg width – 46" |
| Max. backward tilt – 38° | |



5130 1,000 lb. Capacity DriveMaster™ Driveline Lift

- Low profile of 6" and a lift range: 24" to 30".
 - Pivoting pump handle +/- 15° tilt in each direction
 - Includes 553516 Differential Adapter
 - ANSI/PALD
- Specifications:
- | | |
|-------------------------|------------------|
| Overall Length – 43" | Min. Height – 6" |
| Overall Width – 30-1/4" | |
| Max. Height – 30" | |



5019A 2,200 lb. Capacity Low-Lift Transmission Jack

- Special mounting adapter fits popular Eaton® Fuller® RoadRanger® transmissions used on nearly all Class 7 and 8 heavy-duty trucks. Mounting plate angle is adjusted with the turn of a wrench.
 - Swiveling pump handle permits ease of operation in restricted working spaces. Fast-acting pump quickly raises lifting arm.
 - Includes No. 49611 adapter for Eaton® Fuller® RoadRanger® transmissions (also available separately).
- Specifications:
- | | |
|--------------------------|------------------------------------|
| Min. height is 8-1/4" | Max. side tilt (either side) – 12° |
| Max. height is 36-1/2" | |
| Max. forward tilt – 15° | Overall length – 52" |
| Max. backward tilt – 20° | Overall width – 32-1/2" |

Power Train Lifts

- These lifts will handle engine and transmission assemblies, gas tanks, drive axle assemblies, engine/transaxle assemblies, electric vehicle batteries, and more.
- Scissors-type design allows access to all four sides of a component.
- Two independent adjusting screws tilt the table ±15° side-to-side, or fore and aft. Can be operated manually or with non-impact air wrench.
- 20" x 32" table.
- 8" swivel casters provide enhanced mobility under heavy loads.
- ANSI/PALD compliant.

5285 Power train lift (1,650 lb. Capacity)

- Air / hydraulic operation – Foot control pump with hose allows movement around lift.
- Min. height is 31-1/2"; Max. height is 74-1/2".
- Footprint 33" wide x 48" long.

1595 Power train lift (2,500 lb. Capacity)

- Powered by a quiet, 110V electric/hydraulic pump.
- Smooth, steady lifting and lowering motion controlled by hand-held remote.
- A 30 ft. long retractable extension cord is mounted to the frame.
- Min. height is 29"; Max. height is 80"
- Footprint 31" wide x 50" long.

1522A

Heavy-Duty 2,000 lb. Capacity Low-Lift Transmission Jack...for Class 7 and 8 Trucks

- Includes No. 220492 adapter for Eaton® Fuller® RoadRanger® transmissions.
- Pump handle rotates 360° for operator convenience; ball bearing 3.5" diameter swivel casters provide easy positioning of jack.
- Safety overload system prevents use of jack beyond its rated capacity, and a safety bypass protects the hydraulic cylinder from damage.

Specifications:

Min. height is 6-7/8"	Max. side tilt (either side) – 11°
Max. height is 35-1/4"	Overall length – 43-1/2"
Max. forward tilt – 24°	Overall width – 26"
Max. backward tilt – 18°	



5285
extended

Casters provide a 9-1/2" clearance on lower frame



5285 collapsed



1522A

Accessories for 5019A / 5078 / 1522A Transmission Jacks and 5130 Driveline Lift

- 558382** – Auxiliary box adapter. Used with all.
- 561949** – Light duty transmission adapters. Used with all.
- 528150** – Eaton® "Lightning" adapter. Used with the No. 5019A transmission jack.
- 543284** – Roadranger transmission Model series FRO-11210C to FRO-18210C that is equipped with an internal cooler. Used with the No. 5019A transmission jack.
- 49611** – Eaton® Fuller® RoadRanger® auxiliary housing adapter. Bolts directly to the countershaft bearing caps to provide a stable platform for removing and installing the auxiliary housing.
- 553516** – Differential Mounting Adapter. Mounts easily using existing bolt patterns. Fits the most common differentials currently in use on Category 7 and 8 Heavy Duty Trucks. Including: Eaton, Fuller, Rockwell, Meritor, Spicer, International, and Mack. For use on OTC (5019A – 553516 requires 565188 adapter) 5078 and Stinger 1522A Transmission Jacks.
- 314729** – Allison 500/600 series automatic transmission adapter used with No. 5078 transmission jack.
- 540231** – Eaton® Fuller® RoadRanger® transmission adapter
- 540232** – Mack transmission mounting brackets. Provides a stable platform for Mack T200 series transmissions.



558382

561949

553516

528150

540231

543284

49611

314729

540232



5018A
Truck Clutch & Flywheel Handler

- Replaces 14" & 15-1/2" clutch assemblies weighing up to 250 lbs.
- 13" low point enables access below side faring.
- Linkage raises load from horizontal to vertical position.
- 360 degree swivel head.
- Covered by OTC Lifetime Marathon Warranty®.

516160 – Optional flywheel handling attachment

515686 – Optional splined shaft, 1-3/4" dia. with 1-1/4" pilot

516159 – Optional splined shaft, 1-3/4" dia. with 1" pilot



5015A
Truck Clutch & Flywheel Handler

- Handles 14" and 15-1/2" clutch assemblies weighing up to 150 lbs.
- Lifting range of 9" to 37". Swivel casters provide easy maneuverability.
- Includes a 2" spline shaft with a 1-1/4" pilot to aid in alignment.

218174 – Flywheel handling attachment for use on No. 5015 and 5015A only.

48625 – Optional splined shaft, 1-3/4" dia. with a 1-1/4" pilot.

440533 – Optional splined shaft, 1-3/4" dia. with a 1" pilot. Needed for clutch service on some Navistar 466 series engines.

314386 – Optional 1-3/4" dia. alignment shaft extension. Used for 2-plate clutch of Navistar 466 series engine.



1520
10-Ton Capacity Lifting System (Includes two lifts)

- Mobile, tandem system is air-operated. This will handle your class 7 and 8 tractor lifting needs. No need to waste time re-blocking and making additional lifts for the clearance you need for under-vehicle service. Roll the system to the vehicle anywhere in the shop or outside on a level surface.
- Unique design provides lift from the tires, not the frame or axle members. Ideal for situations where limited ground clearance or a lack of clear access complicates lifting.
- Single controller operates both sides of the system for a smooth, level lift up to two full feet from the bottom of the tires to the ground. Units can double as support stands when retention pin is inserted.
- Covered by OTC Lifetime Marathon Warranty®.

Specifications:

Capacity – 10-tons (20,000 lbs.) (pair)
Air pressure – 150 psi
Lifting range – 0"-24"
Saddle width – 19-1/2" – 24" dia. rim sizes
Height – 53-1/4"
Width – 41-1/2"
Length – 39-1/2"



1591B
10-Ton Combination Air Lift & Support Stand

- 40" removable handle and 8' air hose.
- Covered by OTC Lifetime Marathon Warranty®.

Specifications:

Capacity – 10 tons (at 200 PSI air)
Minimum height (unpinned, no extension) – 18-3/4"
Maximum height (pinned in top hole, with extension) – 50-1/2"
Stroke – 10-7/8"



1590
10-Ton Air Lift

- Adjustable lifting saddles and an extra-wide stance for extra stability.
- Automatic mechanical safety catch engages in five height positions.
- Two large swivel casters and pneumatic tires make it easy to maneuver, even on loose gravel.
- Covered by OTC Lifetime Marathon Warranty®.

Specifications:

Capacity – 10 tons (at 200 psi air)
Air pressure – 100–200 psi
Lifting range – 13"–52"
Saddle spread – 29" – 41-3/4"
Saddle – 4" X 5-1/4"
Height – 67-1/2"
Width – 41"
Length – 36"
Distance from lift arm to floor support – 12-1/2"

572913 – Optional saddle set for 1590. Saddle – 4" X 5-5/8"



5214
4-Ton Capacity Fork Lift Jack

- 8,000 lb. capacity with a low starting height of 2-5/32".
- 10,000 lb. capacity (5 tons) when lifting from cylinder saddle– ideal for agriculture and industrial applications.
- Unique shape of primary saddle allows for handling of all lift truck configurations with flat or edged surfaces.
- Features include high-quality seals, chrome-plated internal components, and high-strength steel construction.
- Secondary lifting surface feature.
- Complies with ASME-PALD.
- Lifting Height: 2-5/32 – 17-15/16".



1540
4-Ton Capacity Fork Lift Jack

- 8,000 lb. capacity with a low starting height of 2-5/8".
- Two-position lift pad permits handling of all lift truck configurations with flat or edged surfaces.
- Minimum low lift: 2-1/4".
- Maximum high lift: 16-1/4".
- Features include high-quality seals and high-strength steel construction.
- Handle stop makes for easy maneuverability.
- 30" long handle.



UNDER AXLE JACKS HEAVY DUTY TOOLS & EQUIPMENT



Convenient and secure storage space for large adapter & saddle.



Maximum extended height

Saddle

Large adapter

5292 27.5-Ton Under Axle Jack

- Features class-leading 27.5 ton capacity
- Robust design with completely sealed piston.
- New lever design and pneumatic release valve for more precise release control.
- Power return allows lowering with no load.
- Includes two height adapters for flexibility.
- PALD compliant.
- Minimum retracted height (with saddle only): 8-1/4".
- Maximum extended height (with screw extended and large adapter): 21-3/8".
- Stroke: 4.9375".
- PSI range: 90 to 175.

5093B 3-Stage Under-Axle Jack

Three-stage lift capacity 20T, 35T, and 65-tons. Ideal for lifting loaded trailers, buses, and other Class 7 & 8 vehicles.

- Piston and cylinders are made from chromium molybdenum vanadium steel for durability and then liquid nitrided to prevent rust and seizing.
- Features a high load-approach speed.
- Air-driven cylinder with pressure control knob for maximum user safety.
- 4-position handle: horizontal, 45 degrees, vertical, or collapsed.
- 7-inch minimum height for low clearance vehicles.
- Comes complete with a 3-15/16 in. (100 mm) lifting extension.
- Complies with ASME / PALD test requirements.



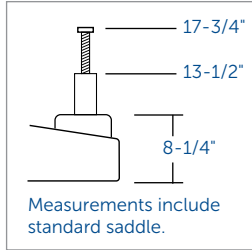
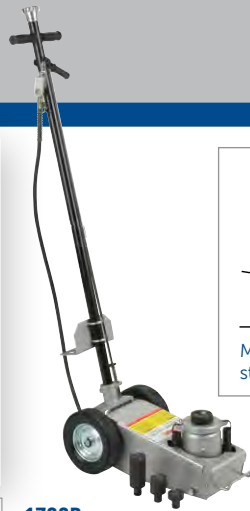
Single control switch, handy and easy to use.



4 positions: horizontal, 45 degrees, vertical, or collapsed for easier transport.



8-1/4" width for easy access to the lifting point.



1788B 22-Ton Capacity Under-Axle Jack

- Improvements include advanced seal ring material and one-piece air piston air pump
- Long 49-1/2" T-handle lets you easily position jack under vehicles with long overhangs.
- One pull of the handle activates the self-retracting 22-ton capacity ram without having to crawl underneath the vehicle.
- Jack has large rubber-tired wheels.
- Lifting range:
 - 3/4" saddle Max. height 17-3/4"
 - 1-15/16" saddle Max. height 18-15/16" 3-7/8" saddle Max. height 20-5/8"
- Cylinder stroke, 4-1/2"; extended screw length, 4-1/4"; PSI range, 90-145.

215009* – In-line oil lubricator.

Add to air line to meter precise flow of lubricant to air motor. Has 1/4" NPT fitting. *Not included, order separately. Prevents harmful contamination caused by moisture in the air line!

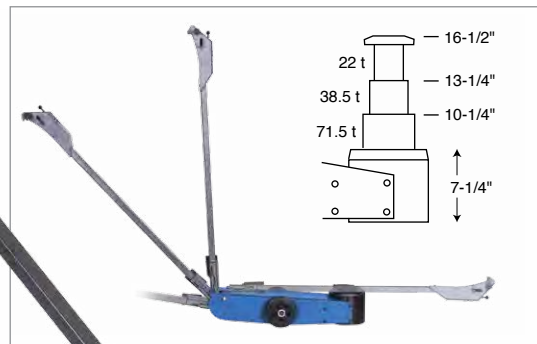


5110

6- & 10-Ton Capacity Air/Hydraulic Service Jack

- Huge steel front wheels are mounted in bearings for trouble-free service life. Rear swivel casters make spotting the jack easy.
 - Spring-loaded handle can be locked in three positions.
 - Covered by OTC Lifetime Marathon Warranty®.
- 5106** – 6-Ton Air/Hydraulic Service Jack. Lifting range 4-3/4" to 23-1/4", reach 87", 45" handle.
- 5110** – 10-Ton Air/Hydraulic Service Jack. Lifting range 6-3/4" to 26-7/8", reach 93", 47" handle.

Specifications	5106	5110
Capacity	6-ton	10-ton
Air pressure	90-175 PSI	90-175 PSI
Lifting range	4-3/4" to 23-1/4"	6-3/4" to 26-7/8"
Saddle dia.	7"	7-3/8"
Overall reach	87"	93"
Frame height	8"	10"
Handle length	45"	47"





6- & 10-Ton Heavy-Duty Service Jack

- Ergonomic handle for user comfort and easy mobility.
- Foot pedal for quick approach of the lifting saddle to load. Built-in tray for fasteners and tools.
- CE marked – ASME/PALD tested.
- Covered by OTC Lifetime Marathon Warranty®.

5206 – 6-ton HD service jack. Lifting range 6-11/16" to 22-13/16".

5210 – 10-ton HD service jack. Lifting range 6-11/16" to 23-13/16".

Specifications	5206	5210
Capacity	6-ton	10-ton
Min. Height	6-11/16"	6-11/16"
Max. Height	22-13/16"	23-13/16"
Overall length	87"	99-1/2"
Overall width	16-5/8"	16-5/8"
Handle length	39-3/8"	39-3/8"

5-Ton and 10-Ton Service Jacks

- A built-in safety overload prevents using the jack beyond its rated capacity.
- Convenient foot pedal speeds the lifting operation. Handle lock and release control are located on top of the handle. Handle can be locked in any position from vertical to horizontal.
- Both models have a spring-loaded 40" handle.

1505B – 5-ton service jack

1510B – 10-ton service jack

20-Ton Capacity Service Jack

- Low-profile stance and extended height add to versatility.
- Wheels and swivel casters feature internal bearings.
- Either the foot pedal or jack handle may be used for pumping action. Counter-balanced, spring-assisted handle has a three-position lock.

1512 – 20-ton service jack

Specifications	1505B	1510B	1512
Capacity	5-ton	10-ton	20-ton
Lifting range	6" to 22"	6-1/4" to 22"	7-1/2" to 24"
Saddle dia.	5-1/8"	6"	7-1/2"
Overall reach	47"	51"	97"
Frame height	7-3/4"	9-3/4"	10-1/4"
Handle Length	43"	43-1/4"	42"
Floor space	14-3/4" to 56"	18" to 60"	18-1/8" to 61-3/8"



5-Ton and 10-Ton Air/Hydraulic Service Jacks

- Bring the versatility of air-assist operation to your shop's lifting tasks.
- Huge front wheels mounted in bearings provide trouble-free service life. Rugged steel frame members.
- Rear swivel casters make spotting the jack easy. Spring-loaded handle may be locked in three positions, from horizontal to vertical.

1507B – 5-ton air/hydraulic service jack

1511B – 10-ton air/hydraulic service jack

Specifications	1507B	1511B
Capacity	5 ton	10 ton
Air pressure	80–120 PSI	80–120 PSI
Lifting range	5-7/8" to 22"	6-3/8" to 22"
Saddle dia.	6-5/8"	5-3/4"
Overall reach	87"	90"
Frame height	8"	10"
Handle length	40"	45"



ENGINE STANDS / ADAPTER PLATES

HEAVY DUTY TOOLS & EQUIPMENT



6000 lb. Revolver® Diesel Engine Stand

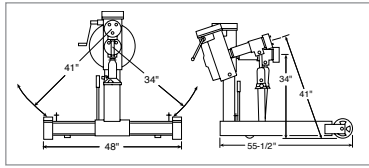
- 96-to-1 ratio worm and gear set rotates components 360°; handle locks in any position.
- Integral 12-ton jack raises the work to provide the swing radius needed for clearance. Two front wheels and two rear casters provide mobility.
- Universal adapter assembly permits use with a wide variety of mounting plates.
- Covered by OTC Lifetime Marathon Warranty®.

1750A – Revolver diesel engine stand with No. 205061 universal engine adapter assembly.

1750 – Engine stand without universal engine adapter assembly.

Revolver® Engine Adapter Plates

You can order only those plates you need for the engines you work on. The universal adapter assembly is required for mounting all plates to the stand.



205061 Universal Adapter Plate Assembly. Included with 1750A engine stand. (Must be used with all plates below.)

J-29109-J Adapter plate to accommodate adapters for Kent-Moore engine stand. Detroit Diesel

205058* For Detroit engines: 53 series in-line 6 cyl., 6V & 8V; 71 series in-line 6 cyl., 6V, 8V, & 12V; 92 series 6V & 8V; 8.2 liter V-8.

52871* For coach 6V and 8V series 71 Detroit Diesel.

218504* For Detroit series 60 in-line 6-cylinder engines.

Detroit Allison

208160* Allison transmission mounting plate for transmission Nos. AT500, MT600, MT 6-speed, VH, VS, and V730.

61373* Allison transmission adapter plate for transmission series HT-750, CLBT, HT-740D, CR/DR, and HT-750CT.

Cummins

205059* For Cummins engines: All NH, NTC, NTE, N14 855 series in-line 6 cyl; 378 series V6; 504, 555, & 903 series V8; KT 1150 series in-line 6 cyl., L10.

61405* For Cummins L-10 and M11 series engines. Plate attaches to the left side of engine for complete tear down.

218098 For Cummins "B" series 5.9L in-line 6 cyl. engines.

218099* For Cummins "C" series 8.3L in-line 6 cylinder engines.

Caterpillar

205060* For Caterpillar engines: Nos. 1673, 1674, 1693, 3306, & 3406 in-line 6 cyl.; Nos. 1100, 3208, and 3408 V8.

217687* For Caterpillar 3114, 3116, and 3176 in-line 6 cylinder and C12 engines.

Mack

205101* For Mack engines: All 672, 673, 675, & 711 series in-line 6 cyl.

206629* For Mack engines: V8 1000, E6, & E7 in-line 6 cyl.

528858* For Mack 865, and 868.

International Harvester

206386* For International Harvester engines: DT-466, DT-360, DT408, and 530 in-line 6 cylinder; DV-550, MV-404, MV-446, V304, V345, V392, 4-152, 4-196, 4-194; 9.0 liter and T444E V8; and Ford 6.9L, and 7.3L DIT.

528856* For IH300 & 400 Series.

528868* For International VT365.

Ford

61681* For mounting Ford 6.6L/7.8L engines.

206386* For Ford 7.3 engines.

Volvo

528853* For Volvo TD67 and TD71 engines.

John Deere

528859* For JD 400 and 500 engines.

528861* For JD Powertech 4.5L & 6.8L.

528863* For JD 8995 V6, must be used with 528859.



205061 – Universal Adapter Plate Assembly



52871 Detroit



205058 Detroit



61373 Allison



208160 Allison



61405 Cummins



218504 Detroit



218099 Cummins



205060 Caterpillar



218098 Cummins



205059 Cummins



206629 Mack



217687 Caterpillar



61681 Ford 303-DO61 (Same as D87T-6000-A)



528853 Volvo



205101 Mack



206386 International Harvester, Ford



528861 John Deere



528859 John Deere



528863 John Deere



528856 IH



528868 IH

***NOTE: Must be used with 205061 univ. adpt. plate assembly. Each engine mounting plate includes all the necessary hardware and an engine application chart.**



1735B

1735B
2,000 lb. Capacity Heavy-Duty Motor-Rotor® Repair Stand

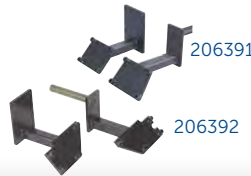
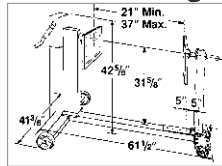
- Handles a wide variety of engines, transmissions, torque converters, and rear axles from trucks, tractors, and construction machinery.
- The 50:1 ratio gearbox allows full rotation of mounted unit with just a turn of the crank and locks in position. Easily maneuvered when loaded.
- To ensure engine stability in all positions, this repair stand is equipped with a positive-crank handle locking mechanism.
- Twin-post design, featuring laterally adjustable, 3 position outboard support; provides an extremely stable work-holding unit.
- Locking rear wheels anchor stand in position.
- Covered by OTC Lifetime Marathon Warranty®.

206391 – 6.0L and 6.4L Ford engine adapters. (Works with both the OTC 1735, 1735A and 1735B.)

206392 – Ford 6.7L Engine Adapter for 1735B HD Rotor Repair Stand.



1735B with engine



206391

206392

1783
Heavy-Duty 20-Ton Capacity Adjustable Support (One only)

- Designed for the really big service jobs. Rugged steel construction, and large 15-1/2" square base will satisfy support requirements up to 40,000 lbs.
 - Features include 4-point adjustment. Height range is 15-1/4" to 24". Saddle diameter is 6".
 - Covered by OTC Lifetime Marathon Warranty®.
- Note: Recommend use in pairs.



1778B
12-Ton Capacity Low profile Jack Stand (One only)

- Spun steel base won't dig or sink into asphalt or sand.
 - Height range of 19" to 29-1/2".
 - Covered by OTC Lifetime Marathon Warranty®.
- Note: Recommend use in pairs.



1779B
12-Ton Capacity High profile Jack Stand (One only)

- Spun steel base won't dig or sink into asphalt or sand.
 - Height range of 33-3/4" to 44-1/4".
 - Covered by OTC Lifetime Marathon Warranty®.
- Note: Recommend use in pairs.



Extension Tubes for 1778B and 1779B Jack Stands

543751 – Extension Tube
Height range of 19" to 29-1/2"

543752 – Extension Tube
Height range of 33-3/4" to 44-1/4"

543751

543752



3- and 6-Ton Capacity Ratcheting Jack Stands

- Jack stands feature a formed steel frame for strength and long life, and rolled base edges that resist sinking into soft ground or asphalt.
- Recessed column saddle for acceptance of vehicle panel rail (pinch weld).
- Dual purpose handle serves as carrying handle and column release.
- Investment cast rack bar for long life strength.
- Covered by OTC Lifetime Marathon Warranty®.

1736A – Pair of 6-Ton Jack Stands. Height Range of 15-1/2" to 24-1/2".

1733A – Pair of 3-Ton Jack Stands. Height Range of 12-1/2" to 18-1/2".



1774B
10-Ton Capacity Ratcheting Jack Stands (pair)

- These ratcheting jack stands are highest quality steel and factory tested to ANSI PALD standards.
- The form-fit saddle design and 12" x 14" base ensures stability.
- Height range is 20" to 31-1/2".



5373

OTC Stinger 3-Ton, 6-Ton and 12-Ton Jack Stands

- Formed and welded steel base for strength; self-locking ratchet handle cannot be released under load. Durable baked enamel finish resists corrosion.
- Stands conform to ANSI PALD load rating standard; factory tested before shipment.

5372 Pair of 3-ton jack stands. Base: 8-1/4" x 7-1/2". Height range: 12" to 17-11/16".

5373 Pair of 6-ton jack stands. Base: 11-9/16" x 10-3/8". Height range: 15-5/8" to 23-11/16".

1784D Pair of 12-ton jack stands. Base: 12-1/8" x 10-7/8". Height range: 17-1/2" to 27-1/2".

1780
22-Ton Capacity Jack Stands

- Height range is 13-7/8" to 19-7/8".
- Saddle size 3" x 3-3/4".
- Pin-style (non-ratchet) three positions, 3" intervals.
- Reinforced collar to meet newest ANSI PALD test standards.
- 11" flat base prevents sinking into the surface.



BOTTLE JACKS HEAVY DUTY TOOLS & EQUIPMENT

OTC 9300 STINGER SERIES BOTTLE JACKS GIVE YOU LIFTING RANGE FROM 2 TO 50 TONS.

- Forged base and cylinder to ensure strength and eliminate leaks.
- Chromed pump piston and ram for additional rust resistance.
- In-line design for increased ease of use in positioning and operation.
- Includes free seal kit with each unit to extend product life.
- ANSI/PALD compliant.



OTC 9300 Stinger Series Bottle Jacks

Cap. (tons)	Stroke	OTC No.	Retracted Height min.	Length of Screw Extension	Height with Screw Extension	Pump Strokes to Extend Piston One Inch	Saddle Dia.	Base Size	Carry Handle	Weight
2	4-5/8"	9302	7"	2-3/8"	14"	8	13/16"	4-5/16" x 2-9/16"	No	5 lbs.
3	4-1/2"	9303	7-1/2"	2-9/16"	14-9/16"	13	15/16"	4-9/16" x 2 7/8"	No	6.2 lbs.
5	4-13/16"	9305	7-13/16"	3"	15-5/8"	20	1-1/8"	5-3/16" x 3"	No	8.4 lbs.
8	4-15/16"	9308	7-13/16"	3"	15-3/4"	21	1-3/8"	6" x 3-9/16"	No	12.6 lbs.
12	6"	9312	9-3/8"	3-1/4"	18-5/8"	21	1-3/4"	6-9/16" x 4-3/16"	Yes	17.4 lbs.
12	3-11/16"	9314	7-1/16"	2-7/8"	13-5/8"	21	1-3/4"	6-9/16" x 4-3/16"	Yes	15.1 lbs.
20	6-7/8"	9320	10-5/8"	2-15/16"	20-7/16"	28	2-1/8"	7" x 4-11/16"	Yes	27.2 lbs.
20	3-7/16"	9322	7-3/16"	1-11/16"	12-5/16"	25	2-1/8"	7" x 4-11/16"	Yes	20.9 lbs.
30	6-5/8"	9330	11"	N/A	17-5/8"	41	2-1/2"	7-11/16" x 6"	Yes	41 lbs.
50	7-3/16"	9350	11-3/4"	N/A	18-15/16"	74	2-1/2"	8-11/16" x 7"	Yes	76.5 lbs.



5221



5213



5213T

Bottle Jacks

- Base, pressure cylinder, and oil reservoir form one internal part, which results in a stronger jack.
- Piston never contacts cylinder, so pressure will be absorbed and not damage jack if vehicle tilts.
- The No. 5213T is telescopic, allowing for very low initial height with high lifting.

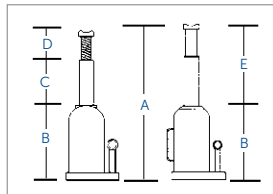
5213 – 12-Ton Bottle Jack.

5221 – 20-Ton Bottle Jack.

5213T – 12-Ton Telescopic Bottle Jack.

Bottle Jack Dimensions

Jack	A	B	C	D	E
5213	17-3/4"	8-7/8"	5-7/8"	2-15/16"	
5221	18-1/16"	9-1/4"	5-7/8"	2-15/16"	
5213T	22-1/2"	9-5/8"			12-13/16"



Air/Hydraulic Bottle Jacks

- Operate manually or pneumatically, 100 PSI minimum air pressure required.

4313C – 12-ton air-assist bottle jack; lift range 9-1/2" to 18-3/8", stroke 6-1/8".

4321C – 20-ton air-assist bottle jack; lift range 9-7/16" to 17-11/16", stroke 5-7/8".



4313C

1734A Heavy-Duty Wheel Step

- Tire-mounted wheel step provides quick, easy access to under-hood components.
- Fits heavy-duty vehicles (Class 7/8).
- Installs in seconds; adjusts to fit 22-1/2" to 24" wheel sizes and folds for easy storage.
- 300 pound capacity.
- Non-skid platform surface.



Shown folded

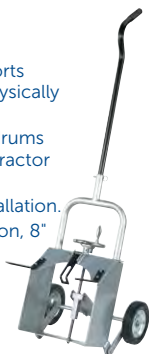


**5017A
Brake Drum Dolly**

- Remove, install, and transport truck brake drums without physically having to lift them.
- Works on 15" and 16-1/2" drums found on most Class 7 and 8 tractor and trailer brake systems.
- Heavy-gauge steel construction, ten-inch pneumatic tires, and adjustable handle.
- Covered by OTC Lifetime Marathon Warranty®.

**1543
Brake Drum Dolly**

- Removes, installs, and transports truck brake drums without physically having to lift them.
- Works on all 15" and 16-1/2" drums found on most class 7 and 8 tractor and trailer brake systems.
- 6" height adjustment aids installation.
- Heavy-gauge steel construction, 8" tires, and 36" handle.



Easy Lever Wheel Dollies

- Gives technicians the leverage they need to easily remove or install truck tire-and-wheel assemblies.
- Heavy-duty construction capable of toting 300 pounds.
- Onboard rollers that make stud-hole alignment a snap.
- Spring-loaded kickstand for handy parking.
- Two models that, together, can accommodate tire diameters from 24 to 48 inches.
- Rugged tubular steel construction.

5096A – Heavy-duty Easy Lever wheel dolly. With a width of 26", this dolly handles tire diameters of 36" to 48".

5095A – Easy Lever wheel dolly. With a width of 22", this dolly handles tire diameters of 24" to 36".

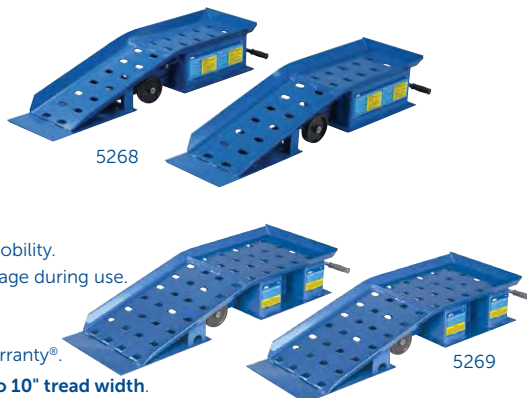


20-Ton Truck Ramps

- Long, retractable T-handle enhances mobility.
- Non-skid rubber matting prevents slippage during use.
- Durable, heavy-duty rubber wheels.
- Capacity per pair is 20 tons
- Covered by OTC Lifetime Marathon Warranty®.

5268 – 20-ton truck ramps handle up to 10" tread width.

5269 – Wide 20-ton truck ramps handle up to 16" tread width



5268

5269

**5090
Back Buddy™ II**

- Remove, transport, service, and install heavy truck brake drums and hub assemblies.
- Fast-motion ratcheting jack with 14" of vertical lift.
- Pneumatic rear tires.
- Tilting mechanism to achieve the exact angle necessary for precise reassembly.
- Fold-down handle for open access to the work area.
- Onboard lube tray and toolbox.
- An array of optional adapter sets capable of grabbing almost any truck hub assembly or brake drum, inboard or outboard.



513926 – 10 stud inboard hub & drum assemblies – 335 mm.

513927 – 10 hole outboard drums – 3/4" thick back plates

Adapter Sets (sold separately)

513925 – 5 and 6 spoke wheels

514644 – 8 stud inboard hub & drum assemblies

514645 – 8 hole outboard drums

514646 – 6 stud inboard hub & drum assemblies

514647 – 6 hole outboard drums

514648 – Humvee/ Hummer geared hubs



**5105B
1,100 lb. Capacity High-Lift DualWheel Dolly**

- Effortless air-powered hydraulic lift system for a variety of applications.
- 0 to 42" lifting range.
- Six-inch lateral adjustment.
- Tilt adjustment of +15° to -8° ensures easy alignment.
- Features four swivel casters, two locking, for enhanced mobility.



**1770A
1,500 lb. Dual Wheel Dolly**

- Hydraulic jack provides almost 5" of lift and tilts wheel assembly 4° to prevent damage to wheel seal.
- Independent lifting rack provides maximum stability; rollers won't catch on load.
- Swivel casters for easy maneuverability.
- Floor space is 45" by 41".
- 6' chain holds load in place.
- Covered by OTC Lifetime Marathon Warranty®.



**1769A
Truck Dual Wheel Dolly**

- This 1,500 capacity dolly will remove, transport, and replace dual wheel and tire assemblies without strain or struggle.
- Swivel casters, 3-1/2" front and 3" rear, provide easy maneuverability.
- Floor space is 43" by 42".
- No. 1769A hydraulic jack provides over 6-1/2" of lift and tilts wheel assembly 7° to prevent damage to wheel seal.
- Includes a 6' support chain to hold load in place.

Model	Frame Height	Frame Width	Frame Length	Wheel Diameter	Handle Length
5268	9-1/4" (23.5 cm)	13-1/2" (34.29 cm)	47" (119.38 cm)	5" (12.7 cm)	33" (83.82 cm)
5269	9-1/4" (23.5 cm)	18-1/4" (46.36 cm)	47" (119.38 cm)	5" (12.7 cm)	33" (83.82 cm)

TIRE SERVICE HEAVY DUTY TOOLS & EQUIPMENT

5789-PACK Tire Service Display

Includes 23 popular tools for changing a tire:



Part Number	Qty
5716	1
5720	1
5724	1
5728	1
5729	1
5731	1
5732	1
5733	1
5735-35	2
5735-42	2
5735-42K	1
5736-24	1
5736-30	1
5737-30	1
5739-24	1
5739-30	1
5758	2
5047LP	1
5789ID-520	1
5789ID-1032	1
5700-DISPLAY	1

5700-DISPLAY Hammer & Tire Service Display Rack

- Designed to display various products in the framed rack, complete with removable rear sign holder.
- Sturdy display framed with heavy 5/16" rod with heavy steel base eliminates tipping.
- Black powder coat finish for a rust free, durable finish.
- Contains 2" x 2" = 52 slots and 2" x 4" = 6 slots.
- Includes 4 side hooks (not pictured).
- Assembled dimensions; W 18.5", D 19", H 44".
- Weighs approx. 35 lbs.



5700A Accessory Tire Bead Seater

- Provides the ability to control the blast with both hands firmly on the nozzle assembly, increasing effectiveness and safety.
- Includes all the fittings to adapt the hose to most surge tanks found on tire changers. A tank hook is also included to hang the nozzle when not in use.
- Long 6-1/2' hose will reach all positions on the tire.



5702 Tire Bead Seater

The 5702 OTC Tire Bead Seater provides many of the great features of it's 5713 big brother, at a more economical price!

- The trigger style discharge valve allows for optimum airflow control while allowing both hands to firmly hold the tank/valve assembly, critical for effective and safe use.
- Unique nozzle design significantly reduces "blowback recoil" and contains discharge holes strategically placed for optimum inflation of a wide range of tire sizes and wheel diameters.
- Inline design allows for a comfortable distance from the tire and wheel while seating.
- ASME approved 2-gallon tank with inlet valve, pressure gauge, and relief pressure valve for safety.



5715 Tire Spoon Rack

- Designed to hold OTC Tire Spoons by the handle upset.
- Also holds tools with 3/4" or smaller diameter shafts.
- Can be hung on end of tool box or mounted to the wall via holes on 16" center.



5727 Sliding Bead Breaker

- The 5727 Sliding Bead Breaker has a split head, unique wedge design and slide hammer to reduce bead friction. Foot loops and tipping slots provide leverage and ease of transferring force to the tire.
- Sliding Bead Breaker, 47" extends to 81", 21 lbs.



5713 Tire Bead Seater

The Tire Bead Seater is used when a tire, new or used, is mounted on a wheel and the tire bead does not touch both sides of the wheel, making inflation possible. The air trigger on this tool expels a tremendous burst of air that inflates the tire to seat it to the wheel rim. This allows the tire to be inflated to the recommended pressure through the tire valve.



- The Tire Bead Seater is equipped with unique configurations that enhance ease of use, productivity and safety for technicians looking to get the job done right every time.
- Unlike other options out there, the Tire Bead Seater's ASME certified 13-gallon tank is designed with a nozzle and valve connected via hose assembly, giving the user more control rather than requiring them to hold the weight of the tank.
- The trigger style discharge valve allows for optimum airflow control while allowing both hands to firmly hold the nozzle/valve assembly, critical for effective and safe use. Wheels and handle function in either the vertical or horizontal position for easy mobility and storage.
- Unique nozzle design significantly reduces "blowback recoil" and contains discharge holes strategically placed for optimum inflation of a wide range of the tire sizes and wheel diameters.
- Air valve included for filling tank, which also provides compressed air for filling the tire while seating the bead, optimum for on-the-road service.





Convex Slip Head - Unique "Convex Slip Head" curved design allows the spoon to slide easily into the tire bead while the spoon bump limits the depth for quick-and-easy operation.



Grip grooves - Eliminate spoon slippage on the wheel rim while mounting or demounting the tire. The grooves also limit the depth of the spoon to help eliminate pinching tire tube applications.

5716 **HD Sliding Tire Spoon** - 38" extends to 52", 3/4" diameter. Inner slide bar provides hammer action to easily insert and remove the spoon.



5716G **HD Sliding Tire Spoon with Grip Grooves** 38" extends to 52", 3/4" diameter. Inner slide bar provides hammer action to easily insert and remove the spoon.



5720 **Sliding Dual Tire Spoon** 35" and 3/4" diameter. Unique configuration provides mount and demount heads on either end with the aid of a slide hammer mounted mid bar, allowing for hammering either end in or out of the tire bead. Twist-lock feature locks 3.5 lb. slide weight in position.



5724 **Extending Tire Spoon** 22" extends to 34", 3/4" diameter. Twist-lock feature allows the spoon to be extended to any length and locked into position with a twist of the collar.



5734-18 **Tire Machine Spoon, Double End**, 18" Has a curved end and a bent tip end for starting the bead on a tire changing machine.



5734-18G **Tire Machine Spoon, Double End with Grip Grooves**, 18" Has a curved end and a bent tip end for starting the bead on a tire changing machine.



5735-18 **Double End Curved & Flat Tip Curved Tire Spoon**, 18" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



5735-18G **Double End Tire Spoon with Grip Grooves**, 18" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



5735-35 **Double End Curved & Flat Tip Curved Tire Spoon**, 35" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



5735-35G **Double End Tire Spoon with Grip Grooves**, 35" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



5735-42 **Double End Curved & Flat Tip Curved Tire Spoon**, 42" Same great design as the original double end mount/demount tire spoon, but in a 42" length for added leverage. 3/4" diameter.



5735-42K **Double End Tire Spoon with Kick Start**, 42" Includes kick loops to allow the spoon to be forced into tight bead locations with the help of foot pressure. 3/4" diameter.



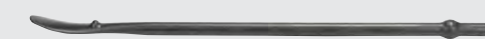
5736-18 **Curved Tire Spoon**, 18" Handle knob enables easier spoon pick up. 3/4" diameter.



5736-18G **Curved Tire Spoon with Grip Grooves**, 18" Handle knob enables easier spoon pick up. 3/4" diameter.



5736-24 **Curved Tire Spoon**, 24" Handle knob enables easier spoon pick up. 3/4" diameter.



5736-24G **Curved Tire Spoon with Grip Grooves**, 24" Handle knob enables easier spoon pick up. 3/4" diameter.



5736-30 **Curved Tire Spoon**, 30" Handle knob enables easier spoon pick up. 3/4" diameter.



5737-30 **Flat Tip Curved Tire Spoon**, 30" Handle knob enables easier spoon pick up. 3/4" diameter.



5739-24 **Curved Shank Tire Spoon**, 24" The curved shank allows improved access for the spoon head around the tire bead or wheel rim. Handle knob enables easier spoon pick up. 3/4" diameter.



5739-30 **Curved Shank Tire Spoon**, 30" The curved shank allows improved access for the spoon head around the tire bead or wheel rim. Handle knob enables easier spoon pick up. 3/4" diameter.



HEAVY DUTY TOOLS HEAVY DUTY TOOLS & EQUIPMENT



Tire Service Hammers, Indestructible Handle

- Indestructible handle - never needs replacement!
- Ergonomic rubber grip handle reinforced with steel bars resists breaking while absorbing impact and vibration.
- Drop-forged head is induction-hardened for long life, and contains steel locking plates that are specially bonded to ensure the head never becomes loose.
 - Use top hook as a wheel tipper; sledge end hook to drag tire into position.
 - Bead breaking wedge has grooves and a convex shape to help drive tire lube into the bead.

5789ID-520 – 5 lb. head, handle length 20", total weight 7.3 lbs.

5789ID-1032 – 10 lb. head, handle length 32", total weight 14.4 lbs.



5729 Inside Dual Wheel Bead Breaker

- Breaks the inner bead on the outside tire without removing the wheel from the truck.
- Unique design places pressure in the exact location required to quickly and easily break the inner bead.
- Simply pull up on the handle and the bead is forced off the wheel rim.



5747 Tire Valve Stem Punch Kit

- Quickly and easily remove old valve stems from a wheel with a swing of a hammer.
- Simply place the punch tip on the inside of the valve stem and strike the punch to force the old valve stem out of the wheel.
- The unique punch tip is heat treated and shaped to remove all types of valve stems, including 10mm nickel plated, steel, and brass valve stems.
- Includes hand protecting grip with interchangeable 5" and 8" punch adapters for car and truck wheel applications.



5752 Wheel Loader & Tipper

- The new ergonomic wheel loader and tipper integrates two very helpful tools into one.
- The wheel loader feature allows a technician to lift various sizes and types of wheels and tires in and out of a truck bed.
- The wheel tipper feature allows the technician to flip a wheel over during tire service, or just tip up a wheel and tire to move.
- Both of these features allow the technician to easily and safely service and lift wheels by eliminating the need to bend over to lift, dramatically reducing the risk of back injury.
- Works on steel or aluminum wheels, inflated or deflated.



5750 Wheel Tipper

- This ergonomic wheel tipper allows the technician to flip a wheel over during tire service, or just tip up a wheel and tire to move.
- Allows the technician to easily and safely service wheels by eliminating the need to bend over to lift, dramatically reducing the risk of back injury.
- Works on steel or aluminum wheels, inflated or deflated.



5728 Tire Bead Breaker

- Unique head is designed to provide a large striking area for all angles, while providing the mass needed to break the tire bead.
- This design puts the force exactly where it's required and eliminates the possibility of accidentally hitting the wheel, problems typically encountered while using larger swing hammer style bead breakers.



5745 Hands Free Air Chuck

- Perfect for applications where the tire valve is facing the floor while seating the tire bead, such as most dual wheel configurations.
- Hooks on the top bead seat of the wheel and the spring pressure holds the chuck on the tire valve pointing to the opposite side.
- Ball valve included to allow inflation only when needed.



5047LP Lug Nut Cap Remover Locking Pliers

- Designed to remove lug nut caps found on heavy duty truck and trailers quickly and easily without damage. Caps can be easily damaged by prying or using standard cap removers.
- Locking plier design with specially coated jaws apply maximum grip on the lug nut caps without damage.

5047 Lug Nut Cap Remover

- Chrome-plated lug nut caps found on many heavy-duty trucks and trailers can be tough to remove, and they're easily damaged if you pry them off or use an ordinary cap remover. This tool avoids those problems. It is ruggedly built and features specially coated jaws that won't slip off the caps, no matter how much squeezing force you apply.
- Features cushioned handles.



5082 Wheel Tipper

This heavy-duty wheel tipper makes handling those hard-to-manage truck tires easy. To use the wheel tipper, simply deflate the tire and break the bead, then hook the wheel tipper to the rim of the wheel. The wheel tipper makes an otherwise tough task effortless.

- Designed for both aluminum and steel wheels won't damage wheel rim.



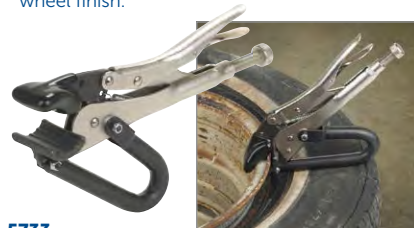
5731 Tire Bead Locking Pliers

- Prevents the tire from slipping while mounting the top bead.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.
- Prevents tire from contacting costly TPM Sensors.



5732 Tire Spoon Holding Pliers

- Tire Spoon Holding Pliers is the 3rd hand needed to ease mounting and demounting of tires with tire spoons.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.



5733 Tire Bead Wedge Pliers

- Tire Bead Wedge Pliers keeps the tire in the bead drop area to ease mounting and demounting of larger truck and agricultural tires.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.



Accutorq™ Klikker Torque Wrenches

These precision torque wrenches make a loud click when you've reached the torque setting. They feature ratcheting heads, all-metal construction, permanently roll-marked scales, and soft-grip rubber handles that enable you to firmly grasp the wrench for right- or left-hand torquing.

- Includes molded plastic case.
- One-year warranty.

Tool No.	Torque Range	Graduations	Square Drive	Length
7378	50–250 in. lbs. (68–339 N•m)	2 ft. lbs.	1/2"	19-3/8"
7379	100–600 in. lbs. (136–813 N•m)	10 ft. lbs.	3/4"	42-1/4"



7367 Torque Multiplier, 1000 lb-ft

- Drive Input; 1/2", 365 lb-ft Max
- Drive Output; 3/4", 1100 lb-ft Max
- Head Width; 2.9", 3.3:1 Ratio
- Reaction Bar; 13-3/4"
- Includes reaction foot.
- Note; frictional gear loss = 6%



7368 Torque Multiplier, 2000 lb-ft

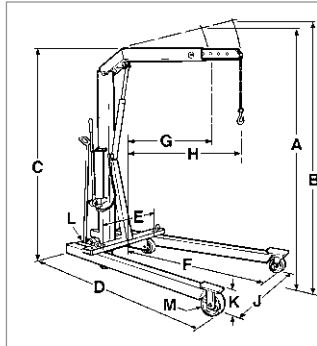
- Drive Input; 3/4", 730 lb-ft Max
- Drive Output; 1", 2200 lb-ft Max
- Head Width; 3.6", 3.3:1 Ratio
- Reaction Bar; 15-5/8"
- Includes reaction foot.
- Note: frictional gear loss = 6%

FLOOR CRANES

HEAVY DUTY TOOLS & EQUIPMENT



1819, 1820



Specifications	1819	1820
Cap., boom retracted	2,200	4,400
Cap., boom extended	1,650	3,300
A Max. boom height, boom retracted	107"	111"
B Max. boom height, boom extended	117"	122"
C Overall height, boom horizontal	80"	82"
D Overall length	83"	89"
E Minimum throat width	24"	25"
F Inside leg length	54"	57-1/2"
G Effective boom reach (retracted)	33"	35-1/2"
H Effective boom reach (extended)	48"	50-1/2"
J Inside leg width (3-position)	24", 36" 48"	26", 40" 52-1/2"
K Leg height	8"	9-1/2"
L Dolly wheel diameter	5"	5"
M Wheel diameter	6"	8"
Height, folded	79"	86"
1819 Floor space folded	27" x 38"	
1820 Floor space folded	31" x 42"	

2,200 and 4,400 lb. Capacity Heavy-Duty Floor Cranes

- To conserve valuable floor space, crane folds into a compact package for storage.
- For "close-in" work, leg spread adjusts to clear vehicle's wheels, telescoping boom extension gives additional reach. Roller bearing mounted wheels and steering dolly provide ease of mobility.
- A two-speed hydraulic hand pump provides fast boom travel; descent of boom is under precise control of operator.
- Covered by OTC Lifetime Marathon Warranty®.

1819 – 2,200 lb. Capacity Crane. Has hydraulic hand pump and 16-7/8" lifting chain.

39610 – 1/4" steel chain grade 43, 18-3/8" long, 2,200 lb. capacity. Has safety hook on end. Use with 1819.

1820 – 4,400 lb. Capacity Crane. Has hydraulic hand pump and 18-3/8" lifting chain.

39611 – 5/16" steel chain grade 70, 19-3/4" long, 4,400 lb. capacity. Has safety hook on end. Use with 1820.



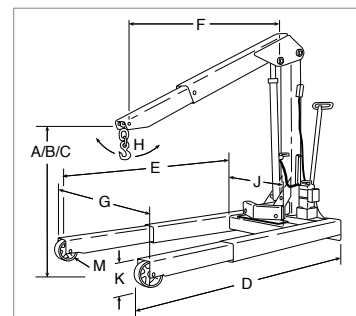
1813

No. 1812 Load-Rotor (not included)

Boom Capacity (lbs.)	Extended	Centered	Retracted
Description	4,000	5,000	6,000
A Maximum boom height	161-7/8"	150-11/16"	139-1/2"
B Minimum boom height	6"	17-3/8"	28-3/4"
C Overall height (boom horizontal)	87"	87"	87"
D Overall length*	129-1/8"	113-7/8"	98-1/4"
E Inside leg length	91-11/16"	76-1/8"	43-1/4"
F Effective boom horizontal reach	94-1/4"	78-3/4"	63-1/4"
G Outside leg width**	59-3/4"	57-3/4"	55-3/4"
H Boom swing	36"	31"	26"
J Inside leg width		35-3/4"	
K Leg height		9-1/16"	
M Wheel diameter		8"	
Dolly wheel diameter		5"	

* Legs in storage position: 80-7/8"

** Legs in storage position: 53-1/2"



6,000 lb. Capacity Heavy-Duty Mobile Floor Cranes

- Three boom positions give capacities of 4,000, 5,000, and 6,000 lbs. to handle the biggest engines, and often the transmission right along with the engine! Usable reach is almost 92".
- Boom swivels for vertical and lateral positioning; legs extend to straddle the biggest tires.

1814 – 6,000 lb. capacity crane with electric/ hydraulic pump (115V) with remote motor control.

1813 – 6,000 lb. capacity crane with two-speed hydraulic hand pump.



2,000 and 4,000 lb. Capacity Folding Floor Cranes

- Both of these cranes fold up for compact storage.
- Front wheels are 3-1/2"; rear casters 5-7/8".

2002 – 2000 lb. capacity crane with a reach of 24" to 36"

2004 – 4000 lb. capacity crane with a reach of 25" to 46"

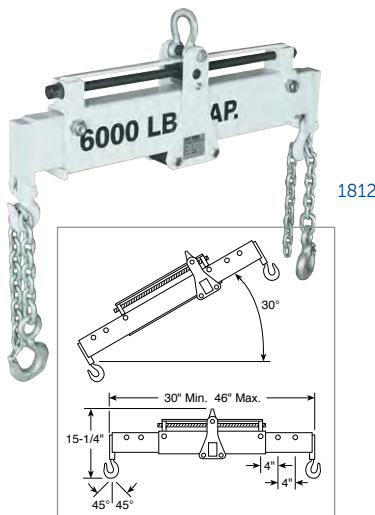
Specifications	2002	2004
Maximum capacity, boom extended	500 lbs.	1,000 lbs.
Maximum capacity, boom retracted	2,000 lbs.	4,000 lbs.
Maximum height, boom extended	94"	104"
Maximum height, boom retracted	87"	81"
Effective boom reach, boom extended	36"	48"
Effective boom reach, boom retracted	24"	26"
Leg width @ front wheels	32-1/2"	25"
Leg height	6-1/2"	7-3/4"
Floor space folded	57" x 38"	16" x 17-1/2"
Floor space unfolded	70" x 32"	33" x 33-1/2"



4305
1,500 lb. Capacity Engine Load Leveler

Designed to hook to a crane or hoist to handle and position large, bulky components.

- The horizontal tilt can be adjusted to compensate for off-center loads, or adjusted to a certain angle for a component being positioned.



1812

Load Leveler

- Improved design over conventional spreader bars.
- Carriage on main support beam moved by turning lead screw; this permits fine adjustment of the tilt angle of component being lifted.
- Turn lead screw manually or with air-powered tools.
- Spreader bar adjustment secured with locking bolts.
- Chain grade is 80.
- Covered by OTC Lifetime Marathon Warranty®.

1812 – Load Leveler. Max. lifting capacity: 6,000 lbs.; distance between hooks: min. 30", max. 46".

1822 – Load Leveler. Max. lifting capacity: 10,000 lbs.; distance between hooks: min. 36", max. 56".



1806
4,000 lb. capacity Load-Rotor® Positioning Sling

- Use with a floor crane. Engine, transmission, or other component is tilted or leveled by turning sling's 5/8" hex drive end with a common speed handle and socket.
- Has 65-3/4" long chain (5/16") and hook assembly with forged hook on each end. Pair of special lifting brackets included.
- Makes engine removal and installation a snap, even in close quarters.
- For use with floor cranes only; not to be used with overhead hoists or lifts.



Heavy-Duty Adjustable Slings

- For lifting and positioning engines, transmissions, etc. Each chain can be adjusted independently for length; plate design enables chain to be "short-hooked" for correct tilt.

205049 – 2,000 lb. capacity sling with 1/4" chain, 56" long

205050 – 4,000 lb. capacity sling with 5/16" chain, 65" long

38841 – Plate only, use with any 1/4" or 5/16" alloy steel chain



302249

Alloy Chains for Overhead Lifts and Hoists

302941 – 5/16" alloy chain, 26-13/16" long, 4,000 lb. capacity. With safety hook on one end. Use on No. 1812.

302249 – 3/8" alloy chain, 28-3/8" long, 6,000 lb. capacity. With safety hook on one end.



7100

4,000 lb. Capacity Lifting Brackets (pair)

- Attach directly to component for easy lifting; will take 1/2" diameter bolts.

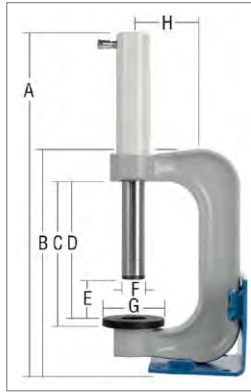
PRESSES HEAVY DUTY TOOLS & EQUIPMENT



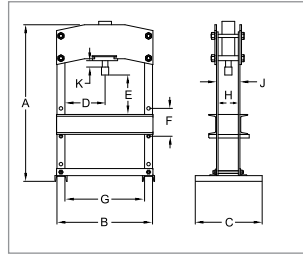
5180 10-Ton Portable Hydraulic C-Frame Press

- Weighing less than 28 lbs, this durable press is portable for various applications, i.e., roadside maintenance services, industrial applications, marine, general automotive.
- For clamping, pressing and bending. Ideal for welding and metal fabrication.
- 9" Open-Throat® design.
- Couples to any 4- or 10-ton Porta Power pump.
- The base can be assembled to position the press either vertically or horizontally and can also be mounted to a bench.

Set includes: C-Frame press with base, adapters: V-pushing and ram pushing (9/16" and 3/4" dia. shanks), receiving insert, flat insert, storage case.



A	B	C	D	E	F	G	H
21-1/4"	13-3/4"	9"	8-1/2"	2-1/2"	1-1/2"	4"	4-1/4"

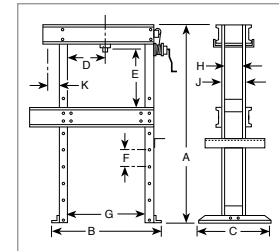


5230 16-1/2 Ton Capacity Bench Press

This innovative press integrates all the hydraulic elements within the chassis. The compact and functional design saves workshop space and ensures protection during transport.

- Bolster is adjustable for height.
- Automatic spring return piston.
- Pressure gauge with damper to extend its working life— positioned at eye level for easy reading.
- Includes set of two V-blocks and legs with bolt-holes for fixing to bench.

A	B	C	D	E	F	G	H	J	K
37"	16-1/2"	23-7/8"	9-1/2"	5-7/8"-17-5/8"	6"	19-5/8"	4-3/4"	5-1/2"	3"

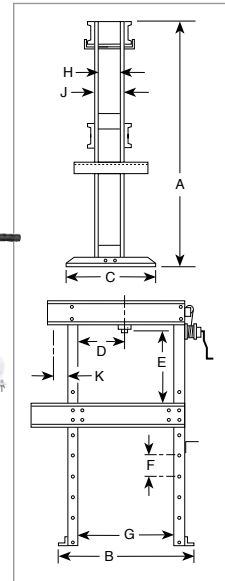


1825 17-1/2 Ton Capacity Heavy-Duty "Open Throat" Press

- Ram head moves side to side for off-center pressing; ram-to-work distance is adjusted by a forcing screw that is extended or retracted by a speed crank.
- "Open-throat" frame extensions make handling of bulky jobs possible outside of the press frame.
- This press does not have a lifting mechanism. If a lifting mechanism is needed, order 211407.
- Covered by OTC Lifetime Marathon Warranty®.
- Has No. 201832 hydraulic ram with 2" stroke, No. 4002 hydraulic hand pump, No. 9650 gauge, No. 9767 hose, adjusting screw, speed crank, ram cap, and pump mounting bracket.

211407 – 17-1/2 ton winch kit.

A	B	C	D	E	F	G	H	J	K	Floor Space
64"	28"	28"	17-7/8"	34-7/8"	3-3/8"	20"	4-1/4"	5"	4-3/8"	28" x 28"



25-Ton Capacity Heavy-Duty "Open Throat" Press

- "Open throat" feature enables ram to be positioned outside of press frame for fast axle bearing removal and installation, as well as other tasks. Rugged press is covered by OTC Lifetime Marathon Warranty®.
- Press bed is raised or lowered with a hand crank, and a spring-return hydraulic ram is laterally adjustable for off-center work at full capacity.

1826 – 25-ton press. Includes No. 4016 hydraulic hand pump; No. 52025 hydraulic ram with 14" stroke; No. 9652 gauge; No. 303563 hose (3/8" ID x 8'); and pump mounting bracket.

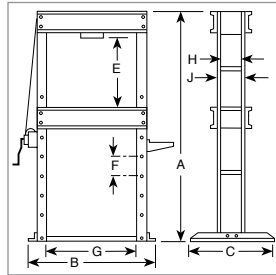
1826A – 25-ton press. Includes No. 4020 air/hydraulic pump; equipped the same as 1826.

A	B	C	D	E	F	G	H	J	K	Floor Space
68"	43"	28"	3"-29"	6-7/8"-4-3/8"	4-1/2"	32"	5-1/2"	6-1/2"	7"	28" x 25-1/4"

*Lateral head movement. Frame shipped assembled.



1833



25-Ton Capacity Shop Presses

- Tough, economical press is ideal for pressing rear axle bearings, piston pins, and much more.
- Large 30" x 46" work area under ram makes positioning of even bulky work easy. Press bed is easily raised and lowered by a dependable lifting mechanism. Choice of model with hand- or air-driven hydraulic pump.

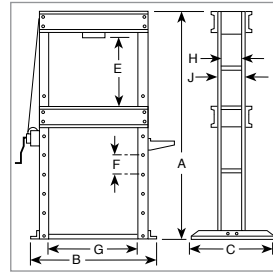
1833 – 25-ton press. complete with No. 4002 hydraulic hand pump; No. 9652 gauge; No. 24815 tee; No. 9767 hose (1/4" ID x 6"); hydraulic ram No. 51426 with 6-1/4" stroke; and 42733-WH2 pump mounting bracket.

1834 – 25-ton press. complete with air-driven No. 4020 hydraulic pump; No. 9652 gauge; No. 24815 tee; No. 9768 hose (1/4" ID x 8") and hydraulic ram with 6-1/4" stroke.

A	B	C	E	F	G	H	J	Floor Space
69-1/2"	40-1/2"	28"	5-3/4"-46"	4"	30"	5-1/2"	6-1/2"	41-1/2" x 28"



1850



55-Ton Capacity Economy Shop Presses

- Wide 10" throat opening between lower bolsters
- Durable steel frame resists buckling and bending. Covered by OTC Lifetime Marathon Warranty®.
- Hand-operated winch and cable mechanism adjusts lower press bolster.

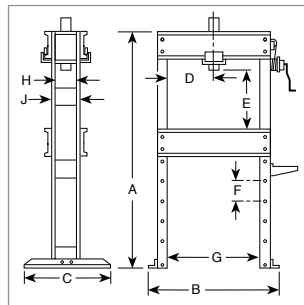
1850 – 55-ton press. Includes No. 52457 hydraulic ram with 6-1/4" stroke; No. 4016 hydraulic hand pump; No. 9651 gauge; No. 9767 hose (1/4" ID x 6"); and pump mounting bracket.

1851 – 55-ton press. Includes No. 52457 hydraulic ram with 6-1/4" stroke; No. 4020 air/ hydraulic pump; No. 9651 gauge; No. 9767 hose (1/4" ID x 6"); and pump mounting bracket.

A	B	C	E	F	G	H	J	Floor Space
70-3/4"	47-1/2"	28"	6-1/8"-41-1/8"	5"	35"	7-1/16"	10"	55-1/2" x 28"



1845



55-Ton Capacity Heavy-Duty Presses

- Side-to-side positioning of ram allows full capacity pressing along entire bolster length without buckling or bending. Covered by OTC Lifetime Marathon Warranty®.
- Hydraulic ram features 13" of stroke. Choice of hydraulic power units.

1845 – 55-ton press. Includes single-acting ram No. 52380 with 13" stroke; No. 4044 electric/hydraulic pump; No. 9651 gauge; No. 303563 hose (3/8" ID x 8"); and pump mounting bracket.

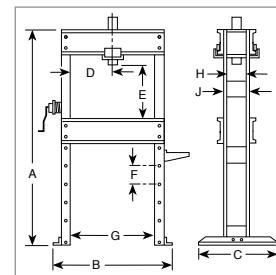
1846A – Same as No. 1845 except has No. 4016 hydraulic hand pump and single acting ram No. 65458 with 10-1/8" stroke.

1847 – Same as No. 1845 except has a No. 4022 air/hydraulic pump and a No. 9781 hose (3/8" ID x 10').

1872 – 55-ton press. Includes double-acting ram No. 51682 with 13" stroke; No. 4046 electric/hydraulic pump; No. 9651 gauge; No. 36887 hoses; and pump mounting bracket.

A	B	C	D	E	F	G	H	J	Floor Space
72"	48-1/2"	36"	3-1/4"-32-3/4"	6"-42"	6"	36"	6-3/4"	8"	56-1/2" x 36"

*Lateral head movement.



1854

100-Ton Capacity Economy Shop Press

- Large 35" opening between press uprights allows easy handling of large gears, shafts, sprockets, and other components serviced in truck, construction, and agricultural equipment shops. Covered by OTC Lifetime Marathon Warranty®.
- Hand-operated winch and cable mechanism gives operator precise control in adjustment of lower press bolster to any height.

1854 – 100-ton press. Includes hydraulic ram No. 52434 with 10" stroke; No. 4044 electric/hydraulic pump; No. 9651 gauge; No. 9768 hose (1/4" ID x 8"); and pump mounting bracket.

A	B	C	D	E	F	G	H	J	Floor Space
86-5/8"	47-1/2"	28"	17-1/2"	9-5/8"-49-5/8"	8"	35"	6-3/8"	10"	55-1/2" x 28"

PRESSES / ACCESSORIES HEAVY DUTY TOOLS & EQUIPMENT



1857



1858

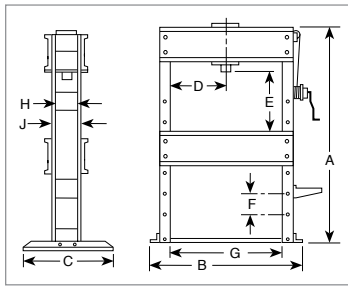
100-Ton Capacity Heavy-Duty Shop Presses

- Wide open uprights allow easy positioning of bars and shafts for straightening or bending.
- Upper bolster can be lowered for convenient positioning during repetitive jobs.
- Ram head glides smoothly on rollers for easy horizontal adjustments; rugged press frame will withstand a full capacity load with the ram head in any position across the upper bolster.
- Covered by OTC Lifetime Marathon Warranty®.

1857 – 100-ton press. Includes single-acting No. 52434 ram with 10" stroke; No. 4008 hydraulic hand pump; No. 9651 gauge; No. 9781 hose (3/8" ID x 10'); and pump mounting bracket.

1858 – Same as No. 1857, except has double-acting No. 51683 ram with 13" stroke; No. 61217 3-phase, 220V, 3450 rpm electric/hydraulic pump; and two No. 9769 hoses.

1858-1P – Same as No. 1858, except it has a No. 4064 2-stage, 1-phase hydraulic pump.



A	B	C	D	E	F	G	H	J	Floor Space
77-1/4"	64"	36"	7"-43"	2"-42"	8"	50"	8"	10"	36" x 78-1/4"

*Lateral head movement. Frame shipped assembled.

100-Ton Presses Accessory Set

50392 – Straightening fixtures (pr.)

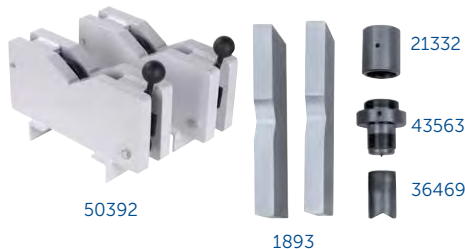
1893 – V-blocks, 14" long (pr.)

21332 – Pushing adapter (must be used with reducing adapter).

36469 – V-pushing adapter (must be used with reducing adapter).

43563 – Reducing adapter (for double-acting ram).

43562 – Reducing adapter (for single-acting ram, not pictured).



1880

17-1/2-Ton Press Accessory Set

- Adapters and accessories attach to ram's forcing screw or are used on press bed to support work.

Set includes:

1123 – Bearing pulling attachment

201923 – Ram pushing adapter with a 1/2" dia. shank

210454 – Ram pushing adapter with a 3/4" dia. shank.

34806 – V-pushing adapter

1890 – V-blocks (pair)



1881

25-Ton Press Accessory Set

- Adapters and accessories attach to ram's forcing screw or are used on press bed to support work.

Set includes:

1124 – Bearing pulling attachment

34510 – Ram pushing adapter with 3/4" dia. shank

34511 – Ram pushing adapter with 1" dia. shank

34807 – V-pushing adapter

1891 – 11-1/2" long V-blocks (pr.)

28229 – Ram forcing cap

38953 – Threaded adapter



1882

55-Ton Press Accessory Set

- Accessories attach to ram's forcing screw or support work on press bed.

Set includes:

1126 – Bearing pulling attachment

34755 – Ram pushing adapter with 1" dia. shank

34756 – Ram pushing adapter with 1-1/4" dia. shank

34808 – V-pushing adapter

1892 – 14" long V-blocks (pr.)

28230 – Ram forcing cap

37368 – Threaded adapter – for single acting only

38954 – For 1872 double acting press



Universal Outside Thread Chaser

Damaged bolt or nut threads can be an annoying, costly problem—unless you have one of our thread chasers. It will quickly restore threads to near original condition without the use of expensive thread-cutting equipment.

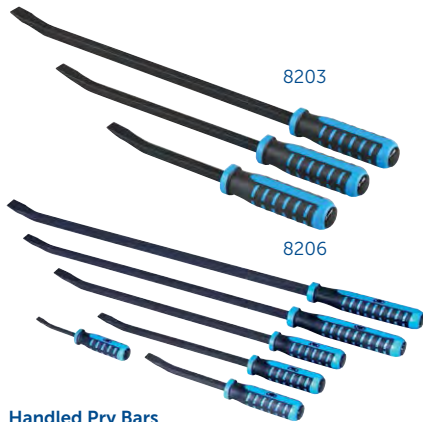
- Replaceable V-pads and dies.
- 1-1/4" to 5" O.D.

7402 – Thread chaser with 6 dies: threads per inch - 4, 5, 6, 7, 7-1/2, 8, 9, 10, 11, 11-1/2, 12, 14, 16, 18, 20, and 24.

216884 – Standard die set. Includes 6 dies, in the sizes listed above.

202817 – Metric die set. Includes three dies: 1 mm- 1.25 mm-1.5 mm-1.75 mm, 2 mm-2.5 mm-3.0 mm-3.5 mm; 4 mm pitch dies.

206803 – V-pad.



Handled Pry Bars

Heavy-duty pry bar made of tempered square steel that you can hit without damaging the handle.

- Black chrome striking cap allows hitting the bar without damage to the handle.
- Ergonomic handle – dual durometer composite handle for user comfort; reduces hand fatigue.
- Polished tip with black oxide finish.
- Long-life finish resists rust and wear during use.
- OTC Marathon Lifetime Warranty.

8203 – 3-piece handled pry bar set. Includes 12", 18", and 24" sizes.

8206 – 6-piece handled pry bar set. Includes 8", 12", 18", 24", 32" and 36" sizes.

8208 – 8" handled pry bar

8212 – 12" handled pry bar.

8218 – 18" handled pry bar.

8224 – 24" handled pry bar.

8232 – 32" handled pry bar.

8236 – 36" handled pry bar.



6492

Engine Preluber Kit

- Ensures oil is present to internal engine components on the first start of a new or rebuilt engine, or after major engine work is performed.
- Required to prime the oil pump and fill the oil galleries and internal engine components with clean, new oil.
- Connects to engine oil system at the oil pressure sensor on a variety of domestic and import engines.
- Oil pressure sensor adapters included.



5086

10-Ton Collision Repair Set

- Exert hydraulic force just where it's needed to lift, spread, bend, or straighten. Handles the high-force jobs you face daily in trailer maintenance or other applications.
- Includes reliable components including 10-ton, 10-1/8" stroke hydraulic ram; air/hydraulic pumping unit; hydraulic hose; four snap-together extension tubes; extension tube coupling; serrated saddle; flat base; 90° wedge head; flex head; storage case.
- All set components are covered by OTC Lifetime Marathon Warranty®.



1515B

10-Ton Collision Repair Sets

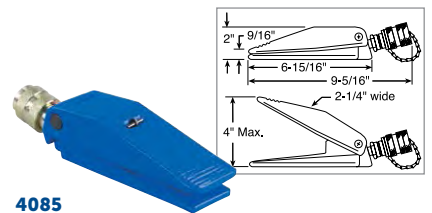
- Components snap together for quick setups to apply pushing, spreading, or pulling force.
- Components include: hydraulic pump, hose, and ram; ram flat base; extension tubes (4); 1/2-ton spreader; tube coupling; ram toe; wedge head; serrated saddle; flex head; plunger toe; 90° wedge head; storage case. The case has wheels for mobility.
- Single speed hydraulic hand pump and ram with 6" stroke.



4020

Air/Hydraulic Pump

- Ideal all-around power source develops 10,000 PSI at 100 PSI air.
- Two-stage release mechanism; internal relief valve.
- 98 cu. inches of usable oil.
- Covered by OTC Lifetime Marathon Warranty®.



4085

1-ton Capacity Hydraulic Spreader

This hydraulic spreader is rated at a full 1-ton capacity at 10,000 PSI and that's enough for a wide variety of jobs. Working in tight spots is no problem—it needs only a 9/16" clearance to engage the jaws. With a big 4" spread, it's ready for a variety of applications: straightening work, removing dents and creases from sheet metal, or as a clamp. The device's spring-return jaws are made of high-strength alloy steel. It can be dead-ended at 4" spread under full load. Ideally suited to work with No. 4012 hand pump (not included).

4180

Power Twin Ram and Pump Set

- Center-hole feature permits extending adjusting screws, cables, puller screws, etc., straight through the ram.
- This spring return unit is compact and lightweight.
- Ideal for jobs having restricted working space.
- Set includes 4120 17-1/2 ton, 2" stroke single-acting hydraulic ram; 4002 pump; 9650 gauge; 24815 tee; 9767 hose; and 9798 hose half coupler.



Pumps and Rams

9110B – 10-Ton Ram with 6" stroke. Use with the snap-together components of OTC Stinger's collision repair sets, or with most similar competitive products.

9107B – Single Speed Hydraulic Pump. Ideal for single acting rams. Developing up to 10,000 psi operating pressure, the pumps operate horizontally or vertically in the "head down" position. Finger tip control provides instant release or pumping action. Has a built-in safety overload valve.



5286

Portable Diesel Particulate Filter Cleaner

The Diesel Particulate Filter (DPF) Cleaner was designed with shop service in mind. Its portability allows the unit to be placed as close to the vehicle as possible and to be stored wherever needed in the service facility. The advent of the 2010 Tier 4 cleaning requirements created the need for a lighter, more portable cleaning system which can be taken into the field to clean filters at the point of service.

Diesel Particulate Filter features

- Lightweight and Highly Portable - ideal cleaning system for use in the shop or on a service truck.
- Flexibility - clean DPF's from 6" to 15.5" in diameter using shop or compressed air of at least 100 PSI and 20 CFM sustained airflow.
- Fully Automated Operation - once started, the cleaning process can be completed with minimal operator oversight, freeing up the technician to simultaneously do other work in the shop.
- Focused Air Jet Technology™ - concentrates a precise high pressure stream of air directly into every cell.
- Easy Maintenance - contains no internal filters that require user maintenance.
- Rugged design provides maximum durability.
- Operates on 12-24 volt DC, or 110-220 Volt AC.

Efficiency by the Numbers*

- Cleans up to 20% more efficiently than traditional pulse based systems.
- Cleans up to 5% more efficiently than other more expensive "air knife" systems.

*Based on third party OE test data using Pin-gauge measurement.

Unique floating puck prevents "splash back"

- Features Focused Air Jet Technology™ with a unique floating puck that prevents splash back.
- Includes three nozzles: two straight (short and long), for standard "open face" DPFs; and one curved for the angled-flange DPFs.
- Ensures quiet operation.

Ash disposal System and Shield

- Innovative ash disposal system enables technician to quickly and easily remove and dispose of particulate matter in accordance with local environmental requirements.



5286 kit includes:

- Cleaning unit
- Three neoprene rings fit filters from 6 in. (165 mm) to 15.5 in. (400 mm) in diameter
- Wet / dry HEPA vacuum
- Short, long, and curved-flange filter nozzles
- Adjustment feet for standard and flanged filters
- Ash disposal kits
- AC and DC adapter cables

Accessories

563197 (Set of 5) – Ash disposal system enables technician to quickly and easily remove and dispose of particulate matter in accordance with local environmental requirements.



Curved neck nozzle with floating puck for angled-flange DPFs.



Long nozzle with floating puck for standard open face DPFs.



Includes innovative shield to protect cleaning area from moisture.



CE

5280

OTC 5280 Diesel Particulate Filter Cleaner

The Diesel Particulate Filter (DPF) Cleaner was designed with shop service in mind. The cleaning process allows the DPF to be cleaned as part of a general maintenance schedule at the service location with minimal time away from the vehicle. It's portability allows the unit to be placed as close to the vehicle as possible and to be stored wherever needed in the service facility.

DPF Cleaner Features

- OE tested and Dealer recommended – By many major diesel engine manufacturers. Robust design – For long shop life. Can be used as part of a preventative maintenance program.
- High Pressure cleaning process for thorough cleaning of ash from DPF – produces 10 times the burst energy of competitive low pressure units.
- Initial Burst Quick check – To identify filters too plugged for proper cleaning.
- Movable with locking wheels – For placement throughout the shop.
- Computer Controlled Process Based on OE Requirements – for "Start to End" cleaning without constant technician monitoring.
- Containment of hazardous ash – For easy disposal.
- HEPA Filter Air Exhaust System – To exceed environmental air standards for shop.
- Operates on standard 115V outlet.
- Proven to clean to over 92% efficiency. (3)

(3) Third-party OEM test results using pin gauge measurement with approved OTC adapters and burst cycles. Actual results may vary.

DPF Cleaner Includes:

OTC Diesel Particulate Filter (DPF) Cleaner

- 535936** – Small Cone
- 543887** – Medium Cone
- 543885** – Large Cone
- 553913** – CAT Adapters
- 553915** – Cummins Adapters



Upgrade kits for other OEM's are sold separately:

- 556889** – Detroit Diesel upgrade kit
- 553990** – UD TRUCK (with Hino Engine) upgrade kit
- 553991** – Isuzu upgrade kit
- 553993** – Volvo/Mack upgrade kit
- 558181** – Navistar upgrade kit*
- * Requires use of 5281 DPF Thermal Processing Unit.
- 554654** – Includes all upgrade kit shown above.
- 558569** – 12" HEPA filter
- 558571** – 30" air filter cartridge

5281

OTC DPF Thermal Processing Unit

The 5281 DPF Thermal Processing Unit is a device which will thermally regenerate a DPF unit at a controlled, pre-programmed rate. Sometimes, the DPF cannot be regenerated on the truck due to a failure with the vehicle's own regeneration system, or in the case of retrofit applications, a lack of an on-vehicle regeneration system. Thermal regeneration of DPFs is used in conjunction with the OTC 5286 DPF Cleaner.

Designed to facilitate the cleaning of dirty filters – especially those with high amounts of wet soot, and unburned hydrocarbons.

- Pre-programmed thermal profile controls temperature 'ramp up' and 'cool down' to protect the DPF from thermal shock, reducing the risk of cracking the DPF.
- Holds temperature constant for two hours to ensure complete regeneration of filter.
- Includes both standard cycle and "pre-treat" cycle for oil-soaked filters.
- Built-in electronic safety lock prevents unauthorized opening of the door when temperatures exceed 200 degrees F.
- Large chamber accommodates various DPF sizes and shapes. Front access door allows for easy access to the thermal chamber.
- 220VAC / 60Hz / Single phase / 50 Amp.
- 1-year warranty.
- CE, UL201, UL499.
- Internal chamber dimension: 24" (L) x 24" (W) x 26" (H).



Electronic safety lock.



**J-47399
Horizontal DPF Handler**

- The Universal mounting assembly adjusts front to back and side to side for easy DPF handling
- The height range of 6-1/2" to 29-1/2" is ideal for most of today's trucks
- Safety strap holds the load securely while moving about the shop

Specifications:

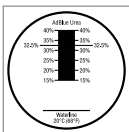
Overall Length: 34-1/2"
Overall Width: 19-3/8"
Max. Height: 29-3/4"
Min. Height: 7-1/2"
Side tilt: 30°, Front tilt: 15°, Back tilt: 15°

GENISYS EVO® HD STANDARD HEAVY DUTY TOOLS & EQUIPMENT

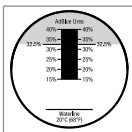


5025 OTC DEF Refractometer

Kit includes: Refractometer, dropper, lens wipe cloth, instructions and quick guide, screwdriver and case.



The scale without any liquid on the prism.



The scale with liquid on the prism. The reading is taken at the point the shadow line crosses the scale.

5025 DEF Refractometer SCR and EPA 2010

EPA regulations require all diesel engines manufactured on or after January 1, 2010 to meet lowered NOx emissions standards.

- Most heavy duty engine (Class 7-8 trucks) manufacturers, have chosen to utilize SCR. This Includes Detroit Diesel (DD13, DD15, and DD16 models), Cummins (ISX line), PACCAR, and Volvo/Mack.
- SCR-equipped engines require the periodic addition of Diesel Exhaust Fluid (DEF, a urea solution) to enable the process. DEF is available in a bottle from most truck stops, and some have installed bulk DEF dispensers near the Diesel Fuel pumps. However, to ensure the proper operation of the SCR system, operators must ensure the DEF in their vehicle consists of a 32.5% Urea / Water solution.
- The OTC 5025 makes this a simple and quick process for an operator or technician.

Application:

The refractometer is a portable, precision, optical instrument used for measuring the Diesel Exhaust Fluid (DEF) concentration. When a liquid sample is placed on the prism, the light passing through it is bent. The more concentrated the liquid, the more the light will bend. The refractometer contains a reticle, or scale, that is enlarged through the eyepiece to measure this light. The values on the scale have been established to evaluate the DEF condition.

Scale:

- 0.5% line graduations
- 32.5% Indicated
- Scale 15-40%
- Waterline & 20 Deg C



3095 Digital DEF Tester SCR and EPA 2010

EPA regulations require all diesel engines manufactured on or after January 1, 2010 to meet lowered NOx emissions standards.

- Ensure the proper operation of Class 7-8 trucks utilizing the SCR system with accurate Diesel Exhaust Fluid solution displayed on screen.
- Most heavy duty engine (Class 7-8 trucks) manufacturers, have chosen to utilize SCR. This Includes Detroit Diesel (DD13, DD15, and DD16 models), Cummins (ISX line), PACCAR, and Volvo/Mack.
- SCR-equipped engines require the periodic addition of Diesel Exhaust Fluid (DEF, a urea solution) to enable the process. DEF is available in a bottle at most truck stops, and some have installed bulk DEF dispensers near the Diesel Fuel pumps. However, to ensure the proper operation of the SCR system, operators must ensure the DEF in their vehicle consists of a 32.5% Urea / Water solution.
- The OTC 3095 makes this a simple and quick process for an operator or technician.
- Features:
 - Digital Display
 - Displays % UREA
 - Displays washer fluid freeze point



3421-79 Genisys Heavy-Duty Starter Kit

Genisys Heavy-Duty Standard software includes J1587/1708 and J1939 CAN communications.

Kit includes 9-pin Deutsch cable, 6-pin Deutsch cable, Smart Card, and PC software CD.

NOTE: System 4.0. 4GB card minimum required to install; see No. 3421-138.



3895-07 Genisys Touch Heavy-Duty Standard

OTC Genisys Touch HD supports two Society of Automotive Engineers (SAE) standards for the heavy-duty industry, J1587 / J1708 and J1930 CAN. Features Class 4 - Class 8 truck coverage, View and clear diagnostic trouble codes and live vehicle data.

Heavy-Duty Standard Starter Kit. Includes 9-pin Deutsch cable, 6-pin Deutsch cable, and heavy-duty security card.



3874HD Genisys EVO® USA Deluxe with Heavy Duty Standard Kit

Includes Genisys EVO® featuring the NEW System 5.0 with Code-Assist™ experienced-based Confirmed Fixes™ from Identifix®, NEW USA 2012 Domestic / Asian with ABS and European 2011 software including Pathfinder, Repair-Trac®, Fast fixes™ information, Heavy-Duty Standard software with cables, InfoTech Component Information software, Automated System Test™, OBD II Smart Cable, USA Domestic OEM vehicle cables (for GM, Ford, Chrysler, Jeep, Saturn), manuals, and carrying case.

NOTE: OEM cables may be required for certain vehicle system functions. Additional OEM cables are available individually or in convenient kits - Asian OEM Cable Kit 3421-94, European OEM Cable Kit 3421-75 and ABS/Airbag OEM Cable Kit 3421-54. One time scan tool registration required.

HEAVY-DUTY WIRELESS DIAGNOSTIC SYSTEM



EZ-TAP HEAVY-DUTY WIRELESS DIAGNOSTIC SYSTEM



PC PROGRAM FOR HD STANDARD DIAGNOSTICS

- RP1210 compatible and will work with any RP1210 VCI.
- SAE J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage.
- Read and clear diagnostic trouble codes.
- Live vehicle data of HD Standard Engine parameters.
- Vehicle data communication and live data stream.
- Demo mode permits operation without vehicle connection.
- On-screen definitions of diagnostic trouble codes.
- PC & CD user's manual.
- Customizable line graphs .
- Automatic recording of data.
- Print screen data or save reports to print later.
- Ez-Tap Kits Available.

3070 HD Scan Software

- Stand-alone software.
- Works with any RP1210 interface (VCI).

3076 HD Scan with Ez-Tap

- In-shop wireless capability.
- Ez-Tap Wireless Vehicle Communication Interface (VCI) works with OEM diagnostic software.
- One wireless VCI for all your diagnostic software.
- Eliminate cables and cable replacement costs.



Ez-Tap 3076

3086 HD Scan with Ez-Tap Extended Range

- 300 ft. wireless range to scan trucks anywhere on facility grounds.
- Scan trucks and perform initial diagnosis before you bring them into the shop.
- One wireless VCI for all your diagnostic software.
- Eliminate cables and cable replacement costs.



Ez-Tap 3086

HEAVY DUTY SCAN HEAVY DUTY TOOLS & EQUIPMENT



3075 Ez-Tap Wireless Diagnostic Hardware Kit

- The EZ Tap Diagnostic kit enables a Heavy-Duty facility to use their OEM software for direct diagnostic mode operation.
 - Kit includes: Ez-Tap wireless (non-locking) VCI, Ez-Base wireless adapter, Ez-Tap 9-pin to 6-pin adapter, USB cable and Ez-Tap CD.
- Note: OEM diagnostic software not included.



Ez-TAP Wireless VCI



Non-Locking



3075-01
9-pin non-locking



Locking

3075-02 9-pin locking

Note: For your PC to communicate with the Wireless Ez-TAP, you will need an OTC Ez-Base (3075-05) or OTC Ez-Base ER (3075-06).



3075-08
Ez-TAP Adapter
9-pin to 6-pin adapter cable.



3075-05 Ez-Base Wireless Adapter

The Ez-Base allows a PC or host computer to communicate with Ez-TAP using our AirBridge® 2 wireless technology.

- 100+ foot range.
- Built in indicator lights.
- Allows full wireless throughput for direct diagnostics.
- Allows a single PC to connect to any Ez-TAP in range.



3075-06 Ez-Base Extended Range Wireless

Ez-Base Extended Range allows even more range and flexibility for your truck yard or service environment.

- 300+ foot range with the included antenna.
- 1000+ foot range with optional remote mounted antenna. (3075-07) sold separately.
- Built-in Wireless signal strength indicator lights.
- Plus all the features of Ez-Base.

Ez-TAP USB VCI



Non-Locking

3075-03 9-pin non locking, 16 foot USB cable and Ez-TAP CD



Locking

3075-04 9-pin locking, 16 foot USB cable and Ez-TAP CD



3940-HD Heavy Duty Digital Multimeter

OTC 550 Series Auto Ranging Multimeter

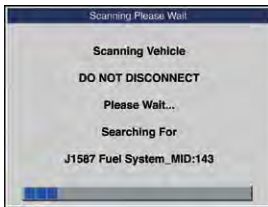
- Powerful professional grade test functions
 - Frequency
 - Duty Cycle
 - Diode & Continuity Tests

Mid-Range Amp Probe

- Non-intrusive AC/DC current measurement
- Measurement range of 2–600 amps AC/DC
 - Covers HD truck components and electric motors

Extended Length Test Leads

- 5 ft. test leads to provide improved reach
- Detachable probes allow use with amp probe



"Automatic Protocol Search"



3417 OTC Heavy-Duty Scan Tool

For Heavy-Duty shops that need a second tool in the shop and for their mobile repair trucks.

Product Features:

- Brilliant Color Display
- Class 4 – Class 8 truck coverage featuring "Automatic Protocol Search".
- HD J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage and more!
- Live vehicle data such as: Engine speed, Engine ECU temperature, Percent acceleration pedal position, Engine intercooler temperature, Engine coolant temperature, Battery volts, Alternator volts, Ambient air temperature, Air inlet temperature
- Read and clear diagnostic trouble codes.
- Global OBD II – All 9 Modes.
- English, Spanish, and French support
- Battery powered for off vehicle use.
- Trilingual Quick Start Guide included to help technicians get started fixing cars FAST.
- CD-based manuals in Spanish, French, and English.
- Customize data views in line graph, LED, or digital format with the push of a button.
- Three record modes – marker frame, freeze data history, and code triggered record.

3417 HD Scan Kit Includes: HD scan tool, 9-Pin deutsch cable, 6-Pin deutsch cable, OBD II cable, heavy duty cable, USB cable, ScanMate software operations manual, carrying case and 3-year warranty.



3418 OTC Heavy-Duty Code Reader

- Class 4 – 8 truck coverage.
- HD J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage and more for diagnostic trouble codes!
- Read and clear diagnostic trouble codes.
- Provides on screen DTC definitions for heavy-duty standard codes.
- Battery powered for off vehicle use.
- Internet update capable.

Applications:

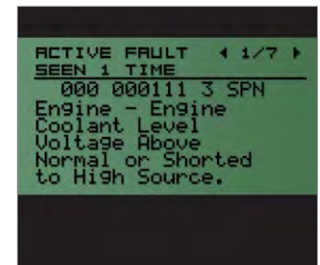
Tow trucks, recreational vehicles, cement trucks, dump trucks, garbage trucks, buses, step vans, municipal vehicles, refrigerated trucks, and conventional trucks.
Heavy-Duty Standard compliant construction, marine, agriculture, and industrial diesel power plant configurations!

3418 HD Reader Kit Includes:

HD reader tool, 9-Pin deutsch cable, 6-Pin deutsch cable, operations manual, 3-year warranty, and soft nylon carrying case.



Menu



Fault



Summary

HEAVY DUTY SCAN HEAVY DUTY TOOLS & EQUIPMENT



SMARTER—EASIER—ESSENTIAL, THE RECOGNIZED STANDARD IN DIAGNOSTIC SCAN TOOLS.

Pro-Link iQ is designed to help diagnose engine, brake, and transmission failures. This easy-to-use, advanced tool is engineered to support today's commercial vehicles as well as the more complex vehicles of tomorrow. Using clear menus and message screens, the Pro-Link iQ guides technicians through the most complicated vehicle tests.

3110 Pro-Link® iQ

- Easy-to-use common user interface across all OEM applications
- Free trial period for all OEM software
- Software easily updated via the Internet
- Large capacity hard drive for future updates
- Light-weight and durable for the shop area
- 8.4" color screen for use in any light
- Touch screen for easy activation of on-screen tabs
- PC and printer connectivity via USB ports
- Can print to most USB printers
- Power from either the vehicle or internal battery for continuous use
- 2 USB ports
- 1 compact flash port
- Protective carrying case

Available iQ Applications

- Generic
- HDS | Medium- and heavy-duty trucks
- OBD II | Light- and medium-duty trucks

OEM

- Caterpillar | ACERT
- Detroit Diesel | DDEC III, IV, V
- International | Engine
- Allison | 1K and 2K, WTEC, CEC1
- WABCO | Air and hydraulic

3110 Pro-Link kit includes: PRO-LINK iQ scan tool, iQ Heavy-Duty Standard application, Power and data cable, 6-pin Deutsch adapter, 9-pin Deutsch adapter, 2-cell battery pack, CD manual/driver, Stylus pen and Carrying case.

Optional Software, Cables & Accessories

3110-01	Pro-Link IQ software, ALLISON Suite
3110-02	Pro-Link IQ software, ALLISON GEN 4 Update
3110-04	Pro-Link IQ software, WABCO Suite
3110-05	Pro-Link IQ software, DDEC Suite (DDEC III, IV, V)
3110-07	Pro-Link IQ software, OBD II (AUTO)
3110-08	Pro-Link IQ software, Detroit Diesel Mercedes Benz
3110-09	Pro-Link IQ software, Heavy Duty J1939
3110-10	Pro-Link IQ Adapter, J1962 HD
3110-11	Pro-Link IQ Adapter, OBD II/J1962
3110-12	Pro-Link IQ Adapter, 6-pin
3110-13	Pro-Link IQ Adapter, 9-pin
3110-14	AC Adapter for Pro-Link IQ
3110-15	Pro-Link IQ software, CAT electronic engines
3110-16	Pro-Link IQ software, BENDIX ABS
3110-17	IQ LCD touchscreen protector
3110-18	Pro-Link IQ case with logo
3110-19	Pro-Link IQ DDEC VI kit with software
3110-20	Maxx Force
3110-21	Light and medium truck
3110-23	Pro-Link IQ International 2.0 software
3110-24	Pro-Link IQ International 2.0 upgrade software
3110-25	Pro-Link IQ Caterpillar ACERT 2.0 software
3110-26	Pro-Link IQ Caterpillar ACERT 2.0 upgrade software
3110-27	Pro-Link Brake Link V8.4.0.0 kit

3110-22 Pocket iQ™

The versatile Pocket iQ reports both engine and transmission functions—and it covers brakes, too.

Gather data quickly and easily. Smart and handy, compact and lightweight, the Pocket iQ puts data at your fingertips.

Pocket iQ key functions and features:

- Monitors all vehicle data
- Checks engine speed/load, pressures, temperatures, other data
- Reads and clears active and inactive fault codes
- Displays trip data
- Collects and stores vehicle data from multiple vehicles
- Stores vehicle data in PDF or text format
- Provides J1587 and J1939 data



3110-27 Brake-Link™

No more working under the trailer watching for blink codes. Brake-Link™ is the low-cost full-service ABS brake scan tool that:

- Connects to trailers and tractors utilizing the SAE J1587 communication protocol
- Includes a built-in PLC converter
- Comes with J560 (7-way) cable that allows direct connection to trailer without tractor
- Provides ABS coverage for a wide range of applications

Brake-Link™ ABS Coverage

Bendix EC-17, EC-30, EC-30T, EC (60) ABS 6, and TABS 6

Meritor WABCO Trailer Support

Wabash National MBS-1P and MBS-2

Eaton GEN4 and GEN5

Haldex PLC, PLC Plus, and PLC Select



3940-HD HD Digital Multimeter

OTC 550 Series Auto Ranging Multimeter

- Powerful professional grade test functions
 - Frequency
 - Duty Cycle
 - Diode & Continuity Tests

Mid-Range Amp Probe

- Non-intrusive AC/DC current measurement
- Measurement range of 2–600 amps AC/DC
 - Covers HD truck components and electric motors

Extended Length Test Leads

- 5 ft. test leads to provide improved reach
- Detachable probes allow use with amp prob



6522



EVAP – LEAK DETECTION SYSTEM

- Vacuum Leak Testing
- Exhaust Leaks
- Crankcase Oil
- Cooling System Testing
- Wind and Water Leaks
- 1-Year Warranty

LeakTamer is the latest generation of leak detection systems, providing more smoke and better control. Solid-state circuitry improves reliability and ensures more consistent smoke output. A wide assortment of accessories make the LeakTamer versatile tools for quickly locating different kinds of leaks.

LeakTamer Evap offers:

- Densest smoke in the industry.
- Newly redesigned smoke chamber and control system.
- More complete line of accessories.
- User refillable.
- Includes smoke producing solution for 500 tests.
- Non-toxic, non-corrosive smoke.

Product Features:

- OEM approved technology
 - Contains STAR Technology; the ONLY OEM-Approved smoke technology anywhere in the world
- Large full range flow meter
 - Detects Microleaks™ down to and below 0.10
 - Flow-test components with full range of flow values
- Pinpoint leaks with Smoke and dye
 - UltraTraceUV® dye deposits at exact location of a leak
 - Finds leaks that smoke alone won't find
 - Introduce to an engine before disassembly to find internal leaks
 - It's the only OEM-Approved dye solution
- Variable Smoke Flow
 - Helps pinpoint smoke exiting a leak
 - Directional knob shows exact flow position
- Compact light weight design
 - More powerful diagnostics in smaller package
- Can be used with air or nitrogen
 - Use any inert gas for safer EVAP testing and shop air for all other tests

6522 EVAP – Leak Detection System

Includes: Leak Tamer unit, White/UV combination light with laser pointer, UV glasses, EVAP adapter tool, exhaust cone, cap plug adapters, removal tool, smoke producing solutions enough solution for 500 tests.

Accessory / Replacement Parts

6522-1 UltraTraceUV® (8 oz. / 236 ml) patented solution is the only Automaker-approved smoke-producing solution in the world. Contains a special dye that deposits at the exact location of a leak. Each bottle will perform approximately 300 tests. Part No. is for one bottle, two bottles included with 6522.



6522-2 Inert Gas Pack Kit connects directly to fitting on back of LeakTamer 6522. Includes preset CO2 regulator with cylinder fitting, 20 oz. liquid CO2 cylinder, pressure gauge, universal push-on female coupler accommodates both automotive and industrial male fittings (Cylinder arrives empty) Performs approx. 25-50 full cycle EVAP tests per 20 liquid oz. cylinder.



6522-3 Combination Light for easier smoke location and ultraviolet (UV) light, to highlight the fluorescent dye deposited at the exact location of a leak. Also has laser pointer. Includes batteries and glasses.



6522-4 Standard Size Service Port Adapter.



6522-5 Schrader® Removal/Installation Tool.



6522-6 Cap Plugs Kit. Used for sealing some systems during leak testing.



6522-7 Universal Fuel Neck Adapter fits the majority of vehicles. Allows access to fuel tank for evaporative system testing.



6522-8 BMW and MINI Fuel Neck Adapter. Allows access to fuel tank for evaporative system testing.



6522-9 Smoke Diffuser locates leaks around doors, windows, sunroofs, trunk compartment seals, EV vehicles' battery modules, or any closed system that can be pressurized from the inside and observe the smoke disturbance from the outside.



6522-10 Cone Adapter (standard) for introducing smoke into induction or exhaust system. 1" x 3.5" & 6" long (25.4 mm x 89 mm x 152 mm).



6522-11 Cone Adapter (Large) for introducing smoke into induction or exhaust system. 3.5" x 6" & 4.6" long (89 mm x 152 mm x 144 mm).



6522-12 Replacement Dipstick (for 6522).



6522-13 Replacement smoke supply hose and Delrin® Nozzle



6522-14 Delrin® Nozzle



6522-15 Flow meter red pointer flag. For easy viewing of flow meter measurements.



DIESEL EMISSION TESTER HEAVY DUTY TOOLS & EQUIPMENT

Smoke Check 1667 Diesel Emission Tester

In some states, failing the on-road emission test can result in a "must appear in court" citation, and up to an \$1,800 fine. Add the downtime, missed delivery, rescheduling, and the potential for lost business. More states are adopting emissions standards and testing programs.

This can cost time and money for local and interstate fleets.

- Fleets can determine immediately if the truck will pass state standards and interstate emission programs.
- Completely portable; all components in one case; there is no PC. One person can do the entire test. Windows-based, PC downloadable program transfers up to 100 stored tests.
- No warm-up time needed; perfect for random roadside testing or in your PM Service Program.
- The partial flow meter clips inside any smokestack; testing can be performed in any weather.
- Digital LCD screen walks you through each step; when testing is complete, a printout of results is produced for verification.
- This is the same meter used for enforcement in California, New York, Illinois, and the majority of states that test for diesel emissions compliance.
- Meets the latest SAE J1667 specifications.

SPECIFICATIONS

Range.....	0-100%
Accuracy	+/-1.0% Light Source
	Green LED
Power	12 VDC battery (built-in)
Battery Life	40 hrs./charge
Warm-up Time	5 sec.
Response Time	0.01 sec.
Control Unit	14" x 10" x 8"
Maintenance	Clean lens w/cotton swab
Weight:	
Control Unit	15.5 lbs.
Sensor.....	3.5 lbs.

ORDERING INFORMATION:

RM1020CPCL

Smoke Check 1667 diesel smoke opacity tester. Includes partial flow meter, base unit with hand-held display, built-in printer, ambient sensors, two battery chargers – one for vehicle or shop, 20 ft. cable, telescoping rod, spring clamp, neutral density filter, and sensor head case.

OPTIONAL ITEMS:

OTC3020CPCL

Standard meter listed above with OIL/RPM software and accessories. These options are required for state approval testing in New York and New Jersey.

OTCSH

Sensor head with quick detach release.



RM1020CPC



Temp: 76.4 F
Rel. Humid: 23.2%
Atm Pres 28.4 inHg
Press any key

Visual Inspection
Press 1 for OK
2 for REJECT
All AUX Equip is off

PRESS
1 = ENTER USER DATA
2 = BEGIN TESTING
3 = CHECK SENSORS

PRESS
1 to TEST MENU
2 to EDIT SETTINGS
3 to CALIBRATE METER

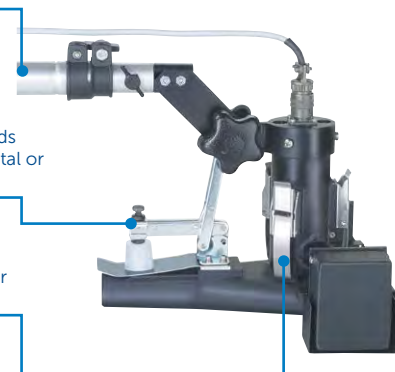
Scrolling instructions walk you through the entire testing procedure.

Aluminum rod telescopes from 3 ft. to 8 ft.; reaches all stacks.

Optional pinch clamp holds head securely, on horizontal or downward facing stacks.

Three-point detachment quickly releases the sensor head for easy cleaning.

One person can run the entire test, even in the wind, since the sensor measures smoke inside the stack.



Sabre Heavy-Duty Battery & Electrical System Diagnostic Tester

- Heavy-duty for 24-volt battery and electrical systems.
- Diagnoses battery packs in series, parallel, or series/parallel.
- Tests AGM/gel-cell batteries.

HIGHEST CCA capacity ranges (50–4000 CCA – 24V).

LARGE DISPLAY for less scrolling, more detailed instructions. It's also backlit for all light conditions.

INDUSTRY FIRST amp-clamp connection ports for live amperage readings using optional external amp-clamp.

15 FT. Cable to perform tests from the cab of the vehicle.

FIELD UPDATEABLE to accommodate new battery types, system updates, feature additions.

Battery Testing

- Tests the following battery pack configurations:
 - One battery (6V or 12V).
 - Two batteries in series (24V); 2, 3, or 4 batteries in parallel (12V).
 - Two banks in parallel, each bank having 2 batteries in series (24V).
- Uses pack configuration in algorithm design.
- Step-by-step user instructions for easy test completion.
- Tester-applied loads used on all pack combinations.

Electrical System Testing

- 12V and 24V charging/starting system tests.
- 12V and 24V diode tests.
- Amp-clamps available (not included) for starting/charging and current draw tests.

Product Features:

- Amp-Clamp Connection – allows current drain tests and starting/charging analysis.
- Tests Both FLA (flooded lead acid) and AGM (absorbed glass mat) battery types.
- Scales – CCA, CA, AHR, MCA, JIS, DIN
- User Definable – print header and footer.
- Removable Test Cables – easily field replaceable.
- PC Interface Port – allows for field updateable software.
- IR Compatible – allows optional infrared wireless printer.
- Readout Display – backlit for low light conditions, easy to view data in direct sunlight (4 x 20 character display).
- Security Cable Connection – protects against stolen or dropped units.
- Over-molded Surround with Soft-touch Keys – ruggedly built, easy to use, even with gloves.

3167-HD – Sabre HD deluxe kit

Includes 24-volt heavy-duty battery tester, 15' test leads, instruction manual, molded-plastic carrying case.

3168-HD – Sabre HD deluxe kit with printer

Same as No. 3167-HD above, but also includes an infrared wireless printer.

Accessories:

3172-15 – 15' lead set

3169 – Infrared wireless printer



3168-HD



3181

130-Amp Heavy-Duty Battery Load Tester

Applying an industry-leading 130-amp load, this ergonomically designed, heavy-duty battery tester provides accurate, reliable test results in just 10 seconds. It includes uniquely designed clamps for a positive grip on top- and side-post batteries and an extra-large, easy-to-read display.

Product Features:

- 130-amp load capacity for accurate results.
- 0–16 volt range.
- Uniquely designed clamps for both top- and side-post batteries.
- Extra-large display with zero adjust.
- Works on both 6V and 12V batteries.
- Side tabs for on-tool clamp storage.
- Back brackets for tool storage on wall or toolbox.

34288



34788NI



A/C Recovery & Recycling

34288 – Combines simple operation with superior accuracy. It recovers, recycles, evacuates, leak tests, and recharges R-134A quickly and accurately. Meets SAE J-2788 standards for accuracy: 95% refrigerant recovery and charging to +/- 1/2 oz.

34788NI – Recover, recycle, evacuate, leak-test and recharge R-134a vehicle A/C systems. Features a larger graphical display, leak testing, automatic refrigerant refill and automated oil drain/inject – putting A/C lubricant back into the system. 34788NI boasts an ability to add a printer and refrigerant identifier. An optional refrigerant charge and oil capacities database is available for North American market vehicles.

Features:	34288	34788NI
Fully-Automatic Function: Program to recover, vacuum, leak test and charge without operating panel valves.		X
Automatic Oil Drain: A display reminds you to empty the graduated container to show the amount of oil to replace.	X	X
Oil Inject: Less than 1% cross-contamination.		X
Refrigerant & Oil Database: For North American market vehicles 1994 - 2007 (updates available mid-2008).		Optional
Visual & Audible Alarm: Notifies the user when service is complete, or if a problem has occurred.		X
Vacuum Leak Test: Monitors level after evacuation, informs of possible leak.	X	X
Automatic Air Purge: Eliminates damaging air without monitoring gauges or opening valves.	X	X
Automatic Refrigerant Refill: Maintains a user-selectable amount of refrigerant in an internal vessel and signals with it's time to change supply tank, no monitoring required.		X
Vacuum Feature: Defaults to 15 mins, programmable up to 99 mins. "Remaining time" is displayed.	X	X
Display: Multilingual	X	X
Refrigerant Charging: Select a charge mode from high or low side.		X
Refrigerant Management System: Displays refrigerant use and monitors remaining filter life. Prompts appear when 1/3 of filter life remains.	X	X

A/C & COOLANT SERVICE HEAVY DUTY TOOLS & EQUIPMENT



Recovers, Recycles, Evacuates, and Recharges R-12, R-134a, R-22, R-502, MP and HP Blends— and many more!

Design certified by UL to meet SAE J-1770.

One piece of equipment is all you need for A/C and refrigeration service. Also great for in-plant maintenance!

17800B

Multiple Refrigerant Recovery, Recycling, and Recharging Machine

The 17800B recovers, recycles, evacuates and recharges — all in one fast, continuous operation through one hook-up. It's ideal for refrigerated trailers, buses, RVs, and other vehicles that use more than one refrigerant. The Multi RRR machine is also great for fleet maintenance, covering a variety of makes and models since it has both R-12 and R-134a capabilities. In-plant maintenance departments will find it can handle the different types of refrigerants used in various systems.

Proven technology simplifies service!

Microprocessor — Controls functions; prompts lead you through programming and also signal when it's time to change the filter-drier, vacuum pump oil, and compressor oil.

Float Chamber — Automatically adjusts from liquid to vapor for most efficient recovery.

Electronic Scale — Makes it simple to recharge to factory specifications; also weighs recovered refrigerant and provides tank overflow protection.

CoolTech Vacuum Pump — 6 CFM has the capacity to thoroughly evacuate the system, readying it for recharging.

Versatility for many types of systems!

Lockout Panel — Prevents mixing of refrigerants; rotates to one side for 1/4" fittings and to the other for 1/2" Acme fittings.

Single-Pass Recycling — Makes an initial pass through the filter-drier; additional recycling can be programmed in case of compressor burn-out, or other conditions.

Heavy-Duty Filter-Drier — Removes moisture and acid from the refrigerant; can handle up to 200 pounds between change-overs. Comes with two 50 pound tanks, one with 1/4" fittings and the other with 1/2" Acme fittings. Also three sets of charging hoses are included — one for R-12, one for automotive R-134a (with field service couplers), and one for other refrigerants using 1/4" SAE fittings.

International Models

17801B — 220–240V 50 Hz, readout in kilograms

Replacement Parts

19776 — Recycling filter-drier

17506 — 50 lb. (23 kg) refillable tank, 1/4" fittings

34750 — 50 lb. (23 kg) refillable tank, 1/2" ACME fittings

Specifications

Voltage	115V 60 Hz
Tanks	Two 50 lb. (23 kg) refillable
Operating Range	50° to 105° F (11° to 41° C)
Recovery Rate	Vapor — 1/2 lb/min. (.2 kg/min.) Liquid — 1 lb/min. (.4 kg/min.)
Recycling Rate	4 lbs/min. (1.8 kg/min.) flow rate
Recycling Filter-Drier	1150 g XH-9
Pump Free Air Displacement	6 cfm (142 l/m) at 50 Hz
Dimensions	47" H x 26" W x 30" D (119 cm x 66 cm x 77 cm)
Weight	256 lbs. (116 kg) without tank



19776



Works on both pressurized and non-pressurized cooling systems.

Increase Your Profits
Our 10-minute exchange process means no more waiting for the engine to warm up!



75700

Coolant Exchange Unit

Designed with the user in mind.

Safety First

- Our "engine off" feature removes pulleys, belts, and fan blades from the safety equation.
- No additional ventilation required.
- Vacuum mode creates a "push/pull" exchange process allowing the technician to safely remove high pressure in a hot system.
- "Hands-off" transfer of used coolant to a bulk tank prevents spills and helps protect the technician.

Simple to Operate

- Two clearly marked valves and an easy-to-read gauge make this machine very simple to use.
- Sight glass clearly shows the amount of coolant in the waste tank.
- One valve controls the flow of coolant; process is easy to understand—no special training needed.
- No electricity required. 90 psi shop air drives the exchange process, as well as the 2 gpm pump on the waste tank.

Designed to Survive

- Impact-resistant polypropylene cabinet will not scratch or dent vehicle.
- Cabinet is impervious to chemicals commonly used in the shop.
- Large, inflatable tires carry a well-balanced platform easily across any shop floor.
- Easy to maneuver between bays and vehicles.

Extra Design Features

- Two external new coolant supply tanks allow on-board storage of two different coolant types.
- Graduations on tanks show user the amount of new coolant on board.
- On-board storage of step adapters.
- Adapter kit included.
- No hoses to cut.
- 96" hoses can be neatly stored on unit.
- One-year warranty.

Replacement Parts and Accessories

75360 — Heavy-duty adapter kit. Links the two tanks for 14 gal. capacity to service class A vehicles. (Note: must have 7-gallon tank No. 75370).

75370 — Replacement coolant 7-gallon tank

17490 — Protect your investment with a heavy-duty vinyl dust cover.

Specifications

Power Supply	— 90 psi shop air
Tanks	— Internal waste — 15-gallon capacity — External supply (2) 7-gallon capacity (removable)
Dimensions	47" H x 26" W x 33" D (119 cm x 66 cm x 84 cm)
Medium Step Adapter	Two included; fits hose size 1-1/4", 1-3/8", and 1-1/2"
Large Step Adapter	Two included; fits hose size 1-3/4", 2", and 2-1/4"



Back View: 7-gallon capacity supply tanks allow storage of different coolants.

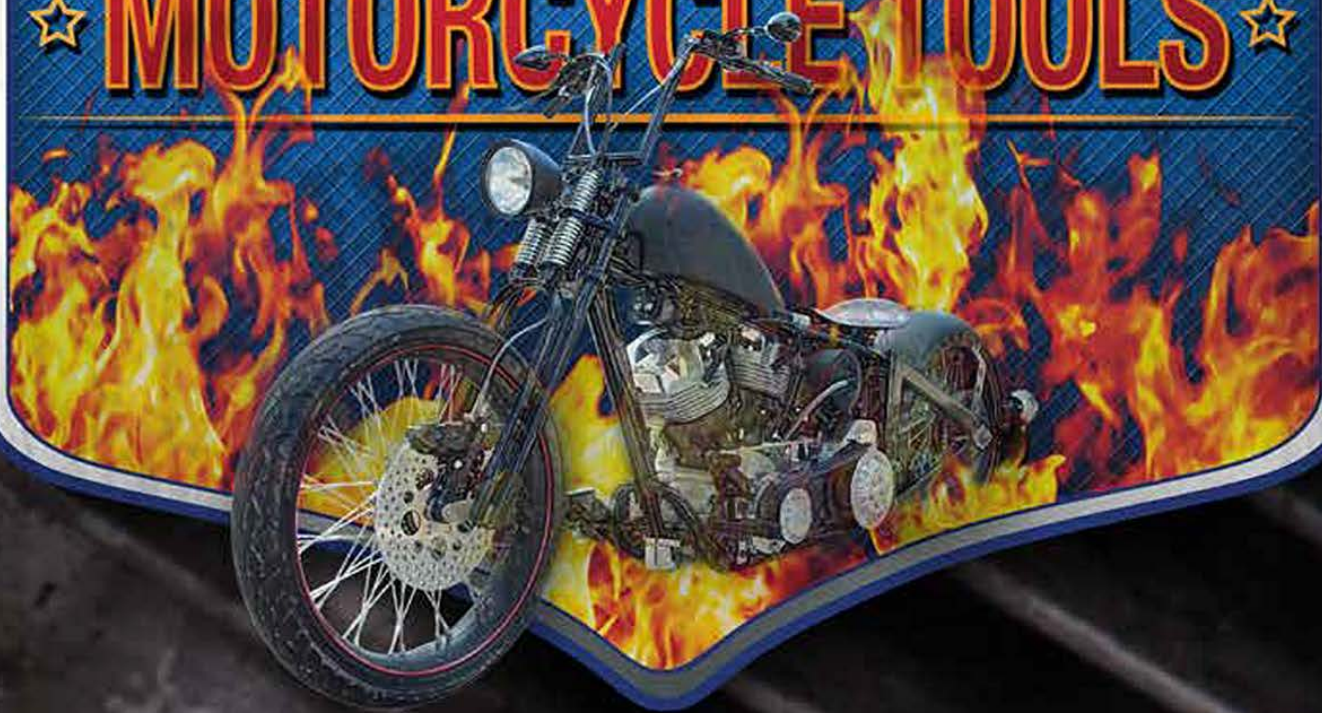


75360

OTC[®]

GENUINE TOOLS SINCE 1925 • DWATONNA, MINNESOTA

☆ **MOTORCYCLE TOOLS** ☆





4565

Swivel Handle Oil Filter Wrench

- Fits filters ranging from 2-1/2" to 3-1/8" (64 mm to 80 mm) in diameter.
- Features a 1" wide stainless steel band for positive grip on the filter; swivel handle makes it easy to turn filters in hard-to-reach areas.

4568

Oil Filter Wrench, 2 way, 3 leg

- Fits filters ranging from 2-1/2" to 5-1/4" (65 mm to 135 mm) in diameter.
- To turn the tool, use a 1/2" ratchet in the ratchet drive or a 13/16" wrench on the nut.
- Knurled legs provide extra gripping power.



4896

Oil Filter Ring

- Slim wrench provides clearance around oil coolers and crank position sensor. Use on 14 flute HD filters. 3/8" square drive.



6901

Oil Filter Socket

- Fits Wix oil filters on S&S Engine applications, as well as other filters with 74mm x 15 flutes.



6905

Oil Filter Socket

- Fits Polaris oil filters, as well as other filters with 66.5mm x 14 flutes.



4898

Oil Filter Socket

- Fits Polaris oil filters, as well as other filters with 64mm x 14 flutes. Similar to Polaris No. PU-50105.



Strong magnetic end.

5911

OTC Drain Plug Pro™

- Remove oil drain plug without touching the plug or hot oil.
- No touching HOT plug.
- No hot oil on hands.
- No dropping of plug in HOT oil.
- No oil soaked gloves.
- Just magnetically attach DRAIN PLUG PRO™ to pre-loosened drain plug and rotate to remove plug.



4848

Flexible Spout Funnel

Many oil, transmission, and coolant fluid fill caps are located in hard to access areas. This aluminum 5 1/2" funnel features a removable debris screen in the base flowing to a 25" flexible spout designed to reach these difficult fill locations.

4521

Hose Removal Tool

- Unique tip easily fits between hose and fitting to break stubborn hoses loose.
- Large handle provides a reliable grip on tool during hose removal.
- Works on fuel and oil lines – any place a rubber hose is clamped to a fitting.



8260

Hose Removal Set (6-piece)

- Consisting of six (6) hose removal tools which consists of three (3) 10", soft-handled tools and three (3) 15", soft-handled tools, each with a hard end-cap.
- They are made of heat-treated, chrome steel with assorted tip shapes.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Hose removal tools can also be used on upper and lower radiator hoses, clips, washers, gaskets and other items.
- Packaged in a molded tray.



4496

Hose Clamp Pliers Set

Contains five different styles of hose clamp pliers, which will service most flat-band and ring-style hose clamps. Also contains a hose removal tool.

Set Contains:

- Straight hose clamp pliers set
- Hose removal tool
- Flat-type hose clamp pliers
- Offset hose clamp pliers
- 45° hose clamp pliers



4510

Hose Pinch Off Pliers Set, 3 Piece

- Shuts off flow through vacuum lines, fuel lines, coolant lines, etc.
- Cocking ratchet mechanism holds pivoting jaws tightly in place. Heavy-duty swivel jaws pivot to assure parallel pinching.
- Available separately:

4510-8 – 8" tool for small hoses and tight areas.

4510-10 – 10" tool for radiator and vacuum lines.

4510-12 – 12" tool for radiator and vacuum lines.



4522

Vacuum Hose & Fuel Line Removal Tool

Designed to remove vacuum hose or fuel lines (3/16" to 1/2") from fittings or tubing.



4839

Adjustable Piston Ring Expander Pliers

These simple pliers include tips designed to capture the ends of piston rings to hold and expand them securely while installing onto pistons.



4437
Sensor Socket Set (8-Piece)

- Includes:
- 4673-1** – 29 mm Vacuum Switch and O2 Socket, 1/2" Drive.
 - 4673-2** – 7/8" Vacuum Switch and O2 Socket (wide slot), 3/8" Drive.
 - 4673-3** – 27 mm Thermal Sensor Switch, 1/2" Drive.
 - 4673-4** – 7/8" Vacuum Switch and O2 Socket (narrow slot), 3/8" Drive.
 - 4673-5** – 1-1/16" & 1" Oil Pressure Sending Unit Socket, 3/8" Drive.
 - 4673-6** – 7/8" O2 Sensor Socket, offset 1/2" Drive.
 - 4673-7** – 7/8" O2 Sensor Socket (low profile), offset 3/8" Drive.
 - 4437-8** – 1-1/16" and 1" Oil Pressure Socket (short access), 3/8" Drive



4480
Basic Fuel Injection Service Kit

Performs running, residual, rail and flow rate pressure tests on fuel injected engines. Kit includes adapters, hoses, fittings, and a professional dual scale gauge that reads 0-100 PSI and 0-700 kPa with relief valve. All packaged in a professional, heavy-duty, blow molded carrying case.



7991
Cooling System Pressure Tester

Now you can pressure test the cooling system on motorcycles, ATVs, and even snowmobile applications. The tester's universal fit eliminates the need for multiple adapters.

4838
Piston Ring Compressor Set, 6 Piece

This 6 ring set covers 2-7/8" thru 4-3/8" piston diameters. The ring compressor pliers feature a ratcheting lock to hold the handles in position for easy piston installation.



4840
Piston Ring Compressor Set with Ring Expander

This complete set includes 12 chrome plated compressor sleeves covering 1-3/8" thru 4-3/8" diameter piston applications. Both the ring compressor and ring expander pliers feature a ratcheting lock to hold the handles in position for easy piston and ring installation. Complete with a metal carry case.



4842
Heavy Duty Valve Spring Compressor

Used to compress valve springs for removal or installation. The heavy duty C-frame has a 9" opening and a 5" throat. Kit includes 16mm, 19mm, 23mm, 25mm, and 30mm valve spring retainer adapters.



4572
Valve Spring Compressor

- Designed to compress valve springs on overhead valve engines.
- Includes two valve spring adapters, which fit valve spring retainers up to 1" (25 mm) and 1-3/16" (30 mm).
- Unique, direct action compressor lever gives better visibility of valve spring retainers located in difficult access areas.
- Jaw opening of 1-3/8" to 5-5/8" (35 mm to 142 mm); throat clearance of 5-7/8" (150 mm).



4875
Cam/Crank Locking Tool

- Designed to lock the cam and crank sprockets together for removal, replacement and proper torquing of the sprocket bolts.

Application

- Dyna 2006 & Later
- Similar to HD-47941.



4876
Cam/Crank Locking Tool

- Designed to lock the cam and crank sprockets together for removal, replacement and proper torquing of the sprocket bolts.

Application;

- Twin Cam 88/B 1999 & Later
- Similar to HD-42314.



4844
Cam/Crank Locking Tool, Twin Cam & Dyna

- Designed to lock the cam and crank sprockets together for removal, replacement and proper torquing of the sprocket bolts.
- Double end design covers;
- Twin Cam 88/B 1999 & Later
- Dyna 2006 & Later

4849

Cam Chain Tensioner Unloader Tool

- These tools are used to unload the pressure of the primary and secondary chain tensioners when servicing HD Twin Cam 88 engines.
- Tools can also be used to check spring loads on chain tensioners.
- Applications include 99-06 FL, 99-05 FXD, 00-06 FXST.
- Similar to HD-42313.



4847

Twin Cam Inner Cam Bearing Remover/Installer Kit

- This kit contains the tools to remove and install inner cam bearings without damage to the crankcase.
- The bearing puller is designed to trap the needle bearings and keep them from falling into the crankcase.
- The installation tools are designed to press on the outer most diameter of the bearing, eliminating damage to the bearing, cam, or case. The press adapter will also set the bearing to its proper depth.
- Similar to HD-42325-B.



7419

Timing Tensioner Locking Pin Set

- This pin set is used to lock timing belt or chain tensioners once they have been compressed, required during the service procedure.
- Once the belt or chain service is complete, the pin is simply pulled out to return the tensioner to functional.
- 6 pin set with clip to cover most all applications.

4845

Wrist Pin Installer & Remover Tool

- Removes and installs piston wrist pins without having to hold the piston in position and use a drift.
- Applications include HD stock and aftermarket engines, including Twin Cam, and other engine makes with similar piston pin diameter sizes.



4866

Timing Plug

- This threaded clear acrylic timing plug used in conjunction with a timing light allows for viewing the crankshaft timing marks without oil spraying out of the crankcase, typical during full advance RPM.
- Fits all HD models.
- Similar to HD-96295-65D.



6589

Electronic Ignition Spark Tester

Use to quickly check spark on 2 and 4 stroke gasoline engines with electronic ignition systems.



4723

Ear Type Clamp Pliers

- Used to crimp the type of clamps used on fuel and cooling system hoses.
- Ensures even, precise crimping, and eliminates possibility of damage to the clamp, boot, or hose.



4846

Tappet Block Alignment Set

- These adapter screws provide perfect alignment of the oil hole from the crank case to the tappet block on Shovel and Evo style engines.
- Align rocker boxes on Evo heads.
- Also align twin cam oil pump.
- Applications include all HD Big Twin single cam engines, stock and aftermarket, 76 – Present.
- Similar to HD-33443.



4948

Water Pump Drive & Rotor Puller

- Installs the water pump drive gear on the rotor and removes the rotor from the crankshaft. This tool also works on RZR XP.
- Similar to Polaris No. PA-49316.



4851

Tappet Oil Filter Screen Plug Tool

- A simple tool to remove the tappet oil filter screen plug without removing the exhaust pipes on HD applications. Can also be used on any slot type plug.





5604

Motorcycle Compression Tester Kit

Designed specifically for testing motorcycle and small engines, this kit features a specially designed compression gauge and hose assembly, plus three different size hose adapters. Compression Tester and hose lengths are designed for optimal viewing along side engine. Covers most popular motorcycle and small engine plug sizes.

Features and benefits:

- Corrosion resistant nickel plated finish
- 10" flex hose gauge assembly with quick coupler.
- 2-1/2" gauge features chrome bezel and rugged protective outer boot
- Dual scale gauge reads 0-300 psi and 0-2100 kPa
- 12" flex hose -14 mm standard/plus reach (extra length supports V-Twin applications)
- 12" flex hose -12 mm standard reach
- 12" flex hose -10 mm standard reach
- Rugged blow molded hard case with removable lid
- Repair parts kit



5613

Vacuum/Pressure Gauge Kit

Ideal for testing vacuum lines and components. Accurately tests low-pressure fuel systems. Quickly diagnose internal engine problems such as bad rings, valves and leaking head gaskets. Kit comes complete with adapter for most applications. Pin point hard to find problems such as cracked lines.

Features and benefits:

- Large 3-1/2" gauge features a chrome bezel and rugged protective outer boot.
- Dual purpose gauge reads vacuum and pressure.
- Dual scale gauge reads 0-30 in. Hg vac and 0-70 cm Hg, also reads 0-15 psi and 0-100 kPa.
- Built in rear hook allows gauge to be hung at eye level.
- Adapters for most applications.
- Blow molded hard case with removable lid.
- Detailed instruction chart.



5609

Cylinder Leakage Tester Kit

Quickly diagnose internal engine problems such as bad rings, valves and leaking head gaskets. Kit come complete with adapters for most applications.

Features and benefits:

- Dual 2-1/2" gauges feature chrome bezel and rugged protective outer boot.
- Scales read 0-100 psi and 0-700 kPa.
- Pressure regulated manifold includes quick couplers.
- Long flex 24" 14 mm hose.
- 10 mm, 12 mm and 18 mm thread adapters.
- Blow molded hard case with removable lid.
- Detailed instruction chart.



3367

Digital Timing Light

Professional digital timing light has advanced features with a bright LED screen and mode indicator lights.

Unique features

- Microprocessor-controlled circuitry.
- LED tachometer display reads 0-9999 rpm.
- LED advance display indicates to 1/10.
- Unique flashlight feature.
- 2/4 cycle and rpm/advance lights.
- Up and down scroll buttons.

Standard features

- All metal inductive pickup.
- Reflected, super bright xenon flash.
- Removable leads with positive twist lock connector.
- One touch control.
- Durable, plated ABS housing with over-molded grips.
- Heat resistant over-molding on clips.
- Blow-molded case included.



4862
5 Speed Main Drive Gear Tool

- This tool set will remove and install the transmission main drive gear and install the main bearing without removing the transmission. Designed to not damage the bearing or gear during installation.
- Applications include 5 speed Big Twin and aftermarket 6 speed 1980-2006 (ex 06 Dyna and Sportster 91-05).



4860
Transmission & Steering Bearing Puller/Installer Kit

- This combination kit works on transmission main-shaft and steering stem bearings on HD motorcycles.
- Removes; Fork stem bearings on most applications. Flywheel bearing 00-03 XL. Removes/Installs; Inner bearing race on trans main-shaft Big twin 84 & later.
- Aftermarket trans main-shaft bearings & bushings on 5 & 6 spd. LSD and RSD trans.



4742
Flywheel Puller Kit

- Developed for many small engines in the ATV, and Motorcycle service markets, these tools are machined from high quality tool grade steel and are packaged in a convenient blow-molded case.
- Each part is marked with size for reference and has a corresponding location in the storage case.
- Works on many makes like Honda, Suzuki, Kawasaki, Yamaha, Ducati and others. For street, performance or off-road.

4864-1
Flywheel Puller

- M33x1.5 RH Internal threads.

Applications

- KTM 625 SMC 2006, 640 LC4 Adventure 04-07, 640 LC4E 2001, 690 RFR 2008
- Suzuki GSXR 1000 01-08, GSXR 600 01-09, GSXR 750 00-08
- Yamaha WR 450F 04-08, YFZ 450 04-09.



4864-6
Flywheel Puller

- M38x1.5 RH Internal threads.
- Includes crankshaft protector.

Applications

- Arctic Cat DVX 400 04-07
- Kawasaki KLX & KSF 400 03-06
- Suzuki AN & LT-Z 400 03-07, DR-Z 250 01-07, LTZ 90 2007, LT-Z 250 04-07, LT-F 300F 99-01, DR-Z 400 01-06, DR-Z 400E 00-07, DR-Z 400S 00-06, DR-Z 400SM 05-07, LT-R 450 06-08.



4864-2
Flywheel Puller

- M50x1.5 RH Internal threads

- Includes crankshaft protector.
- Fits Suzuki.



4864-3
Flywheel Puller

- M24x1.5 RH Internal threads.

- Includes 12mm shaft protector cap.
- Fits Honda, Kawasaki, and Suzuki motorcycle applications.



4864-4
Flywheel Puller

- M26x1.0 RH Internal threads.

- Includes 12mm shaft protector cap.
- Fits KTM 4 stroke motorcycles.



4864-5
Flywheel Puller

- M30x1.0RH Internal threads.

- Fits Yamaha WR 250F.



4800
Clutch Hub and Alternator Puller

- Removes clutch on Big Twins with 3, 5, and 10 fingers. Also works on Sportster transmission sprocket and clutch. Pulls motor sprockets, alternator covers, and many general pulling applications.



4850
Flywheel Puller

- Designed to pull magneto flywheel, clutch hubs, or starter gears. Works on wet or dry clutches. 6x25mm and 8x40mm bolts included.



4888
Flywheel Socket Set

- The best flywheel sockets available. These offer a low profile design that provides full nut to socket contact to eliminate rounding off the nut and slippage. Made from heat-treated chrome moly steel.

Set includes:

- 4888-1** – Socket fits pinion shaft nut on big twin 81-89. Size 1-1/4" with 1/2" square drive.
- 4888-2** – Socket fits crank pin nut on big twins 54 – early 81. Size 1-5/16" with 1/2" square drive.
- 4888-3** – Socket fits crank pin nut on Sportster 81-99 and Buell 87-99. Can also be used on top fork nut on glide forks. Size 1-3/8" with 1/2" square drive.
- 4888-4** – Socket fits crank pin nut on big twin 83-99 single cam. Size 1-1/2" with 1/2" square drive.
- 4888-5** – Socket fits sprocket shaft nuts on big twins 72-99 single cam. Size 1-5/8" with 3/4" square drive.



4970
Heavy Duty Flywheel Puller

- Extremely heavy duty puller to pull the most stubborn flywheels. Includes 2 drive screws and bolts; 8mm x 1.25 x 60mm (3X), 6mm x 1.0 x 55mm (6X), 6mm x 1.0 x 50mm (6X).
- The 6 bolt capable design fits Polaris ATV, Snowmobile, Watercraft and many other makes and models.
- Similar to Polaris No. 2871043-A.

4858
Clutch Spring Compressor Tool

This tool will release the clutch spring pressure for easy removal and installation of the retainer ring. Applications include HD big twin 90-97, and includes spring compressor nut for use on XL 91-05 and Buell.



4992
Clutch Spring Compressor Tool

- This is a required tool for efficient servicing of HD 1340 cc (80 ci) clutches. The compressor relieves spring pressure for disassembly during servicing. Applications include 1340 cc (80 ci) Models 90-97, Buell 95-Later, XL 91-Later.
- Similar to HD-38515-A.



4991
Clutch Compressor Tool

- This universal compressor is used to compress the drive or driven clutch during assembly of disassembly. Innovative design makes use quick and effective without binding. Works on all Polaris and TEAM clutches found on full-sized model ATV, Side x Side, and Snowmobile.
- Similar to Polaris No. PU-50518.



4971
Clutch Holding Wrench

- Designed to hold the drive clutch for retainer bolt removal and torquing. For both P-85 and P-90 drive clutches on Polaris ATV & Side x Side.
- Similar to Polaris 9314177-A.



4972
Drive Clutch Holding Fixture

For solid holding of drive clutch for spider removal when shimming for belt-to-sheave clearance or servicing spider.

- Bolt to bench or clamp in a vise.
- Contacts all webs for maximum support to eliminate clutch web damage.
- Center hold down for much greater holding stability while applying off center torque.
- Single person operation, even on the most difficult spiders.
- ATV and Ranger applications.
- Similar to Polaris No. 2871358-B.



4990
Clutch Holding Tool

- Designed to hold the clutch basket while removing or servicing clutch.
- Fits 00-02 Polaris Xpedition models.
- Similar to Polaris PA-44688.



4801
Universal Clutch Holder

Holder arms designed to fit into the external teeth of a clutch hub, but can also be used on gears and sprockets. Opens to handle a 5" OD hub.



4986
Primary Drive Clutch Puller

- Removes primary drive clutches on Polaris ATV & Snowmobile 1985-up (except 400, 500, 600, 700, 800 domestic twins, '99 700 & 800 XCR, '99 Trial RMK, & Supersport 550 Fuji). 3/4" - 16 thread, 10-1/2" long.
- Similar to Polaris 2870506.

4985
Primary Drive Clutch Puller

- Removes primary drive clutches on Polaris ATV Sportsman 600/700 twin EFI X2 02-08.



4984
Secondary Drive Clutch Puller

- Removes secondary drive clutches on Polaris ATV & Side x Side 1985-up. 1" - 12 rolled thread, 5-1/2" total length.
- Similar to Polaris No. 2870913.



4974
Clutch Puller

- Removes drive clutches on Polaris Side x Side and Snowmobile.
- Snow Applications: 700/800 XCR Fuji 3 cylinder engines 1999-2001, all Domestic twin 2 -strokes model year 2000 and newer, FS/FST models 2006 and newer.
- Side x Side Applications: Ranger RZR XP 2011 and newer.
- 3/4-16 thread.
- Similar to Polaris 2872085.



4975
Clutch Puller

- Short puller for removal of the drive clutch from the crankshaft taper on Polaris 550 Sportsman XP 4x4 09-12, 550 Sportsman (all models) 10-12, 570 RZR 4x4 12, 800 RZR 4x4 (all models) 08-12, and Ranger Diesel.
- Similar to Polaris PA-48595.



4978
Clutch Alignment Tool

- Establishes correct clutch offset and alignment on Polaris EBS Clutches.
- Similar to Polaris 2872292.



4979
Clutch Alignment Tool

- Establishes correct 1/2" clutch offset and alignment on Polaris ATV & Side x Side.
- Similar to Polaris 28870654.



4980
Clutch Alignment Tool

- Establishes correct clutch offset and alignment on Polaris P85 Clutches.
- Similar to Polaris 2870426.



4987
Clutch Spider Nut Socket

- Used to remove and install the drive clutch spider jam nut on 2011 & newer Ranger RZR XP. Similar to OE P/N PU-50578.
- Similar to Polaris No. PU-50578.



4988
Clutch Spider Nut Driver

- Essential when servicing or re-building Polaris clutch. Fit's P85 and P90 clutches found on Polaris ATVs and snowmobiles 1972 to Present. (except 900 RZR XP 4x4 11-12, 900 RZR XP 4 4x4 12).
- Similar to Polaris No. 2870338.



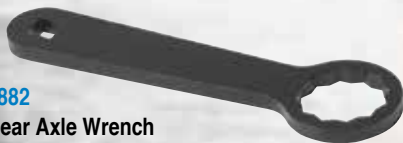
4989
Clutch Spider Tool

- Essential when servicing or re-building Polaris clutch. Fit's P85 and P90 clutches found on Polaris ATV, Side x Side, and snowmobiles 1972 to Present.
- Similar to Polaris No. 2870341.



4880
4-in-1 Hex Axle Tool

- Fits internal hex on many late model sport bike axles and some dirt bikes.
- Heavy duty CrMo steel construction for shop use.
- Four metric hex sizes: 17 mm, 19 mm, 22 mm and 24 mm.
- 3/8" square drive on both ends.



4882
Rear Axle Wrench

- This wrench allows for simple adjustment of drive belt tension or rear wheel alignment.
- Eliminates the need to remove any exhaust components.
- 36mm wrench includes a 1/2" square drive allowing for use with a torque wrench for proper axle torque.
- Similar to HD-47925.



6673
Belt Tension Gauge

Belt tension gauges are used to properly check drive belt tension on drive belts to ensure maximum belt and bearing life. This belt tension gauge simply connects to the belt to provide the tension reading. Dual scale reads 30-180 in lbs. (2.5-15 ft. lbs.) and 130-800 Newtons, covering the 10 ft. lb. spec. typically found on rear drive motorcycle belts.



4748
Belt Tension Gauge

This easy to use and read tool allows for accurate belt tension to be set after belt replacement, adjustment, or wheel service. Use on secondary drive belts with a 10 lb. spec. Instructions; 1. Position the small O-ring over the 10 lb. mark. 2. Position the U-shaped belt cradle against the bottom of the belt at a 90 degree angle and locate the large O-ring to a reference point, record reading. 3. Push upward on the rubber bumper until the small O-ring touches the bottom of the tool body. Re-align the large O-ring to the reference point, difference in the reading is the belt deflection (refer to service manual for spec.).



4745
Chain Master Link Clip Tool

Designed specifically for roller style chains with specialized tips to easily remove and install master link clips. Includes comfort grip handles.



4746
Chain Master Link Plate Tool

Tool will remove press-fit master link plates found on many standard and O-ring style roller chains. Will also break 40-60 series chains to add a master link or remove links.



4744
Chain Breaker and Riveting Tool Kit

This kit will break, press, and rivet most #25 - #35 and # 428 - #630 standard and O-ring roller chains. Includes HSS rivet tip for riveting hollow nose master links. The hardened steel body has a removable handle for compact storage.



4738
Chain Breaker & Riveting Tool Kit

This heavy duty kit makes easy work out of breaking, pressing, and riveting # 415 - # 632 size standard and O-ring chains. The handle can be mounted in 3 different positions on the forged and hardened alloy c-frame, providing access while the chain is on the vehicle. The kit can rivet hollow nose master links as well as hardened pins. Storage case included.



4739
Chain Brush

Use to clean and oil various sized roller chains found on motorcycles, ATVs, machinery, etc. Brushes adjust to chain widths ranging from 1/4" to 9/16".



4749
Chain Alignment Tool

Designed to simplify the alignment of the countershaft and rear sprocket during chain adjustment or wheel service. Tool clamps to rear sprocket and held with the thumb screw. The rod indicates alignment.



4758
Motorcycle/ATV Chain Tensioner

- Tool is designed to work on drive chains found on motorcycles and all-terrain vehicles (ATVs). Fits the following size chains: 428, 520, 525, 528, and 530.
- Tool jaws fit in chain link ends. Tightening the forcing screw pulls the jaws together to hold the chain for easy removal or installation of the chain connector or master link.



714
Horseshoe Lock Ring Pliers

These pliers feature 8" handles and are designed to spread and remove horseshoe style lock rings found on engines, transmissions, and chassis.



7313
Retaining Ring Pliers

These pliers are 7-3/4" long and are designed to spread and remove retaining rings found on engines, transmissions, and chassis. Maximum spread is 1- 1/16".



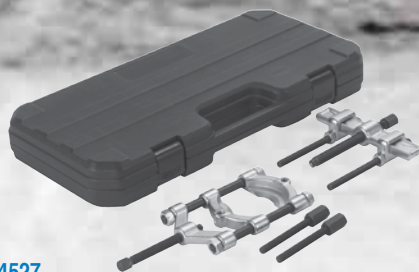
4623
CV Joint Banding Tool and Cutter

Use to install and tighten the "band-it" or strap style clamps found on CV joint boots, steering gear boots, or hoses. Tighten the band by turning the handle on the tool; use a socket or wrench on the handle to torque the band to OE specifications. When the boot clamp has been tightened to specs, cut the band to the correct length by flipping the lever (at the front of the tool) forward.



4721
CV Boot Clamp Cutter

Designed to easily cut the CV boot clamp without damaging the boot. Will cut boot clamps up to 10 mm wide and .7 mm thick. Handles are spring loaded to the open position to allow easy access to the clamp.



4527
5-Ton Pressure Beam Bearing Splitter Kit

Single point of adjustment allows quick attachment of 3" splitter to the bushing or bearing. Pressure beam is used in conjunction with interchangeable legs. Includes carry case.



7790
Flange Puller Set (48 piece)

Versatile puller capable of removing a wide variety of components having tapped pulling holes such as gears, pulleys, etc.

- Capable of handling 2- or 3-way bolt pulling applications.
- Puller flange: adapts to bolt circle dia. of 1-1/2" to 4-5/8".
- Forcing screw: 5-5/8" lg., 5/8-18 thread.
- Shaft protector: 1-3/16" dia. x 3/4" thick.



525
Flange-Type Puller Combination

Two specialty pullers in one box. You get a flange-type puller for removal of parts with two or three tapped holes. You also get a pulley and flywheel puller. 525 includes: flange-type puller along with a puller with four sets of cap screws.



5049
Pilot Bearing Puller

Make quick work of pulling stubborn, rusted pilot bearings. Fits 1" I.D. bearings. The puller's forcing screw expands the jaws inside the bearing and simultaneously pushes against the bottom of the blind hole.



981
Blind Hole Puller Set

This set provides a complete selection of expanding collets ranging in size from 5/16" to 1-3/4". Collet is placed through bore of part to be removed, then expanded with actuator pin so that lips of collet secure a positive grip for pulling. Force is exerted by means of a forcing screw and a bridge assembly or a slide hammer. Individual pieces can be ordered separately.

1037
7-Ton Grip-O-Matic Puller

Mechanical Grip-O-Matic® Puller Remove and install parts for fast, effective repairs. The puller is forged from quality steel, heat treated, and subjected to rigorous tests which exceed their rated capacity.

- 7-Ton, 2/3-Jaw
- Max. Reach 5" Max. Spread 10-1/2"
- Screw Size 11/16"-18 x 9"
- Jaw Thickness Upper 5/16" Lower 11/32"
- Jaw Width Upper 1" Lower 1"



4532
7-Ton Multi Purpose Bearing and Puller Set

- Offers a bearing/pulley tool solution featuring a classic "H" Bar style puller block accommodating 7" to 11" application spread.
- Comes with 2 sets of forged jaws for a pulling reach range of 5" to 9" – tempered for heavy-duty applications. Two forcing screws are included for short and long pulls.
- Where a Push Puller is the best pulling choice and threaded holes are not available, the 4532 provides technicians and shops with a solution for many applications like side bearings, alternators, generators, power steering and crankshaft pulleys.
- Deep set works excellent for pulling the primary plate from the transmission

6930 Flange-Type Puller Combination

Heavy-duty flange puller features a live center forcing screw. Includes two live center forcing screw tips and two sets of commonly used automotive bolts. Puller will work on bolt circles from 1-1/2" to 4-1/4".

Three cap screws, 3/8-24 x 3" long, and three cap screws, 3/8-16 x 3" long.



7403 Pulley and Flywheel Puller

Here's a puller that works in a variety of applications. Works as a regular 2/3-way puller to remove pulleys and small engine flywheels. Cap screws included (pairs): 3/8-16 x 3-1/2 in.; 5/16-18 x 3-1/2 in.; 5/16-24 x 3-1/2 in.; M8-1.25 x 90 mm; and 5/16-18 x 4 in. (SIR).



4518 5-Ton Bar-Type Puller/Bearing Separator Set

- This combination set includes our two most popular bearing "splitters" (2" and 3"), four sets of hex push-puller legs and a bar-type puller head with a 9/16" forcing screw. Separator tools are used with bar puller and legs for a wide variety of pulling jobs.
- The 5" puller cross-bar with a 6-1/4" forcing screw or each of the bearing separators may also be used separately or in combination with other pullers or tools.
- A blow-molded plastic storage case keeps set contents organized and protected from loss.

Tool No.	Min. Spread	Max. Spread	Tapped Holes	Distance Between Adj. Screws
4518-2	3/16"	2-3/8"	3/8-16	2-3/8"
4518-3	1/2"	2-3/8"	3/8-16	3-9/16"



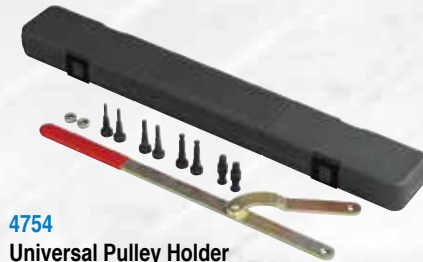
4852 Adjustable Primary Locking Bar

- Used to lock primary for service work.
- Will work on Chain or Belt Drive style primary drives.
- Adjustable length from 4" to 7-1/4" to cover virtually any application.

518 Flange Puller

Pull larger diameter parts having two or three tapped holes.

- Slotted holes in puller body permit cap screws to be positioned to handle bolt circle diameters from 1-1/2" to 4-5/8".
- Three each of two cap screw sizes included: 3/8"-24 x 3" long and 3/8"-16 x 3" long.



4754 Universal Pulley Holder

- Universal design fits many different size pulleys having slots or holes, such as crankshaft / transmission pulleys or gears.
- Wrench is adjustable from 1-1/2" to 8-5/8"; four different size step pins are interchangeable.
- Long handle enables technician to easily hold the pulley when tightening or loosening retaining bolts.

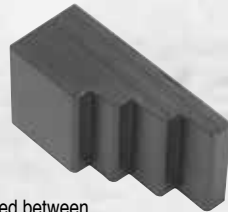


4802 Universal Pulley Holder Locking Pliers

This adjustable locking pliers can be used to hold pulleys, clutch hubs, flywheels, gears, and sprockets with internal or external teeth up to a 4" diameter. Can also be used on applications with slots or holes with the 5/16" pins.

4856 Primary Drive Locking Tool

- This wedge is placed between the primary chain and motor sprocket to lock them together during removal and installation of the engine sprocket nut without damage.
- Made of POM material to not damage the sprocket or chain.
- Fits all chain primaries.
- Similar to HD-41214.



464 Griplock 2 Ton, 3 Jaw Puller

Three-in-One "Griplock" Puller is used for general purpose pulling such as hubs, gears, bearings and anywhere this versatile puller can be attached.

- Pressure bearing yoke cap holds jaws in place for ease of set up - in any orientation.
- Yoke arms have two jaw positions and do not require tools to change.
- 2 or 3 jaw applications, with a 3" to 4" spread.
- Both external and internal pulling action.



465 Griplock 5 Ton, 3 Jaw Puller

Three-in-One "Griplock" Puller is used for general purpose pulling such as hubs, gears, bearings and anywhere this versatile puller can be attached.

- Pressure bearing yoke cap holds jaws in place for ease of set up - in any orientation.
- Yoke arms have two jaw positions and do not require tools to change.
- 2 or 3 jaw applications, with a 3" to 7" spread.
- Both external and internal pulling action.



4803 Universal Pulley Holder Locking Pliers Set

This adjustable locking pliers can be used to hold pulleys, clutch hubs, flywheels, gears, and sprockets with internal or external teeth up to a 4" diameter. Can also be used on applications with slots or holes with the addition of the interchangeable 5, 6, 7, 10, and 16mm pin sets. Complete with metal carry case.



4804 Heavy Duty Pulley Holder

This strap style universal wrench features a 9" drop forged handle and 23" leather strap for excellent grip on diameters up to 7". The milled foot increases grip on the strap and pulley as handle force is increased.

**4889****Fork Cap & Compression Valve Socket Set**

- This set is designed to fit fork cap sockets or the compression body with an octagonal shape. These offer a low profile design that provides full nut to socket contact to eliminate rounding off the nut and slippage. Made from high quality aluminum and can be driven with the 3/8" square drive or 19mm wrench.

Set includes:

4889-1 – Internal Socket to remove the compression body from the cartridge on KYB twin chamber forks, found on Honda CRF 250 & 450. Size 32mm.

4889-2 – Internal Socket to remove the compression body from the cartridge on KYB twin chamber forks, found on Yamaha YZ 125/250 & 250F/450F, Honda CRF250R/CRF450R, Kawasaki KX450F. Size 36mm.

4889-3 – Socket fits fork cap on Showa BPF with 43mm fork tubes. Size 45mm.

4889-4 – Socket fits fork cap on Showa with 44mm - 46mm fork tubes, found on late model Honda CRF 250R & Suzuki RM 125/250. Size 46mm.

4889-5 – Socket fits fork cap on KYB forks found on Honda CRF 450R, Yamaha YZ125/250 & YZ250F/450F, Kawasaki KX450F. Size 49mm.

4889-6 – Socket fits fork cap on Showa forks found on Honda CRF 250R/450R & CRF 250X/450X, Suzuki RM 125/250 & RMZ 250/450, Kawasaki KL250F. Size 50mm.

**4891****Fork Spring Compressor Kit**

- Designed to install fork caps on forks with a large amount of spring pre-load. Kit includes 39mm and 41mm adapter sets, and one jackscrew.
- Application: 39mm and 41mm HD forks.

**4892****Steering Head Bearing Installer**

- Designed to install steering head bearing cups and races completely straight without any damage.
- Will work on stock and custom applications.
- Similar to HD-39302.

**4886****Swing Arm Bearing Tool**

- Designed to install new needle style bearings into a swing arm. Includes 3 drivers to fit different size bearings. Driver 1 (22.0mm/26.8mm), Driver 2 (21.0mm/26.0mm), Driver 3 (20.0mm/26.0mm).
- Application: For use on late model off-road motorcycles such as Honda, Suzuki, Kawasaki, Yamaha models.

**4884****Swing Arm Pivot Bearing Puller**

- An essential tool for removing and installing pivot bearings in swing arms and front fenders.
- Applications include HD Softail swingarms 86-Present, HD Springer front fender mounts 97-11.

**4968****Swing Arm Tool**

- This 2-in-1 tool is designed with one end for removing and installing the pivot bolt lock nut, while the other end will remove the pivot bolt.
- Applications include Honda 4-stroke 4 wheelers.

**4964****Ball Joint Service Kit**

- Use to remove and install ball joints in vehicle on Sportsman XP, RZR and Ranger models.
- Similar to Polaris No. PU-50506.

**4965****ATV Steering Knuckle/Ball Joint Separator**

- Eliminates damaging the A-Arm, ball joint stud, or rubber boot while separating the ball joint from the knuckle body. Includes 2 drive bolts for Applications include ATV models Honda TRX and Yamaha YZF, YZF, and YFM.

**4966****ATV Steering Knuckle/Ball Joint Separator**

- For removal and installation of lower ball joints on models with pressed-in ball joints on the front strut casting found on Polaris and other Makes.
- Similar to Polaris No. 2870871

**4995****Coil Spring Compressor Locking Plier**

- Locking plier with special jaws that clamp on the external side of the coil spring. Use 2 pliers to evenly compress each side of the spring found on struts and coil over shocks.
- Similar to Polaris No's 2871573 & 2871574.



4517

7-Ton Bar Type Puller/Bearing Separator

- Includes a Bearing Splitter with 4" capacity, two sets of hex push puller legs, a 8" bar type puller head mated with a custom thread forcing screw.
- Puller/Bearing set for tough jobs, up to 7-tons, larger applications, and greater reach 8" to 16".
- Capacity to remove steering stem bearings.



4581

Blind Hole Bearing Puller

- For pulling jobs requiring an internal pull, such as pilot bearings and pinion bushing from cam cover.
- Four collets which fit a wide range of applications. Select the appropriate sized collet by comparing it with the application. Insert the collet, expand it to fit the hole, then attach the slide hammer assembly.

Set includes:

- Four collet sizes: 7/16" to 1/2", 9/16" to 11/16", 5/8" to 1", 1" to 1-1/4" and 2-1/2 pound slide hammer with T-handle.
- Housed in a blow-molded plastic storage case.



6642

Trim Tool Kit (11 Piece)

- Includes 11 tools designed to remove specialty body fasteners, trim strips, panels, bezels, liners, shrouds, fascia, and more. . .
- Tools are constructed of durable, impact-resistant nylon that will not damage metal and non-metal surfaces.



4790

Wheel Bearing Removal/Installation Kit

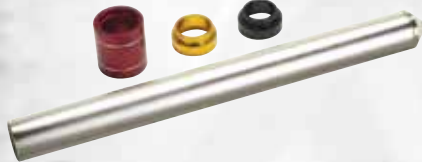
- This tool assembly will remove and install 3/4", 1", and 25mm I.D. sealed wheel bearings.
- Standard wrenches used in combination with tool. Instructions included along with blow molded case.



4507

Bearing Driver Set, Stinger

- Permits installation of tapered bearing races and seals without damage to the component or housing. Includes a driver handle plus popular bearing and seal drivers, ranging from 1.565" to 3.180".
- Tapered side of driver is used to install races. Invert the driver to the flat side to install seals. Set is housed in a blow-molded plastic storage case.
- Bearing applications include steering stem, swing arm, and wheel bearings races.



4797

Steering Stem Bearing Installation Tool

- Provides a quick and easy method to install lower steering stem bearings. The 14" drive tube accepts the 1.0", 1.4", and 1.75" I.D. bearing adapters.

4779

Front Fork & Shock Vice

This vice is designed to hold up to 4" diameter round or oddly shaped components such as forks, shocks, pistons, rods, etc. The V shaped jaws are covered with thick rubber pads to ensure a firm grip without leaving a mark. Comes complete with a table/vice mounting bracket that allows adjustment to any position.



4791

Spanner Wrench, 3/4" - 2"

This chrome vanadium hardened steel wrench features a 5" handle and slim strong hook to access slotted retaining rings in hard to reach areas.



4792

Spanner Wrench, 2" - 4 3/4"

This chrome vanadium hardened steel wrench features a 9" handle and slim strong hook to access slotted retaining rings in hard to reach areas.



4784

10" Profile Gauge

- This 10" gauge provides an exact copy of a contour or profile needed during bodywork or fabrication. The plastic fingers will not scratch original finish and non-metal surfaces.

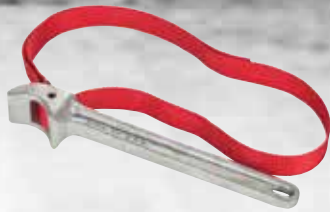


3176

Smart Battery Charger & Maintainer

Excellent for vehicles in storage for weeks or months. This charger and maintainer will keep 12V batteries fully charged when not in use, without damaging the battery.

- Charges deep discharged batteries in about 12 hours.
- Switches to float mode after the battery is completely charged.
- Easy to read LED lights to show the status of charging and battery condition.
- Microprocessor controlled pulse charger.



7206
Multi-purpose Strap Wrench

You'll find many uses for this heavy-duty strap wrench. The 53" long nylon strap won't mar precision surfaces of shafts, pulleys, or other components. Useful on engine, transmission, and drive pulleys up to 16 inches. Special head design self-tightens the strap as force is applied to the lightweight, 12" long handle.
305085 – Replacement Strap.



4750
Tire Valve Installer/Remover Tool

This 14" steel tire valve tool includes a stepped rubber sleeve that can be positioned on the handle for optimum pulling angle of the valve, while protecting the wheel finish. Removes and installs snap-in style tire valves.



4751
Tire Pressure/Tread Depth Gauge

This 3-in-1 gauge will measure tire pressure, lower tire pressure, and measure tread depth all in one gauge. Rugged cast housing for strength and long life.



4770
Tire Spoon with Grip

This 13" curved tip tire spoon is strong yet comfortable to use with the form fit hand grip. The rounded head prevents puncturing the tube.



4769
Wheel Rim Protector Set, (3 piece)

Fits over the wheel rim to protect the wheel from being scratched or damaged while using tire spoons. Set of 3.

4771
Tire Bead Alignment Tool

This aluminum tool will hold a tire bead into the drop center of the wheel when changing the tire or installing an inner tube. The nylon thumbscrew will not damage the wheel finish.



4598
Brake Fluid Tester

Catch bad brake fluid before it has time to destroy expensive brake calipers and other brake system components! Tester determines quality of brake fluid. One battery included: 1.5V AAA.

1. Remove cap from brake fluid reservoir.
2. Remove probe cap from brake fluid tester.
3. Press power button on top of tester. Green LED lights up.
4. Dip entire length of metal probes into brake fluid.
5. After one second, match color of LEDs with color chart to determine brake fluid quality. Tester automatically powers off after twelve seconds of inactivity.



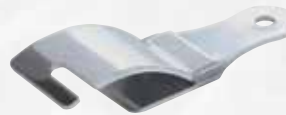
4777
Tire Bead Holding Tool, Long

This tool allows the tire bead to be held in the drop center of the wheel when changing the tire or installing an inner tube. The slot slides over the spoke and the opposite end is depressed to push the tire into position. For use on wheels with 1 5/8" maximum side profile height.



4775
Tire Bead Holding Tool, Std.

This tool allows the tire bead to be held in the drop center of the wheel when changing the tire or installing an inner tube. The slot slides over the spoke and the opposite end is depressed to push the tire into position. For use on wheels with 3/4" maximum side profile height.



3833-15
Digital Tire Gauge

Digital tire gauge for accurate tire pressure measurements in 0.1 psi increments. Display is backlit for use in low light conditions. 0-150 psi capability.



3833-17
Tire Valve Core Tool

This tire valve core tool will remove and install valve cores when servicing tires. The tool is preset to tighten the valve core to the proper torque during installation.



4741
Spoke Tool Set (9 Piece)

- Use to tighten or loosen spoke nuts found on most motorcycle and scooter wheel applications.
- Nine interchangeable wrench ends; 5.2 mm, 5.4 mm, 5.6 mm, 5.8 mm, 6.0 mm, 6.2 mm, 6.4 mm, 6.6 mm, 6.8 mm.



4747
Spoke Torque Wrench Set (22 Piece)

Take the guesswork out of spoke wheel assembly and maintenance. This dual head spoke wrench offers install and removal in one wrench. The click-type torque end applies accurate and equal tension to each spoke, while the fixed end easily removes damaged or rusted spokes. This set includes 11 torque heads and 11 fixed heads for use with the sealed body wrench, all complete in an organizer case. Head sizes included for both ends; 5.0mm, 5.6mm, 5.8mm, 6.0mm, 6.2mm, 6.3mm, 6.5mm, 6.7mm, 6.8mm, 7.1mm, and Spline.





6703

Line Fluid Stopper Kit

Stop messy fluid leaks and prevent contamination during service.

- Kit seals all types of rubber and steel line found on fuel, brakes, and oil lines.
- Includes two banjo style fitting stoppers, two steel line stoppers, six line plugs, a line disconnect tool, and a long reach line pinch-off tool for hard-to-reach hoses.

6703-1 – Banjo Line Fluid Stoppers, 2 pk.

6703-2 – Steel Line Fluid Stoppers, 2 pk

6703-3 – Line Plug Fluid Stoppers, 6 pk



7559A

Deluxe Vacuum Pump

This pump kit is designed for vacuum testing, brake bleeding, and fluid transfer. With this kit, one person can quickly and cleanly bleed brake and hydraulic clutch systems, actuate vacuum switches (VOES), as well as get answers to numerous diagnostic and mechanical problems.

Kit includes:

- Precision-made repairable vacuum pump with 360° gauge rotation for improved visibility.
- 4-1/2 oz. Reservoir jar with fluid transfer and storage lid.
- Two – 2 ft. long, 1/4" ID hoses.
- Rubber cup adapter, two universal bleed screw adapters.
- Vacuum "T" adapter, test and bleed adapters.
- User manual (English, Spanish, French).



4740

Spring Hook (6" reach)

- Made from heat treated alloy steel.
- Designed for removing and installing hard-to-reach headlight adjusting springs, exhaust, brake and kickstand springs.



4599

One Man Break Bleeder Hose

- Removes air from brake system—one wheel at a time—and eliminates the need for an assistant to help do the job.
- Hose easily attaches to bleeder screw, which holds hose in place and prevents leaking.
- Check-valve on end of hose prevents air from entering brake system when pumping brake pedal.

4743

Brake Caliper Spreader

- Compresses the brake pistons on most style calipers for easy pad replacement.
- Fits calipers with 1/4" thick rotor applications, popular on motorcycles.
- Range: .25" (5 mm) to 2.25" (58 mm). Works on all automotive applications in this range.



4799

Brake Piston Removal Locking Pliers

This specially designed locking pliers allows the removal of brake caliper pistons during service or rebuild. The pliers is simply clamped into the I.D. of the caliper piston allowing it to be pulled out of the caliper. Range; 5/8" to 2-1/4" diameter pistons.



4795

Safety Wire Twist Pliers

These versatile 8" pliers will reliably twist safety wire rapidly and consistently. The right hand twist mechanism features an automatic spring return. The forged alloy steel construction features tapered jaws for confined areas and mated cutters to cut safety wire. For use on safety wire applications found on vehicles, machinery, and aircraft.

4796

Steering Neck Bearing Race Remover

Simple way to remove bearing race in the steering neck. Remover is inserted into neck and bolt is adjusted to tighten the remover against I.D. of steering neck. The remover is then driven from other end of neck to remove race. Fits 1-1/8" to 2-5/8" I.D. bearing race.



4794

Safety Wire Drill Guide Set, SAE & Metric Set

Here is the perfect way to drill those nuts and bolts for use with safety wire without breaking the drill bit. These guide, align, and support the hex head or the bolt threads. The hex fixture fits nuts and bolt heads that measure up to 1 1/4". The SAE fixture bar is threaded for 1/4"-20, 5/16"-18, 5/16"-24, 3/8"-18, 3/8"-24, 7/16"-14 bolts, and the Metric fixture bar covers M6x1.0mm, M8x1.0, M8x1.25mm, M10x1.25mm, M10x1.5mm, M12x1.5mm sizes.



8104

Vacuum Brake Bleeder

This one man brake bleeding system allows for fast and efficient vacuum brake bleeding. Universal rubber fitting holds securely on brake bleeder screw. Attach shop air and use the quick release trigger for on-demand vacuum and hands free operation. Compact size and 17 oz. (500ml) capacity.



4870

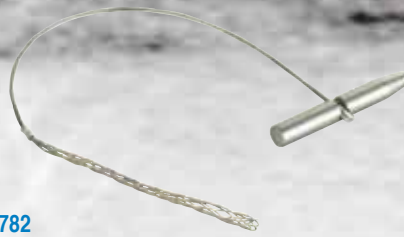
Master Cylinder Snap-Ring Pliers

Allows for removal of the internal snap rings found in hydraulic master cylinder. Remove and install small to medium snap rings up to a 2 1/8" depth. Other snap ring applications include transmission gear locators, bearing and oil seal retention, and fork seal retaining rings.



3910
Digital Multimeter

This digital multimeter contains all the base functions required for today's electrical system testing, at an economical price. Digital display provides; Volts, Ohms, Amps, Duty Cycle, Resistance, Capacitance, Diode, Continuity, Temperature.



4782
Wire Pulling Tool

This tool contains an 18" cable with a "T" handle at one end and wire mesh at the other. By threading the cable through a difficult to reach area such as a bike frame, wires or connector can be hooked to the end allowing the wiring to be pulled through.



3650
Heavy-Duty, Remote Starter Switch

Allows one person to start and crank engine while under the hood or from either side of the vehicle.

Product Features:

- With convenient hot circuit indicator, red ready light glows when starter switch is connected to a hot circuit; light goes off when switch is depressed.
- High current, heavy-duty push button switch ensures reliable operation and long service life.
- 5' leads made from heavy-duty, oil and grease resistant, 12-gauge wire.
- High current clips with protective boots open to an extra wide 5/8" for ease of hook-up.
- Soft, non-slip rubber grip.



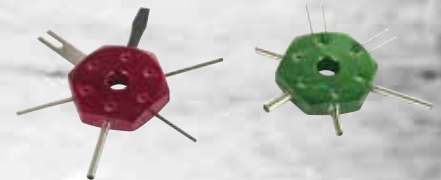
4878
Ignition Switch Housing Alignment Tool

- This tool aligns the ignition switch housing properly as the retaining screws are being torqued. Proper switch alignment extends the life of the ignition switch. Applications include HD FL Touring models 03 – Present, V-Rods 02 – Present.
- Similar to HD-45962.



4617
Terminal Battery Brush

- Designed to clean corrosion from side post batteries.
- One brush used to clean battery terminals; other brush used to clean battery cable ends.
- Plastic handle resists battery acid.



4822
Wire Connector Tool Set (2 Piece)

Designed to remove terminals from connector housing without damage to the terminal or connector. Set provides 12 different tool styles fit most common connectors.



3633
Circuit Tester

The standard in electrical system testing. This basic and simple to use tester provides the capability to locate shorts, grounds, and open circuits. 12', heavy-duty, red coil, cord lead.

- Checks 6- and 12-volt systems.
- Ergonomic, slim designed clear handle.
- Bright red, high intensity/slim style replaceable bulb.



3907
Probe Multimeter

This full function digital multimeter is used for electrical system testing, but it's compact design allows it to be conveniently carried anywhere in case of emergencies. Digital display provides; Volts, Ohms, Diode, Continuity.



4813
Heat Shrink Tubing Set (171 Piece)

Protection and insulation for solder connections and components. 2 to 1 shrink ratio with flame or heat gun.



4614
Battery Terminal Wrench, 5/16, 6 pt.

- Designed for use on side-terminal batteries, or any 5/16" hex head battery bolt.
- 5/16", 6 point, box end, 5-1/2" long, ratcheting wrench; insulated handle.



3908
Amp Clamp Multimeter

This digital clamp meter is well suited for testing starting/ charging circuits, and provides easy access to current, voltage, temperature and other key electrical system measurements, all in one easy to use tool. Digital display provides; Volts, Ohms, Amps, Duty Cycle, Resistance, Capacitance, Diode, Continuity, Frequency, Temperature.



4814
Waterproof Heat Shrink Tubing Set (106 Piece)

Waterproof protection and insulation on solder connections and components. Adhesive lined inner wall to seal out moisture. 3 to 1 shrink ratio with flame or heat gun.



4616
Battery Terminal Wrench, 10mm, 12 pt.

- Designed for use on 10 mm battery terminal bolts found on many batteries.
- 10 mm, 12 pt., box-end ratcheting wrench; 5-1/2" long with insulated handle.



4461 Terminal Release Tool Set

- Save time and money. Repair or rebuild a wiring harness without having to order the entire OE replacement.
- Services most OE terminal connectors. Insert the appropriate release tool to depress the locking tab and the individual wire slides out for service or replacement.

Kit includes:

7737 – Computer edge board and header release tool. Each end of the tool works on different terminal connector configurations. Works on various domestic and import models.

7738 – Weather Pack sensor terminal release tool. Works on various domestic and import models.

7740 – Micro-style terminal release tool. Works on various domestic and import models.

7741 – Specifically designed to release ID computer terminals on various domestic and import models.

7742 – Universal harness release tool designed to work on various domestic and import models.

7743 – Releases terminals on most harness connectors on various domestic and import models, including water, O2, vacuum, and air temperature sensors.



4467 Automatic Wire Stripper

- Quick removal of insulation on wire AWG 12-20.
- Comes with adjustable depth gauge (8mm to 12mm).
- Sharp v-shaped tooth easily removes insulation without any damage to soft wire strands.
- Cutting tool stored below the stripper.
- Features a space saving locking mechanism for pockets or tool drawer storage.



5912 Crimpwell™ Angled Crimping Pliers

- Universal crimping design accommodates soft wire – solid or stranded – 10-22 AWG.
- Cutting feature included for quicker preparation.
- 9" (228mm) in length, with protective grips to increase leverage and secure crimp.
- Angled design keeps the connector, the wire, and the crimper "in-line" –improving visibility and access in hard to reach places.
- Designed to not pierce connector insulation and also works on un-insulated connectors.
- Service tech can use as much force as desired to ensure connection and it will not damage connector insulation.
- Easy-to-use: Simply insert the connector into the crimping feature, slip over the connector and squeeze.



5950A CrimPro™ 4-in-1 Angled Wire Tool

- The angled feature allows access to close quarters and facilitates superior crimps.
- Compact 7-inch design used 4 ways.
- Gripping nose – to pull, twist, bend, and shape.
- Crimper – crimps 12-20 AWG insulated and non-insulated wire.
- Stripper – strips 12-20 AWG wire.
- Cutter – ability to make cuts both above and below pivot.



5950S CrimPro™ 4-in-1 Wire Tool

- Compact 7-inch design used 4 ways.
- Gripping nose – to pull, twist, bend, and shape.
- Crimper – crimps 12-20 AWG insulated and non-insulated wire.
- Stripper – strips 12-20 AWG wire.
- Cutter – ability to make cuts both above and below pivot.



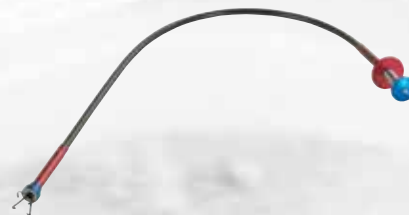
5953 Dual End Wire Holder

- Holds wire and connectors solidly during soldering or other wire service.
- Unique design allows connection to be held firmly on both sides with infinite adjustability.
- Insulated clips act as heat sinks to protect shrink tubing or other sensitive parts from heat.



5955 Magnetic Clamp Wire Holder

- Holds wire and connectors solidly during soldering or other wire service.
- Unique design allows connection to be held firmly on both sides with infinite adjustability.
- Insulated clips act as heat sinks to protect shrink tubing or other sensitive parts from heat.
- Clamp with magnet allows for attachment to a work bench, vehicle, or any other object for a firm base.



4783 Flexible Magnetic/Claw Pick Up Tool

The 25" flexible spring shaft allows the tool to reach difficult areas and pick up objects either magnetically or with the use of the retractable claw.



4818 Multi-Purpose Scissors

Will cut hose, wire and cables, wood dowel, PVC, and thin sheet metals in addition to general cutting. The hardened stainless steel blades have an angle ground into one that eliminates slipping when cutting round materials.



5900A

Master Torx® Bit Socket Set, 52 Piece

52-piece professional socket set in a blow molded case covers the popular versions of Torx® specialty fasteners in all popular sizes.

- Styles available: Torx® Bit Sockets, Torx® Plus Bits Sockets, Tamper-Resistant Torx® Bits, and Torx® Socket for external bolts.
- Made from superior S2 steel to meet or exceed torque specifications.
- All bit sockets are a 2-piece design. .20 percent stronger than a one-piece style for longer life.

6100

Standard TORX® Socket Set T10 to T60 (12 piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6101	T10	1/4"
6102	T15	1/4"
6103	T20	1/4"
6104	T25	1/4"
6105	T27	1/4"
6106	T30	1/4"
6107	T40	3/8"
6108	T45	3/8"
6109	T47	3/8"
6110	T50	3/8"
6111	T55	3/8"
6112	T60	1/2"



6150

External TORX® Socket set (7 piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6151	E6 x 25	1/4"
6152	E7 x 25	1/4"
6153	E8 x 25	1/4"
6154	E10 x 32	3/8"
6155	E12 x 32	3/8"
6156	E14 x 32	3/8"
6157	E16 x 32	3/8"



6170

Metric Hex Socket Set (7 piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6171	3 mm	3/8"
6172	4 mm	3/8"
6173	5 mm	3/8"
6174	6 mm	3/8"
6175	7 mm	3/8"
6176	8 mm	3/8"
6177	10 mm	3/8"



6180

TORX® Plus Socket Set (9 piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6181	TP10	1/4"
6182	TP15	1/4"
6183	TP20	1/4"
6184	TP25	1/4"
6185	TP27	1/4"
6186	TP30	1/4"
6187	TP40	3/8"
6188	TP45	3/8"
6191	TP50	3/8"



6950

SAE Ball Hex "L" Keys 1/16" to 3/8" (10 piece)

Set includes one each of the following:

No.	Size
6950-1	1/16"
6950-2	5/64"
6950-3	3/32"
6950-4	1/8"
6950-5	5/32"
6950-6	3/16"
6950-7	7/32"
6950-8	1/4"
6950-9	5/16"
6950-10	3/8"



6952

Metric Ball Hex "L" Keys 1.5mm to 10mm (10 piece)

Set includes one each of the following:

No.	Size
6952-1	1.5mm
6952-2	2mm
6952-3	2.5mm
6952-4	3mm
6952-5	4mm
6952-6	5mm
6952-7	6mm
6952-8	7mm
6952-9	8mm
6952-10	10mm



6954

Standard TORX® "L" Keys T8 to T50 (10 piece)

Set includes one each of the following:

No.	Size
6954-1	T8
6954-2	T10
6954-3	T15
6954-4	T20
6954-5	T25
6954-6	T27
6954-7	T30
6954-8	T40
6954-9	T45
6954-10	T50



6956

TORX® Plus "L" Keys TP8 to TP50 (10 piece)

Set includes one each of the following:

No.	Size
6956-1	TP8
6956-2	TP10
6956-3	TP15
6956-4	TP20
6956-5	TP25
6956-6	TP27
6956-7	TP30
6956-8	TP40
6956-9	TP45
6956-10	TP50



4780

Personal Tool Pack

Includes 1/4" drive ratchet, 2" extension, 16 drive bits, and Universal Spline sockets fit both SAE 3/16" - 9/16" and metric 5mm - 14mm nuts and bolts in a variety of styles; 6 pt., 12 pt., torx, square, spline, etc. All tools included in a travel pouch.





4781
Super Stubby Screwdriver Set

These screwdrivers are perfect for those limited access fasteners typically found on carburetors or in electrical compartments and many other areas.

- 2 Phillips and 2 straight screwdrivers included in set.



8262
Short Pick & Hook Set (4 Piece)

Consisting of four (4), 6.5", soft-handled picks.

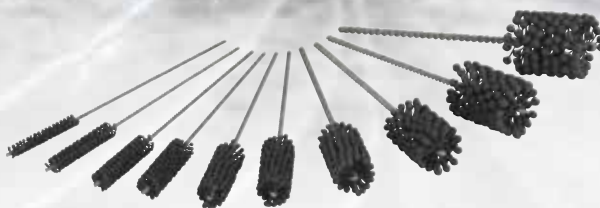
- They are sturdy, with both stainless steel shafts and tips, with assorted tip shapes designed for marking, removing O-rings, accessing snap rings and other assorted applications.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Multi-use tools to scribe, align pierce, clean or remove O-rings, shaft seals, CV boot and motorcycle fork seals and dust hoods.
- Packaged in a molded tray which can be placed in tool drawer.



8263
Long Pick & Hook Set (4 Piece)

Consisting of four (4), 9.25", soft-handled picks.

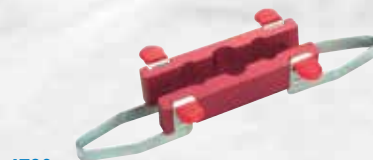
- They are sturdy, with both stainless steel shafts and tips, with assorted tip shapes designed for marking, removing O-rings, accessing snap rings and other assorted applications.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Multi-use tools to scribe, align pierce, clean or remove O-rings, shaft seals, CV boot and motorcycle fork seals and dust hoods.
- Includes a knurled shaft which allows good grip with grease or oil on hands.
- Packaged in a molded tray which can be placed in tool drawer.



7011
Ball Hone Set, 10 piece

- Ball Hones can be used for refinishing and resizing bores such as found in brake calipers, engine lifters, and u-joint yokes. Also useful for any bearing or bushing application.
- All hones are 180 grit Silicone Carbide for excellent cutting and finish.

Tool No.	Size
7011-1	.375" 10 mm
7011-2	.500" 13 mm
7011-3	.625" 16 mm
7011-4	.750" 19 mm
7011-5	.875" 22 mm
7011-6	1.00" 25 mm
7011-8	1.25" 32 mm
7011-10	1.50" 38 mm
7011-12	1.75" 44 mm
7011-14	2.00" 51 mm



4786
Aluminum Vice Inserts

Essential for every workbench vice. Aluminum jaws have reliefs for 5/16, 3/8, & 9/16 (7mm, 10mm, & 15mm) diameter shafts. Excellent for holding steel shafts without scratching or damage such as shocks, crankshafts, or any threaded bolts and shafts.



4410
Master Bushing Driver Set

- Enables you to remove and install bushings ranging from 10mm to 42mm in diameter, and 3/8" to 1-3/8" in diameter.
- Includes large, medium, and small driver handles and adapters all made of steel.
- Housed in a blow-molded storage case.



5180
Portable Multi Purpose C-Frame Press.

- Lightweight (less than 28 lbs.) and durable, the 5180 portable press is perfect for bench top pressing applications.
- Use for all clamping, pressing, and bending needs. Ideal for welding and metal fabrication.
- Press can be positioned vertically or horizontally.
- Versatile 9" – 4-1/4" Open-Throat® design.
- Couples to any 4- or 10-ton Porta Power pump.
- Base allows the operator to mount the press to a bench.

Set includes: C-Frame press with base, adapters: V-pushing and ram pushing (9/16" and 3/4" dia. shanks), receiving inserts, flat insert, storage case.



8203
Handled Pry Bar Set

Finally, a heavy-duty pry bar made of tempered square steel that you can hit without damaging the handle.

- Black chrome striking cap allows hitting the bar without damage to the handle.
- Ergonomic handle – dual durometer composite handle for user comfort; reduces hand fatigue.
- Polished tip with black oxide finish.
- Long-life finish resists rust and wear during use.
- OTC Marathon Lifetime Warranty.

Set includes 12", 18", and 24" bar shank lengths packaged in a gray molded tray.



4497A

Ratcheting Terminal Crimper

- Heavy-gauge steel crimping tool designed for insulated wire terminals.
- Ratcheting action crimps terminal to correct tightness on the wire, making crimping fast and easy.
- Insulated handles with compound mechanical leverage for power.
- For wire sizes: AWG 22-18 (0.6mm—1.0mm) red terminal; AWG 16-14 (1.3mm—1.6mm) blue terminal; AWG 12-10 (2.0mm—2.6mm) yellow terminal.



4411

Ratcheting Hose & PVC Cutter (Standard)

- Cuts hose and PVC up to 1-3/8" dia.
- Features metal frame and ergonomic handles for high leverage.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



1545

Motorcycle/ATV Lift

- 1,500 lb. capacity and 17" long skids that will lift the largest, widest cruisers.
- Lowest clearance available, 3-1/2" at lowest level, with a wide lift range of 3-1/2" to 16-3/4".
- Removable handle provides 360° access to load.
- Features also include foot pedal release, locking rear casters, automatic safety lock, and two ratcheting tie down straps for safety.



4498

7-in-1 Wire Stripper & Crimper

- Strips insulation off electrical wires ranging from 10 AWG—22 AWG (0.6mm—2.6mm) in diameter. Pliers on tip of jaw for looping or grabbing wire in tight places.
- Heat-treated steel jaws cut solid or multi-strand wire.
- Screw cutter shears screws clean, with no thread clean-up required. Works on machine screw sizes 4-40, 5-40, 6-32, 8-32, 10-24, and 10-32.
- Crimps insulated and non-insulated wire terminals, 7mm—8mm spark plug wire connectors.



4412

Ratcheting Hose & PVC Cutter (Heavy Duty)

- Cuts hose and PVC up to 1-3/4" dia.
- Features metal frame and rubber padded ergonomic handles for high leverage and comfort.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



4490

Magnetic Tray

- Rectangular, stainless steel tray is 9-1/2" x 5-1/2" and 1-1/4" deep. Holds tools and small metal parts so they don't get lost or misplaced during repair work.
- Two heavy-duty magnets on bottom of tray have non-marring contact pads; will securely hold tray to metal objects such as a tool box, frame rail, fender, etc.



4509

Straight-Blade Hose Cutter

- Cuts rubber hoses ranging from 1/4" to 1-1/2".
- Simply place hose in tool and squeeze handle to cut.
- Replacement steel cutter blade No. 4509-1 is available.

4509-1 – Replacement hose cutter blade



4515

Mini Pick and Hook Set – 4-Piece

- Sturdy stainless steel points and shafts designed for marking, removing o-rings, accessing snap rings, and performing other tasks. Assorted angle tips allow you to reach awkward locations.
- Knurled shaft design enhances finger control for delicate jobs.



Impact Drivers

- Loosens hard-to-turn screws, bolts or nuts.
- Handle design prevents possibility of hitting hand with hammer when striking impact driver.
- Bit holder has 3/8" drive (No. 4608), 1/2" (No. 4607) drive, and 5/16" hex for Phillips and flat screwdriver bits.
- Includes eight screwdriver bits:
 - No. 2 Phillips bit, 1-3/8" long with 5/16" hex
 - No. 2 Phillips bit, 3-1/8" long with 5/16" hex
 - No. 3 Phillips bit, 1-3/8" long with 5/16" hex
 - No. 3 Phillips bit, 3-1/8" long with 5/16" hex
 - 5/16" wide x 1-3/8" long with 5/16" hex slotted bit
 - 5/16" wide x 3-1/8" long with 5/16" hex slotted bit
 - 3/8" wide x 1-3/8" long with 5/16" hex slotted bit
 - 3/8" wide x 3-1/8" long with 5/16" hex slotted bit
- 4607** – 1/2" impact driver.
- 4608** – 3/8" impact driver.



4512

Snap Ring Pliers Set – Internal/External

- For internal or external snap rings; thumbscrew permits quick conversion.
- Made of heavy-gauge tempered steel.
- Includes two stainless steel handled picks.
- Contained in a blow-molded plastic storage case.

No. 4512 includes:	
Tool No.	Description
4512-1	.090" tip, straight pliers
4512-2	.090" tip, 90° pliers
4512-3	.070" tip, straight pliers
4512-4	.070" tip, 90° pliers
4512-5	.047" tip, straight pliers
4512-6	.047" tip, 90° pliers
4512-7	.038" tip, straight pliers
4512-8	.038" tip, 90° pliers
4512-9	Straight tip pick
4512-10	90° tip pick
All items can be purchased separately.	



6986

SAE Stud Remover Set

This SAE, 4-piece, stud remover set offers the best professional extractors available. Designed and tested to reach studs in difficult work areas.

SAE stud remover set. 3/8" drive for 1/4" and 5/16" stud sizes, and 1/2" drive for 3/8" and 7/16" stud sizes. Housed in a blow-molded storage case.

- 6986-1 – 1/4" stud remover
- 6986-2 – 5/16" stud remover
- 6986-3 – 3/8" stud remover
- 6986-4 – 7/16" stud remover



6987

Metric Stud Remover Set

This metric, 4-piece, stud remover set offers the best professional extractors available. Designed and tested to reach studs in difficult work areas.

Metric stud remover set. 3/8" drive for 6 mm and 8 mm stud sizes, and 1/2" drive for 10 mm and 12 mm stud sizes.

Housed in a blow-molded storage case.

- 6987-6 – 6 mm stud remover
- 6987-8 – 8 mm stud remover
- 6987-10 – 10 mm stud remover
- 6987-12 – 12 mm stud remover



Rolling Head Pry Bars

You'll have a lot of leverage using one of these rolling head pry bars. The long, tapered body will also serve as an aligning drift.

- 7163 – Pry bar; 12" long.
- 7165 – Pry bar; 18" long.

Accutorq™ Klikker Torque Wrenches

These precision torque wrenches make a loud click when you've reached the torque setting. They feature ratcheting heads, all-metal construction, permanently roll-marked scales, and soft-grip rubber handles that enable you to firmly grasp the wrench for right- or left-hand torquing.

- Includes molded plastic case.
- One-year warranty.



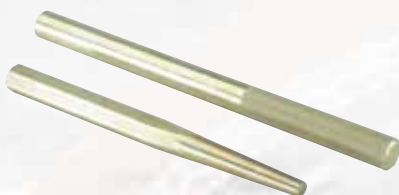
Tool No.	Torque Range	Graduations	Square Drive	Length
7375	100-1000 in.-lb (11-113 N·m)	10 in.-lb	3/8"	15-1/8"
7377	10-150 ft.-lb (14-203 N·m)	2 ft.-lb	1/2"	17-3/4"



4629

Brass Hammer and Punch Set

- Brass-head hammer and punches are ideal to use where sparks from ferrous metals would be hazardous, or where precision metal parts could be damaged by steel tools.
- Two hammer head weighing 24 and 12 oz.
- Two tapered punches 14" x 5/8", 10" x 5/8".
- One hex tapered punch 8" x 5/8".
- Two drift punches 10" x 3/4", 8" x 1/2".
- Two pin punches 6" x 3/8", 4" x 1/4".



4602

Brass Punch Set (2 piece)

- Two large, brass non-sparking punches. Ideal for use near precision parts or in locations where sparks from ferrous metal could be hazardous.
- Includes an 8" punch (5/8" hex, tapered to 3/8") and 10" straight punch (3/4" dia., chamfered at both ends).



4606

Brass Hammer and Punch Set

- Brass-head hammer and punches are ideal to use where sparks from ferrous metals would be hazardous, or where precision metal parts could be damaged by steel tools.
- Hammer head weighs 24 oz.; brass drift punch is 10" x 3/4" diameter; brass tapered punch is 8" x 5/8" hex tapered to 3/8" diameter point.



4605

Interchangeable Punch and Chisel Set

- Safety protective handle allows easy grip and protects hand from being hit by hammer.
- 12 punches and chisels included:
 - 5 flat chisels:** 1/2", 5/8", 3/4", 7/8", and 1" wide blades
 - 1 cape chisel:** 1/4" wide blade
 - 2 taper punches:** 1/8" and 1/4" diameter
 - 2 pin punches:** 3/16" and 1/4" diameter
 - 2 center punches:** 1/8" and 3/16" diameter
- Double locking ball detent holds punch or chisel securely in the driver handle. Replacement parts available:

- 4605-1 — Drive handle
- 4605-2 — 1/2" wide flat chisel
- 4605-3 — 5/8" wide flat chisel
- 4605-4 — 3/4" wide flat chisel
- 4605-5 — 7/8" wide flat chisel
- 4605-6 — 1" wide flat chisel
- 4605-7 — 1/4" cape chisel
- 4605-8 — 1/8" taper punch
- 4605-9 — 1/4" taper punch
- 4605-10 — 3/16" pin punch
- 4605-11 — 1/4" pin punch
- 4605-12 — 1/8" center punch
- 4605-13 — 3/16" center punch



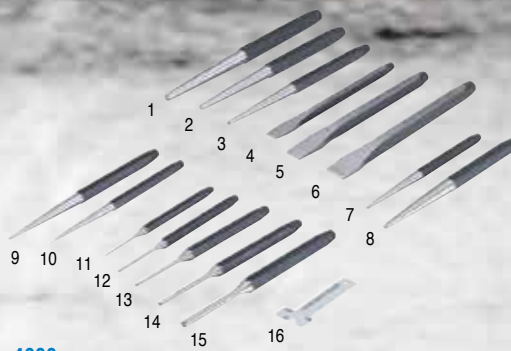
6613

Variable Pin Spanner Wrench

- Universal design fits many different types of pulleys having slots or holes, including camshaft pulleys and crankshaft pulleys.
- Wrench is adjustable from 1-1/4 inch to 5 inches; works with a 1/2 inch ratchet or breaker bar.

Set Includes:

- 526908-1 — 3.5 mm pin
- 526908-2 — 4 mm pin
- 526908-3 — 4.5 mm pin
- 526908-4 — 5 mm pin
- 526908-5 — 6 mm pin
- 526908-6 — 7 mm pin
- 526908-7 — 10 mm pin
- 526908-8 — Handle



4600

Punch and Chisel Set (16 piece)

- Durable set of heat-treated chrome vanadium steel punches and chisels. Storage tray included.

Contents of set:

- 3 — Cold chisels (with gauge): 3/8" x 5-1/2"; 1/2" x 6"; 5/8" x 6-1/2"
- 2 — Center punches: 1/8" x 5"; 3/16" x 6"
- 5 — Pin punches: 3/32" x 4-1/4"; 1/8" x 4-3/4"; 5/32" x 5"; 3/16" x 5-1/4"; 1/4" x 5-3/4"
- 5 — Taper punches: 3/32" x 5-1/4"; 1/8" x 5-3/4"; 5/32" x 6"; 3/16" x 6-1/4"; 1/4" x 6-3/4"
- 1 — Chisel gauge



4576

Universal C-Frame Nut Splitter

- Forged and heat-treated frame with offset handle works where ordinary nut splitters may fail. Smooth action cracks nuts without damaging bolt threads.
- Chisel rotates to line up parallel to bolt. Splits non-heat-treated nuts of 7/16" (11mm) through 3/4" (19mm) diameter. Tool is 6-3/4" in length.



4514

Mini Snap Ring Pliers Set (4 Piece)

- Small-size pliers for work in tight areas. Service S-ring and R-ring clips, internal or external, straight or angled. Ruggedly built of heat-treated chrome molybdenum steel.
- Set includes two internal snap ring pliers (one straight, one 45°) and two external snap ring pliers (one straight, one 45°).
- All pliers have .038" (1.0mm) diameter tips.

Available separately:

No.	Part No.	Description
1	4600-15	Taper Punch, 1/4" x 6-3/4"
2	4600-14	Taper Punch, 3/16" x 6-1/4"
3	4600-13	Taper Punch, 5/32" x 6"
4	4600-3	Cold Chisel, 3/8" x 5-1/2"
5	4600-2	Cold Chisel, 1/2" x 6"
6	4600-1	Cold Chisel, 5/8" x 6-1/2"
7	4600-4	Center Punch, 3/16" x 8"
8	4600-5	Center Punch, 1/8" x 5"
9	4600-12	Taper Punch, 1/8" x 5-3/4"
10	4600-11	Taper Punch, 3/32" x 5-1/4"
11	4600-10	Pin Punch, 3/32" x 4-1/4"
12	4600-9	Pin Punch, 1/8" x 4-3/4"
13	4600-8	Pin Punch, 5/32" x 5"
14	4600-7	Pin Punch, 3/16" x 5-1/4"
15	4600-6	Pin Punch, 1/4" x 5-3/4"
16	4600-16	Chisel Gauge



4550

Scraper Set

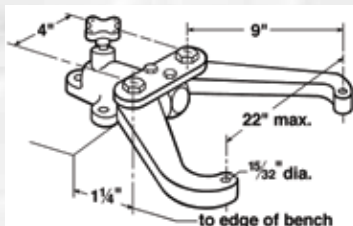
- Scrapers feature polished, heat-treated, stiff, stainless steel blades. Handles are ergonomic two-component plastic and feature a non-slip grip and steel bolstered end. Packaged in a storage tray. Includes: 1-1/4" straight blade, 1-1/4" bent blade, and 2" straight blade tips.



4651

Screw Extractor Set

- Removes broken studs and bolts.
- Includes ten guide bushings, five drill bits and five screw extractors with extractor nuts.
- Drill bits are left handed to help removal.



7020

Bench-Mounted Holding Fixture

Securely hold and rotate small engines, transmissions, and other components while you're working on them.

- This holding fixture will handle pieces weighing up to 250 lbs., and it offers 360° of rotation with positive stops at 90° increments.
- Three sides of the mounted unit remain fully exposed.

34607 – Base assembly only.



Universal Outside Thread Chaser

This thread chaser will quickly restore threads on fork tubes, steering stems, axles, etc. to near original condition without the use of expensive thread-cutting equipment.

- Replaceable V-pads and dies.
- 1-1/4" to 5" O.D.

7402

Thread chaser with 6 dies: threads per inch - 4, 5, 6, 7, 7-1/2, 8, 9, 10, 11, 11-1/2, 12, 14, 16, 18, 20, and 24.

216884

Standard die set. Includes 6 dies, in the sizes listed above.

202817

Metric die set. Includes three dies: 1 mm- 1.25 mm-1.5 mm-1.75 mm, 2 mm-2.5 mm-3.0 mm-3.5 mm; 4 mm pitch dies.

206803

V-pad.



4650

Mirror and Magnet Set

- Handles telescope from 6-1/2" to 25". Swivel heads allow access to tight areas.
- Large, rectangular swivel mirror is 2" x 3-1/2", and is attached to one telescoping handle; small mirror is 1-1/4" in diameter, and is interchangeable with magnets on the other handle.
- Magnets can lift up to 8 lbs.

Spectrum Work Lights

- AC/DC Rechargeable
- Li-Ion battery
- Magnetic base
- Bright LEDs - 50,000 hour life
- Adjustable 60° angle
- Slip resistant textured body
- Impact and water resistant
- Limited Lifetime Warranty

5550

Spectrum Solar 10W LED Work Light with UV Top Light



5551

Spectrum Trio 9W LED Work Light with 3W LED Top Light



5552

Spectrum 30+4 30 Pc. LED Work Light with 4 Pc. LED Top Light

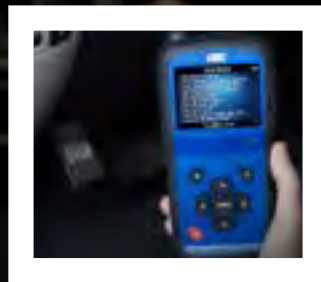


5550 Specifications	5551 Specifications	5552 Specifications
10W LED Work light with UV Top Light	9W LED Work light with 3W LED Top Light	30 Piece LED Work light with 4 Piece LED Top Light
LI-ION Rechargeable Battery – 3.6V 2250 mAh, AC/DC	LI-ION Rechargeable Battery – 3.6V 2250 mAh, AC/DC	LI-ION Rechargeable Battery – 3.6V 2250 mAh, AC/DC
Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V	Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V	Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V
Power Output: 5.0V 1000 mA	Power Output: 5.0V 1000 mA	Power Output: 5.0V 1000 mA
Charger Time: 3.5 ~ 4.0 hours	Charger Time: 3.5 ~ 4.0 hours	Charger Time: 3.5 ~ 4.0 hours
Active Time: 2.5 hours	Active Time: 3.0 hours	Active Time: 4.0 to 5.0 hours
Storage Temperature: -4°F to 158°F; -20°C to 70°C	Storage Temperature: -4°F to 158°F; -20°C to 70°C	Storage Temperature: -4°F to 158°F; -20°C to 70°C
Operating Temperature: 23°F to 122°F; -5° to 50°C	Operating Temperature: 23°F to 122°F; -5° to 50°C	Operating Temperature: 23°F to 122°F; -5° to 50°C
PS: LED Sector: 170°	PS: LED Sector: 25°	PS: LED Sector: 15°
At 50 cm: 350 LUX (750 LM)	At 50 cm: 4000 LUX	At 50 cm: 2250 LUX
Waterproof Grade IP65	Waterproof Grade IP65	Waterproof Grade IP65





ELECTRONIC DIAGNOSTICS



DURATEC
24 VALVE

FASTEST DIAGNOSTIC FLOW IN THE INDUSTRY

ROAM THE SHOP FLOOR WITH
WIRELESS J2534 COMPLIANT VCI



CONTINUING COVERAGE IMPROVEMENTS

GET THE MOST OF THE 12-MONTH SUBSCRIPTION BY UPDATING YOUR TOOL. THE LATEST UPDATES INCLUDE:

- New USA Domestic / Asian / European vehicle coverage with multiple releases through the year
- Frequent updates to the largest experience-based solutions available, already with over 30 million specific fixes
- Performance improvements, user interface, repair information and product enhancements included



- ✓ SCAN
- ✓ IDENTIFY
- ✓ FIX

Battery Disconnect Procedures, Key FOB and Remote Reprogramming!

The battery update covers Domestic and Import vehicles 2000 to present, with partial coverage for 1991-1999. Procedures include battery disconnection precautions, power windows, locks and sunroof reprogramming, engine and body control system resetting and more.

The key and remote programming update covers Domestic and Import vehicles 1996 to present, with partial coverage for 1993-1995. Procedures include system operation, unusual features, programming procedures, illustrated battery replacement procedures for remote and key transmitters and more.

CODE-TO-FIX™

BY PATTERN, SYMPTOM, CODE OR ANY WAY YOU LIKE – EVEN BY SEARCHING THE INTERNET

AUTODETECT™

Genisys Touch software automatically detects and alerts the technician of on-tool or web-based repair information

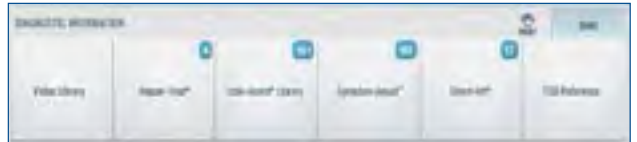
EXPERIENCE-BASED DIAGNOSTICS

On Tool

Code-Assist®	Provides more than 8 million experienced-based Confirmed Fixes™ for vehicle specific, individual OBD-II Diagnostic Trouble Codes (DTCs).
Repair-Trac®	The largest database of known vehicle-specific fixes available to the automotive aftermarket. Includes coverage from 1969 through 2009 for USA Domestic, USA Asian, and USA European vehicles.
Symptom-Assist™	Provides nearly 13 million experienced-based Confirmed Fixes™ for specific symptoms for specific vehicles.

Web Based

Fast Touch Websites	Connect to the shop's Wi-Fi to access your favorite websites right within live diagnostic sessions so no workflow is interrupted.
Direct-Hit®	Includes a free 60-day trial subscription.



ON TOOL REPAIR INFO

Pathfinder Trouble Shooting	Provides critical information: Code information, Symptoms, Specifications, TSB references, Data/sensor information, Component location, PCM connector information.
InfoTech Component Information Database	A vehicle-specific repair information database for testing most common vehicle components.

START THE REPAIR

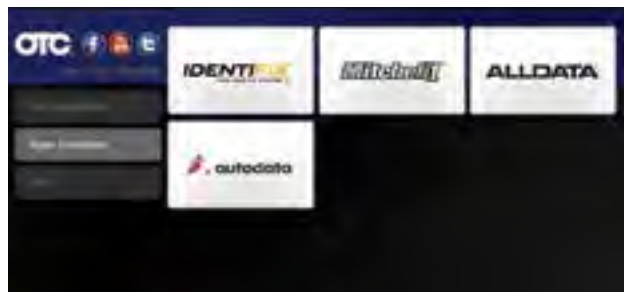
WI-FI INTERNET ACCESS AND MULTI-DEVICE PAIRING FOR MAXIMUM SHOP PRODUCTIVITY

CONNECTIVITY

Partner up with the included OTC J2534 Communication Device. Or pair up with the optional PC-based 2-Channel Tech-Scope® or TPR Tool via long-range Class 1 Bluetooth®



Access the Internet browser within a live diagnostic session and visit one of the Fast Touch websites known by technicians for their wide range of repair information and fixes.



LEARN THE TEST

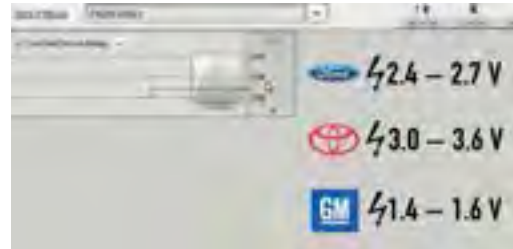
VIDEO TRAINING ON SCAN AND SCOPE TEST PROCEDURES, TOOL OPERATION AND MORE

EMBEDDED TRAINING VIDEOS

Videos within live diagnostic sessions don't interrupt workflow.



In one minute or less, learn test procedures commonly used by technicians every day. An instant alert shows if a video is available for the specific year/make/model selected. No need to attend a lengthy training class, or search on your smartphone — learn it now!



Read OEM-specific data where available



Watch videos any time in the video library

ALL MAKES COVERAGE KIT

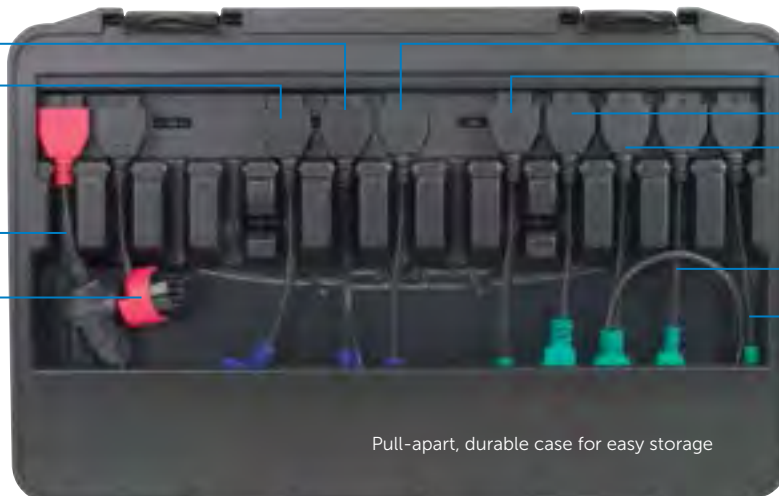
ALL REQUIRED OEM ADAPTERS FOR VEHICLES 1996 AND NEWER

Ford ABS / 3825-16

Ford EEC / 3825-12

Mercedes / 3825-25

BMW / 3825-28



Chrysler CCD / 3825-59

Toyota/Madza / 3825-17

Toyota / 3825-18

Mitsubishi/Chrysler / 3825-19

Nissan 2 / 3825-24

Kia / 3825-93

Pull-apart, durable case for easy storage

GO HOME EARLY TODAY

SHORTEN YOUR DIAGNOSTIC TIME, MAXIMIZE
BILLABLE LABOR HOURS, AND GET THE REPAIR DONE
FROM CODE-TO-FIX™ FASTER THAN EVER BEFORE

PRODUCTIVITY ENHANCEMENTS

Automated System Test

Perform a Comprehensive Health Test. Provides DTCs (generic and enhanced), Freeze Frame, Mode 6 Component Test, Mode 5 Oxygen Sensor Tests, Mode 1 Readiness Tests, and more.

All System DTC Scan

Perform a trouble code check of all supported vehicle systems in seconds. Fast validation that all systems are clear of DTCs before or following a repair. Test Generic and Enhanced DTCs, then store and print the record.

Software Wi-Fi Updates

12-month software subscription included.

GENISYS TOUCH™ DELUXE KIT

3895

Genisys Touch™ Deluxe Kit

Includes a ruggedized 10" high resolution display tablet, J2534-1 / -2 compliant Vehicle Communications Interface (VCI), 10 OEM adapters, OBD II cable, USB cable, 12V power cable, AC power supply and custom carrying case.



3895-08

Genisys Touch™ 12 Month Software Subscription

Genisys Touch Domestic, Asian and European Software 12 month subscription kit provides a year of frequent and valuable updates for new coverage, coverage enhancements, repair information and application improvements.



3825-12

Ford EEC Adapter



3825-16

Ford ABS Adapter



3825-59

Chrysler CCD



3421-93

Kia Adapter



3825-17

Toyota DCL 1/ Adapter



3825-18

Toyota DCL 2/ Adapter



3825-19

Mitsubishi/Chrysler
"Y" Adapter



3825-24

Nissan 2 Adapter



3825-25

Mercedes 38 Pin Adapter



3825-28

BMW Adapter



DIAGNOSTICS FOR LIFE



FASTEST CODE-TO-FIX® WITH A LIFETIME WARRANTY*

NEW BRAVO 2.0 SOFTWARE IS FASTER AND MORE RESPONSIVE

OTC has re-launched the Encore with enhanced diagnostic coverage and a lifetime hardware warranty. The mobile, Android-based system is easy to use, intuitive and fast.

No tool helps you fix faster than OTC Encore

- Re-engineered Bravo 2.0 software is faster, more responsive and includes major and minor bug fixes.
- First OTC tool with Bosch coverage database for European vehicles, focusing on Mercedes-Benz, BMW and Volvo
- Boot up in less than 15 seconds
- AutolD faster than anybody — identify CAN vehicles in less than 5 seconds
- Read and clear codes in seconds
- Access top reported code fixes in seconds
- Extended-hours tech service includes days, nights and Saturdays. Call 888-789-2602.

30 Years of Unmatched OE Coverage

Alert technicians to on-tool or web-based repair information including Identifix® Direct-Hit™. Full scan functionality, including OEM Domestic, Asian and European, bi-directional controls and enhanced data Perform a Google search right within a diagnostic session.



- ✓ LIFETIME WARRANTY*
- ✓ FASTEST TO FIX
- ✓ EXPANDED COVERAGE

- | | | | |
|--|---------------|--|-------------------------------------|
| | Android OS | | Built-in repair information |
| | 7-inch screen | | Touch-screen, capacitive display |
| | Wi-Fi | | Embedded Google™ Search |
| | Bluetooth® | | Deep-link to Identifix® Direct-Hit™ |

The Android robot is reproduced or modified from work created and shared by Google and used according to terms described in the Creative Commons 3.0 Attribution License.

NO OTHER SCAN TOOL COMPARES

One Touch AutoID™

Automatically detects CAN vehicles 2005 or newer to quickly set up year, make, model and engine — all in one tap.

One Touch DTC Fixes

Tap to get codes with access to millions of confirmed experience-based fixes.

Onboard Battery

Technicians asked. OTC listened. Avoid re-entering the vehicle ID and losing data when you cycle the key.

Embedded Training Videos

More than 70 videos show how to perform test procedures or functions in one minute or less.

Fast Touch Home Page

Custom browser home page with access to popular technician forums right from Encore.

30 MILLION EXPERIENCE-BASED REPAIR SOLUTIONS

No other tool has embedded Identifix® assets available during every type of repair, including Code-Assist™, Symptom-Assist™ and Repair-Trac™. OTC has added improvements to its 30 years of OEM level coverage with critical emphasis on most common vehicles seen by technicians every day (out-of-warranty vehicle years 1996-2012 for all OEMs).

Since OTC became part of the Bosch Automotive Service Solutions portfolio in 2012, we've combined our OTC and Bosch diagnostics coverage and made specific improvements to Land Rover, Subaru and Jaguar.

BATTERY DISCONNECT, KEY FOB AND REMOTE REPROGRAMMING PROCEDURES

The battery update covers Domestic and Import vehicles 2000 to present, with partial coverage for 1991-1999. Procedures include battery disconnection precautions, power windows, locks and sunroof reprogramming, engine and body control system resetting and more.

The key and remote programming update covers Domestic and Import vehicles 1996 to present, with partial coverage for 1993-1995. Procedures include system operation, unusual features, programming procedures, illustrated battery replacement procedures for remote and key transmitters and more.

HEAVY-DUTY SOFTWARE AND WIRELESS TPR*

The first integrated diagnostics tablet for Android™ with fast startup and onboard battery has just released wireless TPR and Heavy-Duty software.* Pair up with the optional 3834T OTC TPR TPMS Tool via Bluetooth®. The 3895-07 Heavy-Duty Standard kit is available for reading DTCs and viewing live data on Class 4 – 8 vehicles.



ENCORE KIT

3893

Encore Kit

Encore, OBD II cable, USB cable, power adapter and hard carrying case.

3893MVCI

Total Shop Solution – 3893MVCI OTC Encore + Bosch Mastertech VCI. For details on the Mastertech VCI see page 48.

3893-LTW

Encore 1-Year Subscription & Lifetime Hardware Warranty

Encore Domestic, Asian and European Software 1-year subscription kit provides a year of frequent and valuable updates for new coverage, coverage enhancements, repair information, application improvements and includes the Diagnostics for Life* lifetime hardware warranty.

Diagnostics for Life* lifetime hardware warranty means OTC supports your Encore for as long as you own it, as long as you update it.



*The "hardware warranty" applies to the Encore scan tool tablet only. Accessories, such as cables, adapters, batteries and case remain the 90 Day factory warranty from purchase.

GENISYS EVO 2014 SOFTWARE



MORE THAN 35,000 COVERAGE ADDITIONS IN 2014*

- Added coverage through 2014 for GM, Ford & Chrysler/Jeep
- Expanded systems coverage for many older Chrysler/Jeep and GM vehicles
- Expanded coverage for Ford Battery Monitor System Reset for 2011-2013 vehicles
- New coverage for Reprogram Injector Flow Rates for 2006-2014 Duramax diesels, required after replacing an injector

BMW - Battery Exchange Register, Calibrate Lateral Accel Sensor, Front Brake Zeroing, Inspection/Service Interval Reset, Oil Service Reset, Parking Brake tests, Rear Brake Zeroing, TPMS Registration

Chrysler/Jeep - Alternator Field Control, ABS Brake Bleeds, Height Sensor Check, Set Ride Height Level, Steering Angle Sensor Calibration, TPMS Registration

Fiat - Clear Steering Pull Compensation

Ford - Automated Bleed, Battery Monitor System Reset, Battery Saver Relay, Calibrate Lateral Accel Sensor, Calibrate Longitudinal Accel Sensor, IVD Sensor Calibration, Yaw Rate Sensor Calibration

GM - Brake Bleeds, Fuel Filter Life Reset, Oil Life Reset, Park Brake Cable Service Apply and Release, Power Steering Softstops Reset, Reset Trans Oil Life, Steering Angle Sensor, TPMS Registration

Honda - ATF Reset, Oil Life Reset, Steering Angle Sensor Calibration, TPMS Registration

Hyundai - Air Bleeding Mode, ASP Calibration, Pressure Sensor Calibration, Steering Angle Sensor, TPMS Registration, Wheel alignment procedure

Kia - Electric Park Brake Actuator Control Apply and Release, Air Bleeding Mode, TPMS Registration

Mazda - Automated Bleed, IVD Sensor Calibration, TPMS Registration

Mercedes - Clear Maintenance Intervals, Electric Parking Brake tests, Suspension tests, TPMS Registration, EHB Brake Bleed

Mitsubishi - All Sensor Calibration, Brake Bleeds, Steering Angle Sensor Calibration

Nissan - ABS Bleeds, Steering Angle Sensor Calibration, TPMS Registration, Zero Point Calibration

Smart - Alternator test

Toyota - ABS Bleeds, Battery Current Sensor Initialization, Suspension tests, Torque Sensor Adjustment, TPMS Registration, Zero Point Calibration

Volvo - Parking Brake service tests, Steering Angle calibration tests, Oil Light Reset tests, TPMS Registration, Battery Replacement and Battery Monitor Sensor Replacement

Audi - EPB Caliper Open and Close

* 30,000 new vehicle-ECU combinations, 3,500 new Systems, 2,800 new Bidirectional Tests

GENISYS™ / GENISYS EVO™ SOFTWARE KITS

3421-149	Genisys 2014 Super Bundle Domestic/Asian/Euro/System 5.0 with memory (3.0 and Older)
3421-150	Genisys 2014 Domestic/Asian, 2013 Euro 5.0 Loyalty Kit (4.0 and Newer)
3421-151	Genisys 2014 System 5.0, 4GB Memory Kit



3421-149

GENISYS EVO™ KITS	3875	3874	3874TPR	3874HD
Domestic 2014 Software	•	•	•	•
Asian 2014 Software	•	•	•	•
European 2013 Software	•	•	•	•
System 5.0	•	•	•	•
OBD II Smart Cable	•	•	•	•
OEM Domestic Cable Kit		•	•	•
ABS Cable Kit		•	•	•
TPR TPMS Tool			•	
HD Software & Cables				•



3874TPR



3421-79

Genisys Heavy-Duty Starter Kit

Genisys Heavy-Duty Standard software includes J1587/1708 and J1939 CAN communications. Kit includes 9-pin Deutsch cable, 6-pin Deutsch cable, Smart Card, and PC software CD.

NOTE: System 5.0, 4GB card minimum required to install; see No. 3421-151.



3834

Tire Pressure Monitoring Reset Tool Kit

- Compatible with the entire Genisys family of scan tools.
- Use the TPR to activate and decode sensor ID's and transmit them to the Genisys wirelessly.
- Register new sensor ID's on Asian vehicles.
- Bluetooth wireless communication adapter included.
- Quick reference reset procedures can be quickly accessed on the Genisys.

REFLASH, REPROGRAM, REVENUE



3829 Reflash, Reprogram, Revenue

Have you ever spent hours of labor chasing driveability issues only to find out that there was a software update available for the vehicle's computer? Yesterday's shops only needed to address diagnostics. Today's shops must also incorporate reprogramming. In many cases on today's modern vehicles, reflash is the only way to fix:

- OE engineering corrections
- Poor performance
- Check engine light issues
- Premature component failure
- Driveability issues
- Emissions related problems
- And many more!

Features

- J2534-1, -2
- ISO 22900 -1, -2
- Standard and custom OEM protocols and pin-selections
- Wireless with advanced networking functions
- Built-in wireless and data storage
- USB
- Wireless configuration and connection manager applications

3829 includes: Vehicle Communication Interface, power supply adapter kit, OBD II cable, power supply cable, USB cable, J2534 training CD, quick start guide, one-year warranty and protective carry case.



OTC-700A 70 AMP Power Supply Battery Charger

A power supply for Flash Reprogramming is a device that connects to the vehicle's battery and outputs a designated supply of clean DC power. The OTC Power Supply/ Battery Charger will allow the shop to power the widest variety of vehicles during Flash Reprogramming.

Power Supply Features

- Constant voltage output selectable from 13.0 to 14.8V DC
- Output current up to 70 amps
- Clean power for flash reprogramming
- Provides power to vehicles on display

Battery Charger Features

- Fully automatic operation for 12V batteries
- Works with regular automotive, deep-cycle, AGM, and gel cell battery types
- Variable charge rates 4/20/70 amps
- Digital volts and amps display
- Manual mode with digital timer



3829-700A Combines Reflash, Reprogram, Revenue and 70 AMP Power Supply Battery Charger

Powerful J2534 solution that includes a wireless VCI and a 70 amp clean Power Supply.



TECH-SCOPE™

3857

The OTC Tech-Scope™ is a standalone two-channel high-speed lab and ignition oscilloscope with multimeter that allows service technicians to quickly and efficiently test and measure virtually all of the electrical and electronic components and circuits in a modern vehicle. The tool features galvanic isolation not found on automotive scopes for hardware protection and includes an ignition scope and a digital multimeter with an ohm meter. The Tech-Scope is capable of reading 40 million samples per second on each channel with 10 ohm input impedance—eliminating the need for special adapters to capture signals from critical components. The included InfoTech software provides a vehicle-specific repair information database for testing most common vehicle components with step-by-step test procedures using a lab scope or multimeter.



Oscilloscope Features:

- Lab scope, ignition scope and digital multimeter display are user selectable.
- Vertical cursors show time difference/frequency between the two cursors and waveform values at the selected points.
- Automatic record stores waveforms in a circular buffer with 50 screens of data.
- AC/DC coupling.
- Auto setup automatically adjusts the vertical scale, the sweep time and trigger point.
- Peak detect captures high speed signals at the maximum sampling rate, even at slow sweep speed and is user selectable.
- Ability to capture the analog and digital glitches, along with the current waveform.
- Selectable glitch sensitivity: low – medium – high.
- Ability to change the background color.
- Ability to play the recorded files.
- Ability to enable or disable the scale grids.
- Ability to enable or disable the scale display.
- Ability to save the screen shot of the display.

Digital Multimeter Features:

- Measures:
 - DC volts
 - True RMS AC volts
 - Ohms
- Continuity check with audible beep features ability to turn audio on or off.
- Frequency
- Duty cycle
- Pulse width
- Auto scale
- Screen refresh is at the rate of 10 times/sec.
- Ability to view the data in following graph types:
 - Strip chart
 - Dial chart
 - Bar chart
 - Digital chart
- Ability to view the minimum, maximum and average values.
- Ability to turn the grid lines on or off for strip chart.
- Ability to toggle the background between two colors.
- Ability to turn the scale display on or off.

3857 includes: Tech-Scope, scope probe green, scope probe yellow, kV probe secondary, ground clamp USB cable, Tech-Scope CD, one-year warranty and protective carry case.



3398

Fuel Injection Pulse Tester

Fuel injector testing requires precision equipment. This vehicle powered tool fills that requirement. It enables you to check cylinder balance by firing individual injectors at 1/2-second increments in three different ranges: 1 pulse of 500 milliseconds, 50 pulses of 10 milliseconds, 100 pulses of 5 milliseconds.

- Power and output lights indicate test activation.
- Includes wiring harness adapter and instructions.



3395

Multimedia Interface Tester (MIT)

- Will pair via Bluetooth, Auxiliary or USB to vehicle to diagnose connectivity issues.
- Verify and diagnose customer complaints when connecting with infotainment systems.
- Provides a clean signal for accurate and reliable diagnostics.
- Works on Ford, GM and Hyundai vehicles.
- Includes a storage case that will accommodate the MIT and related adapters, etc.



3415

CAN Test Box

Breakout Box and Protocol Detector

- Connects between Diagnostic Link Connector (DLC) and scan tool
- Detects data and protocol communication
- Monitors system voltage – Display and high/low alarm
- Connect leads for increased diagnosis, analysis, and monitoring

Useful Functions

- Verify ECU activity
 - LEDs at pin-out display signal detection, Flashing LEDs for ECU activity
- Monitoring of OBDII data lines
- Probe lines with scope or multimeter for detailed signal information
- Check & monitor battery voltage
 - Continuous numeric display or voltage
 - Alarm warning when voltage drops below 11.6v or rises above 15.2v



SCAN TOOLS SCAN DIAGNOSTICS

SCANPRO™ ELITE

3499N

OBD I and OBD II Scan Tool

The ScanPro™ Elite has a full color screen and an ergonomically designed housing. This full function OBD I and OBD II scan tool provides enhanced powertrain coverage for GM, Ford, Chrysler, and Toyota. All compliant manufacturers are covered with global OBD II including CAN-based vehicles.



Displays codes and descriptions on the same screen



Graph live data or recorded data "flight record and playback"

Product Features:

- Retains data from the last 5 vehicles scanned
- Color QVGA graphic backlit LCD
- ABS code/erase capability for 1996-2006 GM, Ford and Chrysler vehicles
- On tool acronym library
- Dynamic language switching – English & Spanish
- Toyota OBD I functionality – cable sold separately
- USB port in tool – cable Included
- Print data via USB PC interface
- Graphing data – all vehicles.
- OBD II drive cycle mode
- GM, Ford, and Chrysler OBD I functionality
- Gas and diesel engine coverage
- Supports multiple trouble code requests, generic codes, pending codes, enhanced codes, and GM DTC status
- On screen definitions of DTCs
- Battery power (6 AAA batteries included)
- Quick test
- Pending codes
- Erase codes
- View data
- Record and playback of data
- Freeze frame
- O2 monitor test
- Diagnostic monitor test
- On board systems
- Vehicle information
- State OBD check
- Code lookup

3499N includes: Base scan tool Vehicle cables to support OBD II, Ford OBD I MCU/EEC-IV, Chrysler OBD I SCI and GM OBD I ALDL, soft carry case, USB update cable, 8' extension cable, Scanning Suite CD for Windows XP, Vista and 7, 6 AAA batteries



TRILINGUAL OBDII, CAN, ABS & SRS SCAN TOOL

3111PRO

Trilingual OBDII, CAN, ABS & SRS Scan Tool

Fix It Faster with Expanded Domestic and Asian ABS & Airbag coverage. Now with over 4.3 million verified fixes at the touch of a button! Use AutoID® to automatically pull vehicle information for most 2000 and newer vehicles or use Component Locator to find where a component is located on the vehicle.



USB Port: For receiving online updates.



CodeConnect™
Provides millions of verified fixes specific to the vehicle's make, model, year and engine.

CodeConnect™ Revolutionizes vehicle repairs. The CodeConnect information takes vehicle repairs to another level for Technicians at an affordable price. These actual vehicle fixes have been reported and then verified by our team of ASE certified technicians.

Product Features:

- Airbag (SRS) & ABS Coverage: 1996-2010 GM, Ford and Chrysler 1996-2009 Honda, Hyundai, Nissan and Toyota
- CodeConnect™
- Record and playback LIVE engine data
- Display LIVE real time data
- Enhanced code request for GM, Ford, Chrysler, Honda, Hyundai, Nissan and Toyota vehicles
- 2010 MY coverage for HD, Hybrid and Diesel vehicles
- ABS code read/erase capability for most 1996-newer GM, Ford and Chrysler vehicles
- Custom data list for LIVE data
- Dual graphing - Graph two PIDs (data items) at the same time for comparison
- Displays all modes of global OBD II data
- Displays enhanced code definitions

Software Features:

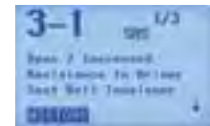
- Read and erase DTCs
- Compatible with OBD II and CAN vehicles 1996 & newer
- Read and display MIL status
- Read and display I/M monitors
- Visual indicator when communicating with vehicle
- Freeze frame data
- Drive cycle mode
- State OBD check
- Code lookup library
- Trilingual menus and definitions

Hardware Features:

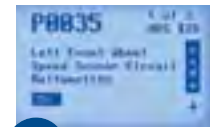
- Review data off vehicle with optional battery power
- Field updatable (USB update cable included)
- Trilingual manual (English, Spanish, & French)
- Print data to PC



3111PRO includes: Scan tool and user manual, USB update cable, Scanning suite CD for Windows XP, Vista and 7 and 8, 4 AAA batteries, deluxe soft storage case.



SRS AIRBAG Airbag screen view



ABS ABS code screen view

SOFTWARE UPGRADE



3111-01

Software upgrade
(Adds all the features of the 3111PRO to current 3111 owners)

Vehicle Coverage

- 1996-2010 GM, Ford, Chrysler ABS Coverage
- 1996-2010 GM, Ford, Chrysler SRS/Airbag Coverage
- 1996-2009 Toyota, Honda, Hyundai & Nissan ABS Coverage
- 1996-2009 Toyota, Honda, Hyundai & Nissan SRS/Airbag Coverage

Enhanced Code Request – For 1996-2010 GM, Ford, Chrysler and 1996-2009 Honda, Hyundai, Nissan and Toyota vehicles

Additional Live Engine data – Now over 300+ possible PIDs. View engine RPMs, coolant temperature, Oxygen sensor readings & more!

AutoID™ – Automatically retrieves VIN from vehicle and decodes to Year/Make/Model

Component Locator – Text descriptions indicate where the vehicle component is located

TRILINGUAL OBD II/EOBD & CAN SCAN TOOL

3109N

Trilingual OBD II/EOBD & CAN Scan Tool

Use AutoID® to automatically pull vehicle information for most 2000 and newer vehicles. New features include Component Locator to indicate where a component is located on the vehicle and the ability to graph live data. Additionally, the OTC 3109N displays all modes OBD II data and meets European OBD standards.



OBD II information available:

- Read and display LIVE sensor data
- Displays generic and enhanced definitions on screen
- Read and display MIL status
- Read and erase diagnostic trouble codes
- It will give visual indication when the tool is trying to communicate and retrieve data from an OBD II vehicle
- Read and display I/M monitors (emissions)
- Read and display pending DTCs
- Read and display pending and permanent codes
- Read and display VIN number, CVN and Cal ID
- Display State OBD check
- Display OBD II Drive Cycle Mode
- Read and display O2 Monitor Test
- Read and display Diagnostic Monitor Test
- Read and display On Board Systems

Product Features:

- Over 15,000 code definitions for comprehensive coverage
- Field updatable via USB port for future expansion EOBD compatible
- CE certification
- Trilingual menu, manual and definitions (English, Spanish, French)

OTC 3109N DIMENSIONS

Width	2.75 inches
Height	5 inches
Depth	0.75 inches
Cord Length	31 inches

3109N includes: OBD II/EOBD scan tool, user manual and CD, USB cable, USB port for receiving online updates.

POCKETSCAN® CODE READER



3108N

PocketScan® Code Reader

Now with LIVE data! View vehicle RPMs, coolant temperature and more. Over 300+ possible data items available. Diagnostic Trouble Codes (DTCs) and descriptions are just a start of the tasks it can handle. In addition to Live data, the OTC 3108N also provides Freeze Frame data, VIN info and performs the important task of (I/M) Inspection and Maintenance testing or emissions-readiness by displaying the I/M readiness monitor status. Great for use before and after repairs are made. The small size makes it perfect for tow trucks or service vehicles as well as home use.

Product Features:

- Over 4,000 generic code definitions
- Compatible with all 1996 and newer OBDII and CAN vehicles
- Automatically reads DTC's when connected for fast diagnostics.
- Erases DTCs and turns off the light
- Reads and displays MIL status
- Reads and displays I/M monitors
- Reads and displays pending and permanent codes
- Reads and displays freeze frame data
- Reads and displays VIN (easy way to check vehicle ID number)

OTC 3108N DIMENSIONS

Width	2 inches
Height	3.18 inches
Depth	0.65 inches
Cord Length	31 inches

BATTERY RESET TOOL



3112

Battery Reset Tool

The OTC 3112 Battery Reset Tool has all you need to quickly and easily reset the battery life. The 3112 Battery Reset Tool has the latest software to work on today's vehicles where a battery reset procedure is required. Don't bother with more expensive tools with scanning features you don't need. The OTC 3112 Battery Reset Tool is reliable, affordable and gets the job done.

Product Features:

- For use with:
 - Late Model Ford F-Series Trucks
 - Late Model BMW
 - Late Model Mini Cooper
- Updateable
- AutoID™ – Automatically pulls Make/Model/Year/ Engine for most vehicles
- Trilingual Menu – English, Spanish and French
- Upgrade software Compatible with Windows XP, Vista, 7, and 8.
- Compatible with 32 and 64-bit OS

SCAN TOOL COMPARISON CHART

SCAN DIAGNOSTICS



	3108N Code Reader	3109N OBD II Scan	3111PRO Code Connect Scan	3499N ScanPro Elite	Genisys EVO Family	3893 OTC Encore	3895 Genisys Touch
--	-------------------------	----------------------	---------------------------------	------------------------	-----------------------	--------------------	-----------------------

SCAN FUNCTIONALITY

CAN Enabled Tool (no adapters to buy)	•	•	•	•	•	•	•
Global OBD II (Domestic, Asian, European)	•	•	•	•	•	•	•
OBD II Generic Diagnostic Trouble Codes	•	•	•	•	•	•	•
Diagnostic Trouble Code Descriptions	•	•	•	•	•	•	•
Vehicle Information (Mode 9)	VIN only	•	•	•	•	•	•
Freeze Frame Data	•	•	•	•	•	•	•
AutoID® Identifies VIN and vehicle on most 2000–newer		•	•			•	•
Upgradable		•	•	•	•	•	•
State OBD Check		•	•	•	•	•	•
Generic Data Stream	•	•	•	•	•	•	•
Manufacturer Specific Diagnostic Trouble Codes		•	•	•	•	•	•
OEM Enhanced Diagnostic Trouble Codes			•	•	•	•	•
Graph Data Stream		•	•	•	•	•	•
OEM Enhanced Data Stream				•	•	•	•
Domestic OBD II OEM Enhanced			•	•	•	•	•
Domestic OBD I				•	•	•	•
Domestic OEM Non-Engine Coverage			OBD II ABS/ Airbag	ABS & Trans	•	•	•
Asian OEM OBD II Enhanced				Toyota	•	•	•
Asian OBD I				Toyota	•	•	•
Asian OEM Non-Engine Coverage			OBD II ABS/ Airbag		•	•	•
Latin America Coverage					•	Future	Future
OEM Bidirectional Controls (Actuator Tests)					•	•	•
European OEM OBD II Enhanced					•	•	•
European OBD I					•	•	•
European Non-Engine Coverage					•	•	•
Heavy Duty Standard Coverage					Option	Option	Option
J2534 All Makes Reprogramming							•
Automated System Test					•	•	•
All System DTC Scan				OBD Quick Test	•	•	•
Multiple Language Support		•	•	•	•	•	•
PC Software		Scanning Suite	Scanning Suite	Scanning Suite	ConnecTech	N/A	N/A
Wired & Wireless Internet Application Connectivity						•	•

SCAN TOOL COMPARISON CHART SCAN DIAGNOSTICS



3108N
Code
Reader

3109N
OBD II Scan

3111PRO
Code Connect
Scan

3499N
ScanPro Elite

Genisys EVO
Family

3893
OTC Encore

3895
Genisys Touch

VEHICLE DIAGNOSTIC SOFTWARE INFORMATION

Code Connect OBD II DTC Tech Tips							
Pathfinder Troubleshooting Diagnostics							
Repair-Trac VIN Specific Tech Tips							
Code Assist DTC Specific Tech Tips							
InfoTech Driveability & Component Test Software							
Identifi® Direct-Hit Technician deep linking							
Symptom-Assist Specific Tech Tips							
AutoDetect							
Auto ID							
Cloud Integration							
Embedded Training Videos							

DIAGNOSTIC ACCESSORIES

High Speed Scope							
Bluetooth Wireless TPMS Sensor Reprogramming							
5-Gas Analyzer							

HARDWARE

Color Display							
Monochrome LCD	Character Mono					N/A	N/A
Detachable Cable							
Battery Power							
High Resolution Touch Screen						7" Capacitive	10" Resistive
J2534 Hardware Compliant VCI							
Cables with Color Coding, Part Numbers, and Description							
AirBridge Technology WiFi Wireless							
Bluetooth Long Range Wireless							
Headphone Jack							
Support Stand							
Stereo Speakers							
Wireless to the car VCI							
VGA Video Out							

SOFTWARE

Internet Browser							
Android Operating System							
Windows Operating System							
Windows Printer Support							

HEAVY-DUTY WIRELESS DIAGNOSTIC SYSTEM



PC PROGRAM FOR HD STANDARD DIAGNOSTICS

- RP1210 compatible and will work with any RP1210 VCI.
- SAE J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage.
- Read and clear diagnostic trouble codes.
- Live vehicle data of HD Standard Engine parameters.
- Vehicle data communication and live data stream.
- Demo mode permits operation without vehicle connection.
- On-screen definitions of diagnostic trouble codes.
- PC & CD user's manual.
- Customizable line graphs .
- Automatic recording of data.
- Print screen data or save reports to print later.
- Ez-Tap Kits Available.

3070

HD Scan Software

- Stand-alone software.
- Works with any RP1210 interface (VCI).

3076

HD Scan with Ez-Tap

- In-shop wireless capability.
- Ez-Tap Wireless Vehicle Communication Interface (VCI) works with OEM diagnostic software.
- One wireless VCI for all your diagnostic software.
- Eliminate cables and cable replacement costs.

3086

HD Scan with Ez-Tap Extended Range

- 300 ft. wireless range to scan trucks anywhere on facility grounds.
- Scan trucks and preform initial diagnosis before you bring them into the shop.
- One wireless VCI for all your diagnostic software.
- Eliminate cables and cable replacement costs.



Ez-Tap 3076



Ez-Tap 3086

EZ-TAP
HEAVY-DUTY WIRELESS DIAGNOSTIC SYSTEM



**EZ-TAP WIRELESS DIAGNOSTICS
KITS AND ACCESORIES**

3075

Ez-Tap Wireless Diagnostic Hardware Kit

The EZ Tap Diagnostic kit enables a Heavy-Duty facility to use their OEM software for direct diagnostic mode operation.

Kit includes: Ez-Tap wireless (non-locking) VCI, Ez-Base wireless adapter, Ez-Tap 9-pin to 6-pin adapter, USB cable and Ez-Tap CD.

Note: OEM diagnostic software not included.



3075-06

Ez-Base Extended Range Wireless

Ez-Base Extended Range allows even more range and flexibility for your truck yard or service environment.

- 300+ foot range with the included antenna.
- Built-in Wireless signal strength indicator lights.



3075-01

Ez-TAP Wireless VCI

9-pin non-locking



Non-Locking



3075-01

3075-02

Ez-TAP Wireless VCI

9-pin locking



Locking



3075-02

Note: For your PC to communicate with the Wireless Ez-TAP, you will need an OTC EZ-Base (3075-05) or OTC EZ-Base ER (3075-06).

3075-03

Ez-TAP USB VCI

9-pin non locking, 16 foot USB cable and Ez-TAP CD.



3075-03

3075-04

Ez-TAP USB VCI

9-pin locking, 16 foot USB cable and Ez-TAP CD.



3075-04

3075-08

Ez-TAP Adapter

9-pin to 6-pin adapter cable.



3075-08

3940-HD

Heavy Duty Digital Multimeter

OTC 550 Series Auto Ranging Multimeter

- Powerful professional grade test functions
 - Frequency
 - Duty Cycle
 - Diode & Continuity Tests

Mid-Range Amp Probe

- Non-intrusive AC/DC current measurement
- Measurement range of 2–600 amps AC/DC
 - Covers HD truck components and electric motors



Extended Length Test Leads

- 5 ft. test leads to provide improved reach
- Detachable probes allow use with amp prob

3418

OTC Heavy-Duty Code Reader

- Class 4 – 8 truck coverage.
- HD J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage and more for diagnostic trouble codes!
- Read and clear diagnostic trouble codes.
- Provides on screen DTC definitions for heavy-duty standard codes.
- Battery powered for off vehicle use.
- Internet update capable.
- Heavy-Duty Standard compliant construction, marine, agriculture, and industrial diesel power plant configurations!



3418 HD Reader Kit Includes: HD reader tool, 9-Pin deutsch cable, 6-Pin deutsch cable, operations manual, 3-year warranty, and soft nylon carrying case.



3417

OTC Heavy-Duty Scan Tool

For Heavy-Duty shops that need a second tool in the shop and for their mobile repair trucks.

Product Features:

- Brilliant Color Display
- Class 4 – Class 8 truck coverage featuring "Automatic Protocol Search".
- HD J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage and more!
- Live vehicle data such as: Engine speed, Engine ECU temperature, Percent acceleration pedal position, Engine intercooler temperature, Engine coolant temperature, Battery volts, Alternator volts, Ambient air temperature, Air inlet temperature
- Read and clear diagnostic trouble codes.
- Global OBD II – All 9 Modes.
- English, Spanish, and French support
- Battery powered for off vehicle use.
- Trilingual Quick Start Guide included to help technicians get started fixing cars FAST.
- CD-based manuals in Spanish, French, and English.
- Customize data views in line graph, LED, or digital format with the push of a button.
- Three record modes – marker frame, freeze data history, and code triggered record.

3417 HD Scan Kit Includes: HD scan tool, 9-Pin deutsch cable, 6-Pin deutsch cable, OBD II cable, heavy duty cable, USB cable, ScanMate software operations manual, carrying case and 3-year warranty.

DIGITAL DEF TESTER / READY SCAN™ / INSPECTION CAMERA / INFOLOGGER ELECTRONIC DIAGNOSTICS

3095

Heavy-Duty Digital DEF Tester

Quick, easy and accurate measurement of UREA concentration. Ensure the proper operation of Class 7-8 trucks utilizing the SCR system with accurate Diesel Exhaust Fluid solution displayed on screen.

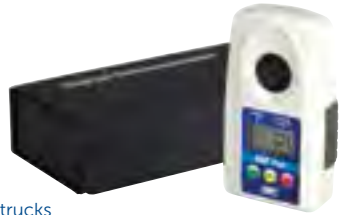
SCR and EPA 2010

EPA regulations require all diesel engines manufactured on or after January 1, 2010 to meet lowered NOx emissions standards.

- Most heavy duty engine (Class 7-8 trucks) manufacturers, have chosen to utilize SCR. This Includes Detroit Diesel (DD13, DD15, and DD16 models), Cummins (ISX line), PACCAR, and Volvo/Mack.
- SCR-equipped engines require the periodic addition of Diesel Exhaust Fluid (DEF, a urea solution) to enable the process. DEF is available in a bottle at most truck stops, and some have installed bulk DEF dispensers near the Diesel Fuel pumps. However, to ensure the proper operation of the SCR system, operators must ensure the DEF in their vehicle consists of a 32.5% Urea / Water solution.

Features

- Digital Display
- Displays % UREA
- Displays washer fluid freeze point



3358

OTC Ready Scan™ Readiness Monitor Tool

A drive cycle is required after any emissions related repair. The 3358 OTC Ready Scan eliminates drive cycle guesswork by notifying any driver, or your customer, with color coded LEDs and built in speaker that the drive cycle has been completed and the vehicle is Ready. Once the vehicle's OBD II system is Ready, repair work is confirmed. If a state emission inspection is required, a retest can then be performed. Works on 1996 and newer OBD II and CAN compliant vehicles.

Product Features:

- Easy to install and no set up required—Connects easily into the vehicle's OBD II connector and is able to display status in 15 seconds.
- Bright color coded LED's provide Readiness Status. Green LED- Vehicle is Ready.
- Built in speaker provides audible tone every 5 minutes when vehicle becomes Ready.
- Ready Scan is powered from the vehicle—no batteries required.



3880X

OTC Automotive Inspection Camera

With an industry leading 5.5 millimeter camera, it allows the technician to inspect hard to reach areas that would have normally required taking an engine apart or removing body panels to inspect. With the added wireless display and ability to record images and video, the 3880X is an ideal tool for any automotive, aviation or industrial technician.

Product Features:

- Micro camera transmits images and video to the removable wireless camera to allow viewing of hard to reach areas.
- Large 3.5" inch high resolution color screen for optimal viewing.
- Detachable 36" camera snake with position hold shaft.
- Images and video are recorded on the included SD card and can be viewed on the camera display or transferred to a computer.
- Easy to change camera allows for use with various camera sizes and lengths.
- Magnetic display mount allows for hands-free viewing.
- Camera head includes four built-in adjustable LEDs for optimal viewing from light to dark areas.
- IP67 Rated camera for complete protection from dust and standard automotive chemicals.
- Unit is powered by removable power pack with four rechargeable AA batteries (batteries and charger included).

Applications:

- Micro 5.5 mm camera allows for inspection through spark-plug holes.
- Inspecting cylinders, valves, diesel injectors and glow plug ports.
- Viewing behind body panels and under the dashboard for electrical wiring and connections.
- Examine for corrosion and wear in hard to see areas.
- Inspect fluid lines for leaks.

3880X includes: Video Scope, Magnetic mount for wireless display, Micro SD card, XvidCodec installation CD, USB cable, Video out cable, Rechargeable AA batteries (4) with charger, AC power adapter, one year warranty and Protective carry case.



3005

InfoLogger OBD II and EOBD Data Recorder

InfoLogger is a remote diagnostic tool that collects your engine data while you drive.

Product Features:

- Records live engine data and trouble codes automatically
- Real-time data collection
- Plug-and-play tool with compact design
- PC required to view vehicle data and graphs
- Compatible with Windows 2000, NT, ME, XP, Vista and 7
- Includes USB cable for easy and quick downloads/uploads.





CE-certified

3840F

Automotive 2-Channel Lab Scope

The exclusive vehicle-specific database in the 3840F contains information for most domestic vehicles as well as many imports. The Scope also recommends the appropriate test procedures for fast, accurate repairs. Visible on the screen are diagrams showing pin numbers and wire colors for both the PCM and the component connector.

Product Features:

- Powerful built-in reference information for each preset test include a test procedure, normal reference signal pattern, theory of operation, and trouble shooting tips.
- A 25 Mega-sample per second sample rate for rapid data updates.
- True RMS GMM (Graphing Multimeter) measurements and graphs.
- "Glitch Snare" feature captures, displays, and saves abnormal signal patterns in the Scope mode for component testing.
- Real-time comparison between actual waveforms and reference waveforms on the same screen for component testing.
- Preset tests enable the user to check the majority of automotive sensors, actuators, and systems easily and quickly.
- The secondary ignition single function displays the waveform along with the spark voltage, RPM, burn time, and burn voltage.
- USB supports fast update for code and data over the internet.

3840F includes: Automotive 2-Channel Scope, Shielded Test Leads with Ground (2 pcs), Inductive Pickup, Secondary Ignition Pickup, Alligator Clips (3 pcs), Back Probe Pins (3 pcs), Test Probes (3 pcs), AC Power Adapter, Ni-MH Rechargeable Battery Pack (Installed), USB Interface kit, User Manual and Soft Carrying Case.

Replacement Accessories

- 3840-01** – Red & yellow test leads.
- 3840-06** – Ignition probe.
- 3843-07** – Inductive pickup.



TIMING LIGHTS



Standard features

- All metal inductive pickup.
- Reflected, super bright Xenon flash.
- Removable leads with positive twist lock connector.
- One touch control.
- Durable, plated ABS housing with over-molded grips.
- Heat resistant over-molding on clips.
- Blow-molded case included.

3363

Inductive Timing Light

Professional inductive timing light designed for standard base timing.

Unique features

- On/off touch control

3363



3365

Advance Timing Light

Professional advance timing light allows accurate adjustment of base and advance timing reading.

Unique features

- Adjustable knob measures centrifugal, vacuum, and computer advance.
- On/off touch control.

3365



3367

Digital Timing Light

Professional digital timing light has advanced features with a bright LED screen and mode indicator lights.

Unique features

- Microprocessor-controlled circuitry.
- LED tachometer display reads 0-9999 rpm.
- LED advance display indicates to 1/10.
- Unique flashlight feature.
- 2/4 cycle and rpm/advance lights.
- Up and down scroll buttons.

3367



3596J

Oil Light Reset Tool Kit

- Oil changes are the #1 service your shop will perform each year.
- The 3596J kit helps eliminate the need to take the vehicle to the dealer or use an OEM scan tool to reset oil service lights.
- Electronic tool set includes the adapters and interface module required to reset the oil service lights on Volkswagen, Audi, Mercedes Benz, BMW, and Volvo.
- The included manual details Oil Light Reset tool procedures as well as the manual reset procedures for domestic and import vehicles.
- The new Oil Light Reset Tool now gives you the ability to update the tool vehicle coverage by connecting to a PC with future update kits.

3596J includes:

- 3596H-1** – Main unit cable.
- 3596H-2** – BMW Connector.
- 3596H-3** – Mercedes-Benz Connector.
- 3596H-4** – OBD II Connector.
- 3596H-5** – Volvo cable.
- 3596H-6** – Transfer plug.
- 3596H-7** – VW and Audi cable.
- 3596H-8** – Power cable.
- 3596J-9** – Reset Procedure Manual.
- 3596J-UPD** – Oil Light Reset Update Kit.



Timing Light Comparison - Functions/Features

	3363	3365	3367
Conventional, electronic, computer controlled ignition systems	•	•	•
DIS and 2-cycle systems	•		•
On/off touch control	•	•	
Adjustable advance		•	•
Digital LED readout tach and advance			•
2- to 4-cycle and rpm/advance mode lights			•
2- to 4-cycle selector button			•
Flashlight feature button			•
RPM to advance selector button			•
Up or down scroll buttons			•

ACCESSORIES / CABLES ELECTRONIC DIAGNOSTICS

GENISYS TOUCH ACCESSORIES

3895-01 AC Power Supply



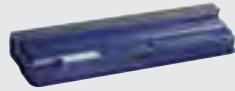
3895-02 AC Power Cord



3895-03 Carrying Case



3895-05 Li-ion Battery



3895-06 Screen Protector



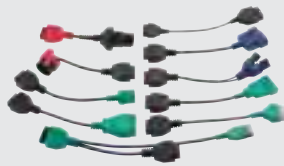
3895-07 Heavy Duty Starter Kit



3895-08 12 Month Subscription



3895-100 OEM Cable Kit



GENISYS TOUCH / ENCORE CABLES

Number **Description**

3421-93 KIA adapter



3825-09 GM 12 pin adapter



3825-10 Chrysler I adapter



3825-11 MECS ABS adapter



3825-12 FORD EEC adapter



3825-13 GEO-ISUZU adapter



3825-14 MAZDA MECS adapter



3825-15 UNIV 9 PIN adapter



3825-16 FORD ABS adapter



3825-17 TOYOTA DCL 1/ adapter



3825-18 TOYOTA DCL 2/ adapter



3825-19 MITSUBISHI/CHRY "Y" adapter



3825-20 NISSAN 1 adapter



3825-21 SUBARU adapter



3825-22 MITSUBISHI/HYUNDAI adapter



3825-23 HONDA adapter



3825-24 NISSAN 2 adapter



3825-25 MERCEDES 38 PIN adapter



3825-26 MERCEDES 1 PIN adapter



3825-27 VW 4 PIN adapter



3825-28 BMW adapter



3825-34 CHRY 3 adapter



3825-59 CHRYSLER CCD adapter



3829-01 OBD II cable



ENCORE ACCESSORIES

3893-01 Optional Battery



3893-03 AC Charger



3893-04 Carrying Case



3895-07 Heavy Duty Starter Kit



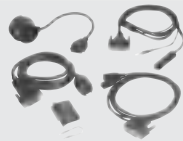
3895-08 12 Month Subscription



GENISYS EVO ACCESSORIES

Number **Description**

3421-75 USA OEM European Cable Kit



3421-94 USA Asian OEM Cable Kit



3421-70 USA Domestic OEM Cable Kit



3780 Genisys Performance 5-Gas Module



NEMISYS ACCESSORIES

Number **Description**

3774-01 DB25 to OBD II cable



3774-02 DB25 to GM OBD I cable



3774-03 DB25 to Ford OBD I cable



3774-04 DB25 to Chrysler OBD I cable



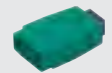
3774-05 Cigarette plug power cord



3774-10 Nissan DCL-1 Adapter



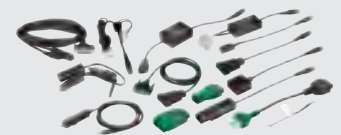
3774-17 Toyota DCL 1 Adapter.



3774-18 Toyota DCL 2 Adapter.



3774-19 Asian Cable Kit



3774-20 USB A-B Cable



3774-34 Nemisys OBD II Smart Cable Expands the system coverage to include GM Single Wire CAN systems and more!





3774-38 2014 software with Memory Kit





ACCESSORIES / CABLES ELECTRONIC DIAGNOSTICS

GENERAL APPLICATION

Number	Description	
212638	Battery adapter for Monitor or Genisys. Used for under-hood access to 12-volt power supply	
3305-71	DB-25 extension cable to connect 25-pin Monitor and Genisys adapter cables	
3305-72	DB-25 to 8-pin DIN extension cable.	
3421-04	AC/DC power adapter for Genisys	
3421-08	6' PC to scan tool cable, DB-9 to RJ-45	
3421-44	20' PC to scan tool cable, DB-9 to RJ-45	
3421-65	USB to serial adapter	
3421-67	Compact flash reader to USB adapter for Genisys and Nemisys	
3421-111	Scan Tool Connector Saver	
239180	9.6V Genisys battery	

Number	Description	Application	
3421-88	OB2 II Smart Cable 2006 software (Genisys only)	Replaces 3305-73 cable and Requires all system smart inserts	
3305-73	System Smart Insert OB2 II 25-pin cable	Use with Monitor Elite, Monitor Enhanced or Genisys. Use with 25-pin SSI.	




DOMESTIC APPLICATION

Number	Description	Model & Year	GM
212633	GM 14" vehicle adapter cable	GM most system 82-'95	
212653	Turned port Inj. adapter cable (gray)	GM 5.0L TPI '86 GM 5.7L TPI '86-'89 GM 2.8L V6 P4 '86-'89	

DOMESTIC APPLICATION

3305-17	Geo/Isuzu adapter cable	GM Geo & '87-'95SpectrumGM Isuzu and Luv '81	
238464	GM ABS cable	GM ABS '90-'95Kelsey Hayes	
Number	Description	Model & Year	Ford
3305-27	Ford ABS cable	Ford ABS Mystique '95 Econoline Van '94-'96	
3305-58	Ford II14" adapter cable (gray)	Ford EEC IV '81-'95 MCU, ABS,suspension. Use with Pathfinder II or newer software.	
3305-84	Ford III, 25-pin,18" cable (red) with 4' power lead	Ford EEC IV DCL '83-'95 ABS, suspension. Use with Pathfinder III or newer software	
213596	MECS 6' adapter cable	Ford/Mazda '88-'95mfd. vehicles	
3305-14	MET adapter	Ford/Mazda '91-'95 mfd. vehicles.	
Number	Description	Model & Year	Chrysler
212635	Standard 12" adaptercable	Chrysler '84-'95	
3305-65	Chrysler III25-pin, 18" cable	LH Chrysler '93-'95 CCD '88-'95 with 4000 Enhanced,Monitor Elite, Nemisys, Genisys	




ASIAN APPLICATION

Number	Description	Model & Year	
212633	GM 14" adapter cable	Isuzu Pickup (3.1L) '91-'95 Rodeo '91-'95 Trooper II '89-'95	
3305-68	Honda/AcuraJumper	Honda '89-'95 Acura '91-'95	
213596	MECS 6' adapter cable	Mazda '83-'95	



ASIAN APPLICATION

Number	Description	Model & Year	
3305-14	MET adapter cable	Mazda 323/Protege '90-'95, '92-'95 Miata '90-'95, MX-3 '92-'95	
216044	Nissan 12" adapter cable	Nissan '87-'95	
3305-15	Subaru adapter cable	Subaru SPFI '87-'93 MPFI (Except Justy) '88-'93 EFC (Justy) '88-'90	
3305-17	Geo/Isuzu adapter cable	Isuzu I-Mark (Fuel Inj.) '88-'89 I-Mark (Carb.) '87-'89 I-Mark '85-'86 Impulse '84-'92 Pickup, Amigo '88-'93 (2.3 & 2.6L) Rodeo '91-'93 Trooper II '89-'91	
3305-17	Geo/Isuzu adapter cable	GM Import Spectrum '87-'89 Storm '90-'93 Geo/Metro '90-'93	
3305-48	Mitsubishi/DS adapter cable	Mitsubishi Diamante '92-'93 Precis '90-'93 3000GT '91-'93 Truck '89-'93 Eclipse '90-'93 Starion '87-'89 Mirage, Montero '89-'93 Van '87-'90 Sigma '89-'91 Galant '87-'93	
3305-48	Mitsubishi/DS adapter cable	Chrysler Import Stealth, D50 Truck '91-'93 Laser '91-'93 Vista '89-'93 Talon '90-'93 Colt '88-'93 Summit '89-'93 Raider '89 Conquest TSI '87-'89	
3305-48	Mitsubishi/DS adapter cable	Hyundai Sonata '89-'93 Scoupe '91-'92	
3305-124	Accord adapter	Accord '92-'95	

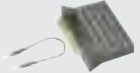



ASIAN APPLICATION

Number	Description	Model & Year	
3305-141	Nissan OBD I and II cable	Nissan '89-'99	
3421-68	Genisys Toyota DCL 2 adapter	Lexus '90-'00 Toyota '89-'01	
3421-93	Kia adapter	Genisys Platform '02-'06 Nemisys Platform '03-'06 Genisys	

HEAVY-DUTY CABLES

Number	Description	
3421-80	6 pin Deutsch cable	
3421-81	9 pin Deutsch cable	

EUROPEAN APPLICATION

Number	Description	Model & Year	
3306-47	38 Pin SSI	Mercedes '86-'05	
3421-41	38 Pin adapter	Mercedes '86-'05	
3421-43	VW 4 pin adapter cable	Volkswagen '86-'94	
3421-76	BMW adapter cable	BMW '87-'05	

AUTOBOSS® V30 EUROPEAN / ASIAN COVERAGE

- Unequaled Diagnostic Power
- Introducing the Autoboss V30, a truly global diagnostic tool providing flexibility and portability in a Windows CE platform.
- OE level coverage for European, Asian, and Chinese cars
- Covers more than 50 vehicle makes
- Access to powertrain, chassis, and body systems
- Quick Test function to test most vehicle systems
- Fault codes (DTC's), Data Stream and Service Reset
- Actuators, Adaptations, and Control Module Coding
- Supports Multi-language
- Frequent Internet based software updates
- CAN Bus with high/low speed
- One OBD II connector for all CAN Bus systems
- High resolution VGA color TFT display
- Windows CE Operating System
- Demo Mode for many OEM's
- Data graphing
- Self-check function

SYSTEM COVERAGE EXAMPLE

Drive
Transmission
ESM – Electronic Selector Module
DTR – Distronic
Motor Electronics

Chassis
SBC – Sensortronic Brake Control
ESP – Electronic Stability Program
AIRmatic – AIRmatic ABC
TPC – Tire Pressure Monitor

Body
Seats and Doors
Actual Values
Actuations
Initial Startup
Control Unit Adaptations
Correction Programming

Air Conditioning
AAC – Automatic Air Conditioning
REAR AC – Rear Air Conditioning
STH – Stationary Heater
HSW – Heated Steering Wheel

Information & Communication
ICM – Instrument Cluster
SCM – Steering Column Module
PTS – Parktronic System
Audio, Video, Navigation and Telematics



Extensive European Vehicle Coverage



Extensive Asian Vehicle Coverage

V30 DELUXE DIAGNOSTIC SYSTEM

3100DLX

Software

- Global European, Global Asian, Chinese
- 12 Month Subscription Included

Vehicle Cable Set

- OBD II Adapters
- European OEM OBD I Adapters
- Asian OEM OBD I Adapters
- USA GM OEM OBD I Adapter
- Chinese OEM Adapters

Included Accessories

- Carrying Case
- 100 – 240 Volt Power Supply
- SD Card Reader
- Rubber Boot



EVAP – LEAK DETECTION SYSTEM

6522

- EVAP – Leak Detection System
- Vacuum Leak Testing
- Exhaust Leaks
- Crankcase Oil
- Cooling System Testing
- Wind and Water Leaks
- 1-Year Warranty

LeakTamer is the latest generation of leak detection systems, providing more smoke and better control. Solid-state circuitry improves reliability and ensures more consistent smoke output. A wide assortment of accessories make the LeakTamer versatile tools for quickly locating different kinds of leaks.

LeakTamer Evap offers:

- Densest smoke in the industry.
- Newly redesigned smoke chamber and control system.
- More complete line of accessories.
- User refillable.
- Includes smoke producing solution for 500 tests.
- Non-toxic, non-corrosive smoke.

Product Features:

- Large full range flow meter
 - Detects .020" & .040" EVAP leak sizes
 - Flow-test components with full range of flow values
- Pinpoint leaks with Smoke and dye
 - UltraTraceUV® dye deposits at exact location of a leak
 - Finds leaks that smoke alone won't find
 - Introduce to an engine before disassembly to find internal leaks
 - It's the only OEM-Approved dye solution
- Variable Smoke Flow
 - Helps pinpoint smoke exiting a leak
 - Directional knob shows exact flow position
- Compact light weight design
 - More powerful diagnostics in smaller package
- Can be used with air or nitrogen
 - Use any inert gas for safer EVAP testing and shop air for all other tests
- OEM approved technology
 - Contains STAR Technology; the ONLY OEM-Approved smoke technology anywhere in the world

6522 includes

Leak Tamer unit, White/UV combination light with laser pointer, UV glasses, EVAP adapter tool, exhaust cone, cap plug adapters, removal tool, smoke producing solutions enough solution for 500 tests.



ACCESSORY / REPLACEMENT PARTS

6522-1 UltraTraceUV® (8 oz. / 236 ml) patented solution is the only Automaker-approved smoke-producing solution in the world. Contains a special dye that deposits at the exact location of a leak. Each bottle will perform approximately 300 tests. Part No. is for one bottle, two bottles included with 6522.



6522-2 Inert Gas Pack Kit connects directly to fitting on back of LeakTamer 6522. Includes preset CO2 regulator with cylinder fitting, 20 oz. liquid CO2 cylinder, pressure gauge, universal push-on female coupler accommodates both automotive and industrial male fittings (Cylinder arrives empty) Performs approx. 25-50 full cycle EVAP tests per 20 liquid oz. cylinder.



6522-3 Combination Light for easier smoke location and ultraviolet (UV) light, to highlight the fluorescent dye deposited at the exact location of a leak. Also has laser pointer. Includes batteries and glasses.



6522-4 Standard Size Service Port Adapter.



6522-5 Schrader® Removal/Installation Tool.



6522-6 Cap Plugs Kit. Used for sealing some systems during leak testing.



6522-7 Universal Fuel Neck Adapter fits the majority of vehicles. Allows access to fuel tank for evaporative system testing.



6522-8 BMW and MINI Fuel Neck Adapter. Allows access to fuel tank for evaporative system testing.



6522-9 Smoke Diffuser locates leaks around doors, windows, sunroofs, trunk compartment seals, EV vehicles' battery modules, or any closed system that can be pressurized from the inside and observe the smoke disturbance from the outside.



6522-10 Cone Adapter (standard) for introducing smoke into induction or exhaust system. 1" x 3.5" & 6" long (25.4 mm x 89 mm x 152 mm).



6522-11 Cone Adapter (Large) for introducing smoke into induction or exhaust system. 3.5" x 6" & 4.6" long (89 mm x 152 mm x 144 mm).



6522-12 Replacement Dipstick (for 6522).



6522-13 Replacement smoke supply hose and Delrin® Nozzle



6522-14 Delrin® Nozzle



6522-15 Flow meter red pointer flag. For easy viewing of flow meter measurements.



ALL-IN-ONE TPMS DIAGNOSTICS



OBD II TPMS TOOL WITH ACTIVATION, DIAGNOSTIC AND RELEARN CAPABILITIES

3838

OBD II TPMS Tool

Save time and perform additional diagnostic capabilities during tire service tire rotations, tire sensor evaluations and reset procedures. The OTC 3838 is both a sensor activation and diagnostic device that features a wireless OBD II module for TPMS sensor registration. The tool works with all OEM and aftermarket sensors.

- Large 3.5" color display featuring easy-to-read icons
- **Exclusive** wireless OBD-II module to initiate and perform relearn procedures
- SD card for vehicle history storage
- USB for software updates
- RJ 45 connection capability
- Includes battery charger

ABOUT TPMS

All 2008 and newer automobiles and light trucks on the road today have TPMS sensors that must be reprogrammed every time tires/wheels are replaced or rotated. If the TPMS sensors are not reprogrammed, the system will continue to report information that could be incorrect such as tire pressure and position of the wheel. TPMS sensors provide data such as sensor identification; tire pressure, temperature and sensor battery life.

FEATURES



STAND-ALONE TPMS TOOL WITH BLUETOOTH OBD II

- All-in-one TPMS tool with sensor activation and on-board procedures
- 3.5" Color display with icon graphical interface
- On screen, step-by-step relearn procedures
- Software updates for 3 years
- Register TPMS sensors wirelessly via Bluetooth OBD II adapter
- OBD II adapter dock for easy storage and portability
- Complete Asian, Domestic, and European coverage
- Reads TPMS codes on applicable vehicles
- Printing via Infrared (IR) Technology or USB
- Includes SD card for vehicle history storage
- Updatable via USB port
- Rubber over-mold for enhanced durability
- Integrated Key Fob RF signal strength test
- Compatible with aftermarket programmable sensors, including Schrader EZ-sensor™, VDO REDI-sensor™, HUF IntelliSens®, and Alligator Sens.it®

Graphical Interface



Integrated KEY FOB Test



3838 KIT INCLUDES

- TPMS Handset
- Bluetooth OBD II Adapter
- Wall Mount Battery Charger
- Carrying Case
- USB Cable
- RJ45 Cable
- Rechargeable lithium-ion battery
- Installation CD
- Relearn Magnet
- Instruction Manual
- 1-year warranty

FULL COVERAGE TPMS SOLUTION

DIAGNOSTICS/RESET/RE-LEARN/REGISTER

The OTC Tire Pressure Monitoring Reset Tool is a fast and simple to use stand alone TPR activation tool

- Works on all known TPMS sensors through 2013.
- Bright graphic display and simple navigation buttons enable vehicle selection for fast activation.
- Automatically adjusts activation output power to eliminate cross activation of near sensors. Combine TPR activation with the power of Genisys® scan
- Register new sensor ID's on Asian vehicles.
- Use the TPR to activate and decode sensor ID's and transmit them to the Genisys wirelessly.
- Bluetooth wireless communication adapter included.
- Quick reference reset procedures can be quickly accessed on the Genisys.



**3834
Tire Pressure Monitoring System Reset Tool**

Includes: TPR handheld, DB25 wireless adapter, carry case, registration card, user manual for TPR and Genisys® interface.



**3834T
TPR Activation Tool**

Combine TPR activation with the power of the Genisys Touch.



**3835
Tire Pressure Monitoring System Reset Tool Master Kit**

Includes: TPR handheld, DB25 wireless adapter, carry case, registration card, user manual for TPR, and Genisys® interface, activation magnet, valve stem torque wrench, valve nut torque wrench, digital tire pressure gauge, TPMS Poster, TPMS flip charts, 11mm socket, 12mm socket, and torque tool.



**3834UPD
TPR One Year update subscription**

The 3834UPD Subscription Update kit provides the user access to all Tire Pressure Reset (TPR) tool updates for one year from registration date. TPR updates include both added vehicle coverage and tool functionality improvements. NOTE: Users must register an account on the site to gain access to the updates. The kit includes a certificate with an authorization code. website.



**3836
Tire Pressure Monitoring System Accessory Kit**

Includes: Activation magnet, valve stem torque wrench, valve nut torque wrench, digital tire pressure gauge, TPMS Poster, TPMS flip charts, 11mm socket, 12mm socket, and torque tool. Note: Genisys requires System 4.0 or later for TPR communication.



EZ-SENSOR PROGRAMMING



“EZ-sensor™ PROGRAMMABLE TPMS is the first Programmable Tire Pressure Monitoring Sensor which has been designed with the goal of replacing 90% of the TPMS sensors currently stocked by the dealer.”

– Schrader® the worldwide leader



- Fast simple programming using OTC TPR Tool
- Eliminates the need to perform relearn procedures when replacing sensors
- No scan tool required for programming
- Replaces over 90% of current TPMS sensors!
- Save money & fit the right part
- Fast simple assembly to the wheel rim

Schrader® is trademark of Schrader International Corporation.

**3834EZ
Tire Pressure Monitoring System Reset Tool with EZ-sensor™ Programming**

Includes: TPR handheld, DB25 wireless adapter, EZ-sensor proximity boot, EZ-sensor software, USB cable, carry case, registration card, user manual for TPR and Genisys® interface.



**3834EZ-01
EZ-sensor™ Update Kit**

Includes: EZ-sensor Proximity boot, EZ-sensor Software, USB cable, and user manual.

Note: For existing TPR owners.



**3834-01
TPR Charging Station**

Now also available for both the OTC 3834 and OTC 3834EZ tool is the new OTC 3834-01 Charging Station. This kit includes a “drop-in” charging cradle, easy to install slimline Lithium Ion rechargeable battery which dramatically increases the amount of sensor activations over standard alkaline batteries, and AC power cable. Increase productivity by eliminating down time and reduce the cost of replacing AA batteries with the OTC 3834-01 TPR Charging Station!



OTC TPMS IS THE TOTAL SOLUTION

Automatically Selects the Proper Sensor Communication!

Activate sensors before tire service is performed, when tires are rotated, and when there is a problem with TPMS.

- Easy-to-follow tool menu and graphics clearly show test options.
- Auto Scan feature provides a "one button" activation mode which automatically scans for TPMS sensor communication.
- Diagnostics uses a make-year-model input which automatically selects the proper sensor communication.
- Auto Scan and Diagnostics are useful for pre-testing sensors for proper functionality prior to service.
- Kit includes vehicle specific Reset Procedures that guide the user through the complete procedure.
- Electronic manuals include critical and comprehensive vehicle set up and reset procedure, along with system descriptions and specifications through 2013 model year.



3833B13

2013 Tire Pressure Monitor Base Kit

Includes a TPM tool with latest software subscription including 2013 MY coverage, activation magnet, quick start guide, CD containing all previous and current reset procedure manuals, update cable, CD training video, backup software CD, and a blow molded case.



3833M13

2013 Tire Pressure Monitor Master Kit

Includes a TPM tool with latest software subscription including 2013 MY coverage, activation magnet, quick start guide, CD containing all previous and current reset procedure manuals, update cable, CD training video, 6 NiMH rechargeable batteries and recharging station, backup software CD, digital tire pressure gauge, 4-way valve tool, valve core torque driver, laminated application flip chart, service procedure flowchart poster, consumer poster, and a blow molded case.



Also includes TPM Electronic Torque Wrench.

- 12-120 in.-lb. \pm 2% accuracy.
- Torque set quickly with unique slide bar on the scale.
- Indexing head allows for use straight (screwdriver position) to spin nut down quickly.
- Torque limit LED flashes with audible beep.
- 1/4" Drive 11mm and 12mm Deep Chrome Socket.

3833-80

2013 Tire Pressure Monitor Software Update Kit

Includes 2013 software subscription CD, and 2013 reset manual on CD. Now includes the high-demand USB update cable that was previously sold separately.



3833-13

Internal battery stick and charging cradle for OTC TPM

The internal battery stick and charging cradle for the OTC TPM allows the unit to be placed in the cradle when not in use, allowing for the unit to always be charged. This also eliminates the need to replace batteries.



TPMS ACCESSORIES

Part No.	Description	
3833-4	Magnet	 3833-4
3833-5	Quick Ref Manual Set	
3833-7	Software Update Cable	
3833-8	Serial to USB Adapter	
3833-9	"T" Update Kit	3833-9
3833-14	Recharge "C" Batt & Charger	
3833-15	Digital Tire Gauge	
3833-16	Valve Nut Tool	
3833-17	Valve Core Driver	3833-14
3833-18	Quick Spec Flip Chart	
3833-24	T-10 Torque Driver	
3833-25	Electronic Torque Wrench	 3833-15
		3833-16
		3833-17
		3833-25

MULTIMETER TESTERS ELECTRONIC DIAGNOSTICS



Built-in Probe Protector



3907 Probe Multimeter

This probe style meter is a full function multimeter in a convenient pocket pen type package. The probe contains a retractable probe cover and lead clip on back of meter for carrying in pocket or storage.

Product Features:

- Display: Max. 2000 Counts
- Function: Ohm/DCV/ACV/Diode/Continuity
- Input Impedance: 10MΩ
- Auto Range
- Auto Power Off
- Pocket pen type
- Back light and testing light
- Rotating pen tip protector
- Test lead installing socket
- Operating Switch: Combined switch with function and power switch



The meter is in compliance with the following standards:

- IEC1010 double insulation
- Pollution degree 2
- Over voltage category III (600 volts)
- Power One 9-volt alkaline battery
- (NEDA 1604 or equivalent)

3908 AMP Clamp/Multimeter

OTC AMP Clamp/Multimeter was designed to allow accurate current measurements using clamp jaws. The clamp meter is well suited for testing starting/ charging circuits, and provides easy access to current, voltage and other key automotive measurements, all in one easy-to-use tool.

Product Features:

- Duty Cycle
- Resistance
- Capacitance
- Diode
- Continuity
- Frequency
- Temperature
- Range auto/manual
- Display maximum reading of 4000 counts
- Automatic negative polarity indication
- Automatic zero adjustment
- Over range indication
- Low battery symbol
- Data hold symbol
- Relative measurement symbol
- Clamp opening size 32mm
- Auto power off



3910 55 Series Digital Multimeter

The 55 Series DIGITAL MULTIMETER meter provides a full feature set at an economical price. The 55 SERIES contains all the base functions required for today's automotive testing.

Product Features:

- Display: Max. 2000 Counts
- Auto / Manual Range
- Diode Check
- Continuity Buzzer
- Data Hold, Max Hold
- Auto Power Off

3940 600V CAT III 550 Series Digital Multimeter

The 550 Series DIGITAL MULTIMETER features powerful automotive test functions such as; Frequency, Duty Cycle, Diode & Continuity Tests, plus all the standard meter features you expect in a professional grade Multimeter.

Product Features:

- Diode Test
- Continuity Test
- Auto Range
- Data Hold
- Relative Change
- Auto Power Off



3980 1000V CAT III 750 Series Automotive Multimeter

The 750 Series AUTOMOTIVE MULTIMETER includes all the great features of the 550 Series METER, PLUS Automotive specific tests; True RMS, RPM, Dwell, Pulse Width, Temperature, Backlight, RS232, and Min/Max. It is CATIII so it is compatible Hybrid vehicle systems.

Product Features:

- Diode Test
- Continuity Test
- Auto Range
- Data Hold
- Relative Change
- Backlight
- Auto Power Off
- CATIII 1000V
- Min/Max
- RS232 & Cable
- Red & Black Test Leads
- Alligator Clips
- RPM Pickup Adapter
- Temp Probe Adapter
- Black Canvas Case
- PC Cable & Software

3990 1000V CAT III Hybrid Multimeter/OTC 1000V CAT III Hybrid

Multimeter with Insulation Test. A full function Multimeter with an insulation test feature is used to test for voltage leaks through insulation found on Hybrid and Electric Vehicles.

Product Features:

- Hybrid Insulation Resistance Test
- True RMS
- Data Logging
- Auto Ranging
- Display Backlight
- Diode Test
- Min/Max Mode
- Continuity Buzzer
- Sleep Mode
- Data Hold
- Low Battery Display



3990 Includes: Heavy Duty Class III test leads with alligator clips, Short Lead, K Type temperature adapter and Manual.



HYBRID MULTIMETER ACCESSORIES

These Hybrid Electric Safety Gloves are the most important articles of personal protective equipment when working on high voltage vehicles. They are the first line of defense for contact with any energized components.

3991-10

Small Glove with Leather outer protector set.

3991-11

Medium Glove with Leather outer protector set.

3991-12

Large Glove with Leather outer protector set.



WARNING: Safety Gloves must be inspected prior to each use in accordance with ASTM Standard F1236 and the applicable Service manual for the vehicle being serviced. Rubber insulating gloves must be retested electrically at least once every six (6) months using the test procedures described in the most recent editions of ASTM Standard F496.

MULTIMETER TESTERS ELECTRONIC DIAGNOSTICS



Specifications:	3907	3910	3940	3908	3980	3505A	3990
Frequency:			1Hz ~ 10MHz ± 0.1%		1Hz ~ 10MHz ± 0.1%	1Hz ~ 10MHz	10Hz ~ 1MHz
RPM (Direct Test with Leads) or (with RPM Pickup)					0 - 10,000	0 - 10,000	
DWELL Angle					0 - 360° (1 - 12 CYL)	(1 - 12 CYL)	
Duty Cycle			0.1% ~ 99.9% ± 2.5%		0.1% ~ 99.9% ± 2.5%	0.1% ~ 99.9%	
Pulse Width-ms (negative)					1 ~ 999ms	1 ~ 999ms	
Temperature		-50°C to 200°C, -58°F to 392°F			-50°C to 400°C, -58°F to 752°F	-50°C to 400°C, -58°F to 752°F	-40°C to 537°C, -40°F to 998°F
DC Volts	200mV/2/20/200V ± 0.5%, 600V ± 0.8%	200mV/2/20/200V ± 0.5%, 600V ± 0.8%	400mV/4/40/400V ± 0.5%, 1000V ± 0.8%	400mV/4/40/400V ± 0.5%, 600V ± 0.8%	400mV/4/40/400V ± 0.5%, 1000V ± 0.8%	400mV - 600V	60mV/600mV/6V/60V/600V/1000V
AC Volts	2/20/200V ± 0.8%, 200mV/600V ± 1.2%	2/20/200V ± 0.8%, 200mV/600V ± 1.5%	4/40/400V ± 0.8%, 400mV/750V ± 1.2%	TRMS-4/40/400V ± 1%, 400mV/600V ± 1.5%	TRMS - 4/40/400V ± 1.5%, 400mV/750V ± 2%	4/40/400V 400mV/600V	TRMS - 6V/60V/600V/1000V
DC Amps (through Meter)		400/4000µA ± 2%, 40/400mA ± 1.5%, 4/10A ± 2%	400/4000µA ± 2%, 40/400mA ± 1.5%, 4/10A ± 2%		400/4000µA ± 2%, 40/400mA ± 1.5%, 4/10A ± 2%	40/4002µA ± 15%, 4/10A ± 2%	0.01mA to 600mA
AC Amps (through Meter)		200/2000µA ± 2.5%, 20/200mA ± 2%, 2/10A ± 2.5%	400/4000µA ± 2.5%, 40/400mA ± 2%, 4/10A ± 2.5%		TRMS - 400/4000µA ± 2%, 40/400A ± 2%, 4/10A ± 2.5%	40/4002µA ± 15%, 4/10A ± 2%	3mA to 600mA
DC Amps (Inductive)				400A ± (1.5% + 5), 1000A ± (2% + 10)			
AC Amps (Inductive)				400A ± (2% + 5), 1000A ± (2.5% + 10)			
Resistance	200Ω/2/20/200kΩ/2MΩ±1%, 20MΩ±2%	200Ω/2/20/200kΩ/2MΩ ± 1%, 20MΩ ± 2%	400Ω/4/40/400kΩ ± 1%, 4/40MΩ ± 2%	400Ω/4/40/400kΩ ± 1%, 4/40MΩ ± 2%	400Ω/4/40/400kΩ ± 1%, 4/40MΩ ± 2%	400Ω/4/40/400kΩ ± 1%, 4/40MΩ ± 2%	600Ω, 6kΩ, 60kΩ, 600kΩ, 6MΩ, 40MΩ
Capacitance			40nF ± 3.5%, 400nF/4µF/40µF ± 3%, 400µF/4000µF ± 20%	40nF/4µF ± (2.5%+5), 40µF/100µF ± (5%+10)	40nF/400nF/4µF/40µF ± 3%, 400µF/4000µF ± 20%	40nF/400nF/4µF/40µF ± 3%, 400µF/4000µF ± 20%	
Insulation Testing							50V, 100V, 250V, 500V, 1000V
Features:	3907	3910	3940	3908	3980	3505A	3990
Diode Test / Continuity Test	•	•	•	•	•	•	•
Auto Range	•	•	•	•	•	•	•
Auto Power Off	•	•	•	•	•	•	•
Data Hold		•	•	•	•	•	•
Backlight	•			•	•	•	•
True RMS				•	•	•	•
Relative Change			•		•	•	
Min/Ma			•		•	•	•
Temp. Adapter		•			•	•	•
Hybrid Compatible/ Class III					•		•
Alligator Clips					•	•	•
CATIII			600V		1000V		1000V
Case				•	•	•	•
RS232 Computer Interface					•		
PC Cable/Software					•		
RPM Pickup adp.					•	•	
Insulation Test (Hybrid)							•
Inductive Current Measurement				•	with Accessory Clamp (Included)	with Accessory Clamp (Included)	

AUTOMOTIVE MULTIMETER / DIGITAL PRESSURE & TEMPERATURE ANALYZER ELECTRONIC DIAGNOSTICS

3505A

100 Series Autoranging Automotive Multimeter

The 3505A is the latest version of the Classic 100 Series Autoranging Automotive Multimeter with many new and useful troubleshooting features.

Product Features:

- Auto/Manual Ranging
- Resistance, Continuity, Diode and Capacitance Tests
- RPM Measurement
- Temperature Measurement (°F/°C)
- Millisecond Pulse width and Peak Volts measurements for Fuel Injectors
- Duty Cycle and Frequency to 10M Hz
- Dwell Measurement
- O2 Cross counts
- Relative Measurement, can be used for low resistance measurements to remove test lead resistance from measurement
- Data Recording: Min/Max for fluctuating measurements
- Data Hold, freeze data at the push of a button
- Fused direct current measurement up to 10 amps through meter
- Auto Power Off (can be disabled)

3505A 100 Series Autoranging Kit Includes: 100 Series Automotive Multimeter, heavy-duty test leads with removable alligator clip ends, inductive RPM clamp, temperature probe.



SCOPE AND METER ACCESSORIES

3820-13

Low-range amp probe with display – use alone or connected to scope. Long, small jaws combined with superior performance are ideal for: Ignition coils, Fuel injectors, Fuel pumps, Relays, Electric motors, Parasitic draw.

- 0–60A range, measure to 90A, 100mV/A
- High accuracy, and low noise interference
- Non-intrusive AC/DC current measurement
- Resolution: 10mA
- Average responding, RMS calibrated
- Auto ranging, auto zero, data hold, low battery indicator



3820-06

Low-range amp probe – Measures current in two ranges: 0-60 amps AC/DC. Ignition coils, Fuel injectors, Relays, Electric motors, Parasitic draw, Non-intrusive AC/DC current measurement.



3825-54

Mid-range amp probe with BNC adapter. Measures current in a range of 2–600 amps AC/DC.



3840-04

Test probes. Three pieces: red, yellow, black.



3840-05

Back probes. Three pieces: red, yellow, black.



3840-03

3-piece, 5-way alligator clip - Plug-on multiple-use clip includes: bed of nails, piercing tip, alligator clip, spade and square lug connectivity.



3840-02

Banana lead extension includes two 4 ft. leads.



MULTI-APPLICATION DIGITAL PRESSURE AND TEMPERATURE ANALYZER

Combining the functions of vacuum, oil pressure, hydraulic system pressure, fuel pressure, transmission pressure compression, and air conditioning—all in one!

No need to have fuel or transmission hoses inside vehicle during a road test. No makeshift taping of gauges to the windshield.

Use with OTC's No. 3398 to find clogged/dirty fuel injectors.

Pinpoints worn power steering pumps or racks.

PSI reading for hydrostatic drives and high pressure hydraulics.

Finds blocked intake ports and plugged catalytic converters.

Checks transmission cooler efficiency and catalytic converter temperatures.

"Min/Max." pinpoints:

- Fuel restrictions
- Plugged filters
- Weak fuel pumps
- Transmission pressure spikes

"Delta Zero" monitors fuel pressure drop caused by faulty check valves.

Displays readings in BAR for checking European specs.

See Scope/Meter accessories for temp probes.

Permits comparison of ABS brake pressures at each wheel.



3490

Deluxe digital pressure/temperature analyzer with four pressure input receptacles and protective boot. Set includes (500 psi) transducer, 12' cable, 8-1/2" hose, bead-type temperature probe, assorted fittings, plastic storage case, instruction manual.



3492

Heavy-duty digital pressure/temperature analyzer with four pressure input receptacles and protective boot. Set includes: No. 3491-02 (5,000 psi) transducer, No. 3491-13 20' cable, No. 3500-05 bead-type temperature probe, assorted fittings, No. 3491-plastic storage case, instruction manual.



Accessory:

3491-01
500 psi transducer.

3491-02
5,000 psi transducer. Required for ABS and power steering pressure readings.

3491-03
10,000 psi transducer. (Note: For No. 3492 only.)

3491-11
6' cable.

3491-12
12' cable.

3491-13
20' cable.

THE JUDGE—ROTATING ELECTRICAL ALTERNATOR/STARTER BENCH TESTER

The Judge will test virtually every alternator and starter precisely, providing accurate results.

This rotating electrical tester, using advanced computer technology, lets you quickly diagnose alternators and starters with extreme accuracy—validated by component manufacturers. It features an integrated self-test to eliminate bad test leads, thus improving test results and reducing warranty costs to the auto parts retailer. Your tester investment is protected by The Judge— it can be updated to accommodate manufacturer's new starters and alternators, or to change test parameters on existing devices.

Easy-to-use, 10.5" color touchscreen allows intuitive user interface.

Innovative alternator mounting with tensioned idler and a newly designed starter vise.



- **No More Flip Charts**—Integrated "Lester-based" part number database, or by vehicle selection.
- **Faster Set-up**—new improved mounting for alternators and starters.
- **Integrated Self-test Features** provide a lead check application—ensuring bad test leads are eliminated.
- **ETL Certified**—with circuitry specifically designed for reliability and durability.
- **Hooded Test Bay**—allows observation while capturing debris, grease, or oil when testing a well-used component.
- **Full-Color Touch Screen**—easy-to-use interface screen (10.5" display).
- **Ease of Component Mounting**—improved flexibility supports the latest mounting configurations.
- **Easy-to-Use Menus**—screen prompts guide technician through procedures.
- **Expandability**—easy to update and expand as new alternators/starters are developed.
- **Compact Flash Card Port**—update software and add memory as needed.
- **Bar Code Reader**—optional feature for fast and accurate test set-up.
- **Interlock Switch**—prevents operation when door is open.



Easy-to-use screen prompts guide you through procedures quickly and accurately.

3643

Judge rotating electrical tester. Includes bench tester, mounting pins, alternator cable, starter cable, solenoid cable, test leads, manuals.

3643-01

High speed serial printer.

Hooded test bay with observation window improves safety. Door interlock switch prevents operation when door is open.



THE JUDGE ROTATING ELECTRICAL TEST CABLE CHART

3643-21
N-01



3643-36
N-16



3643-22
N-02



3643-37
N-17



3643-23
N-03



3643-38
N-18



3643-24
N-04



3643-39
N-19



3643-25
N-05



3643-40
N-20



3643-26
N-06



3643-41
N-21



3643-27
N-07



3643-42
N-22



3643-28
N-08



3643-43
N-23



3643-29
N-09



3643-44
N-24



3643-30
N-10



3643-45
N-25



3643-31
N-11



3643-46
N-26



3643-32
N-12



3643-47
N-27



3643-33
N-13



3643-48
N-28



3643-34
N-14



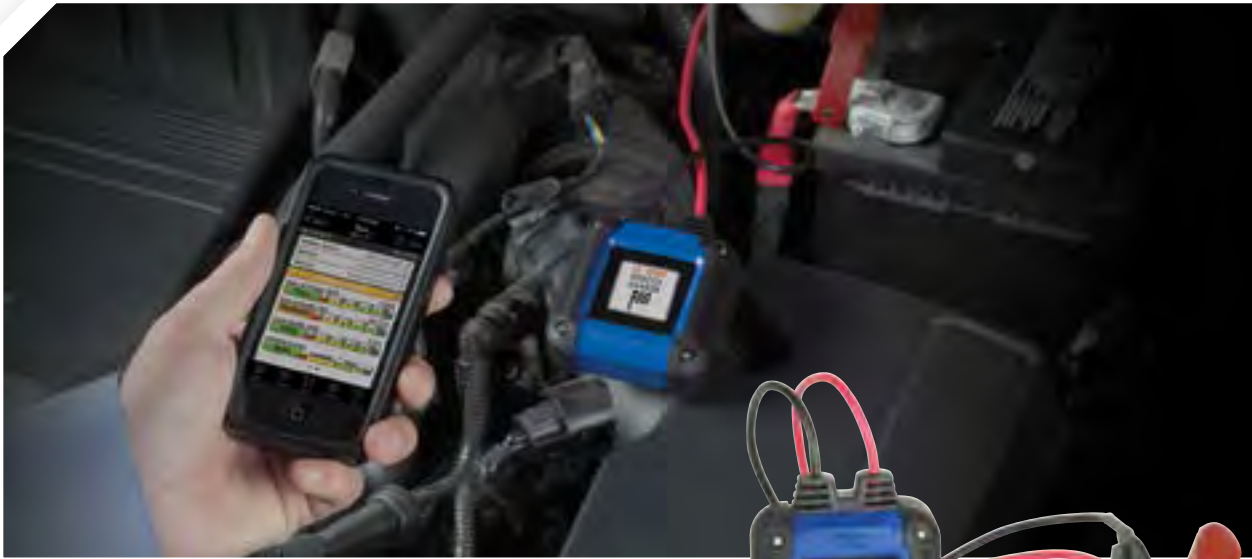
3643-50
N-29



3643-35
N-15



TEST FASTER WITH THE FIRST CLAMP-AND-READ AUTOMATED DIGITAL BATTERY TESTER



TEST AUTOMOTIVE 6V, 8V, 12V LEAD ACID BATTERIES (WET, VRLA, AGM)

3200 OTC SMART BATTERY TESTER

Test faster with the first market solution to utilize the power of your iOS or Android smart device when paired with the OTC 3200 App.

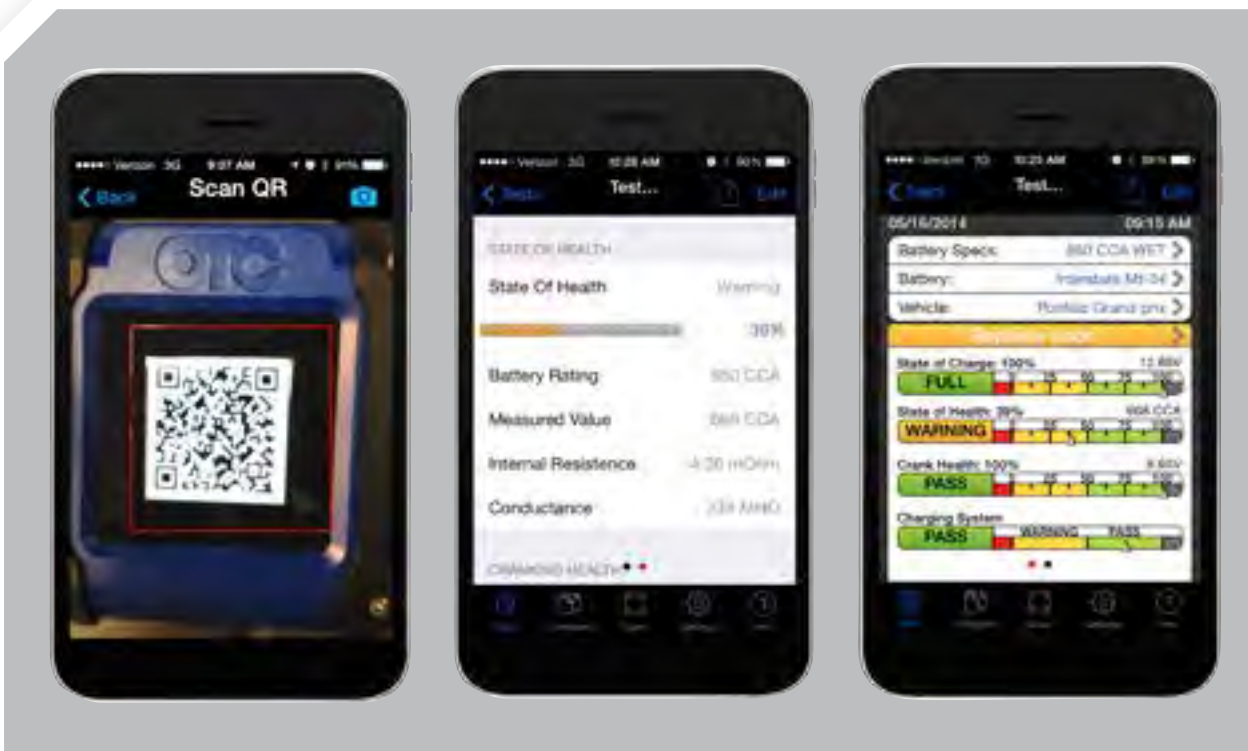
- In 10 seconds or less - get a simple visual diagnosis of a battery, and automatically display battery float voltage, cold cranking amps (Wet and AGM) and charging voltage.
- In 20 seconds or less - with the turn of the key, also test battery cranking health and charging systems.
- In less than 2 minutes - test your battery, cranking health and charging systems. Receive a comprehensive, full color and easy-to-understand test report for your customer on your smart device for easy sharing via on-screen, print or email.

The included 9V battery allows testing of deeply discharged and dead batteries for rapid diagnosis.

UNLEASH FULL POWER WITH THE OTC 3200 APP

The free OTC 3200 App available in the iTunes and Google Play stores, reads and displays battery data contained on the tool's alternating QR code. Instructions are included and online to help get you started.

- Delivers instant stop-light style "red-yellow-green" coded graphical summary reports that can be displayed, printed, emailed and shared on-screen.
- Automatically saves all test reports on your smart device and to a secure cloud service for future searching or sharing.
- Sync feature sends information to all phones used in your shop so service managers and techs can access reports by vehicle.
- Smart phones and tablets paired with the tester must have 5MP auto-focusing, rear-facing camera to meet full requirements.



FOR BATTERY TECHNICIANS AND INSTALLERS:

1. The 3200 is fast and simple to use. The tool's test routine is automatic with no buttons to push. Get at-a-glance understanding in seconds.
2. The 3200 test results are easy to explain to customers. The OTC 3200 App automatically generates easy to understand instant color reports.
3. The 3200 is affordable, offering more features versus competitive products priced 3x higher.

FOR AUTOMOTIVE SHOP OWNERS:

1. The 3200 app can help you sell more batteries, offering a transparent and objective way to show customers their vehicle battery health.
2. When techs use the 3200 app, the data from every test can be used to understand and monitor testing and sales activity.
3. The 3200 drives customer satisfaction, retention and conversion. Battery tests are easily emailed to customers and also linked to customers' work orders and vehicles. You can use the data to bring customers back to the shop for periodic testing.

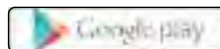
HOW IT WORKS:

Use the 3200 device alone:

The 3200 device can be used standalone as an easy and fast service lane tool delivering near-instant, easy-to-read battery information.

USE THE 3200 DEVICE WITH THE FREE APP:

- Download the 3200 app on your smartphone, register and start the app.
- Attach the 3200 tester device directly to the lead of your battery's posts.
- Make sure to start your engine (you may turn off after 5 seconds) to receive data about the cranking health and charging voltage.
- Enter your desired battery test parameters manually or with optional UPC scan where available and scan the QR code on the tester device.
- Optionally add VIN information with make/model/year manually or via the automated VIN scan function.
- Share your results with customers on-screen, via email or printout with your network printer.



Google Play is a trademark of Google Inc.

HEAVY-DUTY BATTERY TESTER BATTERY EQUIPMENT

SABRE HP

Sabre HP is designed to let you quickly diagnose bad batteries in a discharged state without needing to charge them first. By utilizing a patented OTC micro-load testing method, this tester ensures accurate test results without any interpretation on vehicle battery, starting, and charging systems. Ships with 3' leads.



Product Features:

- Digital circuitry precisely controls battery test loads to accurately determine battery conditions using OTC micro-load test technology.
- Tests the battery both statically & dynamically with multiple fixed loads.
- Provides the most accurate test results.
- Less susceptible to erroneous results from remote or bad connections, surface charge, and parasitic drains.
- Accurately tests both absorption glass mat (AGM) and flooded lead acid (FLA) batteries.
- Tests vehicle's starting and charging systems with minimal user interaction; automatically applies loads for accurate charging system tests.
- Tests all 6- and 12-volt batteries with a 50–2000 CCA operating range.
- Tests batteries down to 1 volt state of charge.
- Temperature and low charge compensation.
- Detects bad cells.
- Scales: CCA, CA, AHR, MCA, JIS, DIN.
- 4 x 20 backlit display shows CCAs, voltage, and good/bad status.
- Over-molded enclosure with soft-touch keys.
- Built-in infrared printer interface for remote printing (printer optional).
- Flash upgradeable memory in field.
- Removable/auto-sensing leads (optional 10' leads available).
- Printout has date/time stamp and user definable header and footer.
- Optional amp clamps for current drain tests and starting/charging measurements—the only hand-held battery tester with this feature.
- Reverse polarity protection.
- Hard carrying case.
- 3-year warranty.

3167 – SABRE HP

Includes SABRE HP, 3' test leads, side-post terminal adapters, instruction manual, and molded-plastic carrying case.



3167

3168 – SABRE HP Deluxe Kit

Includes SABRE HP, 3' test leads, side-post terminal adapters, instruction manual, infrared wireless printer, and molded-plastic carrying case.



3168

Accessories:

3169 – Printer

Infrared wireless printer for use with No. 3167 (included with No. 3168).

3167-01 – 3' test leads.

3172 – 10' test leads.

SABRE HEAVY-DUTY BATTERY & ELECTRICAL SYSTEM DIAGNOSTIC TESTER

- Heavy-duty for 24-volt battery and electrical systems.
- Diagnoses battery packs in series, parallel, or series/parallel.
- Tests AGM/gel-cell batteries.

HIGHEST CCA capacity ranges (50–4000 CCA – 24V).

LARGE DISPLAY for less scrolling, more detailed instructions. It's also backlit for all light conditions.

INDUSTRY FIRST amp-clamp connection ports for live amperage readings using optional external amp-clamp.

15 FT. Cable to perform tests from the cab of the vehicle.

FIELD UPDATEABLE to accommodate new battery types, system updates, feature additions.

Battery Testing

- Tests the following battery pack configurations:
 - One battery (6V or 12V).
 - Two batteries in series (24V); 2, 3, or 4 batteries in parallel (12V).
 - Two banks in parallel, each bank having 2 batteries in series (24V).
- Uses pack configuration in algorithm design.
- Step-by-step user instructions for easy test completion.
- Tester-applied loads used on all pack combinations.

Electrical System Testing

- 12V and 24V charging/starting system tests.
- 12V and 24V diode tests.
- Amp-clamps available (not included) for starting/charging and current draw tests.

Product Features:

- Amp-Clamp Connection – allows current drain tests and starting/charging analysis.
- Tests Both FLA (flooded lead acid) and AGM (absorbed glass mat) battery types.
- Scales – CCA, CA, AHR, MCA, JIS, DIN
- User Definable – print header and footer.
- Removable Test Cables – easily field replaceable.
- PC Interface Port – allows for field updateable software.
- IR Compatible – allows optional infrared wireless printer.
- Readout Display – backlit for low light conditions, easy to view data in direct sunlight (4 x 20 character display).
- Security Cable Connection – protects against stolen or dropped units.
- Over-molded Surround with Soft-touch Keys – ruggedly built, easy to use, even with gloves.

3167-HD – Sabre HD deluxe kit

Includes 24-volt heavy-duty battery tester, 15' test leads, instruction manual, molded-plastic carrying case.

3168-HD – Sabre HD deluxe kit with printer

Same as No. 3167-HD above, but also includes an infrared wireless printer.

Accessories:

3172-15 – 15' lead set.

3169 – Infrared wireless printer.



3168-HD

Battery Charging/Starting System Professional Analyzer Kits

Made for the professional technician, No. 3185 tests batteries and starting/charging systems faster than ever before. The BCS system analyzer has an operating range of 50–2000 CCAs and is able to store data in memory or remotely print out the results using an infrared printer interface. It also measures voltage, and tests starting and charging systems at the push of a button.

Product Features:

- Quick 1-second initial results.
- Tests charging and starting systems 50–2000 CCA range accurate to 5 CCAs.
- Tests 6V and 12V batteries.
- Temperature and low charge compensation.
- Detects and identifies loose leads.
- Supports CCA, IEC, EN, BCI, and DIN scales.
- 4-line, 20-character LCD display shows CCAs, voltage, and good/bad status.
- Displays results in seven languages: English, French, Spanish, German, Italian, Dutch, Swedish.
- Built-in infrared printer interface for remote printing.
- Detachable cable leads.

3184

BCS system analyzer kit. Includes BCS system analyzer, a 12' extension cable for in-cab testing, two voltmeter probes, battery side- and threaded-post adapters, detachable leads, 9-volt battery, soft-sided carrying case.

3185

BCS system analyzer kit. Same as No. 3184, but also includes an infrared printer.

3183

Digital Battery Tester

Speed. Accuracy. Reliability. These are the cornerstones behind the technology in our digital battery testers. No. 3183 tests 12-volt batteries (125–1400 CCAs) and analyzes by measuring multiple parameters within the battery to deliver accurate results. A live voltmeter allows easy starting/charging system testing. Its bright, 4-digit LED display indicates the battery's good/bad status, voltage, and available CCAs. It even compensates for cold temperatures.

Product Features:

- Quick 1-second initial results.
- 125–1400 CCA range.
- Analyze starting/charging system voltages.
- Tests 12V batteries.
- Temperature and low charge compensation.
- Detects and identifies loose leads.
- Detects bad cells.
- Surface charge warning.
- Measures multiple international units: CCA, IEC, DIN, BCI, and EN.
- 4-digit LED display shows good/bad status, available CCAs, and voltage.
- Includes digital battery tester. Includes digital battery tester and soft-sided carrying case.



3180

100-Amp Battery Load Tester

Tests batteries on or off the car in just 10 seconds. Convenient, portable size and easy-to-read scales.

Product Features:

- Heavy-duty, copper-plated clamps.
- 100 amp load capacity.
- 0–16 volt range.
- Load safety switch prevents arcing.
- Heavy-duty, chrome-plated, ventilated steel case.
- Works on both 6V and 12V batteries.
- Ceramic insulators.
- Determines state-of-charge, cranking, and charging volts.
- Determines good/bad status.
- Extra-large display with zero adjust.



3181

130-Amp Heavy-Duty Battery Load Tester

Applying an industry-leading 130-amp load, this ergonomically designed, heavy-duty battery tester provides accurate, reliable test results in just 10 seconds. It includes uniquely designed clamps for a positive grip on top- and side-post batteries and an extra-large, easy-to-read display.

Product Features:

- 130-amp load capacity for accurate results.
- 0–16 volt range.
- Uniquely designed clamps for both top- and side-post batteries.
- Extra-large display with zero adjust.
- Works on both 6V and 12V batteries.
- Side tabs for on-tool clamp storage.
- Back brackets for tool storage on wall or toolbox.



3182

130-Amp Digital Battery Load Tester

Produce more accurate results with this 130-amp digital battery load tester. The compact, lightweight design is rugged enough for everyday testing of 6- & 12-volt batteries.

Product Features:

- Large, easy-to-read display.
- Side-clamp mount.
- Comfortable, easy-to-grip, ergonomic handle.
- Alternator test lead.
- Ripple detection light.
- 0–16 volt range.
- Dual jaw load clamp design.
- State of charge.
- Battery load test.
- Starter and charging system test.
- Alternator ripple test.
- 3182 Digital battery tester. Includes 130-amp digital battery tester and test leads.



3220

3220CD

Battery Diagnostic Manual

Gives essential information for battery service in one convenient manual. Saves valuable time by providing information in a complete manual rather than having to go to multiple locations for information.

Provides the following information in one manual –

- Battery access and service locations
- Battery disconnection precautions
- Power windows, locks and sunroof programming procedures
- Convenience accessory programming procedures
- Supplemental restraint and ABS system precautions
- Engine and body control system resetting
- Available in print or CD



3673

Diesel Glow Plug Tester

Glow Plug Tester provides fault detection thru LED's for a quick analysis; Short Circuit, Over Current, Normal Operation, Open Circuit/Under Current.

- Glow Plug Tester allows for testing without removing glow plug from engine.
- Powers the glow plug to test the plug in it's operating state.
- Much more accurate test than a cold resistance test, which can miss short circuits.
- Tester uses a current measurement to accurately determine proper operation and check for short circuits.



3674

Diesel Fuel Pressure Tester

- Simple one wire connectivity to the fuel pressure sensor signal wire. Designed for diesel engines that have a fuel pressure sensor reading used by vehicle computer.
- Displays pressure in PSI or BAR.
- Range 0-22,000 PSI (0-1500 BAR).
- Read diesel fuel pressure in vehicle.
- No fittings required.
- Readings alternate between current and max pressure.



BATTERY / ELECTRICAL SYSTEMS BATTERY EQUIPMENT

QUICK STARTER TEST ...TESTS STARTER IN SECONDS WITH NO NEED TO DISABLE IGNITION.

MinuteMan Plus saves you hours when you're testing batteries, starters, alternators, regulators, and charging systems.

Features:

- Special AGM test options for accurately diagnosing AGM and spiral (six-pack style) batteries.
- Can switch between English and Spanish languages with a menu-based selection.

Battery Testing

The way it has been: Your customer brings in a dead battery and you have to charge it up to test it. Then, if it's a keeper, you have to recharge it. Hardly efficient use of your valuable time. With MinuteMan Plus on the job, you can test discharged batteries down to as low as two volts, and it won't drain a charged battery you are testing. You won't waste time charging bad batteries.

Works on all 12-volt automotive-type batteries with cold cranking amp ratings of 100–1500.

This includes batteries found in motor-vehicle, marine, agricultural, forestry, and industrial applications. The tester operates from either 110 volts AC or its own internal, rechargeable 6-volt battery. Features self-calibration, an internal battery check, and an automatic shut-down to reduce power consumption.

On certain competitive, carbon-pile load battery testers, the technician must interpret the readings, then make the electrical system diagnosis. With MinuteMan Plus, all you have to do is read simple test results on the LCD display.

Starter Testing

The MinuteMan Plus display shows cranking volts and amps, and indicates either "Good Starter" or "Bad Starter." Excessive starter current draw can indicate a defective starter. Excessive engine drag, due to tight or damaged bearings or piston drag, can also cause an abnormally high starter draw.

Charging System Testing

Checks the charging system at high rpms and at idle, and stores the data. Results show regulator volts, peak amps, and a diode condition. MinuteMan Plus utilizes waveform analysis when testing alternator diodes, which provides more accuracy than the commonly used "ripple voltage" tests.

Battery Tachometer Capability

Unique, patented direct-from-battery technology gives you tachometer readings without having to make complicated connections to the ignition system. Provides battery-sensing measurements to 4,000 rpm, with 1 rpm resolution.

3130AGM – MinuteMan Plus multi-application electrical system tester. Includes connector cables, internal rechargeable battery, battery charger, and instructions. Wt., 27 lbs.

3131AGM – Same as No. 3130AGM, but also includes roll-around cart with two additional shelves for other equipment. Wt., 53 lbs.

Accessories:

3125 – MinuteMan Tester Cart

3135 – Printer kit.

3130-01 – Amp Probe Assembly.

3130-003 – Voltage Harness



3130-01 Amp
Probe Assembly

3130-003
Amp Probe
Assembly



3131AGM



3125



3135

3130-01

ONESTEP™ BATTERY ANALYZER AND CHARGER

The OneStep is a bench-top battery tester and charger that provides extremely accurate battery diagnosis. The combination of SABRE heavy load, dynamic charge, and accuracy test technologies yields unparalleled accuracy, and the addition of charge acceptance into the test algorithms further increases the level of accuracy. Precise high-output charging can test, fully charge, and return a battery to service in under 45 minutes. It also provides analysis of a battery's charge acceptance by testing the battery again following the charge cycle. It is specifically designed for all forms of the newer AGM (including spiral wound types), gel cell and deep cycle batteries, as well as conventional FLA (lead-acid) batteries.

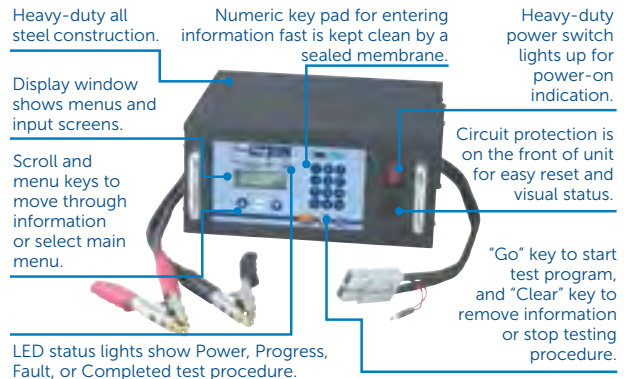
Product Features:

OneStep gives the user one piece of equipment to completely test and charge batteries with the highest accuracy.

- Precise High-output Charging—returns charged batteries to service in less than 45 min.
- Compatible with AGM, FLA, Gel Cell, and Spiral-Wound batteries.
- Extremely accurate testing—combination of Heavy-Load, Dynamic Charge and Accuracy Test Technology.
- LED Status Lights—quickly identify test status.
- Built Rugged—all-steel construction with solid copper transformer.
- Compact Flash Card Port—updates software and add memory as needed.
- Low Cost of Ownership—designed with internal overload protections for high volume use; field replaceable cables.
- Precise Output Charging—computerized control of charging voltage and current.
- Easy-to-Use Menus—screen prompts guide user through procedures.
- Expandability—easy-to-update and expand as new battery technologies are released.
- Bar Code Reader—optional feature for fast and accurate entry of battery specifications.
- Battery Warranty Output Code—allows easy warranty administration analysis.

Specifications:

- Battery Test Range: 12 volt, 150 – 1500 CCA
- Battery Type: Works on all constructions of 12-volt lead-acid, gel-cell, absorbed glass mat (AGM), wet cell, spiral-wound batteries.
- Operating Temperature Range: 4° F – 158° F ambient air temperature.
- Humidity: 0 – 85%
- Voltage Input: 115 volt 20 amp dedicated. Optional 15 amp input available.



3641 – OneStep battery analyzer/charger, 20-amp input. Wt., 68 lbs.

3640 – OneStep battery analyzer/charger, 15-amp input. Wt., 68 lbs.

Accessories:

3136 – Serial printer kit.

Utilizes switching technology which helps restore the batteries that are slightly sulfated.

Switches to float mode after the battery is completely charged.

Application: Lead Acid (FLA, AGM, GEL).



3176

Smart Battery Charger and Maintainer

The Smart Battery charger and Maintainer utilizes a patented 5-Stage Automatic charging system designed to charge a battery efficiently while prolonging the life of the battery. The automatic power switching gives you the ability to charge your battery to 100% without worrying about damaging the battery. The battery charger/maintainer comes with clamps for jump starts or overnight charging and ring connectors for permanent connection to seasonally used vehicles such as RVs and motorcycles.

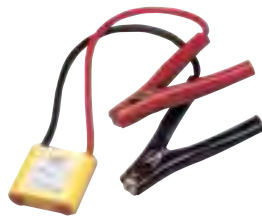
Product Features:

- Maintains the battery charge level during vehicle programming
- Charges deep discharged batteries in about 12 hours
- Maintains the battery charge level if the vehicle or the battery needs to be stored for an extended period of time.
- Switches to float mode after the battery is completely charged
- Utilizes switching technology which helps restore the batteries that are slightly sulfated
- Easy-to-read LED lights to show the status of charging and battery condition
- Micro processor controlled pulse charger
- LED indicator lights : Red & Green
- Input: 110V AC
- Application: Lead Acid (FLA, AGM, GEL)
- Output: 5Amp /12Vdc
- Auto polarity, Spark free & Overcharging Protection
- IP65 waterproof, Dust Splash/Rain Protection
- Switches automatically to float mode

3386

Antizap Auto Surge Protector

- Connects to battery, and becomes part of vehicle's electrical circuit. If a voltage spike is detected, the Antizap automatically clips it to a safe level to prevent damage to sensitive electronic systems.
- Protects fuel gauge, ABS brakes, radios, tape and CD players, car alarms, SRS air bags, LED instrumentation, EFI, fuel, and climate control systems. Protects against welding (Arc, Mig, and TIG).



Saves the on-board computer memory while the vehicle battery is disconnected.

3177A

Professional Memory Saver

An effective solution for saving vehicle data. Saves the vehicles on board diagnostic memory and other on-board memory components such as anti-theft radios, digital clocks, radio presets, seats, mirrors, comfort settings, etc. when the vehicles battery is removed or disconnected.

Product Features:

- OBD II cable for fast connection to the vehicle
- Cigarette lighter adapter for use with vehicles that do not have an OBD II connector LED lights confirm circuit between the cigarette lighter/power outlet and the vehicle's battery with the ignition on or off
- State of charge indicator identifies when the memory saver needs to be plugged in for recharge
- Resettable fuse protects against excessive current draw through either the OBD II connector or the vehicles cigarette lighter
- High capacity, rechargeable sealed lead acid battery for extended service between charges Power on/off switch
- One, complete, durable compact unit

3177A includes: Memory saver power station with rechargeable high capacity 12V battery, 12V AC/DC charger, OBD II connector, Cigarette/power plug and cord.



3665

Phototach

- Phototach can be used as a contact as well as a non-contact tachometer.
- Four styles of contact adapter tips clip easily to the top of the phototach.
- Infrared technology makes the phototach accurate, convenient, and easy to use.
- Infrared beam not affected by ambient light.
- Non-contact design results in (zero) torque loss for true precision.
- Phototach is equipped with a laser pointer for accurate targeting.
- Reflective tape placed on a revolving object can be measured at distances from 2" to 20".
- Wide measuring range and high resolution, 2.5 to 99,999 rpm with a large 5-digit display, autoranging, min/max memory storage, and low-battery indicator.





3630

Battery Powered Continuity Tester

Designed to test any type of non-live electrical circuit. Track down broken wires, bad grounds, and blown fuses quickly.

Product Features:

- Comes with AAA alkaline battery.
- Ergonomic, slim designed clear handle.
- 12', red coil cord.
- Low voltage replaceable bulb.
- Molded strain relief.
- Heavy-duty stainless steel probe with insulated shaft.
- Heavy-duty clip with positive soldered connection.



3633

Mini-coil Cord Circuit Tester

Small handle with needlepoint stainless steel probe allows easy back probing and piercing. Special threaded probe comes with screw on alligator clip for additional versatility. Useful in testing electrical circuits and locating shorts, grounds, and open circuits.

Product Features:

- 12', heavy-duty, red coil, cord lead.
- Checks 6- and 12-volt systems.
- Ergonomic, slim designed clear handle.
- Bright red, high intensity/slim style replaceable bulb.
- Positive contact-molded strain relief.
- Heavy-duty, stainless steel probe with insulated shaft.
- Heavy-duty clip with positive soldered connection.



3639

Extra Long, Heavy-Duty Circuit Tester

Long 7" probe shank allows access to difficult to reach areas for testing electrical circuits and locating shorts, grounds, and open circuits.

Product Features:

- 12-foot, heavy-duty, red coil cord lead.
- Checks 6- and 12-volt systems.
- Ergonomic, slim designed clear handle.
- Bright red, slim style replaceable bulb.
- Positive contact-molded strain relief.
- Heavy-duty, stainless steel probe with insulated shaft.
- Heavy-duty clip with positive soldered connection.



3631

Heavy-duty Logic Probe Tester

Multi-functional design allows testing range of 3–26 volts. Bright red and green LEDs interpret voltage signals such as ground, power, and frequency. Tests fuel injectors, solenoids, presence of serial data, and tach reference signals. Output tests on MAF, Cam, Crank, Hall Effect VRS sensors and more. High impedance input compatible with computer circuits and sensors.

Product Features:

- Air bag safe.
- 12', heavy-duty, twin clip, red coil cord lead.
- Checks 6-, 12-, and 24-volt systems.
- Ergonomic, slim designed clear handle.
- Positive contact molded strain relief.
- Heavy-duty stainless steel probe with insulated shaft.



3634

Heavy-Duty, Straight Cord Circuit Tester

Designed for testing electrical circuits and locating shorts, grounds, and open circuits.

Product Features:

- 5-foot heavy-duty cord.
- Checks 6- and 12-volt systems.
- Ergonomic, slim designed clear handle.
- Bright red, slim style replaceable bulb.
- Positive contact-molded strain relief.
- Heavy-duty, stainless steel probe with insulated shaft.
- Heavy-duty clip with positive soldered connection.



3644

12-Pack Display Assortment

Stand-up display of 12 circuit testers contains an assortment of all 6 circuit testers in a point-of-purchase display.

Contents include:

- 3630 – Battery powered continuity tester - (1)
- 3631 – Heavy-duty logic probe tester - (1)
- 3633 – Mini-coil cord circuit testers - (3)
- 3634 – Straight cord circuit testers - (2)
- 3636 – Coil cord circuit testers - (3)
- 3639 – Extra long circuit tester - (1)
- 3642 – 12V–36V truck circuit tester - (1)



3642

12V–24V Truck Circuit Tester

Product Features:

- Works on 12–24 volt systems.
- Features 7" stainless steel probe.
- 24' coil cord.
- Extra large clamp.



3636

Heavy-Duty, Coil Cord Circuit Tester

Designed for testing electrical circuits and locating shorts, grounds, and open circuits.

Product Features:

- 12-foot, heavy-duty, red coil cord lead.
- Checks 6- and 12-volt systems.
- Ergonomic slim designed clear handle.
- Bright red, slim style replaceable bulb.
- Positive contact-molded strain relief.
- Heavy-duty, stainless steel probe with insulated shaft.
- Insulated shaft.
- Heavy-duty clip with positive soldered connection.

Replacement Bulbs

3630-10

10 pack of replacement bulbs for No. 3630.

3633-10

10 pack of replacement bulbs for Nos. 3633 – 3639.

3642-10

10 pack of replacement bulbs for No. 3642.



OTC Test Leads

Constructed from high quality polyurethane, these high visibility coil cord test leads have superior memory retention and resistance to grease and oil, making them a perfect compliment to any technician's arsenal of test equipment. Test leads come with a variety of interchangeable tips suited for just the right application.

3902

Twin 5' jumper leads. High visibility black and red leads stretch to over 5 feet in length.

3903

24' jumper leads. From headlight to taillight, this extra long test lead stretches to over 24 feet in length.

3904

Twin 5' multimeter lead set. Expand the usefulness of any standard multimeter. This set includes one black and one red test lead, 2 multimeter probes, 2 banana plugs, and 4 alligator clips.

3905

Twin 5' multimeter/piercing jumper lead set. Pierce small gauge wires with this complete jumper lead set. This set includes one black and one red test lead, 2 multimeter probes, 2 banana plugs, 2 bed-of-nails, and 2 alligator clips.

3906

Twin 5' piercing test lead set. With 2 banana plugs and 2 bed-of-nails, this test lead set has just the right combination of tips for most testing applications.



3650

Heavy-Duty, Remote Starter Switch

Allows one person to start and crank engine while under the hood or from either side of the vehicle.

Product Features:

- With convenient hot circuit indicator, red ready light glows when starter switch is connected to a hot circuit; light goes off when switch is depressed.
- High current, heavy-duty push button switch ensures reliable operation and long service life.
- 5' leads made from heavy-duty, oil and grease resistant, 12-gauge wire.
- High current clips with protective boots open to an extra wide 5/8" for ease of hook-up.
- Soft, non-slip rubber grip.



3385

Universal Gauge and Component Tester

This is the fast way to pinpoint problems in fuel, oil, temperature, and vacuum electrical gauges. This gauge and component tester includes a test light and switch to also test instrument voltage regulators on various vehicles. Plus, you can use it as an instrument gauge tester by attaching the alligator clips to sensors and wiring harnesses on a variety of vehicles. Included is an instrument gauge application data sheet listing resistance set points for GM, Ford, Chrysler, Toyota, Nissan, VW, Mack, Navistar, and John Deere.



Ignition System Quick Test Kit

This kit enables technicians to do power-balance tests and diagnose problems on standard, electronic, or distributorless ignition systems. Comes with brass adapters to fit all auto coils, test probes and leads, spark gap tester, and step-by-step instructions that lead technicians through the power-balance test.

- Performs power-balance in less than 5 minutes on standard, electronic, or distributorless ignition systems.
- Spark gap tester checks for adequate KV voltages on electronic ignition systems, providing instant diagnosis of problems—whether a faulty coil, ignition wire, or spark plug.
- Ideal for checking spark in no-start condition, instead of wasting time trying to "ground out your screwdriver."
- Step-by-step instructions lead technician through tests to check if ignition has a bad ground all the way to defective coils.

3589 – Ignition system quick test kit.

3579 – Ignition system adapters, set of six.

6589

Electronic ignition spark tester

Check for spark on gasoline engines used in import and domestic cars and trucks, plus small engines.



3569

Terminal Test Kit with Circuit Tester (Standard Adapters)

- 14-piece standard terminal adapter set for the popular Packard Weather Pack, Metri-Pack, and Micro-Pack style connectors. External-internal versions of adapter styles.
- Circuit tester with bulb for 6-12-24 volt systems with interchangeable probes for use with terminal test adapters. Heavy-duty coil cord extends to 12 ft.
- Terminal adapters have flexible joints that eliminate damaged connector terminals that result from testing with a standard test probe.
- Complete kit in plastic storage case.



3587

Terminal Test Kit (Standard Adapters)

- Excellent accessory when testing with a scope or meter.
- 32-piece standard terminal adapter set for the popular Packard Weather Pack, Metri-Pack, and Micro-Pack style connectors. Multiple external-internal versions of adapter styles.
- Terminal adapters have flexible joints that eliminate damaged connector terminals that result from testing with a standard test probe.
- Set of 4 patch cords (4 ft.) included for use on multiple terminal connectors, for use with terminal adapters.
- Complete kit in plastic storage case.



3590

Electronic Stethoscope

- Quickly pinpoints noise and location of bad bearings, bushings, dirty fuel injectors, wind/air leaks, valves, and lifters.
- Flexible shaft reaches tight areas.
- Ultra-sensitive mic and amplifier provide a full range of sounds needed by the professional.
- 7 sound-level control settings; 60 dB to 120 dB.



Bosch Diagnostics

Unmatched Coverage and Repair



BOSCH
Invented for life

ESI[truck] HD Diagnostics

Unmatched Coverage and Repair Information at the truck



Bluetooth wireless capability.

Increase Shop Efficiency

- ▶ Code to fix at the truck
 - Trouble shooting information in the tool
- ▶ Tech stays at the vehicle
- ▶ Repair Info at the truck
 - Wiring Diagrams
 - Component Pictures & Locations
 - Test Procedures & Descriptions
 - DTC Look-up
- ▶ Automatic Vehicle ID

Single, Intuitive Interface

- ▶ Work on all trucks with a common scan tool
- ▶ Intuitive, easy to use

Functions Mechanics Need

- ▶ Read & clear fault codes
- ▶ Cylinder cut-out
- ▶ Cylinder compression/balance
- ▶ Injector actuations
- ▶ Key component actuations
- ▶ Key system tests

Works with Other Software

- ▶ RP1210 VCI
- ▶ Compatible with industry software including most OEM's



Code	Description	Severity	Resolution
P0128	Engine Coolant Temperature Below Normal	2	Check coolant level and thermostat operation.
P0135	Oxygen Sensor (Bank 1 Sensor 1) Heater Circuit Malfunction	2	Check oxygen sensor heater circuit.
P0171	System Too Lean (Bank 1)	2	Check air intake system for leaks and fuel delivery.
P0172	System Too Rich (Bank 1)	2	Check air intake system for leaks and fuel delivery.
P0300	Random Misfire Detected	3	Check spark plugs, wires, and injectors.
P0301	Misfire Detected (Cylinder 1)	3	Check spark plug, wire, and injector for cylinder 1.
P0302	Misfire Detected (Cylinder 2)	3	Check spark plug, wire, and injector for cylinder 2.
P0303	Misfire Detected (Cylinder 3)	3	Check spark plug, wire, and injector for cylinder 3.
P0304	Misfire Detected (Cylinder 4)	3	Check spark plug, wire, and injector for cylinder 4.

Best Aftermarket Coverage

- ▶ Truck Brands
Freightliner, International, Kenworth, Mack, Volvo, Peterbilt, Sterling, Western Star
- ▶ Engine Brands
Cummins, Caterpillar, Detroit Diesel-MBE, Volvo Mack, Navistar, PACCAR, Perkins, Deutz, MTU
- ▶ Brake Systems
- ▶ Transmissions
- ▶ Trailer ABS
- ▶ In-Depth Heavy Duty, Medium Duty
- ▶ Light Duty basic



3824

Bosch ESI[truck]

- Includes ruggedized 10" tablet
- RP1210 Data Link Adapter
- 6 Pin, 9 Pin, and 16 Pin Connectors
- ESI[truck] Diagnostics Software
- External DVD Drive
- One year warranty



3824BSC

Bosch ESI[truck]

- RP1210 Data Link Adapter
- 6 Pin, 9 Pin, and 16 Pin Connectors
- ESI[truck] Diagnostics Software
- One year warranty



Accessories



3824-01
9-Pin Adapter cable



3824-02
6-Pin Adapter cable



3824-03
16-Pin/OBD cable



3824-04
Multipin cable



3824-05
USB Cable



3824-06
Trailer Adapter

Mastertech VCI

Scan Tool Diagnostic

Essential Product. New Configuration. Impressive Price.

The Bosch Mastertech VCI is now available in a more cost-effective configuration that offers validated flashing that meets both SAE J2534 and ISO 22900 industry standards. It also is capable of OEM-level diagnostics so it is like having multiple OEM tools in one.



Bosch Mastertech VCI provides;

- ▶ **Validated J2534 Flashing** – covers GM, Ford, Chrysler, Honda, Nissan, Mazda, Mitsubishi, Saab, BMW, and more to come in the future. M-VCI is an approved reprogramming device.
- ▶ **Authentic OEM Dealer Level Diagnostics** – compatible with BMW ISTA, Saab GDS 2, GM Tech2Win, GM GDS 2, and more to come in the future. OEM dealer level diagnostic software is purchased separately from vehicle OEM websites.
- ▶ **Optional Aftermarket Diagnostic Software** – Domestic, Asian and European vehicle coverage is available for purchase.
- ▶ **Enhanced High Speed Ford Cylinder Contribution Test¹** – Enables technicians to quickly diagnose cylinder performance problems on Ford CAN vehicles.

¹ The M-VCI is required to run the application

Great coverage for all vehicle models using the Mastertech VCI



Laptop



European



Asian



Domestic

***Note:** OEM's have specific PC requirements for their application to work properly. Please consult their respective websites for information about PC requirements necessary to properly run OEM Applications prior to use. Vehicle calibration files purchased directly from the OEM.

F00E901631 Bosch Mastertech VCI, hardware kit- Includes the base Mastertech VCI, DLC cable, WIFI wireless dongle, AC power supply, USB cable and carrying case. Software not included.

Advantages of M-VCI:

- ▶ Industry-standard SAE J1962 16-pin connector with no special “keys” or adapters required for OBD II vehicles
- ▶ Operates with a Windows PC through either 802.11 wireless, Ethernet or USB connection
- ▶ Fully OBD II compliant, including Controller Area Network (CAN) protocols
- ▶ Includes USB WiFi adapter that provides internet connectivity during vehicle diagnostics



F00E901631

F00E901632 The Bosch Mastertech VCI Aftermarket Diagnostic Software- Includes the final release of Shop Foremen Pro and ESI 2.0. The 2013 final release software is a one time purchase license (no future updates).

Advantages of Optional ESI[tronic] 2.0 and Shopforeman Pro Software:

- ▶ Quick module status check of the vehicle network
- ▶ Intuitive system menus to speed diagnostics
- ▶ Pulls OBD II codes with 4 clicks!
- ▶ Wide range of functions such as*: Auto Brake Bleed Test
 - Bi-directional controls for engine, body and chassis systems
 - Steering Wheel Angle Reset
 - Maintenance Light Reset
 - Electronic Stability Control Test
 - Electronic Throttle Programming
 - Tire Pressure Sensor ID Programming
- ▶ Technical support for tester operations via technical hotline
- ▶ Vehicle health test that is easy to use
- ▶ Includes the following vehicle coverage:
 - European Vehicle Coverage- Audi, BMW, Mercedes-Benz, Mini, Volvo, Volkswagen, Smart
 - Domestic Vehicle Coverage- Chrysler, Ford, General Motors
 - Asian Vehicle Coverage-Toyota, Honda, Nissan, Hyundai, Kia, Lexus, Scion, Acura, Infiniti



F00E901632

*Depending on vehicle/system

3893MVCI Total Shop Solution: 3893MVCI OTC Encore + Bosch Mastertech VCI. For details on the OTC Encore see page 8.

Bosch Diagnostics

Authentic OEM Diagnostics to Aftermarket with Ford VCM II

The Ford Vehicle Communication Module II (VCM II)

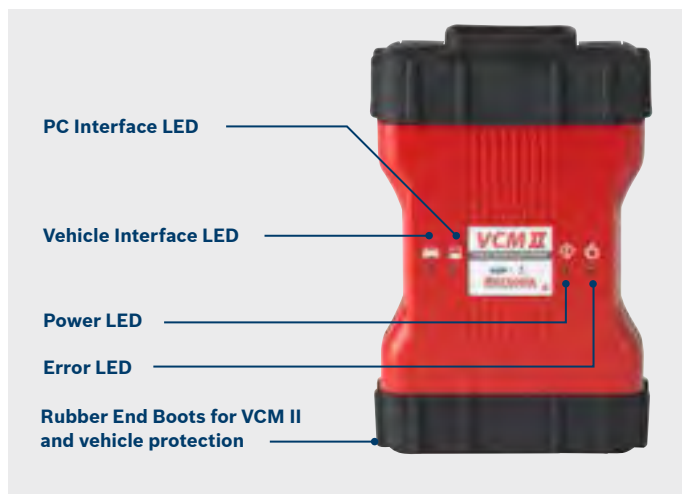
The Ford VCM II is the authentic Ford OEM diagnostics scan tool that works with the Ford IDS diagnostics application running on a PC to diagnose Ford, Lincoln and Mercury vehicles

The VCM II offers:

- ▶ Authentic OEM diagnostics for Ford, Lincoln and Mercury Vehicles.
- ▶ Customer Flight Recorder (CFR) functionality with an optional pendant cable.
- ▶ Industry standardized J1962 Data Link Connector (DLC) and USB cables.
- ▶ Four LED indicators and signaling device providing technician with continuous visual as well as audible operating status.
- ▶ Enhanced 802.11 wireless that minimizes dependencies on service department wireless capability infrastructure.
- ▶ Improved durability.
- ▶ SmartPower Management system to protect the VCM II in extreme environments.

Integration with IDS:

- ▶ New wireless software integrated with IDS installation package.
- ▶ Wireless functionality preferred for all IDS functions including module reprogramming. USB wired connections are only required to update the VCM II loaded code and to set up the VCM II to function as a Customer Flight Recorder.
- ▶ CFR option added to provide legacy and future vehicle coverage.



F00E9016297HH

Includes VCM II, VCM to Laptop cable, USB wireless cards, and DLC cable

*software license sold separately



F00E9016307HH

Includes VCM II, VCM to Laptop cable, USB wireless cards, DLC cable and CFR kit.

*software license sold separately

Bosch Diagnostics

Authentic OEM Diagnostics to Aftermarket with GM (MDI)

GM Multiple Diagnostic Interface (MDI) Programming Solution Bundle



- ▶ The GM MDI Unit is a compact communication module that manages the transfer of data between a vehicle's onboard ECU network and a PC.
- ▶ The GM MDI Programming Solution Bundle includes a one year subscription to the GM Technical Information System (TiS) SPS – a \$995 value!
- ▶ With your included TiS SPS subscription you can always access the most current General Motors vehicle control module calibrations.
- ▶ The GM MDI Unit has an easy to grip, comfortable, rugged enclosure.
- ▶ The GM MDI Programming Solution Bundle allows the user to perform Pass-Thru programming procedures using software running on a laptop or desktop PC.
- ▶ Using the GM MDI Unit for programming frees up your Tech 2 for diagnostics.
- ▶ User can perform Data transfer and Electronic Control Unit (ECU) reprogramming.
- ▶ The GM MDI Unit has shop network communications (LAN and WLAN) capabilities.
- ▶ Future expandability, including diagnostic applications.
- ▶ GM MDI is also available without TiS SPS subscription.



GM Software Subscriptions

To enable Independent Service Centers to be competitive in the automotive aftermarket, ACDelco offers GM Technical Information System (TiS) subscriptions via the Web.

To activate or renew your GM software subscription for your Tech II or Multiple Diagnostic Interface (MDI) unit.

GM MDI Software Subscription (included in bundle)

The GM MDI unit requires the GM Technical Information System (TiS) SPS subscription to perform vehicle programming.



FOOK10832235E GM MDI

Includes the GM MDI, Ethernet and USB cables, cable keeper, power adapter, data link cable, MDI users guide (CD), and four AAA batteries.



169900012935E CANdi Module

Includes the CAN diagnostic interface module and instruction sheet. **IMPORTANT:** In order for the CANdi module to work, you must have a 32 MB PCMCIA card with at least software version 24.001 in your Tech 2.

Tech 2

Scan Diagnostics



Ideal for vehicle diagnostics.

The Tech 2 has been an essential tool in dealerships worldwide since 1997. Now you can put the same dealer software in your shop. When your business depends on maximum productivity, don't settle for anything less.

With additional OEM purchased software, the Tech 2 can be used to diagnose Izuzu, Saab, and Suzuki vehicles. Contact the OEM dealer for software purchase details.

Essential Features

- ▶ Authentic General Motors software coverage
 - Model year 1992 to 2009
 - Most vehicles
 - 2010 to Current – Select vehicles not covered by General Motors GDS 2
- ▶ Covers all powertrain, chassis, and body systems
- ▶ Enhanced diagnostics on GMLAN (CAN) vehicles with optional CANDi module
- ▶ Patented bi-directional control testing



F00E9009777HH Tech 2 Pro Optima

Kits come with pre-loaded General Motors scantest software. Additional TIS 2 Web software must be purchased separately via the ACDelco Tech Connect website.

What Makes the Tech 2 Different?



Access to all on-board systems



Multiplex network module status



Enhanced GMLAN



Comprehensive OEM-validated bi-directional control testing

MTS 5200

Scope/Engine Diagnostic

Comprehensive Engine Analysis

The MTS 5200 is the single solution to all your engine analysis needs. Now you can have the power of the “big box” analyzers in one portable hand-held tool.



Modular Design

Build the functions as they are needed to make a full function engine analyzer.

Start with a 4-channel oscilloscope and a graphing multimeter.



Next, add the ignition upgrade package and get primary and secondary ignition support.

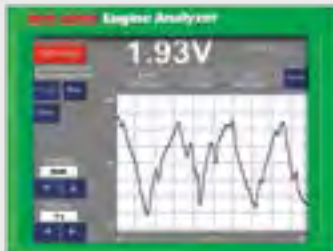


Then, add the vacuum, pressure and failed cylinder test package and get a full complement of mechanical tests.

- F00K1085847HH** MTS 5200 Engine Analyzer Technician Efficiency Pro Package with Amp Probes
- F00K1085837HH** MTS 5200 Engine Analyzer Technician Efficiency Package
- F-00K-108-032** MTS 5200 Engine Analyzer Base Kit

4 Tools in 1

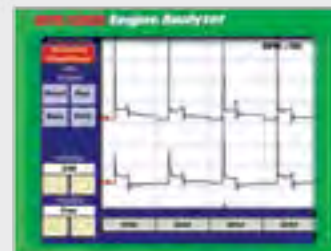
Graphing Multimeter/DVOM



4-channel Oscilloscope



Ignition Analyzer



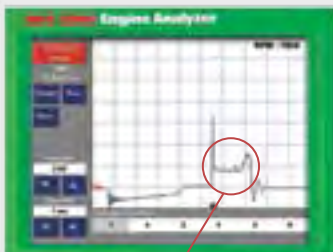
Engine Analyzer



Start with the basic kit and build the MTS 5200 to fit your diagnostic needs.

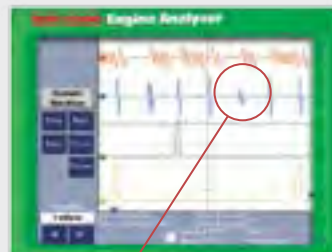
Complex Problems...Simple Solutions

Coil On Plug



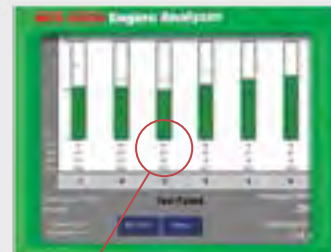
Good burn time
Painless COP diagnosis displays a waveform in three easy steps

Multichannel Pinpoint Test



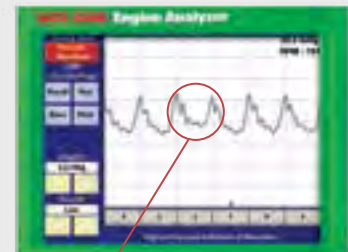
Faulty crankshaft position sensor
Simplified intermittent diagnosis multichannel sensor display

Cranking KV



Weak coil output
Efficient ignition analysis in less than 60 seconds

Vacuum Per Cylinder



Low vacuum on cylinder #2
Comprehensive mechanical testing includes vacuum, pressure and ignition KV

SMT 300

Smoke Machine Tester

The Bosch SMT 300 Smoke Machine Tester is a full featured device which allows today's shop to perform various types of vehicle leak testing.

The compact design and full complement of accessories makes this an ideal fit for any repair shop needing a workhorse of a smoke tester. It has built in safety features for EVAP testing. Suitable for leak testing of any closed system found on today's vehicles.

Essential Features:

- ▶ Compact (13" x 12" x 13" tall)
- ▶ Lightweight (19 lbs)
- ▶ Operates off vehicle (12 V) battery
- ▶ Full featured machine with graduated smoke flow control valve, air flow meter, and pressure/vacuum decay gauge
- ▶ Full complement of accessories with storage case
- ▶ Multi-purpose tester designed for leak detection in any low pressure closed system; usable to pinpoint wind and water leaks of passenger and trunk areas
- ▶ OEM approved smoke test technology
- ▶ Designed for safe use in any vehicle; will not damage vehicle components or void any factory warranty
- ▶ Meets SAE standard for safe EVAP testing (2007-01-1235 and 2008-01-0554)
- ▶ Uses UltraTraceUV® dye solution to create Diagnostic Smoke®; the only OEM approved solution
- ▶ Dye deposit is UV light-traceable (light included w/kit)



F00E90029135E SMT 300 Smoke Machine Tester Kit

Replacement parts for kit—Included items

- F00E90034835E** Smoke Solution
- F00E90034935E** Cap Plug Set
- F00E90035035E** Exhaust Cone
- F00E90035135E** Smoke Diffuser
- F00E90035235E** Light and Glasses
- F00E90035335E** EVAP Port Adapter
- F00E90035435E** Schrader Valve Tool
- F00E90036435E** Accessories Case

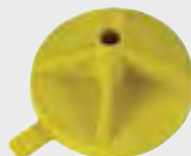
Optional Accessories



F00E90035535E
Insert Gas Pack



F00E90036135E
Filter Kit



F00E900362
Universal Neck Adapter



F00E90036335E
BMW-Mini Neck Adapter



F00E90036535E
Preset 100 psi Regulator*



F00E90036635E
Cylinder Hose*

*For use with larger inert gas bottles found in shops.

Bosch Diagnostics

Digital Multimeter

The Bosch MMD 540H Hybrid Multimeter is a CAT safety rated, auto ranging digital multimeter designed for use in diagnostics of electronic circuits.

Whatever your shop services: automotive, fleet, motorcycle, marine or small engine, the MMD 540H has the capability to keep up with your business.



The MMD 540H offers:

- ▶ CAT III (1000v) safety rating for hybrid vehicle circuits
- ▶ Peak, Min/Max readings as fast as 1 millisecond
- ▶ Higher amperage test ranges, up to 20 Amps
- ▶ Inductive RPM clamp for conventional and DIS ignition systems
- ▶ Fused diagnostic test leads for safe trouble shooting (up to 20 amps) at the circuit fuse location
- ▶ K-Type thermocouple for quick temperature measurement
- ▶ Large LCD display with bright backlighting and auto shutdown
- ▶ Tri-lingual users manual on CD (English, Spanish, French)
- ▶ Rugged nylon case with handle for efficient storage

FO0E9001013CM MMD 540H Hybrid Multimeter Kit

- ▶ Extra long test leads
- ▶ Inductive RPM clamp
- ▶ Additional fused diagnostic test leads for ATC and Mini fuse types
- ▶ K-type thermocouple
- ▶ 9 volt battery
- ▶ CD based, tri-lingual users guide
- ▶ Nylon storage case with handle



The FSA 050: Future-proof as a standalone device or as a special accessory

The diagnostics module for testing vehicles with electric and hybrid drive. The hand-held device be linked wirelessly to a PC system.

As an individual solution, the FSA 050 offers insulation and high-voltage testing for electric and hybrid drives.

Essential Features:

- ▶ More versatility and competence during troubleshooting
- ▶ Cost-effective entry to diagnostics of electric and hybrid vehicles
- ▶ Flexible as a standalone device or as a special accessory



Equipped for professional diagnostics of electric and hybrid vehicles

- ▶ Hand-held unit with radio connection to Windows operating systems¹
- ▶ Testing of vehicles with electric and hybrid drive
- ▶ High-voltage tests
- ▶ Insulation tests
- ▶ Multimeter function: Voltage, resistance, capacity, continuity test
- ▶ Use as a standalone device
- ▶ Windows operating use with systems¹ PC

0684010050480 Multimeter-FSA Hybrid Tester

- ▶ 2 Measuring cables
- ▶ High-voltage probe
- ▶ DVD CompacSoft[plus]
- ▶ Bluetooth stick
- ▶ Storage case



BAT 55, BAT 110

Battery Charger / Battery Tester

BAT 55 Stable Power Supply Charger provides reliable power supply for charging and maintaining battery state-of-charge during ECU reprogramming.



Essential Features:

- ▶ Advanced switch-mode design
- ▶ Provides a cleaner, more reliable power source than standard battery chargers
- ▶ Fully-regulated DC output prevents overcharging of the battery and precisely maintains the necessary battery voltage during complex service and reprogramming
- ▶ Multiple protection features for a long, trouble-free life:
 - Reverse battery polarity protection via replaceable fuses
 - Brownout input protection
 - Over-current protection; cycle-by-cycle peak limiting and rated current-limiting to maximize the life of the converter
 - Over-temperature protection
- ▶ Quiet, small and compact for portability
- ▶ Commercial design and heavy-duty internal components ensure years of continuous use
- ▶ High quality, detachable cables for easy field service
- ▶ Protective carrying case for storage or during use

FO0E9003737HH BAT 55 Stable Power Supply and Charger

Unique proportional fan control circuit sets the fan speed directly proportional to the converter's internal ambient temperature. This enables the fan to turn on and off very slowly, minimizing unwanted fan starting noise.



The BAT 110 is a rugged workshop battery tester that uses conductance technology to provide quick and accurate testing of batteries, charging systems and starter systems.

Essential Features:

- ▶ Large LED display
- ▶ Battery condition is indicated by illuminated LEDs
- ▶ Capable of testing AGM and standard flooded batteries
- ▶ Temperature compensation for accurate test results
- ▶ 5 Large, easy-to-use navigation buttons
- ▶ 12V load-free battery tester
- ▶ Suitable for testing lead-acid batteries: standard, maintenance-free, plus AGM batteries
- ▶ Capable of diagnosing 12V starter and charging systems
- ▶ Lowest voltage storage function when testing starter systems
- ▶ Highest and lowest voltage storage function when testing charging systems
- ▶ Tests CCA norms*, as well as IEC, DIN, SAE, and EN
- ▶ Accurate test results under all temperature conditions
- ▶ Indicator for defective battery
- ▶ Solid and rugged housing stands up to daily shop use
- ▶ The four digit LED voltage screen, three LED indicators and the arrow keys enable easy and intuitive handling of the device



*A JIS Conversion table is located on the back of the device

FO0E90025835E BAT 110 Battery Tester 12V System

A quick reference guide is located on the back of the unit for starting and charging system tests, as well as a JIS conversion chart.

The BAT 110 is designed for a variety of uses in the workshop. Perform numerous, reliable tests efficiently with the clear, easy-to-use navigation buttons.



BAT 131, BAT 151

Battery and Starting/Charging System Tester Battery Tester

Testing batteries and starting/charging systems is fast and easy with the BAT 131 from Bosch

The BAT 131 is the benchmark in battery testing, and is designed for testing all types of 6V and 12V starter batteries, including lead-acid, gel and fleece batteries/AGM. The rugged, exterior housing is specially designed to survive the harshest workshop conditions and molded perfectly for one-handed operation.

The load free test procedure provides fast, precise and reliable measurement results between 100 and 2000 CCA. In addition to CCA, the BAT 131 can also measure and display to CA, MCA, DIN, SAE, EN, IEC and JIS standards.



Essential Features:

- ▶ Easy to use menu
- ▶ Test batteries that are installed in or removed from the vehicle
- ▶ Optimized test algorithm for testing new batteries that are in stock or never been installed
- ▶ Extended test of the starting/charging system for 12 V and 24 V batteries
- ▶ Optional amp clamp upgrade for more extensive starting/charging system testing
- ▶ Integrated printer provides easy to read printouts and can be customized to display your shop's name, address, telephone and website
- ▶ USB port for transferring and storing of test results onto a computer
- ▶ Flexible platform allows for future upgrades

06844007327HH

BAT 131 Battery System Tester

Complete System for Effective Diagnostics

The BAT 151 is a versatile, reliable and easy-to-use electrical diagnostic tool for today's modern automotive service center.

Essential Features

- ▶ Advanced battery testing
- ▶ Enhanced starter system testing
- ▶ Improved alternator diagnostics
- ▶ Cable drop verification testing



Expandable Electrical Diagnostic Platform

Dynamic Conductance Battery Testing Technology

- ▶ Combines direct temperature measurement with deep scan technology to improve accuracy and decisiveness
- ▶ Advanced preventative maintenance algorithms for identifying batteries as they approach end-of-life

Enhanced Starter Diagnostics Including Optional Amp Clamp

- ▶ Combines voltage drop with amps measurements to fully diagnose all parts of the the starting system
- ▶ Output includes current draw graph and voltage drop graph when using optional amp-clamp

Advanced Electrical System Diagnostics Featuring Digital Signal Processing

- ▶ Digital Signal Processing (DSP) provides the capability to digitize the measured alternator output voltage and evaluate the spectral content of the signal to provide a detailed and accurate analysis
- ▶ Provides the ability to analyze the amplitude level and frequency of the diode ripple pattern for improved accuracy and identification of open or shorted diodes and open phase conditions

Conductance Cable Verification Test

- ▶ Uses conductance technology to calculate the voltage drop across the positive (+) and negative (-) sides of any circuit and total circuit drop without running the engine
- ▶ Preset tests for battery ground, starter and alternator circuits, and user-defined test are available

F00E90006635E

BAT 151 Base Kit

F00E90023535E

BAT 151 Complete Kit

ROBINAIR

A/C Service Equipment



As long as there's been air conditioning, there's been Robinair, the global leader in automotive and HVAC/R air conditioning (A/C) refrigerant recovery, recycling and recharge tools, equipment and accessories. Vehicle manufacturers (OEMs), dealership service departments, auto repair shops, industrial and commercial contractors have turned to Robinair for A/C service products since 1956.



A/C Recovery & Recycling

R-134a automotive A/C systems



34288NI

Economy R-134a Refrigerant Recovery, Recycling, and Recharging Machine

Combines simple operation with superior accuracy. It recovers, recycles, evacuates, and recharges R-134a mobile A/C systems quickly and accurately. The product meets the most current SAE J-2788 standards for accuracy and efficiency recovering over 95% of the refrigerant in the vehicle's A/C system and charging to within +/- 1/2 oz of the programmed charge amount. (34288NI-230, 220V)



34788NI

Premier R-134a Refrigerant Recovery, Recycling, and Recharging Machine

Recover, recycle, evacuate, leak-test and recharge R-134a vehicle A/C systems. Features a larger graphical display, leak testing, automatic refrigerant refill and automated oil drain/inject – putting A/C lubricant back into the system. 34788NI also boasts an ability to add a printer and refrigerant identifier. An optional refrigerant charge and oil capacities database is available for North American market vehicles. (34788NI-230, 220V)

Combining Simple Operation With Superior Accuracy:

These machines will test, recover, and recharge R-134a automotive A/C systems quickly and accurately.

Features	34288NI	34788NI	34788NI-H	34988NI
Fully-Automatic Function: Program to recover, vacuum, leak test and charge without operating panel valves.	–	Yes	Yes	Yes
Automatic Dye Inject: Gives the user the ability to use the machine to inject UV dye into a vehicle's A/C system.	–	–	–	Yes
Automatic Oil Drain: A display reminds you to empty the graduated container to show the amount of oil to replace.	Yes	Yes	Yes	Yes
Oil Inject: Automatically inject oil back into the vehicle's A/C systems.	–	Yes*	–	Yes**
Refrigerant & Oil Database: A/C system capacities for North American market vehicles (Optional – not included with the machine)	Optional	Optional	Optional	Optional
A/C System Flush: Flushes a vehicle's A/C system with refrigerant, eliminating any residual oil or other liquid. (Flushing adapters not included)	–	Yes	Yes	Yes
Save & print before and after service data: Allows the user to store before and after service information by vehicle and print this information to provide to a customer.	–	Yes	Yes	Yes
Visual & Audible Alarm: Notifies the user when service is complete, or if a problem has occurred.	–	Yes	Yes	Yes
Vacuum Leak Test: Monitors level after evacuation, informs of possible leak.	–	Yes	Yes	Yes
Automatic Air Purge: Eliminates system-damaging air without monitoring gauges or opening valves.	Yes	Yes	Yes	Yes
Automatic Refrigerant Refill: Maintains a user-selectable amount of refrigerant in an internal vessel and signals when it's time to change supply tank, no monitoring required.	–	Yes	Yes	Yes
Vacuum Feature: Defaults to 15 mins, programmable up to 99 mins. "Remaining time" is displayed.	Yes	Yes	Yes	Yes
Display: Multilingual.	Yes	Yes	Yes	Yes
Refrigerant Charging:	Yes	Yes***	Yes***	Yes***
Refrigerant Management System: Displays refrigerant use and monitors remaining filter life. Prompts appear when 1/3 of filter life remains.	Yes	Yes	Yes	Yes
Electric Vehicle: Capable of servicing high voltage electric compressor A/C systems.	–	–	Yes	–
Printer:	–	Optional	Optional	Yes

* One oil bottle. ** Two oil bottles and one UV dye bottle. *** Charge mode from high or low side, or use both sides.



34788NI-H

Premier R-134a Refrigerant Recovery, Recycling, and Recharging Machine for Hybrid and Non-Hybrid Vehicles

All of the same great features and functions included on the 34788NI, plus the added capability of servicing Hybrid vehicles that use high voltage electric compressors. Recover, recycle, evacuate, leak-test and recharge R-134a vehicle A/C systems. Features a larger graphical display, leak testing, automatic refrigerant refill and automated oil drain. An optional refrigerant charge and oil capacities database is available for North American market vehicles.



34988NI

Premium Refrigerant Recover, Recycle, Recharge Machine

Premium A/C Machine combines ease of use and superior accuracy. It recovers, recycles, evacuates, leak tests and recharges R-134a vehicle systems quickly and accurately. The fully automatic function will recover, vacuum, leak test and charge on its own without the need to stand and monitor the machine. The product is fully SAE J2788 compliant and exceeds the requirements for charge accuracy and recovery efficiency. (34988NI-230, 220V)

Replacement / Accessories / Maintenance Kits	34288NI	34788NI	34788NI-H	34988NI
Replacement Parts				
34724 – Filter (See page 8)	Yes	Yes	Yes	Yes
18190A – Low Side (Blue) Coupler (See page 16)	Yes	Yes	Yes	Yes
18191A – High Side (Red) Coupler (See page 16)	Yes	Yes	Yes	Yes
Accessories				
34412-C – Refrigerant Capacities Database (See page 7)	Yes	Yes	Yes	Yes
18480 and 18490 – Oil Injectors (See page 6)	Yes	–	Yes	–
17499 – Dust Cover, fits 34288NI, 34788NI, 34788NI-H and 34988NI models. (See page 7)	Yes	Yes	Yes	Yes
Maintenance Kits				
13172 – Maintenance Kit (See page 6)	Yes	Yes	Yes	Yes



R-1234yf recovery leaders

Robinair recovery machines are the North American leaders in R-1234yf service.

The AC1234-6 and new AC1234-4 offer fully automatic operation, a powerful 1.5 CFM pump and use a liquid refrigerant flush function to recover more refrigerant faster. Both machines exceed J2843 requirements for R-1234yf recovery, recycle and recharge equipment. Standard features include an integrated refrigerant identifier, automatic internal tank refill, automatic oil drain and a color display.



AC1234-4



AC1234-6

FOR COMPLETE 1234YF SERVICE, PAIR WITH A ROBINAIR LEAK DETECTOR, PAGE 10

Features	AC1234-4	AC1234-6
Fully automatic operation: program for service, walk away and return when complete	Yes	Yes
Integrated refrigerant identifier: (meets SAE J2927)	Yes	Yes
Charge accuracy within +/- .5 oz	Yes	Yes
Automatic internal tank refill: no stopping to fill internal tank during or before service	Yes	Yes
Liquid refrigerant flush function: - flush A/C system components using liquid refrigerant instead of harsh chemicals	Yes	Yes
98.5% recovery efficiency	Yes	Yes
Programmable vacuum operation: quickly achieves necessary vacuum level in any condition	Yes	Yes
Automatic oil drain: shows how much oil was removed from the system during service	Yes	Yes
Automatic air purge: removes potential of air accumulating in the internal tank	Yes	Yes
System leak test to identify gross leaks in a system	Yes	Yes
Color graphical display	4.3" 480x272 QVGA color LCD	5.7" 960x240 QVGA color LCD
On-board printer	Optional	(Yes) for future use
Ethernet Network Port	-	(Yes) for future use
USB 2.0 Port	-	(Yes) for future use
Audio jack	-	Yes
Standard SD Card slot	Yes	Yes
Meets / exceeds SAE J2843 requirement: for R-1234YF recover, recycle and recharge equipment	Yes	Yes
Specifications		
Service time, approx.	60 minutes*	60 minutes*
Operating voltage	103 - 127V, 60 Hz AC	103 - 127V, 60 Hz AC
Pressure gauges	100 mm, EN837-1	100 mm, EN837-1
Keyboard	Alpha-numeric with service function keys	Alpha-numeric with service function keys
Vacuum pump	1.5 CFM dual-stage	1.5 CFM dual-stage
Compressor	1/3 hp hermetic	1/3 hp hermetic
Port access	-	USB, SD, RJ45 I/O
Hoses / couplers	9-foot SAE J2886	9-foot SAE J2886
J2843 compliant	Yes	Yes

*60 minute service time assumes ambient air temp (AAT) of 75 degrees F, vehicle matching AAT, 15-minute vacuum time, 1.2 lbs (550g) R-1234yf refrigerant fill and a 5-minute leak detection cycle.

34888HD

The Robinair 34888HD heavy-duty machine recovers, recycles, evacuates, leak-tests and recharges R-134a with 98.5% efficiency in both small and large mobile air conditioning systems.

- › Large capacity, removable 50-lb. tank and liquid pump for larger A/C systems, typically found in busses
- › Nitrogen port to dry and leak test A/C systems
- › Fully automatic recovery, system evacuation, leak testing, refrigerant charge and oil drain/inject
- › Optional printer for capturing and retaining vehicle service data



Features

Fully-Automatic Function: Program to recover, vacuum, leak test and charge without operating panel valves

Automatic Oil Drain: A display reminds you to empty the graduated container to show the amount of oil to replace

Oil Inject: Automatically inject oil back into the vehicle's A/C system

Visual & Audible Alarm: Notifies the user when service is complete, or if a problem has occurred

Nitrogen Port: Inject nitrogen into the vehicle's A/C system to dry or leak check the system

Automatic Air Purge: Eliminates system-damaging air without monitoring gauges or opening valves

Vacuum Feature: Defaults to 15 mins, programmable up to 99 mins. "Remaining time" is displayed

Removal External Tank: The ability to switch tanks when performing multiple recoveries on large mobile A/C systems

Display: Multilingual

Refrigerant Management System: Displays refrigerant use and monitors remaining filter life. Prompts appear when 1/3 of filter life remains

Refrigerant Charging: Select a charge mode from high or low side, or use both sides

Optional: Printer

Replacement Parts

34724 – Spin on filter **34750** – 50 lb. tank for R-134a

Specifications

Operating Temp Range	32° - 120°F (0°-50°C)
Recovery Performance	>95% at 70 to 75° F (21 to 24°C) <30 minutes
Voltage	125 VAC 60 Hz
Charge Performance	+/- 0.5 oz at 70° to 75° F (+/- 15g at 21° to 24° C)
Display	5 cm x 9 cm graphical display
Filter-Drier Capacity	300 lb (136kg), spin-on type
Hoses	18 ft (5.5 m)
Weight	Approximately 295 lbs. (133 kg)
Compressor	3/8 hp, pressure protected, oiled, hermetically sealed
Dimensions (HxWxD)	49 in x 28 x 39 (124.5 cm x 71 cm x 99 cm)
Vacuum Pump	5.0 cfm Dual Stage, 29.9 InHg
Languages	English, French, Spanish
Cylinder	External 50 lb. DOT
Certifications	SAE J2788
Efficiency	Industry-leading 98.5%

17800C

The 17800C recovers, recycles, evacuates and recharges, all in one fast and continuous operation through one hook-up. It's ideal for mass transit vehicles, buses, refrigerated trailers or containers and other applications that use refrigerants not typically found in mobile applications.



- › Automatically controls machine functions, leading the user through operations and also notifying when it's time to change the filter drier, and vacuum pump oil
- › Automatically adjusts from liquid to vapor for fast and efficient recovery.
- › Electronic scale makes it simple to recharge to factory specifications; also weighs recovered refrigerant and provides tank overflow protection.
- › 5 cfm vacuum pump is large enough to thoroughly evacuate almost any system; making it ready for recharging.
- › Manual air purge function to remove any non-condensable contaminants.
- › Vacuum leak test function allows user to monitor the system for vacuum decay to determine if a leak exists in the A/C system.
- › Automatic oil drain allows the user to see amount of oil removed from the system being serviced.
- › Heavy-duty filter can handle up to 300 lbs. of refrigerant, effectively removing moisture and acid from the refrigerant.
- › Easy to view 4.3" color graphical display.
- › Maintenance counters to monitor cumulative amounts of refrigerant recovered and charged, as well as other machine operation variables.
- › Optional printer can be added to expand capabilities and provide printed record of service performed.
- › Compatible with R12, R22, R134A, R401A, R401B, R402A, R402B, R404A, R407A, R407B, R407C, R410A, R500, R502, and R507 refrigerants.

Replacement Parts

19776 – Quick change filter **17572** – 50 lb. tank with float switch

Specifications

Voltage	115VAC, 60Hz (17800C), 230VAC, 50Hz (17801C)
Operating Temp Range	50 to 105° F (11 to 41° C)
Recovery rate	Vapor, 0.5 lbs./min and Liquid 1 lbs./min
Vacuum Pump	5.0 cfm at 60 Hz
Hose length	18 ft. (5.5 m)
Recycling filter	300 lbs. refrigerant capacity
Dimensions	47" H x 26" W x 30" D
Certification	UL 1963, UL STANDARD FOR SAFETY REFRIGERANT RECOVERY/RECYCLING EQUIPMENT
Weight	230 lbs. 104 kg (without tank)





17580
A/C flushing unit
Make flushing part of your regular A/C service

You know that not all A/C jobs are simple recharges – there are times when you need to flush a vehicle's air conditioning system to ensure that it operates properly. These circumstances fall into three categories:

Routine Maintenance – As an air conditioning system ages, oil, sludge, and particulates build up, plugging screens, expansion valves, and capillary tubes. Periodically, you should flush the system components to remove these contaminants.

Repairs – To be sure the system will operate properly, you should flush it whenever you repair or replace components. Failed components may contain metal shavings, sludge, and other debris that damage the system or affect the operation.

R-134a Retrofits – In some cases, conversion procedures call for complete removal of existing oil in an A/C system before changing fittings and recharging with R-134a. Flushing is the most thorough means of removing the oil, and it will also pick up any refrigerant residue in the system. Flushing, combined with pulling a deep vacuum, is your assurance the system is ready for the new refrigerant.

A/C Component Flusher

The 17580 makes flushing of lines, evaporators, and condensers fast and easy.

Features

Closed Loop Circulates solvent continuously through components. Includes two adapters. Additional adapters may be needed, sold separately.

Pulsing Action Loosens dirt, corrosion and other debris. Switching hoses allows a back flush option.

Air Agitation Needle Valve Bubbles air into liquid stream to enhance cleaning action.

Hose Adapters Contains adapters to mate with 1/4" flare and 3/8" quick disconnect fitting kits.

Sight Glass To observe flow rates and cleaning process.

One gallon of solvent is needed for the flush procedure. The unit purges solvent from the component, collecting the used material in the collection tank. An activated charcoal filter limits emissions and odors during flushing and purging.

Adapter Kit

17607 – Universal A/C flushing adapter kit.

17581 – Adapter.

Specifications

Dimensions	52" H x 33" W x 20" D
Weight	110 lbs. (50 kg)
Supply Pressure	80–150 psi.



13169

13172

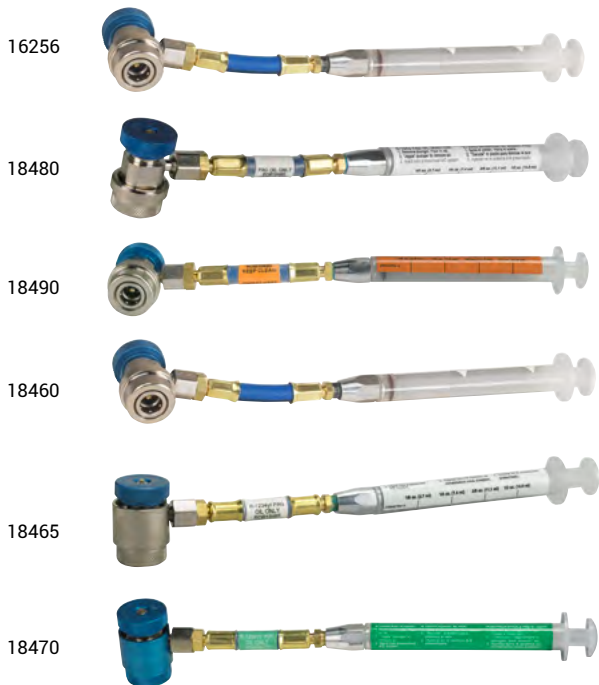
Maintenance Kits

Keep recovery and recycling units operating at peak efficiency with a convenient maintenance kit. Contains one Quick Change filter-drier for use on both R-12 and R-134a stations, and one 16-ounce bottle of our Premium High Vacuum Pump Oil.

13172 – Maintenance kit for models using No. 34724 filter-drier (34288, 34788, 34788-H, 34988, 34288NI, 34788NI, 34788NI-H, 34988NI, AC1234-6, 17700A, 17700-2K, 34700, 34700-2K, 34700Z, 342000, 34711-2K, 34800, 34800-2K, 34900 series).

13169 – Maintenance kit for early models using No. 34430 filter-drier (AC375A, AC374C, AC374, 34134Z, 34134-2K, 17700A, 34700, 34300-2K, 34134Z, 34134-2K).

See your instruction manual if you have questions about which filter-drier to use.



16256

18480

18490

18460

18465

18470

Syringe-Type Injectors

Use these syringe-type injectors to add oil to a fully pressurized A/C system. Fill the barrel with the amount of oil needed, connect the injector, and press the plunger.

16256 – R-134a oil injector, 1/2" Acme quick coupler.

18480 – R-134a oil injector, PAG labeled

18490 – R-134a oil injector, POE labeled

18460 – R-1234yf oil injector, Generic

18465 – R-1234yf oil injector, PAG labeled

18470 – R-1234yf oil injector, POE labeled

Not recommended for UV dye injection.

Vehicle Database Screens

R-134a Vehicle A/C Refrigerant Database 2019

- › Confirm A/C system charge capacities directly from your Robinair A/C RRR machine for R-134a systems.
- › Includes charge amounts and component oil capacities for vehicle model years 1997-2019 using R-134a refrigerant.
- › Database helps ensure the vehicle system is charged correctly with the correct amount of oil, per factory and OEM specification

34411-J – R-134a Vehicle A/C Refrigerant Database 2019. Compatible with legacy Robinair R-134a machines 34788, 34788-H, 34988.

34412-D – R-134a Vehicle A/C Refrigerant Database 2019. Compatible with new Robinair R-134a machines 34288NI, 34788NI, 34788NI-H, 34988NI.



34411-J
134a database
For 34788, 34788-H
& 34988 machines



34412-D
134a database
For 34288NI, 34788NI,
34788NI-H & 34988NI machines



34413-B
1234yf database
For AC1234-4
machines

Vehicle Database Screens

R-1234yf Vehicle A/C Refrigerant Database 2019

- › Confirm A/C system charge capacities directly from your Robinair A/C RRR machine for R-1234yf systems.
- › Includes charge amounts and component oil capacities for vehicle model years 2013-2019 using R-1234yf refrigerant.
- › Database helps ensure the vehicle system is charged correctly with the correct amount of oil, per factory and OEM specification.

34413-B – R-1234yf Vehicle A/C Refrigerant Database 2019. Compatible with new Robinair AC1234-4 R-1234yf recovery machine.



17490



17492



17499

Vinyl Dust Covers

Protect your investment with a heavy-duty vinyl cover. Features corded seams for durability; medium gray color with CoolTech logo.

17490 – Fits all 34888HD, 17800C, 75700, 17800B, 34900, 34800-2K, series.

17492 – Fits all 34288, 34788, 34788-H, 34988, AC375C, AC375A, AC375, 342000, 17700-2K, 34700-2K, 34134Z, 34700Z, 34711-2K, 17700Z, 34702Z.

Dust Cover for A/C RRR Machines

17499 – Fits 34288NI, 34788NI, 34788NI-H, 34988NI, AC1234-4 and AC1234-6, models.

Recycling Filter-Driers

Specially blended for maximum acid and moisture removal.

19776 – Quick change filter for 17800B, 17800C.

34430 – Quick change filter for older 17700A, 34450, 34700 (1997), AC375, AC375A, AC375C, 34134Z.

34724 – Spin-on filter for 17700-2K, 34134A, 34134-2K, 342000, 34234, 34300-2K, 34700, 34700-2K, 34700Z, 34788, 34800, 34800-2K, 34900, 34288NI, 34788NI, 34788NI-H, 34988NI, 34888HD series.



19776



34430



34724

Refrigerant Tanks

17121 – 30 lb. tank, 1/4" fittings (25150, 25175, 25200B, 34234, 34300-2K, 34800 series).

17506 – 50 lb. tank, 1/4" fittings (17800A, 17800-2K, 17700A, 25150, 25175, 25200B series).

17605 – 30 lb. tank with float switch (17650A series).

17572 – 50 lb. tank with float switch. (17800C series).

34102 – 30 lb. tank for R-134a (34234, 34300-2K, 34800, 34134A, 34134-2K series).

34579 – 30 lb. tank (34650 series).

34750 – 50 lb. tank for R-134a (34700, 34888HD series).



17121



17506



17605



17572



34102



34579



34750



10986 Orifice Tube Remover

Use this handy tool to remove the orifice tube before flushing. Speeds service by removing the build-up of particulates on the orifice screen and restrictions that slow flushing. The basic tool works on GM and Ford vehicles and comes with: an extender body for 1985 and newer Ford models; an adapter for 1989-91 GM "J", "L", and "N" cars; and an adapter for 1991 and newer GM "C" and "K" trucks with #3096068 orifices.



17595 Flush Gun Kit

An economical means of flushing contaminants and scale from A/C system components, the flush gun uses dry shop air to pressurize the solvent. The process thoroughly cleans the part, removing oil, any refrigerant contaminants, and residue. The attached nozzle directs the flow of solvent without spray-back.



17565



17609

Power Flush Solvent

Gives you the cleaning power to flush particulates and system lubricant from A/C and refrigeration lines, evaporators, and condensers. An ideal substitute for CFC-113, it has excellent cleaning properties and good evaporation rate. Compatible with all CFC, HCFC, and HFC refrigerants. Meets ANSI/ASHRAE 97-1933.

17565 – Gallon, six per carton.

17609 – Quart, six per carton.



R-ID and R-ID Plus, Refrigerant Analyzer

The Robinair R-ID Plus refrigerant analyzer is a tool to meet the service needs of vehicles equipped with either a R134A or the newer R-1234yf A/C system. It quickly tells the user whether or not the refrigerant in the vehicle's A/C system is good or bad. It is certified to the SAE J2912 standard and is capable of connecting directly to any SAE J2843 or J3030 AC service machine that has an external USB port and is not equipped with a refrigerant analyzer. With a large, easy to read color display results are quickly and accurately displayed to user allowing them to make the right service decisions. The Robinair R-ID Plus comes with an internal printer giving the user the ability to print final test results.

Product Features

- Quickly and accurately determine refrigerant purity
- Displays amount of R-1234yf, R-134a, R-12, R-22 and Hydrocarbons in percentage
- Displays % air in pure R-1234yf & R-134a
- Capable of testing R-12 with optional R-12 hose
- Improved oil resistance with the user replaceable oil restrictor
- Large Color Display
- Battery powered with internal lithium battery
- Ergonomic design with protective boot

16990 – R-ID, Refrigerant Analyzer

16995 – R-ID Plus, Refrigerant Analyzer, same as 16990 plus built in printer and Bluetooth 2.0

Specifications

Refrigerants Measured	R1234yf, R134a, and R12
Contaminants Measure	R22, Hydrocarbons, Unknown
Accuracy	Exceeds SAE J2912 requirements
Refrigerant %'s Displayed	R1234yf, R134a, R22, R12, Hydrocarbons, Air and Unknown
Operating Temperature	0 C to 49 C
Power	12VDC @ 1.5 amps
Battery	Lithium battery
Display	5.0 inch color LCD display with soft keys
Communication Protocols	USB 2.0, (both 16990 and 16995) Bluetooth 2.0, (16995 only)
Languages	ENG, FRE, GER, ITA, POR, SPA, CHI, JAP, KOR, RUS
Certifications	CE, UL and SAE
Warranty	Two Year

16009

DiscovR™ Refrigerant Identifier

How pure is your refrigerant?

Most technicians never question the purity of virgin refrigerant, and most assume the refrigerant in a vehicle is "pure enough" unless the A/C system has a mysterious cooling problem.

If a technician has no way of checking the refrigerant before they pull it out of a customer's vehicle into their recovery equipment it may contaminate their service equipment as well as other vehicles that are serviced with the contaminated equipment.

The first line of defense

The best defense against unknown refrigerant and the risks associated with unknown refrigerant is a refrigerant identifier. With the Robinair 16009 DiscovR™ 134a refrigerant identifier you can:

Protect your A/C service equipment – Know whether or not you have acceptable R-134a refrigerant before servicing the vehicle.

Guard against costly recovery equipment repairs – Contaminated refrigerant can wreak havoc on any R-134a recovery, recycle and recharge machine. Shield your RRR machine from contaminated refrigerant by using the DiscovR™ refrigerant identifier before connecting to the vehicle.

Uncover hard to find air contamination – DiscovR™ refrigerant identifier notifies you when the system contains excessive air.

Fast and Accurate – "Pass" and "Fail" lights clearly show if refrigerant is pure enough to be recovered.

Replacement Parts

16109 – Replacement hose and filter (3 pack).

Specifications

Refrigerant	R-134a
Input Power	12 VDC
Accuracy	Pass/Fail - 95% pure R-134a
Air Detection	Yes
Approvals	SAE J1771 - UL/C



LD3
MADE
IN USA*



LD5
MADE
IN USA*





LD7
MADE
IN USA*

- › Loud audible alert
- › Automatic calibration

- › Color display with graphics and visual alerts
- › Bar graph mode helps locate leaks faster
- › Loud audible alert
- › LED inspection lights
- › Automatic and Manual calibration

- › Color display with graphics and visual alerts
- › Bar and Pinpoint graphing modes help locate leaks faster
- › Loud audible alert with mute option
- › UV and Clear LED inspection lights
- › Automatic and Manual calibration

* Made in USA with globally sourced components

MEETS SAE J2913 (R-1234yf) AND SAE J2791 (R-134a)
ASRAE 173-2012, EN14624-2012 INDUSTRY STANDARDS

COMPATIBLE WITH ALMOST ALL COMMON
REFRIGERANTS INCLUDING R-1234yf AND R-134a

- LD3 Features**
- Long life, stable sensor up to 10 years
 - Automatic calibration and reset to ambient
 - 3 adjustable sensitivity levels
 - Low battery indicator
 - True mechanical pump
 - Uses 4 AA alkaline batteries included
 - Comfortable Santoprene handle grip

- LD5 Features**
- Unique color graphic LCD display
 - Long life, stable sensor up to 10 years
 - Automatic calibration and reset to ambient
 - User friendly message and error screens
 - Hi intensity LED inspection light
 - 3 adjustable sensitivity levels
 - Low battery indicator
 - True mechanical pump
 - Audio mute function
 - Uses 4 AA alkaline batteries included
 - Comfortable Santoprene handle grip

- LD7 Features**
- Patented 3 LED UV lights with 395-415 nm; wavelength is optimum for A/C dye fluorescence
 - Unique color graphic LCD display
 - Long life, stable sensor up to 10 years
 - Sweep mode function to pinpoint leak source
 - Automatic calibration and reset to ambient
 - User friendly message and error screens
 - Hi intensity LED inspection light
 - 3 adjustable sensitivity levels
 - Low battery indicator
 - True mechanical pump
 - Audio mute function
 - Uses 4 AA alkaline batteries included
 - Comfortable Santoprene handle grip

Specifications	LD3	LD5	LD7
Sensitivity	.05 oz/yr R-134a, .0123 oz/yr R1234yf	.05 oz/yr R-134a, .0123 oz/yr R1234yf	.05 oz/yr R-134a, .0123 oz/yr R1234yf
UV Mode	–	–	3 UV LEDs
UV Wave-length	–	–	395-415 nanometers
Sensor Life	> 10 years	> 10 years	> 10 years
Response Time	Instantaneous	Instantaneous	Instantaneous
Power Supply	4 AA alkaline batteries included	4 AA alkaline batteries included	4 AA alkaline batteries included
Battery Life	4 hours continuous	4 hours continuous	4 hours continuous
Warm up time	< 20 seconds	< 20 seconds	< 20 seconds
Alarm Near Sensor	–	–	Visual probe LED
LCD Display	–	128 x 160 full color graphic display	128 x 160 full color graphic display
Probe length	17 inches	17 inches	17 inches
Weight, lbs	1.5 lbs	1.5 lbs	1.5 lbs
Warranty	2 years (includes sensor)	2 years (includes sensor)	2 years (includes sensor)

TIF8800X

Combustible Gas Detector

The TIF8800X is a low maintenance, battery operated, combustible gas detector that provides a ticking signal that increases in frequency as the source of combustible gas or vapor is located. The TIF8800X is small enough to be operated with just one hand, yet loaded with the kind of advanced features service professionals demand. This tool allows you to pinpoint combustible gas leaks as small as 1 ppm quickly, while checking a relatively large area in a short amount of time with absolutely no calibration required.

Applications

The TIF8800X may be used in almost any situation where a combustible gas, vapor, or residue needs to be found. An ideal instrument for pinpointing combustible gas leaks in commercial, residential, and industrial applications.

- › Audible “ticking” signal
- › Leak strength indicating LEDs
- › Adjustable sensitivity
- › Cordless operation
- › Fast warm-up
- › Battery status indicator
- › 15 inch flexible probe for hard-to-reach areas
- › One-year warranty

Kit includes: TIF8800X, battery, battery charger and soft case.

International models

TIF8800X-E – 220V

Replacement Parts

- TIF8801** – Sensor
- TIF8802** – A/C adapter
- TIF8802E** – A/C adapter 220V
- TIF8808** – Battery cover
- TIF8809** – Ni Mh battery pack
- TIF8818** – Rubber boot



Specifications

Power Source	4.8V NiMH rechargeable battery pack lifetime up to 500 charge cycles
Operation	Continuous
Time	Approximately 4 hours
Warm-up	30 seconds
Duty Cycle	Continuous; no limitation
Response Time	Instantaneous
Sensitivity	Variable; as low as 1 ppm (gasoline)
Operating Environment	32°F to 104°F (0°F to 40°C)
Weight	16 ounces (454 grams)
Dimensions	8 in. x 3 in. x 1.8 in. (20.3 x 7.6 x 4.6 cm)
Certifications	UL913 7th Edition (use in Class I, II, or III, Division 1 hazardous (classified) locations)

TIF8900

Combustible Gas Detector

The TIF8900 is a super-sensitive, cordless, combustible gas detector that detects a broad range of natural gases including propane, methanol, butane, and gasoline.

- › Solid-state sensor technology, long life, and precision.
- › Adjustable sensitivity levels; as low as 5ppm.
- › Audible “Geiger counter” signal.
- › Rechargeable battery and charger included.

International models

TIF8900-E – 220V.

Replacement Parts

- TIF8801** – Sensing tip.
- TIF8803A** – 115V battery charger.
- TIF8805** – Cigarette lighter adapter.
- TIF8806A** – Rechargeable Ni-Cad batteries.
- TIF8806B** – 220V battery charger.



Specifications

Power Source	Two 2.4V Ni-Cad batteries (included)
Battery Life	Approx. 4 hours per charge
Dimensions	8-1/2" L x 2-1/2" W x 2" D (21.59 cm x 6.35 cm x 5.08 cm)
Operating Range	32° F to 105° F
Probe Length	16 inches, weights 12.3 oz.

16455

TruTrack Ultrasonic Leak Detector

Use TruTrack to identify:

- › Refrigerant leaks
- › Pressurized gas leaks
- › Vacuum leaks
- › Dry nitrogen gas leaks
- › Steam leaks
- › Failing solenoids, valves, bearings

Easy to Use — Just put on the headset, adjust the sensitivity level, and place the sensor near the suspected problem area; you can use the sensor alone or with one of the probes.

Positive Identification — You hear the sound of the leak in the headset with no beeps or squeals; the sound is loudest when you are near the leak.

Accurate — Wind, stray gases, or other contaminants will not trigger a false alarm; the unit suppresses most background noises.

Dependable — There are no clogged tips to clean, or sensors to replace, for accurate readings.

Versatile — Ideal for a wide range of service and preventive maintenance applications. Taking regular readings of bearing or solenoid function, for instance, can show increased noise, which may be a sign the component is starting to fail.

16455 — Comes complete with padded carrying case, headset, solid contact probe, and flex tube.

Replacement Parts

16456 — Contact probe.

16458 — Replacement headset.



43240

Digital Thermometer

- › Sampling time is just one second; HOLD button freezes display for accuracy.
- › Easy-to-read display can be read even in direct sunlight.
- › Durable case includes a cover to protect the probe.
- › Min/Max display for reading temperature ranges.

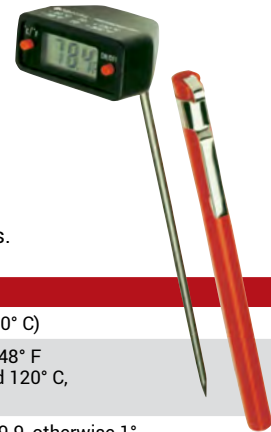
Specifications

Range	-40° to 390° F (-40° to 200° C)
Accuracy	± 2° F between -14° and 212° F ± 1° C between -10° and 100° C, Otherwise: ± 3° F (±1° C)
Display Resolution	0.1° F (0.1° C) throughout range
Battery	One 1.5V x 1, Size LR44 (battery included)

43230

Swivel Head Digital Thermometer

- › 180° swivel head makes display easier to read in tight places.
- › Reliable readings over the entire temperature range.
- › Sampling time is just one second.
- › Durable case includes a pocket clip.
- › For surface, liquid, and air temperatures.



Specifications

Range	-58° to 302° F (-50° to 150° C)
Accuracy	± 2° F between -4° and 248° F q± 1° C between -20° and 120° C, Otherwise: ± 4° F (±2° C)
Display Resolution	0.1° between -19.9 to 199.9, otherwise 1°
Battery	One 1.5V x 1, Size LR44 (battery included)
Automatic Power OFF	After 10 minutes if ON/OFF is not pressed.



16451

TruTrack Ultrasonic Sound Generator

An ideal accessory for Robinair's Model 16455 Ultrasonic Leak Detector, the sound generator detects seal failure in refrigerators, microwaves, vehicle passenger compartments, trunks, and any other location where there should be a good seal. Battery-operated unit emits special frequency from inside the test area; where the sound can be heard, a leak exists.



Dial Thermometers

All pocket thermometers come with a pocket-clip carrying case for protection and easy access. Easy-to-read faces are available in a variety of sizes and ranges.

Part No.	Temperature	Size
10596	-40° to +160°F	1" dial face
10597	0° to +220°F	1" dial face
10945	0° to +220°F	1-3/4" dial face
40859	-40° to +70°C	1" dial face

Specifications

Power Source	One 9V battery (included)
Dimensions	4-1/2" L x 3-3/8" W x 3/4" D (11.43 cm x 8.57 cm x 1.9 cm)
Weight	5 oz. (140 g)



UV Leak Detection

- › Meets SAE J2297 standard for use with both R-134a and R-1234yf.
- › The easiest and most accurate gun available today.
- › One squeeze injects a pre-measured amount (1/8 oz.) of dye. No more adding too much dye.
- › Brightest dyes in the industry, exceeds all industry performance standards.
- › Most powerful light in its class. Fluorescent dye visible from up to 50ft away. (Light is only used in 16235 kit)

16235
Injection gun.
Fluorescent light.
Fluorescent leak detection dye.
Fluorescent dye cleaner.
UV glasses and blow molded case.



16235

16215

16215
Fluorescent light.
UV glasses.

A/C Fluorescent Dyes

- › Exceeds all industry performance standards.
- › Compatible with all materials found in a vehicle's A/C system.
- › Meets the new SAE J2297 standard for use with both R-134a and R-1234yf.
- › REACH and CLP compliant.



16240
64 applications
One 8 oz. bottle



16241
64 applications
One 8 oz. bottle



16242
12 applications
Twelve 1/4 oz. bottles



16243
24 applications
Six 1 oz. bottles

UV Leak Detection

- UV leak detection can be used for both automotive and HVAC-R systems, and dyes won't harm the system.
- › High intensity beam makes even small leaks visible and is bright enough to be used in daylight.
 - › Rugged case and a shock-absorbing mounting mechanism protect the lamp during use and storage.
 - › UV bulb is rated for 3000 hours and is economical to replace.
 - › Comes with a 15' (4.57 m) long cord with battery clips for automotive use or with a transformer for 115V operation.
 - › Designed with super luminescence, so leaks are easy to spot, even small ones.
 - › Won't affect the viscosity of refrigerant lubricants and is safe for the entire A/C system.
 - › Speeds service, since there's no need to recover the charge, add dye, and recharge.

16350 – UV leak detection kit includes: Powerful 50-watt/12-volt UV lamp with 15' cord and battery clips. Injection gun with R-134a hose and R-12 adapter. Four universal A/C dye twist-on cartridges (No. 16356). Enough dye for 20 applications (OEM-approved and SAE-certified dye). UV enhancing glasses with dye cleaner.

16355 – UV injection kit includes: Injection gun with R-134a hose and R-12 adapter, four universal A/C dye twist-on cartridges (No. 16356, 1 oz./ 30 ml each), and service stickers.

16356 – Universal A/C dyes includes: Four 1 oz./30 m twist-on cartridges. Enough dye for 20 applications (OEM-approved and SAE-certified dye). For kit Nos. 16350, 16380, and 16355.

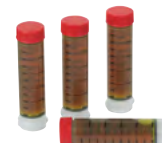
16357 – Six 1/4 oz./7.5 ml twist-on cartridges. Enough dye for six applications (OEM-approved and SAE-certified dye). For kit Nos. 16350, 16380, and 16355.



16350



16355



16356



16357

TIF7620, TIF7612, TIF7610 IR Thermometer PRO

- › Complete IR design is incorporated inside of a single chip, reducing space and creating a compact and light weight product.
- › Innovative optical lens – accurate measurements; wide temperature range.
- › Laser pointer – Easy to define the target area to be measured.
- › Extend temperature – TIF7612 and TIF7620 have a thermocouple interface that can extend the temperature up to 1999°F.
- › Simple and easy to operate – Simply point at desired target and press the trigger button for a temperature reading.
- › Set alarm temperatures (Low and High Temperatures) to receive alert information when the you are measured out of the range (TIF7612 and TIF7620 only).
- › (MAX), (MIN), Difference between MAX and MIN (DIF), and average (AVG) modes are available in TIF7612 and TIF7620.
- › Visual low battery indicator.



Specification	TIF7610	TIF7612	TIF7620
Measurement Range	-76 to +932°F (-60 to +500°C)	-76 to +932°F (-60 to +500°C)	-76 to +1400°F (-60 to +760°C)
Thermocouple Measurement Range	N/A	83.2 to +1999°F (-64 to +1400°C)	83.2 to +1999°F (-64 to +1400°C)
Accuracy: Tobj = 59°-95°F (15-35°C) Tamb=77°F (25°C)	±1.8°F (1.0°C)	±1.8°F (1.0°C)	±1.8°F (1.0°C)
Accuracy: Tobj = -27-932°F (-33-500°C) Tamb = 73°F ±5°F (23 ± 3°C)	±2% of reading or 4°F (2°C) whichever is greater	±2% of reading or 4°F (2°C) whichever is greater	±2% of reading or 4°F (2°C) whichever is greater
Thermocouple Accuracy	N/A	±1% of reading or 1.8°F (1°C) whichever is greater (Test under Tamb=73±11°F[23+6°C])	±1% of reading or 1.8°F (1°C) whichever is greater (Test under Tamb=73±11°F[23+6°C])
Emissivity	0.95 fixed	Adjustable	Adjustable
Resolution: 14.2° F~199.9° F (-9.9~199.9°C)	0.1°F/0.1°C (1° below 9.9 and above 199.9)	0.1°F/0.1°C (1° below 9.9 and above 199.9)	0.1°F/0.1°C (1° below 9.9 and above 199.9)
Spectral Response	5 ~ 14µm	8 ~ 14µm	8 ~ 14µm
Response Time (90%)	.5 sec	.5 sec	.5 sec
Distance: Spot	10:1	12:1	20:1
Battery Life	Up to 18 hours	Up to 18 hours	Up to 18 hours
Dimensions	175.2 x 39.0 x 71.9mm	175.2 x 39.0 x 71.9mm	175.2 x 39.0 x 71.9mm
Weight	179 grams including batteries (AAA*2pcs)	179 grams including batteries (AAA*2pcs)	179 grams including batteries (AAA*2pcs)

TIF7201

Pocket IR Thermometer

- › System-on-a-chip SoC technology: compact and lightweight
- › Backlit LCD display w/ dual readings
- › °C / °F Switch and MAX function
- › Auto power off after 15 sec.
- › Battery level indication
- › Distance to spot (D/S): 1:1

Applications:

- › Automotive
- › Electrical
- › General home use
- › HVAC/R
- › Batteries included



TIF7201

2-Way Brass Manifolds

Robinair brass manifold bodies are constructed from solid brass for added durability needed for repeated, tough daily use. Contoured easy to grip hand wheels are color coded for quick and easy identification.

- › Improved face seal valves. Better design provides a tighter seal, less wear and improved flow.
- › Double O-ring piston for extra reliability and longer service life.



44150

Dual R12/134a Kit

- › Brass manifold with easy-to-grip handles.
- › R12/R-134a gauges, PSI, and °F Temp.
- › 1/2" ACME bottom ports.
- › Rear R-134a and 1/2" ACME fittings for holding hoses.
- › 90° manual couplers.
- › 72" R-134a Hose Set (1/2" ACME x 14mm).
- › 72" R12 Hose Set (1/2" ACME x 1/4" MFL).
- › Blow molded carrying case.



45111

R-134a Manifold Hose Kit

- › Brass manifold with easy-to-grip handles.
- › R12/R-134a gauges, PSI, and °F Temp.
- › 1/2" ACME bottom ports.
- › Rear R-134a and 1/2" ACME fittings for holding hoses.
- › 90° manual couplers.
- › 72" R-134a Hose Set (1/2" ACME x 14mm).

2-Way Aluminum Manifolds

Manifold bodies are constructed from solid aluminum for added durability needed for repeated, tough daily use. Contoured easy to grip hand wheels are color coded for quick and easy identification.

- › Improved face seal valves. Better design provides a tighter seal, less wear and improved flow.
- › Double O-ring piston for extra reliability and longer service life.
- › Easy-to-read 3-1/8" gauges with Lexan lenses.
- › Aluminum Manifolds include sight glass.



47150

Dual R12/134a Kit

- › Aluminum manifold.
- › 90° Manual couplers.
- › 72" R-134a Hose Set (1/2" ACME x 14mm).
- › 72" R12 Hose Set (1/2" ACME x 1/4" MFL).
- › Blow-molded carrying case.



48510

R-134a Manifold Hose Kit

- › Aluminum manifold.
- › 90° Manual couplers.
- › 72" R-134a Hose Set (1/2" ACME x 14mm).
- › Blow-molded carrying case.



41234

R-1234yf Aluminum Manifolds and Hose Set

- › Easy-to-read 3-1/8" adjustable gauges.
- › Durable aluminum manifold block with fittings.
- › Improved face seal valves provide a tight seal, less wear and improved flow.
- › Easy-to-grip control knobs.

Digital Manifold Gauges

The low side gauge has a pressure scale of 30 inHg VAC to 250 psig and the high side gauge has a pressure scale of 0 to 800 psig. Gauges come with a backlight to enhance the view and make the gauges easy to see in low light conditions.

- › Includes profiles for 17 common refrigerants.
- › Detects vacuums in "Hg.
- › Selectable temperature and pressure units of measure.
- › Easy-to-read LCD screen with large digits.
- › Automatic shutdown after 15 minutes of inactivity.
- › Low battery indicator.



11910



11920

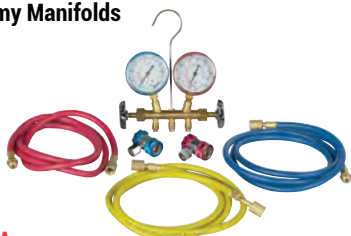


43180



43186

Economy Manifolds



48134A

R134 brass manifold, 90° manual couplers and 60" R-134a hose set.



48134B

R12 and R134 brass manifold, 90° manual couplers and 60" R12/R-134a hose sets.



49134A

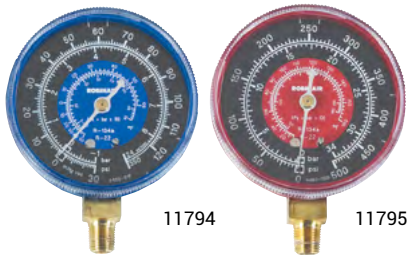
R134 aluminum manifold, 90° manual couplers, 60" R-134a hose set and blow-molded case.



49134B

R12 & R-134 aluminum manifold, 90° manual couplers, 60" R12/R-134a hose sets and Blow-molded case.

Part No.	Description
11910	Low side digital gauge
11920	High side digital gauge
43180	2-Way Manifold with Digital Gauges - No hoses
43186	2-Way Manifold with Digital Gauges - and 60" Enviro-Guard hoses



Replacement Gauges

11780 – Replacement gauge. Blue/Low side - 3-1/4 in. PSI pressure readings and R-1234yf temperature readings in degrees F.

11781 – Replacement gauge. Red/High side - 3-1/4 in. PSI pressure readings and R-1234yf temperature readings in degrees F.

11784 – Replacement gauge. Blue/Low side - 3-1/4 in. PSI pressure readings and R12/R-134a temperature readings in degrees F.

11785 – Replacement gauge. Red/High side - 3-1/4 in. PSI pressure readings and R12/R-134a temperature readings in degrees F.)

11794 – Replacement gauge (replaces 11692). Universal compound replacement gauge, psi/kPa pressure readings, R-22 and R-134a temperature readings in degrees Fahrenheit.

11797 – Replacement gauge.

Universal compound replacement gauge, psi/kPa pressure readings, R-22 and R-134a temperature readings in degrees Celsius.

11795 – Replaces 11693.

Universal pressure replacement gauge, psi/kPa pressure readings, R-22 and R-134a temperature. Temperature readings in degrees Fahrenheit.

11798 – Replacement gauge.

Universal pressure replacement gauge, psi/kPa pressure readings, R-22 and R-134a temperature. Temperature readings in degrees Celsius.

11796 – Replacement gauge lens.

Replacement gauge lens, quarter turn on-off.



Service Couplers for Automotive R-134a

Field service couplers connect to our special Enviro-Guard hoses to allow access to service ports on automotive R-134a A/C systems. The quick-connect design has an integral safety sleeve, which protects against injury and refrigerant loss if the coupler is disconnected under pressure. The compact design easily fits into tight quarters, which is especially handy for retrofits. Six-ball couplers provide a more stable grip on the fitting than do couplers with four balls.

18190A – Low-side manual coupler, blue actuator.

18191A – High-side manual coupler, red actuator.

18192 – Set of manual service couplers.

18341 – High- and low-side automatic couplers.

19150 – O-ring kit for field service couplers.



R-1234yf Service Couplers

› Integrated safety sleeve, protects against refrigerant loss.

› Compact design.

› Provides a stable grip on the fitting.

18122 – R-1234yf Low side service coupler.

18123 – R-1234yf High side service coupler.

18124 – R-1234yf High- and low-side service coupler set.



Side-Wheel Manifolds with 1/4" Fittings

Our popular side-wheel manifold is easy to use and designed for accuracy.

Bar – Solid forged brass for long life; handwheels are durable, color-coded Lexan™.

Universal Gauges – Clearly marked so they're easy to read and protected with Lexan™ lenses.

Field-Proven Face Seal Valve – Prevents leakage past the stem.

Models

40152 – Standard side-wheel manifold, color-coded gauges, Fahrenheit scale, brass bar, hand wheels, and hanging hook– no hoses.

40151 – Standard side-wheel manifold, color-coded gauges, Celsius scale, brass bar, hand wheels, and hanging hook– no hoses.

40153 – Standard side-wheel manifold set, includes three 36" standard hoses with 1/4" fittings.

40169 – Standard side wheel manifold set, includes three 60" standard hoses with 1/4" fittings.



18576

Replacement Parts Kit for R-134a Manifold Gauges and Hoses

› 4 manifold stems.

› 6 o-rings, 14 mm.

› 12 valve core depressors.

› 12 hose gaskets, 1/4".

› 12 manifold stem o-rings.

› 6 Quick Seal™ o-rings for R-134a.

› 2 caps with straps, 1/2" Acme.

› O-ring lubricant (high vacuum grease).

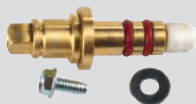
› Valve core remover/installer with 6 valve cores.

› 4 color-coded Lexan® handwheels & screws.

› Set of R-134a coupler o-rings, high- and low-side.

Stem Replacement Assembly Kit

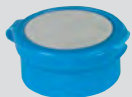
Kits include all necessary parts to service one manifold valve. To replace stems on both valves, order two kits.



40232
Stem assembly kit for manifolds with conical seal design.



13148
Face seal kit for side-wheel manifolds, includes stem with o-rings, spring, and screw. Will not fit sight glass manifold.



13067
High vacuum grease.

Replacement Handwheels



40449
Set of one red and one blue with 1/4" drive.



41698
Set of one red and one blue with 1/4" drive (barrel style).

Replacement Parts for Hoses and Adapters

Help's you keep your charging hoses and adapters in top working condition.



40082
1/4" valve core depressors, package of six.



40083
1/4" gaskets, package of six.



40084
3/8" gaskets, package of six.



40677
3/16" gaskets, package of six.



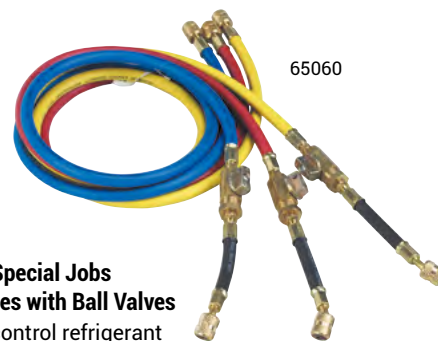
40653B
3/16" valve core depressors, package of six.



30072

Hoses

30072 – Standard hose (500/2500 psi) – 72", 1/4" SAE internal fitting x 1/4" SAE internal.



65060

Special Hoses for Special Jobs Enviro-Guard™ Hoses with Ball Valves

In-line ball valves control refrigerant flow, open and close in a quarter turn.

65060 – Set of three 60" hoses with ball valves.

65160 – 60" Enviro-Guard™ hose with ball valve, yellow.

65260 – 60" Enviro-Guard™ hose with ball valve, blue.

65360 – 60" Enviro-Guard™ hose with ball valve, red.



40333



10328

Hose Extension Coupler

Connect any number of hoses to get the extra length you need – there's no need to order special hose lengths.

40333 – 1/4" MFL x 1/4" MFL, no valve core.

10328 – 1/2" Acme external x 14 mm internal (for automotive R-134a).

20' Charging Hoses

68020 – Set of 20' Enviro-Guard™ red and blue, 1/4" fittings.

68420 – Set of 20' Enviro-Guard™ red and blue, Quick Seal™ fittings.



68020

A/C Recovery & Recycling

A/C Charging Hoses, Coolants

Charging Hoses

Robinair premium refrigerant charging hoses are built for long life and dependability. A strong, six-sided crimp provides a reliable connection between the hose and barb, even at maximum pressure. The coupler nuts are deeply knurled for quick finger-tightening. Enviro-Guard™ hoses are ideal for high pressure applications, including R-410a systems.



Hose Selection Charts

1/4" Standard Hoses with Standard Fittings	Length (inches)	Yellow	Blue	Red	Pkg. Set (Blue, Red, Yellow)
Neoprene-coated for flexibility and wear resistance, with a valve core depressor and a 45° bend on one end for convenient access to the system. 500 psi working pressure; 2500 psi burst pressure.	36	31036	32036	33036	30036
	60	31060	32060	33060	30060
	72	31078	32072	31079	30072
	96	31096	32096	33096	N/A

1/4" Standard Hoses with Quick Seal™ Fittings	Length (inches)	Yellow	Blue	Red	Pkg. Set (Blue, Red, Yellow)
500 psi working pressure; 2500 psi burst pressure.	72	38172A	38272A	38372A	39072A

1/4" Enviro-Guard™ Hoses with Quick Seal™ Fittings	Length (inches)	Yellow	Blue	Red	Pkg. Set (Blue, Red, Yellow)
Special barrier material prevents virtually any permeation of refrigerant, yet remains flexible. With 45° Quick Seal™ fittings. 740 psi working pressure; 3700 psi burst pressure.	36	68136A	68236A	68336A	69036A
	60	68160A	68260A	68360A	69060A
	72	68172A	68272A	68372A	69072A
	96	68196A	68296A	68396A	69096A

Enviro-Guard™ Hoses for Automotive R-134a	Length (inches)	Yellow 1/2" ACME x 1/2" ACME	Blue 14 mm x 1/2" ACME	Red 14 mm x 1/2" ACME	Pkg. Set (Blue, Red, Yellow)
Meets all specifications for low permeation construction. Clearly marked for R-134a. See page 16 for service couplers. 500 psi working pressure; 2500 psi burst pressure.	72	61072	62072	62244	60072
	96	61096	62121	63096	60096
	240	NA	NA	NA	64240 (excl. yellow)
	240	NA	NA	62246	NA
	240	NA	62242	NA	NA

75240

Coolant and Battery Refractometer

This can be used for measuring the freezing point of either propylene and ethylene glycol based cooling systems. It can also be used for checking the strength of electrolyte solution in batteries. This precision instrument features high quality optics with ultra smooth focusing on the body. Coolant scale range: 32° F/0° C to -60° F/-51° C.



75260

Coolant Refiller

- › 26 inHg vacuum refills cooling system without air lock.
- › Eliminates the need for "bleeding."
- › Checks for system leaks and utilizes OEM approved technology.
- › Universal "fits all" cone adapter.
- › Built-in gauge protector.

Multi-purpose Dye and Coolant Fluorescent Dye

- › Brightest dyes in the industry to help find leaks faster.
- › Exceeds all industry performance standards.
- › OEM backed and approved.
- › Solvent-free formula.
- › REACH and CLP compliant.



16244

Tracker Multi-purpose Dye. Six 1/4 oz. bottles, 6 applications



16245

Tracker Multi-purpose Dye. One 8 oz. bottle, 32 applications



16885

Tracker Coolant Dye Six 1/4 oz. bottles, 6 applications



16890

Tracker Coolant Dye One 8 oz. bottle, 32 applications

Works on both pressurized and non-pressurized cooling systems.

OUR 10-MINUTE EXCHANGE PROCESS MEANS NO MORE WAITING FOR THE ENGINE TO WARM UP



75700

Coolant Exchange Unit Designed with the user in mind.

Safety First

- › Our “engine off” feature removes pulleys, belts, and fan blades from the safety equation.
- › No additional ventilation required.
- › Vacuum mode creates a “push/pull” exchange process allowing the technician to safely remove high pressure in a hot system.
- › “Hands-off” transfer of used coolant to a bulk tank prevents spills and helps protect the technician.

Simple to Operate

- › Two clearly marked valves and an easy-to-read gauge make this machine very simple to use.
- › Sight glass clearly shows the amount of coolant in the waste tank.
- › One valve controls the flow of coolant; process is easy to understand—no special training needed.
- › No electricity required. 90 psi shop air drives the exchange process, as well as the 2 gpm pump on the waste tank.

Designed to Survive

- › Impact-resistant polypropylene cabinet will not scratch or dent vehicle.
- › Cabinet is impervious to chemicals commonly used in the shop.
- › Large, inflatable tires carry a well-balanced platform easily across any shop floor.
- › Easy to maneuver between bays and vehicles.

Extra Design Features

- › Two external new coolant supply tanks allow on-board storage of two different coolant types.
- › Graduations on tanks show user the amount of new coolant on board.
- › On-board storage of step adapters.
- › Adapter kit included.
- › No hoses to cut.
- › 96” hoses can be neatly stored on unit.
- › One-year warranty.

Replacement Parts and Accessories

75360 – Heavy-duty adapter kit. Links the two tanks for 14 gal. capacity to service class A vehicles. (Note: must have 7-gallon tank No. 75370).

75370 – Replacement 7-gallon coolant tank.

17490 – Heavy-duty vinyl protective cover.



Back View:
7-gallon capacity supply tanks allow storage of different coolants.

92500

Transmission Fluid Exchanger

- › Top-off feature. Add or subtract in 1/10 qt. increments.
- › “Low Fluid Alarm” and “Indicator Light” to alert operator.
- › “Drain Waste” feature automatically pumps used fluid from the machine into a waste oil container.
- › “Drain Pan” feature drains the pan for easy filter replacement. No mess.

Three modes of operations: Dipstick only, cooler line, or a combination of the two

- › Unprecedented one-tenth quart flow metering for adding or subtracting fluid from the pan.
- › Complete set of cooler line adapters for most foreign and domestic vehicles.
- › Works with all types of automatic transmission fluid.
- › Integral performance designed hose and tool compartment with drain.

529734 – Replacement nylon tube.



Specifications

Electrical	12V DC
Exchange Accuracy	+/- 1/4 qt.
Controls	Microprocessor with digital keypad and LEDs
Fluid Tanks	32 quarts supply (24.6 liters), 34 quarts waste (26.6 liters)
Hoses	91” black & red (Exchange); 76” white transfer tube (Straw)
Fluid Types	Multiple fluid capability.
Adapter Set	Complete set for most applications. Standard adapters for Ford, GM, Chrysler, European, and Universal (covering most Asian imports).
Pump	Positive displacement gear pump, 2 gallons per minute maximum
Weight	158 lbs. (72 kg)
Dimensions	52” H x 33” W x 20” D (132 cm x 84 cm x 51 cm)
Process Time	Depends on mode
Warranty	1 year parts and labor

92000

Transflow Transmission Oil Cooler Flusher

Designed to measure oil flow capacity within the transmission oil cooler, and flush contaminated oil from the TOC after repairs.

- › Only unit in the industry that performs a flow rate test.
- › Flush and flow test time is 5 to 8 minutes.
- › 32-quart supply tank; 34-quart waste tank.
- › Supply and waste hoses each 10’ long.
- › 10’ long, 12V DC power cables with battery lead clips.
- › Requires shop air (90 psi, min.) and 12V DC source.



Specifications

Power Supply	90 psi shop air
Tanks	– Internal waste – 15-gallon capacity – External supply (2) 7-gallon capacity (removable)
Dimensions	47” H x 26” W x 33” D (119 cm x 66 cm x 84 cm)
Medium Step Adapter	Two included; fits hose size 1-1/4”, 1-3/8”, and 1-1/2”
Large Step Adapter	Two included; fits hose size 1-3/4”, 2”, and 2-1/4”



13119

13203

13204

Premium High Vacuum Pump Oil

The performance of your pump depends largely on the quality and purity of the vacuum pump oil. Robinair's oil is engineered to maintain maximum viscosity at high running temperatures and to improve cold weather starts.

To keep the pump operating at peak efficiency, change the oil frequently. Moisture and other contaminants can quickly deteriorate the purity of the oil, thinning the oil, and reducing the pump's ability to reach deep vacuum conditions.

Thermally Stable

Laboratory tests prove that Robinair oil is more thermally stable in comparison to other leading brands, which means it resists breaking down due to heat for a longer period of time.

Lower Moisture Content

Robinair oil has a lower moisture content than other oils, thanks to our special packaging and handling procedures. Moisture degrades the oil's purity, thinning it, and reducing the pump's ability to reach a deep vacuum.

13119 – Pint bottle, 12 per case.

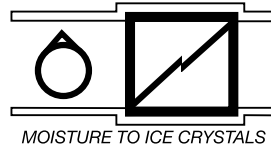
13203 – Quart bottle, 12 per case.

13204 – Gallon bottle, 4 per case.

Change Your Vacuum Pump Oil Frequently

Clean oil is important for peak vacuum pump performance. When the oil is contaminated, it reduces your pump's ability to remove moisture from a system. You should change the pump oil frequently, and especially in the following situations:

- › You have just evacuated a system that you suspect was overly moisture-laden.
- › You have just evacuated a system with a compressor burnout.
- › The pump oil looks cloudy or milky.
- › The pump will not pull to factory specifications when blanked off to an electronic thermistor vacuum gauge.
- › Every 10 hours of operation.



The Importance of Deep Vacuum

The purpose of a vacuum pump is to remove moisture and air from an A/C-R system. Modern systems are built tighter and charges are more critical. That means these systems have a greater sensitivity to moisture and other contaminants, making thorough evacuation more important than ever before.

Moisture in a refrigeration system, directly or indirectly, is the cause of most problems and complaints. First, moisture can cause freeze-up in a system. Moisture is picked up by the refrigerant and transported through the refrigerant line in a fine mist, with ice crystals forming at the point of expansion.

"Freeze-up" is not the only problem caused by moisture. It can also result in corrosion, the effects of which are not apparent until the real damage has occurred. Moisture alone is bad enough, but combined with refrigerants containing chlorine, hydrochloric acids can form. These greatly increase the corrosion of metals.

Also, refrigerant oil rapidly absorbs moisture. Water-formed acids combine with the refrigerant, forming a closely bonded mixture of fine globules. The effect is called sludging and it greatly reduces the lubricating ability of the oil.

A vacuum pump removes troublesome moisture by lowering the pressure within the system and vaporizing (or boiling off) the moisture, then exhausting it along with air.

CoolTech™ – The Inside Story

A vacuum pump that's fast and thorough saves you not only time, but also the expense of callbacks and dissatisfied customers. Robinair pumps perform better than other pumps in the industry, ensuring you complete dehydration before recharging.

Robinair pumps are engineered specifically to meet the needs of the kind of A/C work you're doing today, and to give you trouble-free operation. We've put our years of experience and know-how into developing pumps that help you do the job faster and better.

All Robinair pumps are backed by our exclusive "No Hassle" over-the-counter replacement warranty. You can return a pump to your Robinair distributor for an immediate exchange – with no hassle! (In U.S. and Canada only; in other locations, see your Robinair distributor.)

Robinair CoolTech vacuum pumps are designed for use on A/C-R systems using CFCs, HCFCs, and HFCs in conjunction with mineral oil, ester oil, alkylbenzene oil, and PAG oil as lubricants. Do not use them with ammonia or lithium bromide systems; not for use with flammable refrigerants.

U.S. Patent Numbers: 4,523,897; 4,631,006; 5,209,653.

› Oil Fill Port

Makes adding oil simple since the port is accessible from the front or either side. The sight glass on the front of the pump shows you when enough oil has been added.

› Heavy Duty Motor

High torque design for easy startup and efficient operation.

› Molded Base

Durable polycarbonate base improves pump balance and minimizes vibration during operation.

› Iso-Valve™

Isolates the pump from the system with just a quarter-turn.

› Two-stage Design

Cleans the system more thoroughly than a single-stage pump; the second stage starts pumping at a lower pressure so you can pull a deeper ultimate vacuum.

› Die-Cast Aluminum Housing

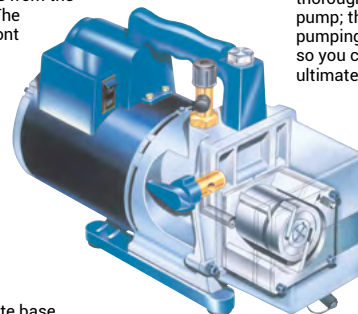
Cast aluminum housings make the pumps lightweight but durable.

› Oil Drain Valve

Positioned at the bottom of the oil reservoir and angled for faster, more complete draining.

› Offset Rotary Vanes

Our proven design builds a powerful compression within the pumping chamber to reduce system pressure and vaporize moisture, so it can be exhausted along with air.



Selecting the right size pump

The more air a pump moves, the faster it can reach an acceptable vacuum. A smaller pump takes more time to evacuate a system than one that's the correct size for the job.



Use this Chart as a Guide to Selecting the Right Size Pump.

System	Recommended Pump Size	
	Robinair® Pump	VacuMaster™ Pump
Up to 10 tons (35kW); Domestic Refrigeration, Passenger Cars	–	1.5 CFM (35 l/m)
Up to 30 tons (105kW); Residential A/C, Panel Trucks & RVs	4 CFM (93 l/m)	3 CFM (71 l/m)
Up to 50 tons (176kW); Rooftop A/C systems, Tractor/Trailers, Buses	6 CFM (142 l/m)	5 CFM (118 l/m)
Up to 70 tons (246kW)	10 CFM (236 l/m)	8 CFM

	Oil Fill Port	Heavy Duty Motor	Two-Stage Design	Molded Base	Die-Cast	Oil Drain Valve	Offset Rotary Vanes	Iso-Valve	Gas Ballast
Robinair® Pumps	•	•	•	•	•	•	•	•	•
VacuMaster® Pumps	•	•	•	•	•	•			

All Robinair pumps are backed by our exclusive “No Hassle” over-the-counter replacement warranty. You can return a pump to your Robinair distributor for an immediate exchange – with no hassle. (In U.S. and Canada only; in other locations, see your Robinair distributor.)

Robinair Vacuum Pumps

- › Power and capacity for a wide range of service applications.
- › High CFM rating for fast, thorough evacuation.
- › Two-stage rotary vane design.

Iso-Valve™ – Isolates the pump from the system with just a quarter-turn.

Gas Ballast – Moisture laden air passing through the pump mixes with relatively dry air so compression does not cause condensation.

Two-stage Design – Cleans the system more thoroughly than a single-stage pump; the second stage starts pumping at a lower pressure so you can pull a deeper, ultimate vacuum.

Oil Drain Valve – Positioned at the bottom of the oil reservoir and angled for faster, more complete draining.

Oil Fill Port – Makes adding oil simple since the port is accessible from the front or either side. The sight glass on the front of the pump shows you when enough oil has been added.

Heavy-Duty Motor – High torque design for easy startup and efficient operation.

Offset Rotary Vanes – Proven design builds a powerful compression within the pumping chamber to reduce system pressure and vaporize moisture so it can be exhausted along with air.

Molded Base – Durable polycarbonate base improves pump balance and minimizes vibration during operation.

Die-Cast Aluminum Housing – Cast aluminum housings make the pumps lightweight and durable.



15120A – 10 CFM



15600 – 6 CFM,
15400 – 4 CFM, 15434 – 4 CFM

Model	Free Air Displacement	Factory Micron Rating	No. of Stages	Intake Fitting	Oil Capacity	Motor Size	Voltage	Approvals	Weight	Dimensions
Domestic Models										
15400	4 CFM	15 microns	2	1/4" MFL & 1/2" MFL	15 oz. (445 ml)	1/2 hp	115V 60 Hz	UL	27 lbs. (12.2 kg)	9.75" H x 5.625" W x 15.5" L 247 mm x 143 mm x 394 mm
15434	4 CFM	15 microns	2	1/4" MFL & 1/2" Acme	13 oz. (384 ml)	1/3 hp	115V 60 Hz	UL	29 lbs. (13 kg)	9.75" H x 5.625" W x 15" L 247 mm x 143 mm x 381 mm
15600	6 CFM	15 microns	2	1/4" MFL, 3/8" MFL, & 1/2" MFL	15 oz. (445 ml)	1/2 hp	115V 60 Hz	UL	27 lbs. (12.2 kg)	9.75" H x 5.625" W x 15.5" L 247 mm x 143 mm x 394 mm
15120A	10 CFM	15 microns	2	1/4" MFL, 3/8" MFL, & 1/2" MFL	16.5 oz. (488 ml)	1/2 hp	115V 60 Hz	UL	38 lbs. (17.24 kg)	10.75" H x 5.625" W x 16.5" L 273 mm x 143 mm x 419 mm
International Models										
15401	94 liters/minute	15 microns	2	1/4" MFL & 1/2" MFL	13.5 oz. (400 ml)	1/3 hp	115V/220-250V 50/60 Hz	CE	29 lbs. (13 kg)	9.688" H x 5.625" W x 15.75" L 246 mm x 143 mm x 400 mm
15601	142 liters/minute	15 microns	2	1/4" MFL, 3/8" MFL, & 1/2" MFL	13.5 oz. (400 ml)	1/3 hp	115V/220-250V 50/60 Hz	CE	29 lbs. (13 kg)	9.688" H x 5.625" W x 16.5" L 246 mm x 143 mm x 419 mm
15121A	283 liters/minute	15 microns	2	1/4" MFL, 3/8" MFL, & 1/2" MFL	16.5 oz. (488 ml)	1/2 hp	115V/220V 50/60 Hz	CE	41 lbs. (18.60 kg)	10.75" H x 5.625" W x 17.5" L 273 mm x 143 mm x 445 mm

VacuMaster™

Economy Vacuum Pumps

- › Performance tested to meet Robinair's high standards
- › Power and capacity for a wide range of service applications.
- › High CFM rating for fast, thorough evacuation.
- › Two-stage rotary vane design.

Features:

Two-stage Design – Cleans the system more thoroughly than a single-stage pump; the second stage starts pumping at a lower pressure so you can pull a deeper, ultimate vacuum.

Oil Drain Valve – Positioned at the bottom of the oil reservoir and angled for faster, more complete draining.

Oil Fill Port – Makes adding oil simple since the port is accessible from the front or either side. The sight glass on the front of the pump shows you when enough oil has been added.

Heavy-Duty Motor – High torque design for easy startup and efficient operation.

Die-Cast Aluminum Housing – Cast aluminum housings make the pumps lightweight and durable.



15150 – 1.5 CFM
15300 – 3 CFM
15500 – 5 CFM



15800 – 8 CFM

Model	Free Air Displacement	Factory Micron Rating	No. of Stages	Intake Fitting	Oil Capacity	Motor Size	Voltage	Weight	Dimensions
Domestic Models									
15150	1.5 CFM	50 microns	2	1/4" MFL and 3/8" Acme 3/8" FFL x 1/2" Acme adapter	7.4 oz. (219 ml)	1/4 hp	115V 60Hz	22 lbs. (10 kg)	9.5" H x 4.75" W x 12.5" L 240 mm x 120 mm x 315 mm
15300	3 CFM	35 microns	2	1/4" MFL and 3/8" MFL 3/8" FFL x 1/2" Acme adapter	7.5 oz. (220 ml)	1/3 hp	115V 60Hz	28 lbs. (12.5 kg)	10" H x 5" W x 13" L 255 mm x 123 mm x 336 mm
15500	5 CFM	35 microns	2	1/4" MFL and 3/8" Acme 3/8" FFL x 1/2" Acme adapter	7.5 oz. (220 ml)	1/3 hp	115V 60Hz	28 lbs. (12.2 kg)	10" H x 5" W x 13" L 255 mm x 123 mm x 336 mm
15800	8 CFM	35 microns	2	1/4" MFL and 3/8" MFL	18.6 oz. (550 ml)	1 hp	115V 60Hz	37 lbs. (16.8 kg)	16" H x 6" W x 10" L 406" mm x 152mm x 254mm
International Models									
15301 3 CFM	71 liters/ minute	35 microns	2	1/4" MFL and 1/2" MFL 3/8" FFL x 1/2" Acme adapter	7.5 oz. (220 ml)	1/3 hp	220V 50Hz	28 lbs. (12.5 kg)	10" H x 5" W x 13" L 255 mm x 123 mm x 336 mm
15501 5 CFM	118 liters/ minute	35 microns	2	1/4" MFL and 1/2" Acme 3/8" FFL x 1/2" Acme adapter	7.5 oz. (220 ml)	1/3 hp	220V 50Hz	28 lbs. (12.5 kg)	10" H x 5" W x 13" L 255 mm x 123 mm x 336 mm

VacuMaster™

Single-Stage Vacuum Pumps

- › Performance tested to meet Robinair's high standards
- › High CFM rating for fast, thorough evacuation.

Features:

The one-stage rotary vane design – provides powerful, quiet, high vacuum capability and ensures moisture removal, while the high pumping capacity reduces evacuation time.

Oil Drain Valve – Positioned at the bottom of the oil reservoir and angled for faster, more complete draining.

Oil Fill Port – Makes adding oil simple since the port is accessible from the front or either side. The sight glass on the front of the pump shows you when enough oil has been added.

The intake screen – prevents foreign matter from entering the pumping chamber, and an internal exhaust filter separates oil vapor from the exhaust flow.

Aluminum housing and rotary vanes – Lightweight and easily portable.



15115 – 1.5 CFM



15310 – 3 CFM or 15510 – 5 CFM

Model	Free Air Displacement	Factory Micron Rating	No. of Stages	Intake Fitting	Oil Capacity	Motor Size	Voltage	Weight	Dimensions
Domestic Models									
15115	1.5 CFM	115 microns	1	1/4" flare and 1/2" Acme	10 oz. (300 ml)	1/5 hp	110V 60Hz	15 lbs. (6.9 kg)	11.25" H x 4.75" W x 11.375" L 286 mm x 124 mm x 288 mm
15310	3 CFM	75 microns	1	1/4" flare and 1/2" Acme	8.5 oz. (250 ml)	1/4 hp	110V 60Hz	18 lbs. (8.2 kg)	10" H x 4.875" W x 13.25" L 255 mm x 123 mm x 336 mm
15510	5 CFM	75 microns	1	1/4" flare and 1/2" Acme	10 oz. (300 ml)	1/2 hp	110V 60Hz	21 lbs. (9.7 kg)	10" H x 4.875" W x 13.25" L 255 mm x 123 mm x 336 mm



34970

Air-Vac™ for R-12 and R-134a

Economical Air-Vac uses shop air to pull the system into vacuum and includes inlet fittings with 1/4" and 1/2" Acme sizes.

Easy-to-use – Unique venturi design runs on shop air.

Rugged Lexan® Case – Both oil- and scratch-resistant and comes with a convenient handle.

Low Maintenance – There's no oil or moving parts to replace.

34977 – Replacement inlet tee, 1/4" MFL and 1/2" acme.

Specifications

Drive	Compressed air
Free Air Displacement	1 CFM
Input Pressure	75 psi
Vacuum Rating	29 in./Hg
Intake Fitting	1/4" MFL and 1/2" ACME
Dimensions	4-1/2" H x 4" W x 7-1/2" L
Weight	2 lbs./1 kg

RAVG-1

Digital Vacuum Gauge Easy as 1 - 2 - 3

Connect, Measure, Test

The RAVG-1 employs a sophisticated MEMS Pirani type sensor that directly measures flow. Unlike all other field service gauges on the market, the RAVG-1 is NOT affected by temperature.

The RAVG-1 measures vacuum from Atmosphere to 10 microns in 6 different scales, and can withstand overpressure beyond 30 bar. The unit employs an industry first multi-color backlight that functions as an instant go/no go indicator of acceptable vacuum or leakage.



Highlight: Integrated "Magnetic Hook" or connect to a manifold.



First time introduction: 3 color backlight display offers at one glance the vacuum process status

Features

- › High Resolution and unique backlight indicator make precision readings easy
- › Patent Pending design, employs a sophisticated MEMS Pirani sensor
- › Range from Atmosphere down to 10 microns
- › Measure vacuum in Microns, mmHg, inHg, mBar, Pascals or Torr
- › Extremely accurate at low micron levels
- › Impact and water resistant case with protective Rubber boot
- › Rapid response to changes in vacuum
- › Large easy to read 5 digit display
- › Auto shut off feature prolongs battery life
- › Battery powered
- › Integrated "magnetic" hook
- › Includes carrying case and tee adapters or in-line connections (1/4" MFL x 1/4" MFL and 1/4" FFL x 1/4" MFL versions)

Specifications

Operating Range	Atmosphere to 10 Microns
Resolution	As low as 5 Microns/ 0.005mmHg/0.002inHg/0.007mBar/0.66Pa/0.005Torr
Accuracy	As low as +/- 5 % of RDG
Over pressure	~ 31 Bar/450 psi
Measuring Units	Microns/mmHg/inHg/ mBar/Pa/Torr
Display	5 digit STN LCD, 50 x 30 mm with tricolor LED backlight
Power Supply	3 x size "AAA" 1.5 V batteries included
Input Connection	1/8"-27 NPT Male

Pump Intake Fitting

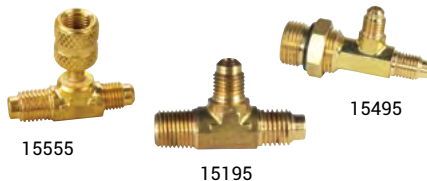
R-12/R-134a Dual Inlet Fitting Convert your pump to R-12 and R-134a. Solid brass tees replace inlet fittings on pump; includes a branch with a 1/4" MFL fitting for R-12 (and other refrigerants) and a branch with 1/2" Acme fitting for automotive R-134a.



13110

Pump Intake Fitting Adapter:

13110 – Adapter, 3/8" FFL to 1/4" MFL.



15555

15195

15495

Also Available:

15555 – Screw-on inlet adapter converts any pump, 1/4" FFL coupler x 1/4" MFL x 1/2" Acme.

15195 – 1/4" MFL/1/2" Acme combination inlet fitting for 15200 series vacuum pumps.

15495 – 1/4" MFL/1/2" Acme combination inlet fitting for 15400/15600 series vacuum pump.

14777

Compact Electronic Vacuum Gauge

Robinair's 14777 electronic vacuum gauge is just 2-1/2" x 3" in size, but accurate enough to clearly indicate when the system is free from moisture and ready for recharging. Specifically designed for use with a high vacuum pump, the 14777 measures to 10 microns.

Clearly Shows Vacuum Level – The display is an easy-to-read LCD type with readout showing the current vacuum level.

6' Lead for Service Flexibility – Hang the gauge in a location that's convenient for you to monitor vacuum level.

Mounting Magnet – Position the 14777 where it's easy-to-read the LCD.

14778 – Replacement thermistor tube.



Specifications

Power Supply	One 9V battery (included)
Vacuum Fitting	1/4" MFL
Length of Lead	6 feet (8.3 m)
Vacuum Rating	29 in./Hg
Dimensions	3" H x 2.5" W x 1" D (7.62 cm x 6.35 cm x 2.54 cm)

Slimline Refrigerant Scales

The TIF Slimline scales offered industry leading accuracy and performance with the choice of getting the familiar usability and quality in either a 120 pound/55 kg. or 200 pound/91 kg. capacity.

Features

- › Touch Key controls.
- › Three display modes – Lbs./oz.; Decimal Lbs., Kilograms.
- › Extremely Accurate.
- › Auto Zero.
- › Removable platform and control box with prop stand/hanging hook.
- › Compact design, completely portable.
- › Removable control box with prop stand/hanging hook.
- › CE approved.
- › Two year warranty.
- › Blow molded case.



TIF9010A

TIF9020A



Specifications	TIF9010A	TIF9020A
Range 15.8 oz., OR	0 lbs. 0.0 oz. to 120 lbs. 0.0 oz., 0.000 lbs. to 120.000 lbs., OR 0.000 kg to 55.000 kgs	0 lbs. 0.0 oz. to 199 lbs.0.000 lbs. to 199.990 lbs., OR 0.000 kg to 100.000 kg
Resolution	0.1 oz./0.005 lbs./2 grams	0.2 oz./0.010 lbs./4 grams
Accuracy	± 0.5% of reading	± 0.5% of reading ± 1 digit
Operating Temp	32° to 120°F (0° to 49°C)	32° to 120°F (0° to 49°C)
Power Supply	9VDC	9VDC
Battery Life	30 hours	30 hours
Coil Cord Length	6 ft. (1.8m)	6 ft. (1.8m)



TIF9031



TIF9030

Economy Digital Refrigerant Scale

- › Easy to carry and store.
- › Capacity up to 220 lbs. (100 kg). Display shows lbs./oz. and kg.
- › High accuracy (±0.5 oz.) and resolution (0.1oz).
- › 9-volt battery power.
- › Platform to adapt to most existing tanks (9" x 9").
- › Three control keys: On/Off, automatic zeroing, and measurement units.
- › Charging and recovery capabilities
- › CE approved.
- › One-year warranty.



TIF9030 – Economy digital refrigerant scale.

TIF9031 – Economy digital refrigerant scale carrying case.

TIF9055

Certified Refrigerant Scale

- › 220 pound / 100 kg capacity.
- › Allows automatic charging or recovery operations.
- › Color-coded keypad controls.
- › Three display modes – lbs./oz.; decimal lbs.; kilograms.
- › Very high resolution – 0.2 oz./0.010 lbs./4 grams.
- › Can be used with all refrigerants.
- › Advanced charge and recovery modes – uses tare weight and maximum capacity of cylinder to calculate maximum charge/recovery available.
- › User programmable memory for up to 99 different stored values.
- › “Repeat” charge feature.
- › Removable platform and control box with prop stand/hanging hook.
- › Compact design – completely portable, battery powered.
- › Low battery indicators.
- › Five-year warranty.



Specifications

Range	0 lbs. 0.0 oz. to 219.99 lbs. 0.0 oz., OR 0.000 lbs. to 219.990 lbs., OR 0.000 kg to 100.000 kg
Resolution	0.2 oz./0.010 lbs./4 grams
Accuracy	± 0.5% of reading
Power Supply	Four AA batteries & one 9V battery
Battery Life	30 hours
Max. Solenoid Operating Pressure	500 psi
Operating Temp.	32°F to 120°F (0°C to 49°C)
Inlet/Outlet Ports	1/4" MFL fittings with 1/2" ACME adapters
Weight	Approx. 7 lbs.

10994

Heater Blanket

Robinair's heater blanket speeds charging by maintaining a constant temperature, thus creating a positive pressure between the refrigerant tank and the A/C system.

- › Fits 30 and 50 pound refrigerant tanks.
- › Thermostat is set at 125°F (55°C).
- › 300 watts, 2.6 amps.
- › Thermal cut-off switch protects against overheating.



International Models

13184 – Heater blanket, 220V–240V 50 Hz, with internal IEC receptacle.



6512

Heavy-Duty Tubing Cutter

- › Works on tubing sizes 1/8" to 1-1/8" O.D. (3 mm to 29 mm).
- › Easily cuts copper, brass, aluminum, and steel brake lines.
- › Ream folds onto cutter body for storage.
- › Extra cutting wheel stored under ream.



42080, 42090

42071

Ratcheting Tubing Cutters

- Designed for confined spaces.
- Unique ratcheting action operates like a socket ratchet, but cuts copper, aluminum, stainless steel, and PVC.
- Spring-loaded adjusting screw applies continuous pressure while cutting.

42071 – Ratcheting tubing cutter for 1/8" to 1/2" tubing.

42080 – Ratcheting tubing cutter for 1/4" to 7/8" tubing.

42090 – Ratcheting tubing cutter for 1/4" to 1-1/8" tubing.



42022

Mini Tubing Cutter

With a short swing radius, this cutter makes quick work of cutting tubing in tight spots. The 42022 is especially versatile with its larger range: 1/8" to 1-1/8" O.D. tubing capacity.



42028

Tubing Cutter

Our roller-type cutter makes clean cuts in copper, aluminum, steel, and stainless steel tubing. Features easy action, wide capacity range, and a pencil reamer. For 1/4" to 1-1/2" O.D. tubing



Replacement Cutter Wheels

These top quality replacement cutter wheels are thinner for cleaner cuts with less effort. Made of high quality, shock-resistant, tool steel, the cutters are also heat treated to resist breakage and last longer. Cutter wheels are available to fit Robinair cutters, and can be used as replacements in nearly all other brands.



42024

Mini Tubing Cutter

With the smallest cutting radius in the industry, the 42024 is ideal for extremely tight places. A finer thread screw provides easier tightening. For 1/8" to 5/8" O.D. tubing.



42035

Slip-Adjust Tubing Cutter

- › All metal construction.
- › Spring-loaded cutting tool for faster cutting.
- › Two locations for spare cutting wheels (1 included).
- › For 1/4" to 2" tubing.
- › Includes attached reaming tool.



6514

Mini Tubing Cutter

- › Works on tubing sizes 1/8" to 5/8" O.D. (3 mm to 16 mm).
- › Easily cuts copper, brass, aluminum, and steel brake lines in hard-to-reach places.
- › Ream folds onto cutter body for storage.
- › Extra cutting wheel stored under ream.

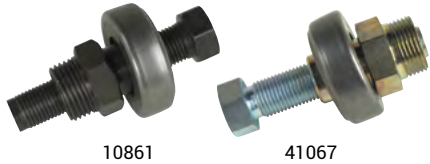
Replacement Wheel Chart

Model No.	Fits Cutter No.
42062	42028
42073	42071
42083	42080, 42090



42040 Single Blade Deburring Tool

This handy tool removes internal burrs in copper tubing. It features a high-speed steel, blade, aluminum handle, and pocket clip. Tubing size is unlimited.



10861

41067

Clutch Plate Remover/Installer

These compact tools are used both to remove the clutch for access to the shaft seal and to re-install it by simply inverting the nut and main bearing.

10861 – A6, R4. **41067** – V5, DA6, HR6.



7238 Spring Lock Coupler Disconnect Set

Set includes four sizes for use on 3/8", 1/2", 5/8", and 3/4" tubes. Allows quick, safe disconnect of spring lock couplers on late model Ford systems and Tecumseh HR980 compressors.



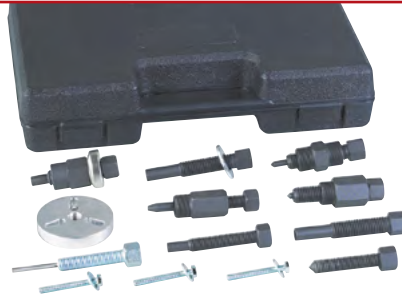
6511 Fuel Line Disconnect Tool

Special low-profile design works in close quarters on GM, Ford, and Chrysler vehicles where there is limited clearance between the fuel line fittings and fuel filters, fuel rails, or sending units. This tool is designed to access the center port on the GM fuel tank sending unit. For 3/8" and 1/2" applications; will also service 2001 thru current 3/4- and 1-ton trucks with the Duramax Diesel engine.



4536 A/C Clutch Pulley Puller Set

- › For removal of stubborn air conditioning clutch pulleys. Also used on many alternator, generator, power steering, and crankshaft pulleys, harmonic balancers, and fiber timing gears.
- › Set includes drop-forged components: one 3/4"-16 x 5" live-center forcing screw, 5-1/2" crossbar with three spread settings, two pairs of jaws, and a clamp bolt.
- › Spread: 3" to 5"; Reach: 1" to 5".
- › Includes blow-molded plastic case.



4535 A/C Clutch Hub Remover/Installer Set

- › For damage-free removal and installation of the clutch hubs on these air conditioning compressors: GM-Harrison DA-6, HR-5, V-5, A-6, and early R4; Nippondenso Ford/Chrysler A590, C171, FS-6, 6P148A (new style); Sanden & Sankyo; York/Tecumseh HR980; Zexel/Mitsubishi CH series.
- › Set includes a removing flange, plus forcing screws and adapter assemblies to remove and install virtually all clutch hubs.
- › Includes blow-molded plastic case.



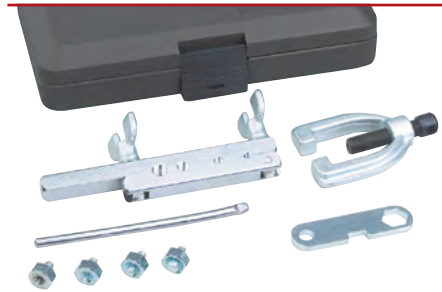
4537 A/C Clutch Holding Tool

This three-stud spanner wrench keeps the A/C clutch from turning when loosening or tightening the retaining nut. Adjusts quickly with brass thumbscrews to fit various styles of A/C compressors used on GM, Ford, and Chrysler vehicles. Also fits a variety of other pulleys.



4503 Double Flaring Tool Kit

- › Designed for double or single flare in copper, aluminum, soft steel brake line, and brass tubing (to 45 degrees).
- › Includes five adapters 3/16" through 1/2" (4.8 mm through 12.7 mm).
- › Chrome swivel, made of alloy steel, reduces friction. Forged yoke made of heat-treated steel. Housed in a blow-molded storage case.



4504 Bubble (I.S.O.) Flaring Tool Kit

- › Designed for crack-free bubble flares on soft steel tubing used in automotive brake systems.
- › Includes four dies: 4.75, 6, 8, and 10 mm adapters.
- › Forged steel yoke, flaring bar, and all the adapters needed for ISO bubble flaring.
- › The most economical "Bubble" flare tool to date. Housed in a blow-molded storage case.



18410
Hydraulic Flaring Kit

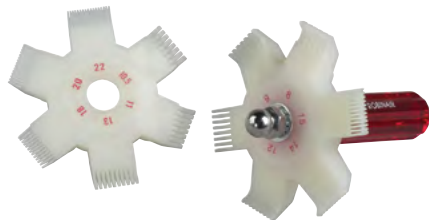
- › Fabricates a variety of fuel, brake and A/C line flares.
- › Push connect 1/4, 5/16 and 3/8".
- › GM fuel line, brake line and transmission 5/16 and 3/8".
- › Flare and double flare.
- › Metric bubble flare.
- › Comes in a custom blow molded case.



12540
Tubing reamer



18706
Eccentric flaring tool



18403
Fin Straightener

- › Clean and straighten condenser and evaporator coils.
 - › Compact design for confined spaces: the straightener head is 3-1/8" in diameter; the handle is 3-1/2" long.
 - › Includes 12 clearly marked combs
- Wheel 1: 8, 9, 10, 12, 14, & 15 fins per inch
Wheel 2: 10.5, 11, 13, 18, 20, & 22 fins per inch



18560
Valve Core Remover / Installer

Remove and install the valve core from a 1/4" male flare access fitting without the loss of refrigerant. Durable, solid brass tool has a ball valve that can be opened and closed in just a quarter-turn, rather than a stem-type valve. Designed with a stainless steel ball and brazed side fitting for durability and long life.



18561
Valve Core Remover / Installer

Replace leaking valve cores quickly and easily, or remove the valve core and hold it out of place for evacuation or charging. The 18561 features a solid brass body with convenient handle that opens and closes in a quarter-turn to speed service. The compact design easily fits most installations.



14773
Thread Chaser

For use with No. 18560 or 18561, valve core remover/ installer. This item actually repairs damaged threads on valve cores in the service line, without releasing refrigerant into the atmosphere.



14774
Pick Extractor

For use with No. 18560 or 18561, valve core remover/ installer, this extractor lets you remove damaged cores in the service line while the system is fully charged. There's no release of refrigerant into the atmosphere.

Access Valve Core Removers
Save Service Time

These handy tools remove valve cores without losing the system charge. They're designed specifically for use during evacuation or recharging on any system with valve core-type access ports. Removing the core restriction results in maximum flow, greatly reducing the time required for evacuation and charging.



11014
R-12 Valve Core Remover

Services late model GM cars with deeper valve cores.



10588
R-134a Valve Core Remover

Our popular valve core remover/installer has been engineered for use when servicing deeper core R-134a A/C systems.



13145
1/4" Valve Core Remover, pkg/6

Robinair's standard valve core remover includes six replacement valve cores which store in the tool's body.

Access Adapters

Robinair offers a complete selection of access adapters for hooking up A/C systems for evacuation and recharging. These adapters fit most systems, and sizes are available to fit most passenger cars. "A" models have longer valve core depressors to work on both standard and the deeper-set valve cores in some vehicles. Check manufacturer's specifications for specific applications.

90° Style Adapters

Solid brass fitting is ideal for tight spots or locations where making connections is difficult.

10469A – 1/4" MFL x 3/16" FFL.

40563A – 1/4" MFL x 1/4" FFL.

Straight Style Adapters

Straight adapter is versatile and easy to use. Made of solid brass.

10468A – 1/4" MFL x 3/16" FFL.

40560A – 1/4" MFL x 1/4" FFL.

Flexible Adapters

Flexible adapters feature brass fittings and a durable neoprene-coated hose, 6" long.

10470A – 1/4" MFL x 3/16" FFL, red.

10778 – 1/4" MFL x 1/4" FFL, yellow.

40677 – 3/16" gasket.

40653B – 3/16" valve core depressors.

40082 – 1/4" valve core depressors.

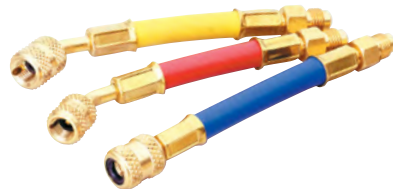
40083 – 1/4" hose gaskets.



40563A



10468A



10237A

Fits-All Adapter Kit

Our access adapters have been combined into a kit that's ideal for accessing R-12 vehicle A/C systems, as well as other types of systems. Five different adapters are included with 1/4" fittings: three flexible adapters (part numbers 10470A, 10778) and two 90° brass adapters (part numbers 10469A and 40563A).



10292

Quick Seal™ Adapters

Quick Seal fittings automatically shut off the charging hose when you disconnect it from the system, so any refrigerant left in the hose is not released. This also prevents "finger burn" and adds an extra measure of safety. Made of solid brass.

10292 – 1/4" MFL to 1/4" FFL.

10250 – 1/4" MFL to 1/4" FFL, 90°.

14450

Heat Gun

A lightweight source of directed heat offering 500°F and 750°F settings, and also has a "cold" setting. This handy heat gun is ideal for many applications, including:

- › Fast heating/drying of materials.
- › Quick curing/drying of epoxies.
- › Applying shrink tubing.
- › Softening tubing for bending.
- › Speed-drying of touch-up paint to eliminate "haze."
- › Drying out condensation in motors, clutches, controls, etc. Shock-proof and cool-running with a tough Lexan® housing, the unit weighs just 2-1/2 lbs.
- › 115V 50/60 Hz.



Replacement parts

44997 – Switch assembly.



18451

Quick Seal Repair Kits

18451 – 45° 1/4" Quick Seal™ kit.

40302 – 1/2" Acme Quick Seal™ kit.



40572

Brass Caps

40572 – 1/4" solid brass caps have knurled ridges for easy gripping. Package of six.

HEAVY-DUTY SERVICE

OTC ROBINAIR BOSCH



The Bosch ESI[truck] platform is unlike any other in the industry, taking heavy duty diagnostics to the next level

KEEP YOUR TRUCKS RUNNING WITH OTC



Unbeatable coverage for HD trucks, construction equipment and more



New & Improved Windows 10 Touchscreen tablet



Increase Shop Efficiency with the Bosch ESI[truck]

DPF regeneration, component actuation, special tests and automatic module identification for Class 4-8 trucks and more.

3824A

Truck, engine, and system coverage

- ▶ Truck brands: Freightliner, International, Kenworth, Mack, Volvo, Peterbilt, Sterling, Western Star, and more
- ▶ Engine brands: PACCAR, Perkins, Detroit Diesel-MBE, Mack, Navistar, Caterpillar, Deutz, MTU, and more
- ▶ System coverage: transmissions, brake systems, trailer ABS, exhaust treatment, and more

Expert-level diagnostics

- ▶ Automatic vehicle ID
- ▶ Fault code reading, reporting, clearing
- ▶ Diesel particulate filter (DPF) regeneration
- ▶ Cylinder cut-out
- ▶ Injector coding and trim files
- ▶ Key component actuations
- ▶ Special tests
- ▶ Vehicle parameter modifications



NEW

3824A-TBL

Heavy Duty Tablet Upgrade

- ▶ Everything you need to upgrade an existing 3824 ESI[truck] Tablet to the new and improved 3824A model.
- ▶ Windows 10 Touchscreen tablet

ESI[truck] Off-Highway Upgrade Cable Kit with Introductory Software License (3824CBL-UPG)

Add off-highway vehicle and machinery coverage for multiple manufacturers to your 3824 or 3824A ESI[truck] scan tool. Coverage included for:

- Construction equipment
- Agricultural vehicles
- Stationary engines
- Street sweepers and more

- ▶ **Manufacturer coverage:** Caterpillar, John Deere, Kubota, Perkins, Volvo, Massey Ferguson, SISU, Deutz, Deutz-Fahr, MTU, and more
- ▶ **System coverage:** Gearbox, HVAC, engine, steering, hydraulic systems, suspension, electronic modules, antipollution, central computer and more
- ▶ **Diagnostic coverage:** Manual processes, diagnosis info, measurable values, component actuations, ECU data, parameter IDs (PIDs), calibrations and resets, system technical data, wiring diagrams, vehicle technical data and vehicle maintenance info

3824CBL-UPG

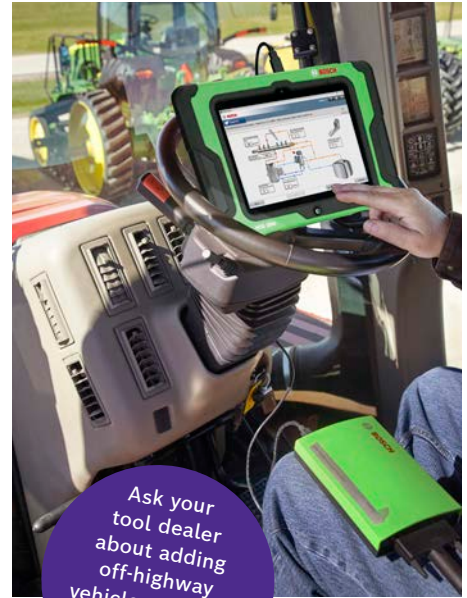
Kit contents:

- ▶ 10 cables for machinery, construction equipment, agricultural vehicles and more
- ▶ ESI[truck] off-highway software package with full diagnostic capabilities. Introductory off-highway software expires when your ESI[truck] heavy duty truck software expires
- ▶ Software renewals can be done simultaneously, ensuring continuous HD truck and off-highway vehicle coverage

3824-080HW

ESI[truck] Off-Highway 1-Year Software License

- ▶ 12-months of off-highway diagnostic coverage, including all coverage updates
- ▶ Used to renew initial software included with Off-highway upgrade cable kit with introductory software license



Ask your tool dealer about adding off-highway vehicle coverage to your ESI[truck]



Off-highway cable upgrade kit and off-highway software only compatible with 3824A, 3824 and 3824BSC ESI[truck] diagnostic tools. Customer must first purchase Off-highway upgrade cable kit with introductory software (3824CBL-UPG) prior to purchasing or activating Off-highway 1-year software license (3824-080HW)

Adapters

3824-06

Bosch ESI[truck] Trailer Adapter

7-pin PLC adapter for trailer ABS diagnostics

- ▶ J2497 Power Line Carrier (PLC) communication compatible
- ▶ Allows direct connection to trailer
- ▶ Works with tractor present or without the tractor present
 - External power supply is necessary without tractor
- ▶ Bosch ESI[truck] trailer ABS coverage for Bendix, Haldex, Meritor Wabco and Wabash systems
- ▶ Compatible with 3824, 3824BSC, 3823 and 3823BSC diagnostic tools



3824-10

Bosch ESI[truck] 9 Pin Adapter Cable High Speed Comm

- ▶ 9-pin heavy-duty diagnostic connector
- ▶ High-speed diagnostics communication
- ▶ Backward compatible with older black 9-pin vehicle connectors
- ▶ Compatible with 3824, 3824BSC, 3823 and 3823BSC diagnostic tools



License Renewal

3824-08

Bosch ESI[truck] License Renewal

12-Month Security Card includes one year of advanced diagnostic software for 3824, 3824BSC



Subscription

3824-08R

ESI[truck] Troubleshooting and Repair Subscription

- ▶ For technicians of all experience levels, this software bridges the gap between diagnosing and repairing the vehicle
- ▶ Troubleshooting procedures by trouble codes: after reading or entering DTCs, users are guided through steps to troubleshoot the vehicle
- ▶ Troubleshooting procedures by symptoms: users can select vehicle symptom – example: “Engine oil pressure too low” – and they are guided through steps to troubleshoot the vehicle
- ▶ Technical Service Bulletins (TSBs): documents that explain service procedures for particular makes/models



High-pressure leak detection for heavy-duty system diagnostics & repair

169950000

HPT 500 Features

- ▶ Produce leak detection "smoke" at higher pressure than standard machines (up to 20psi) for higher pressure systems
- ▶ Higher flow rate fills the system with smoke up to 5 times faster
- ▶ Ideal for finding leaks in exhaust after-treatment systems
- ▶ Test entire system, from intake to exhaust, in one 15 minute test
- ▶ High-pressure and large volume systems found in heavy-duty truck & turbocharged passenger vehicles



169950001

HPK 200 Accessory Kit for HD and Medium Duty Applications

- ▶ Cooling system adapter
- ▶ SmokeMeister wands
- ▶ Exhaust stack retention hoop
- ▶ Power intake adapter 3.9" (2 included)
- ▶ Accessory storage case
- ▶ Halogen inspection light
- ▶ Vapor producing fluid
- ▶ Ball-end hex point L key
- ▶ Oxygen sensor port adapter
- ▶ Temperature sensor port adapter
- ▶ Pressure sensor port adapter
- ▶ Block off coupler
- ▶ Detachable 12V DC power cable
- ▶ Quick start guide



HDS 250 Heavy-Duty Scan Tool for Class 4–8 Vehicles

Ideal for heavy-duty shops as a second diagnostic tool and mobile repair trucks. Cost-effective solution for aftermarket shops in need of heavy-duty coverage

HDS 250 Features

- ▶ Brilliant Color Display
- ▶ Rugged enclosure for durability
- ▶ Class 4 – Class 8 truck coverage featuring “Automatic Protocol Search”
- ▶ HD J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage and more
- ▶ Global OBD II Quick Test
- ▶ Works on 12V and 24V systems
- ▶ Gasoline and diesel engine coverage
- ▶ Read and clear diagnostic trouble codes
- ▶ Live vehicle data includes
 - Engine speed
 - Engine ECU temperature
 - Percent acceleration pedal position
 - Engine intercooler temperature
 - Engine coolant temperature
 - Battery voltage
 - Alternator voltage output
 - Ambient air temperature
 - Air inlet temperature
- ▶ On-screen definitions of diagnostic trouble codes

1699200240



HDS 250 Includes

HD Scan tool, 9 Pin Deutsch Cable, 6 Pin Deutsch Cable, 16 Pin HD/OBD II Cable, USB Cable, Quick Start Guide, Carrying Case and 1-Year Warranty.



HENDRICKSON SUSPENSION

REMOVE AND INSTALL SELECT HENDRICKSON HEAVY DUTY REAR & FRONT SUSPENSION BUSHINGS



4247
4246 (Same as 4247 without 2510A air/hydraulic pump)



4250



4275
4274 (Same as 4275 without 2510A air/hydraulic pump)



4254

REAR SUSPENSION

4246

Hendrickson Rear Suspension Bushing Tool Kit

- Patent-pending design is suspension-mounted, eliminating the need to hold the tool during operation.
- Remove and install Hendrickson PRIMAAX EX, COMFORT AIR, FCCC V Ride™ Pivot and D-Pin Bushings.
- Save time and effort during suspension service to get trucks back on the road faster.
- Included adapters align tool with the suspension to ensure proper bushing installation and reduce the chance of misalignment and bushing damage.
- Includes an OTC 4106A 25-ton single acting cylinder.

4247

Hendrickson Rear Suspension Bushing Master Kit with Pump

- Adds an OTC 2510A air/hydraulic pump to make bushing service faster and easier.
- Includes everything in the 4246 kit.

4250

Hendrickson Adapter Kit for Front Suspensions

- Use with your 4246 or 4247 Rear Tool on select Hendrickson Front Suspensions.
- Remove and install Hendrickson PACCAR Monoleaf, Navistar Monoleaf, Volvo Monoleaf suspension Pivot Bushings.

FRONT SUSPENSION

4274

Hendrickson Front Suspension Bushing Tool Kit

- Patent-pending design is suspension-mounted, eliminating the need to hold the tool during operation.
- Remove and install Hendrickson PACCAR Monoleaf, Navistar Monoleaf, Volvo Monoleaf suspension Pivot Bushings.
- Save time and effort during suspension service to get trucks back on the road faster.
- Included adapters align tool with the suspension to ensure proper bushing installation and reduce the chance of misalignment and bushing damage.
- Includes an OTC 4106A 25-ton single acting cylinder.

4275

Hendrickson Front Suspension Bushing Master Kit with Pump

- Adds an OTC 2510A air/hydraulic pump to make bushing service faster and easier.
- Includes everything in the 4274 kit.

4254

Hendrickson Adapter Kit for Rear Suspensions

- Use with your 4274 or 4275 Front Tool on select Hendrickson Rear Suspensions.
- Remove and install Hendrickson PRIMAAX EX, COMFORT AIR, FCCC V Ride™ Pivot and D-Pin Bushings.



4263

4263

Suspension Bushing Tool

- Suspension bushing tool used to remove and replace suspension bushings. The hydraulic cylinder and press plate assembly mounts to the suspension component or leaf spring for hands free operation and eliminates the need to hold heavy equipment. Used in conjunction with the bushing adapter sets designed to fit specific bushings and suspension components.
- Includes an OTC 4106A 25-ton single acting cylinder.



4261

4261

Hendrickson Front Suspension Bushing Tool

- Suspension bushing tool kit used to remove and replace the leaf spring bushings on Hendrickson Airtek NXT front suspensions found on Freightliner Cascadia vehicles. The hydraulic cylinder and press plate assembly mounts to the leaf spring for hands free operation and eliminates the need to hold heavy equipment. Press plates and bushing adapters are specifically designed to fit the front leaf spring and bushing.
- Includes an OTC 4106A 25-ton single acting cylinder.



4255

4255

Hendrickson Airtek NXT Bushing Adapter Kit

- This adapter kit is used in conjunction with the 4263 Suspension Bushing Tool to remove and replace the leaf spring bushings on Hendrickson Airtek NXT front suspensions found on Freightliner Cascadia vehicles. Plate, adapters and cups make bearing removal and installation faster and easier than other methods.
- Plate, cup and adapters specially designed to fit Airtek NXT front suspension
- Included adapters and cups allow bushing to be pressed out and new bushing to be pressed in
- Adapters aid with installation to help ensure a straight, clean installation of vital suspension bushings

FREIGHTLINER SUSPENSION



Freightliner Rear Suspension Tool

- Removes and installs single-wrapped FAS II Airliner Freightliner Rear Suspension bushings in a fraction of the time of traditional methods.
- Saves an average 45 minutes per bushing (4 per vehicle) on flat rate of 1.5 hours per bushing.
- 15 ton Capacity cylinder

4244 Freightliner Rear Suspension Tool

4245 Freightliner Rear Suspension Tool includes 2510A Air/Hydraulic Pump.

1757

Hendrickson Bar Pin Adapter Set

Adapter set is used with the beam removed from the truck, and in conjunction with OTC No. 51100 press plate and a 100-ton hydraulic shop press.

To remove bushings, use OTC's previously introduced No. 302030 removing adapter and No. 206457 press adapter, both of which may be ordered separately. Reinstall bushings following procedures recommended by the suspension manufacturer.



1767

Hendrickson Primaax Quick Alignment Socket

- Hendrickson – Approved tool.
- Used to adjust axle alignment on the Primaax air suspension.
- Works on Primaax models 230, 460, and 690 rear suspensions.



1768

Hendrickson PRIMAAX® Quick Wrench

- Used to torque cross tube end cap bolts and longitudinal torque rod top pad bolts.
- Reduces maintenance time by eliminating the need to remove the tires to gain access to the end cap bolt.
- Use with the following Hendrickson PRIMAAX suspensions:
 - Type A - PAX 230/460/690 and FMX 240/480 with 8-1/2" ride height
 - Type B - PAX 230/460/690 with 10" ride height.



OTC EQUIPMENT



✓ WORKS ON BOTH STRAIGHT AND TAPERED KINGPINS.
 ✓ TWO-SPEED HAND PUMP FOR FASTER SERVICE.

4240A Kingpin & Brake Anchor Pin Pusher (30-ton capacity)

Five special collars and two pins allow this unit to work on both straight and tapered kingpins and accommodates sizes from 7/8" to 2" in diameter and up to 11-1/4" long. The tool delivers 30 tons of hydraulic force to push out even the most corroded kingpins. The anchor pin can be removed quickly by using the special adapter installed in the pusher's base block and the unit positioned over the brake's spider.

- Works on many models of trucks and buses.
- 27-1/2" high x 8-1/2" wide.
- Set includes No. 4002 hydraulic hand pump, No. 9767 hose, No. 9798 hose-half coupler, No. 4121 Power Twin 30-ton ram, and No. 29424 anchor pin adapter.



7503HD

Heavy Duty Tie Rod and Ball Joint Remover

A universal heavy-duty puller that removes a wide range of tie rods and ball joints from a variety of cars, trucks, SUVs and heavy-duty vehicles. The 7503HD has a 10-ton pulling capacity, twice the force applied by the original 7503. Jaw spread and reach are increased to 3 and 4 inches for a wider variety of applications and larger vehicles. A heavier duty forcing screw is used, measuring 3/4" - 10, 6 1/2" long with interchangeable tips including cone, flat and cup for multiple applications. The tool will also remove pitman arms and can be used in many pulling situations that require a 2 jaw puller on other vehicles types and machinery.

5025

Diesel Exhaust Fluid (DEF) Refractometer SCR & EPA 2010

- The OTC 5025 makes this a simple and quick process for an operator or technician to get an accurate measurement of UREA concentration in DEF or AdBlue solution.

Scale:

0.5% line graduations

32.5% Indicated

Scale 15-40%

Waterline & 20 Deg C

Application:

The refractometer is a portable, precision, optical instrument used for measuring the Diesel Exhaust Fluid (DEF) concentration. When a liquid sample is placed on the prism, the light passing through it is bent and shows on the scale to indicate the DEF condition.



TIRE SERVICE

5713 Tire Bead Seater

The Tire Bead Seater is used when a tire, new or used, is mounted on a wheel and the tire bead does not touch both sides of the wheel, making inflation possible.

The air trigger on this tool expels a tremendous burst of air that inflates the tire to seat it to the wheel rim. This allows the tire to be inflated to the recommended pressure through the tire valve.

- The Tire Bead Seater is equipped with unique configurations that enhance ease of use, productivity and safety for technicians looking to get the job done right every time.
- Unlike other options out there, the Tire Bead Seater's ASME certified 13-gallon tank is designed with a nozzle and valve connected via hose assembly, giving the user more control rather than requiring them to hold the weight of the tank.
- The trigger style discharge valve allows for optimum airflow control while allowing both hands to firmly hold the nozzle/valve assembly, critical for effective and safe use. Wheels and handle function in either the vertical or horizontal position for easy mobility and storage.
- Unique nozzle design significantly reduces "blowback recoil" and contains discharge holes strategically placed for optimum inflation of a wide range of the tire sizes and wheel diameters.
- Air valve included for filling tank, which also provides compressed air for filling the tire while seating the bead, optimum for on-the-road service.



5702 Tire Bead Seater

The 5702 OTC Tire Bead Seater provides many of the great features of it's 5713 big brother, at a more economical price!

- The trigger style discharge valve allows for optimum airflow control while allowing both hands to firmly hold the tank/valve assembly, critical for effective and safe use.
- Unique nozzle design significantly reduces "blowback recoil" and contains discharge holes strategically placed for optimum inflation of a wide range of tire sizes and wheel diameters.
- Inline design allows for a comfortable distance from the tire and wheel while seating.
- ASME approved 2-gallon tank with inlet valve, pressure gauge, and relief pressure valve for safety.

5727 Sliding Bead Breaker

The 5727 Sliding Bead Breaker has a split head, unique wedge design and slide hammer to reduce bead friction. Foot loops and tipping slots provide leverage and ease of transferring force to the tire.

- Sliding Bead Breaker, 47" extends to 81", 21 lbs.



5735-PACK Tire Spoon Pack with Hang Rack

An upgraded pack of popular tire spoons features the 35" Double End Tire Spoon with Grip Grooves (5735 35G), 35" Curved/Flat Tip Curved Tire Spoon (5735-35) and 30" Curved Tire Spoon (5736-30), along with a FREE rack (5715) that can be hung on a toolbox or wall for easy organization.



5729 Inside Dual Wheel Bead Breaker

- Breaks the inner bead on the outside tire without removing the wheel from the truck.
- Unique design places pressure in the exact location required to quickly and easily break the inner bead.
- Simply pull up on the handle and the bead is forced off the wheel rim.



5731 Tire Bead Locking Pliers

- Prevents the tire from slipping while mounting the top bead.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.
- Prevents tire from contacting costly TPM Sensors.



5732 Tire Spoon Holding Pliers

- Tire Spoon Holding Pliers is the 3rd hand needed to ease mounting and demounting of tires with tire spoons.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.



5733 Tire Bead Wedge Pliers

- Tire Bead Wedge Pliers keeps the tire in the bead drop area to ease mounting and demounting of larger truck and agricultural tires.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.



Convex Slip Head - Unique "Convex Slip Head" curved design allows the spoon to slide easily into the tire bead while the spoon bump limits the depth for quick-and-easy operation.



Grip grooves - Eliminate spoon slippage on the wheel rim while mounting or demounting the tire. The grooves also limit the depth of the spoon to help eliminate pinching tire tube applications.

5735-35 **Double End Curved & Flat Tip Curved Tire Spoon, 35"** Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.

5735-35G **Double End Tire Spoon with Grip Grooves, 35"** Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.

5735-42 **Double End Curved & Flat Tip Curved Tire Spoon, 42"** Same great design as the original double end mount/demount tire spoon, but in a 42" length for added leverage. 3/4" diameter.

5735-42K **Double End Tire Spoon with Kick Start, 42"** Includes kick loops to allow the spoon to be forced into tight bead locations with the help of foot pressure. 3/4" diameter.

5736-24 **Curved Tire Spoon, 24"** Handle knob enables easier spoon pick up. 3/4" diameter.

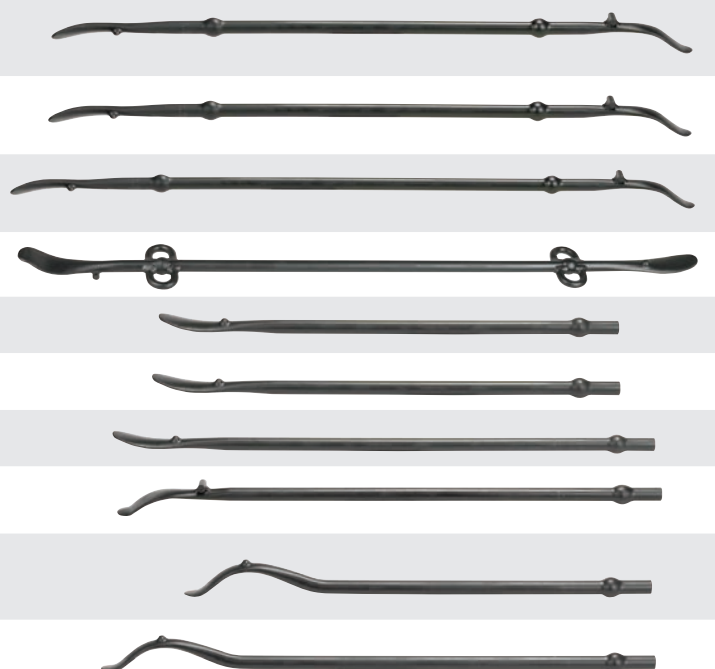
5736-24G **Curved Tire Spoon with Grip Grooves, 24"** Handle knob enables easier spoon pick up. 3/4" diameter.

5736-30 **Curved Tire Spoon, 30"** Handle knob enables easier spoon pick up. 3/4" diameter.

5737-30 **Flat Tip Curved Tire Spoon, 30"** Handle knob enables easier spoon pick up. 3/4" diameter.

5739-24 **Curved Shank Tire Spoon, 24"** The curved shank allows improved access for the spoon head around the tire bead or wheel rim. Handle knob enables easier spoon pick up. 3/4" diameter.

5739-30 **Curved Shank Tire Spoon, 30"** The curved shank allows improved access for the spoon head around the tire bead or wheel rim. Handle knob enables easier spoon pick up. 3/4" diameter.



OTC EQUIPMENT



5105B 1,100 lb. Capacity High-Lift Dual Wheel Dolly

- Effortless air-powered hydraulic lift system for a variety of applications.
- 0 to 42" lifting range.
- Six-inch lateral adjustment.
- Tilt adjustment of +15° to -8° for easy alignment.
- Features four swivel casters, two locking, for enhanced mobility.



5015A Truck Clutch & Flywheel Handler

- Handles 14" and 15-1/2" clutch assemblies weighing up to 150 lbs.
- Lifting range of 9" to 37". Swivel casters provide easy maneuverability.
- Includes a 2" spline shaft with a 1-1/4" pilot to aid in alignment.

218174 – Optional Flywheel handling attachment for use on No. 5015 and 5015A only.

48625 – Optional splined shaft, 1-3/4" dia. with a 1-1/4" pilot.

440533 – Optional splined shaft, 1-3/4" dia. with a 1" pilot. Needed for clutch service on some Navistar 466 series engines.

314386 – Optional 1-3/4" dia. alignment shaft extension. Used for 2-plate clutch of Navistar 466 series engine.

600011 – Optional splined shaft adapter for Eaton Fuller UltraShift Plus Transmission, 14 Spline, 2" OD, 1.18" Pilot. For use with the 5015A Clutch Handler and 1797 Trans Jack HD Clutch Adapter.

600007 – Adapter for attaching Splined Shafts for the 5015A Clutch Handler to the 5018A Clutch Handler.



5130 OTC 1,000 lb. Capacity DriveMaster™ Driveline Lift

- Low profile of 7".
- Lift range: 23" to 30".
- Pivoting pump handle +/- 15° tilt in each direction.
- Includes 553516 differential mounting adapter. Mounts easily using existing bolt patterns. Fits the most common differentials currently in use on Category 7 and 8 Heavy Duty Trucks. Including: Eaton, Fuller, Rockwell, Meritor, Spicer, International, and Mack.
- CE certified, PALD compliant.

5018A Truck Clutch and Flywheel Handler

- Replaces 14" & 15-1/2" clutch assemblies weighing up to 250 lbs.
- 13" low point enables access below side faring.
- Linkage raises load from horizontal to vertical position.
- 360 degree swivel head.
- Covered by OTC Lifetime Warranty®.

516160 – Optional flywheel handling attachment

515686 – Optional splined shaft, 1-3/4" dia. with 1-1/4" pilot

516159 – Optional splined shaft, 1-3/4" dia. with 1" pilot

600005 – Optional splined shaft adapter for Eaton Fuller UltraShift Plus Transmission, 14 Spline, 2" OD, 1.18" Pilot. For use with the OTC 5018A Clutch Handler. Includes part number 600007 clutch handler shaft adapter allowing splined shafts designed for the 5015A to be used on the 5018A.



1590 10-Ton Air Lift

- Adjustable lifting saddles and an extra wide stance for extra stability.
- 10 tons of lift at 200 PSI air pressure.
- Lifting range is 13" to 52".
- Automatic mechanical safety catch engages in five height positions.



5292 27.5-Ton Capacity Under-Axle Jack

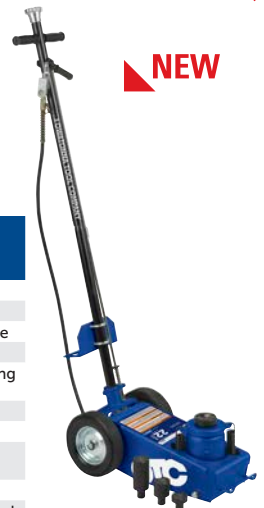
- Robust design with completely sealed piston.
- New lever design and pneumatic release valve for more precise release control.
- Power return allows lowering with no load.
- Includes two height adapters for flexibility.
- PALD compliant.
- Minimum retracted height (with saddle only): 8-1/4".
- Maximum extended height (with screw extended and large adapter): 21-3/8".
- Stroke: 4.9375".
- PSI range: 90 to 175.



UA22 22-ton under-axle hydraulic service jack

- Includes 3 saddle attachments for height adjustment; 3/4" saddle; 1-15/16" saddle; 3-7/8" saddle
- Self-retracting ram activated with handle-end controls

UA22 22-ton under-axle hydraulic service jack	UA22
Capacity	22-ton
Air pressure	90 - 145 PSI
Max height	20-2/3" with longest saddle
Min height	8.27"
Handle length	47.24" T handle with lowering lever and air-chuck hook
Footprint	22.63" x 11.73"
Reach	69.87"
Saddle	3" dia., round with center notch, includes 3 lengths
Frame height	8.27"
Wheels	2 fixed; 7.88" rubberized steel



NEW

TESTED AND TRUSTED SAFETY FOR LIFE ALL JACKS AND STANDS ARE COVERED BY A LIMITED LIFETIME WARRANTY



HDJ5

HDJ5 5-ton hydraulic service jack

- Designed to safely lift step vans and bucket trucks
- 3-position handle lays flat, 45° or 90° for storage and use

HDJ5P 5-ton hydraulic service jack with air-assist

- Same as HDJ5, with air/hydraulic assist to reduce effort to raise, lower vehicles



HDJ10

HDJ10 10-ton hydraulic service jack

- Ideal for bucket trucks and school buses
- Rugged steel frame and extra-large wheels for durability and strength

HDJ10P 10-ton hydraulic service jack with air-assist

- Same as HDJ10, with air/hydraulic assist to reduce effort to raise, lower vehicles



HDJ20

HDJ20 20-ton hydraulic service jack

- 3-position spring-loaded handle can lay flat, 45° or 90°
- Foot and hand pump options to raise load quickly

5, 10, and 20-ton heavy-duty jacks



✓ ALWAYS SUPPORT VEHICLE WITH OTC JACK STANDS

5, 10, 20-ton heavy-duty jacks	HDJ5	HDJ5P	HDJ10	HDJ10P	HDJ20
Capacity	5-ton	5-ton air-assist	10-ton	10-ton air-assist	20-ton
Lifting range	6" to 22"	5-7/8" to 22"	6.3" to 22"	6-3/8" to 22"	7-1/2" to 23.8"
Air pressure	–	80–120 PSI	–	80–120 PSI	–
Handle length	43" 3-position with lock and release controls	45.4" 3-position with lock and release controls	43-1/4" 3-position with lock and release controls	45.4" 3-position with lock and release controls	47-1/2", 3-position spring-assisted locking
Footprint	15" x 56"	14.2" x 55.5"	18" x 60"	18.9" x 60.8"	18-1/8" x 61-3/8"
Reach	47"	87"	51"	90"	110.4"
Saddle	5-1/8" dia., round	5.1" dia., round	6" dia., round	5-3/4" dia., round	6-1/2" dia., steel crown
Casters	4; 4.4" fixed front (2), 2.8" mid-body swivel (2)	4; 4.4" fixed front (2), 2.8" mid-body swivel (2)	4; 5.6" fixed front (2), 3.6" mid-body swivel (2)	4; 5.6" fixed front (2), 3.6" mid-body swivel (2)	6; 4 front fixed; 2 mid-body swivel
Frame height	7.9"	7.5"	9.8"	9.8"	10.2"

TESTED AND TRUSTED SAFETY FOR LIFE ALL JACKS AND STANDS ARE COVERED BY A LIMITED LIFETIME WARRANTY

WHY OTC?

- Lifetime warranty
- Jack design tested to comply with safety standards as defined by ASME PASE-2019
- Stand designs tested to comply with safety standards as defined by ASME PASE-2019
- Light-duty 2-ton to heavy-duty 22-ton capacities
- Padded handle to protect bumpers and rocker panels (LDJ Models Only)
- Product capacities durably marked for proper application

Proven to safely perform in all working environments

OTC jacks and stands are proven to meet the safety standard for Portable Automotive Service Equipment (PASE-2019). What does PASE mean to OTC? Every jack and stand design is tested to meet every PASE-2019* test, not just one.

Service jacks undergo a series of 5 tests:

Load Sustaining Test: Jack will not inadvertently drop under load. REMEMBER: Use OTC Stands to support a load – not a jack.

Load Limiting Test: Jack will not lift a load beyond its rated capacity

Release Test: Jack can be lowered gently

Periphery Test: Jack avoids tipping when load is not centered on saddle.

Proof Load Test: Jack structure supports 150% of rated capacity

Jack stands are subject to 2 tests:

Off Center Load Test: Limits allowable deformation when stand is placed off center.

Proof Load Test: Stand structurally limits allowable deformation at 200% of rated capacity.

*Bosch testing to ASME PASE-2019 standards, conducted in Owatonna, Minnesota January – October 2019



S06 6-ton steel jack stands

- Ratcheting design cannot be released under load
- Formed and welded steel base with baked enamel finish for strength, corrosion resistance



S022 22-ton steel jack stands

- 11" flat square base prevents sinking into concrete or other surfaces
- Large flat base rated to safely hold up to 44,000 lbs
- Pin Style Stand with 3 adjustment positions



1778B 12-Ton Capacity Low profile Jack Stand (One only)

- Spun steel base won't dig or sink into asphalt or sand.
- Height range of 19" to 29-1/2".
- Covered by OTC Lifetime Warranty®.

Note: Recommend use in pairs.



1779B 12-Ton Capacity High profile Jack Stand (One only)

- Spun steel base won't dig or sink into asphalt or sand.
- Height range of 33-3/4" to 44-1/4".
- Covered by OTC Lifetime Warranty®.

Note: Recommend use in pairs.

Heavy-duty stands	S06 (sold as a pair)	S022 (sold as a pair)
Capacity	6-ton	22-ton
Max height	23-11/16"	19-7/8"
Min height	15-5/8"	13-7/8"
Footprint	11-9/16" x 10-3/8" square base; welded foot pads	11" square base, flat for maximum ground contact
Adjustment	Ratcheting; 11 teeth	Pin-style; 3 slots in 3" increments
Saddle	V-notch style, 1.2" x 4.2"	3" x 3-3/4" V-notch

6000 LB. REVOLVER® DIESEL ENGINE STAND & ADAPTERS



1750A

6000 LB. Revolver Diesel Engine Stand

- 96 to 1 ratio worm and gear set rotates components a full 360°; handle locks in any position.
- Includes 205061 universal mounting plate for use with individual engine adapter plates.



217687 *
Caterpillar



205060 *
Caterpillar



218098
Cummins



218099 *
Cummins



61405 *
Cummins



205059 *
Cummins



61373 *
Allison



208160 *
Allison



205061
Engine
mounting plate

Caterpillar, Cummins, Allison and generic adapters

Item	Description	Application	Brand	Component	Requires use of 205061 plate*
217687	Caterpillar engine adapter plate	3114, 3116, 3176 in-line 6 cylinder and C12	Caterpillar	Engine	Yes
205060	Caterpillar engine adapter plate	1673, 1674, 1693, 3306, & 3406 in-line 6 cyl.; Nos. 1100, 3208, and 3408 V8	Caterpillar	Engine	Yes
218098	Cummins B series adapter plate	"B" series 5.9L in-line 6 cyl. engines	Cummins	Engine	No
218099	Cummins C series adapter plate	"C" series 8.3L in-line 6 cylinder engines	Cummins	Engine	Yes
61405	Cummins L-10, M11 engine adapter plate	L-10 and M11 series engines. Plate attaches to the left side of engine for complete tear down	Cummins	Engine	Yes
205059	Cummins engine adapter plate	All NH, NTC, NTE, N14 855 series in-line 6 cyl.; 378 series V6; 504, 555, & 903 series V8; KT 1150 series in-line 6 cyl., L10	Cummins	Engine	Yes
61373	Allison transmission adapter plate	HT-750, CLBT, HT-740D, CR/DR, HT-750CT	Detroit Allison	Transmission	Yes
208160	Allison transmission adapter plate	AT500, MT600, MT 6-speed, VH, VS and V730	Detroit Allison	Transmission	Yes
1750-35926	Allison transmission adapter plate	Allison 3000 series transmissions	Detroit Allison	Transmission	No
1750-41445	Allison transmission adapter plate	Allison 4000 series transmissions; requires pairing with 1750-35926	Detroit Allison	Transmission	No
205061	Engine mounting plate	Universal adapter plate, included with 1750A. Must be used with most adapter plates	Generic engine plates	Generic	N/A - Adapter included with 1750A
J-29109-J	Kent-Moore stand adapter plate	Adapter plate to use adapters for Kent-Moore engine stand	Generic engine plates	Generic	No



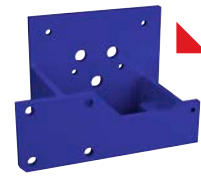
205058 *
Detroit Diesel



218504 *
Detroit Diesel



52871 *
Detroit Diesel



1750-47022
Detroit Diesel

NEW



61681 *
Ford



206386 *
International Harvester / Ford



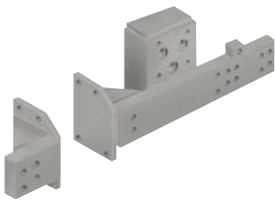
528856 *
International Harvester



528868 *
International Harvester

Detroit Diesel, Ford and International Harvester adapters

Item	Description	Application	Brand	Component	Requires use of 205061 plate*
205058	Detroit Diesel Series 53, Series 71, Series 92 engine adapter plate	53 series inline 6, 6V and 8V; 71 series inline 6, 6V, 8V and 12V; 92 series 6V and 8V, 8.2-liter V8	Detroit Diesel	Engine	Yes
218504	Detroit Diesel Series 60 adapter plate	Series 60 inline 6-cylinder engines	Detroit Diesel	Engine	Yes
52871	Detroit Diesel Series 71 engine adapter plate	Coach 6V and 8V series 71 Detroit Diesel	Detroit Diesel	Engine	Yes
1750-47022	Detroit Diesel MBE 900 engine adapter plate	Detroit Diesel 2004 - 2007 MBE 900 engines	Detroit Diesel	Engine	No
61681	Ford 6.6L / 7.8L engine adapter mounting plate	Ford 6.6L/7.8L engines	Ford	Engine	Yes
206386	International Harvester / Ford engine adapter mounting plate	DT-466, DT-360, DT408, and 530 in-line 6 cylinder; DV-550, MV-404, MV-446, V304, V345, V392, 4-152, 4-196, 4-194; 9.0 liter and T444E V8; and Ford 6.9L, and 7.3L DIT	International Harvester / Ford	Engine	Yes
528856	International Harvester 300 & 400 series	IH300 & 400 Series	International Harvester	Engine	Yes
528868	International Harvester VT365 engine adapter mounting plate	International VT365	International Harvester	Engine	Yes



528859 *
John Deere



528861 *
John Deere



528863 *
John Deere



206629 *
Mack

John Deere, Mack, Navistar and Volvo adapters (continued on page 12)

Item	Description	Application	Brand	Component	Requires use of 205061 plate*
528859	John Deere 400/500 series adapter	JD 400 and 500 engines	John Deere	Engine	Yes
528861	John Deere 4.5/6.8 adapter plate	JD Powertech 4.5L & 6.8L	John Deere	Engine	Yes
528863	John Deere 8995 V6 adapter plate	JD 8995 V6, must be used with 528859 400/500 series engine adapter	John Deere	Engine	Yes
206629	Mack engine adapter mounting plate	V8 1000, E6, & E7 in-line 6 cyl	Mack	Engine	Yes



205101 *
Mack



1750-4940 *
Navistar / IH



1750-4649 *
Navistar / IH



1750-4789 *
Navistar



528853 *
Volvo

John Deere, Mack, Navistar and Volvo adapters (continued)

205101	Mack engine adapter mounting plate	All 672, 673, 675, & 711 series in-line 6 cyl	Mack	Engine	Yes
528993	Mack engine adapter mounting plate	865, 868	Mack	Engine	Yes
1750-4940	Navistar / IH MaxxForce engine adapter plate	2010 - 2016 Navistar MaxxForce DT, MaxxForce 9, MaxxForce 10 engines	Navistar / International Harvester	Engine	Yes
1750-4649	Navistar / IH MaxxForce engine adapter plate	2004 - 2009 International Harvester DT466, DT570, HT570; Navistar MaxxForce DT, MaxxForce 9, MaxxForce 10 engines	Navistar / International Harvester	Engine	Yes
1750-4789	Navistar MaxxForce engine adapter plate	2007 - later MaxxForce 11, MaxxForce 13 engines	Navistar	Engine	Yes
528853	VOLVO TD67/TD71 ENGINE	TD67 and TD71 engines	Volvo	Engine	Yes

DETROIT DIESEL ENGINE TOOLS

Detroit Diesel engine tools	Tool	Application	Use
	6492-10 Oil Priming Adapter	Detroit Diesel DD13 and DD15 engines	This adapter allows for proper engine pre-lubing, preventing dry starts after engine service. The adapter installs into the oil priming port in the oil module. For use with the engine oil primer p/n OTC6492. For use on Detroit Diesel DD13 and DD15 engines. Similar to J-49181.
	5881 Cam gear alignment fixture	Detroit Diesel Series 60	This tool pulls the cam drive gear hub and thrust plate forward for camshaft and/or thrust plate seal removal and installation. Similar to J-35906 and J-35906-6A.
	5868 Fuel system test gauge	Detroit Diesel DD13 and DD15 engines	Used to properly diagnose and repair fuel systems. Similar to J-48876.
	5870 Injector height gauge set	Detroit Diesel Two cycle 53, Two cycle 71, Two cycle 92, Series 60, and DDEC IV Engines.	Injector height gauges are used to properly set injector body height to the injector follower for proper fuel injector timing. Incorrect injector timing can cause engine power issues, poor idle quality and fuel mileage issues.
	5889 Rocker Arm Shaft Socket	Detroit Diesel Series 60 engines	This deep-well 12mm socket is used to torque the rocker arm nut to OE specification and has a stepped outside diameter for proper clearance and access to the fastener. Similar to J-44706.
	5887 Crankshaft Seal and Wear Sleeve	Detroit Diesel Series 60 and two cycle 92 engines	This tool installs the front and rear crankshaft wear sleeves and seals. It eliminates lip flare on the wear sleeve and installs the seal properly. Similar to J-35686-B.

DETROIT DIESEL ENGINE TOOLS

Detroit Diesel engine tools	Tool	Application	Use
	5869 Fuel System Priming Pump	All	Pressurizes the fuel system after service. Required to bleed air from the system and provide correct fuel pressure. Required for proper fuel system operation and efficient starting. Stainless steel tank for long life. Includes fuel line coupler fitting Similar to J-4791
	5869-1 Fuel System Coupler Fitting	Detroit Diesel S60, MBE900, MBE4000	Connects to compu-check quick-connect fitting. Similar to J-47912-QC
	4853 Piston Ring Compressor	All	Universal piston ring compressor fits most piston rings. Adjustable from 2.125" to 5.0" piston rings. Similar to J-8037
	5877 Injector Cup R/I Tool	Detroit Diesel S60, MBE900, MBE4000	Two-tool set for screw-in stainless steel cups. Eases removal and installation of injector cups. Similar to J-46904 and J-48824
	5879 Poppet Disassembly Tool	Detroit Diesel engines	Aids disassembly of poppet valves with 2-prong spanner style end. Similar to J-36452-B
	5884 Cam Gear Retaining Tool	Detroit Diesel S60	Holds cam gear during cam gear bolt R&I. Secures to gear case with access cover bolts. Similar to J-35652-B
	5886 Fuel Injector Torque Adapter	Detroit Diesel DD13 and DD15	Eases R&I of injector feed tubes. Unique design for clearance on injector tube nuts and can be used to properly torque injector tubes during installation. Similar to J-48770
	5883 Crankshaft Alignment Tool	Detroit Diesel S60	Places No. 1 cylinder at TDC during camshaft timing inspection and service. Ensures crankshaft is aligned properly. Similar to J-45947
	5883-1 Crankshaft Alignment Tool	Detroit Diesel S60	Replacement tip for 5883 crankshaft alignment tool.
	5875 Cylinder Liner Remover	Detroit Diesel S60 12.7L with EGR; MTU S2000	Expands in the cylinder to pull liners from 5.0" to 5.75" inner diameter. Uses thrust bearings on expander and bridge nuts for friction-free operation. Similar to J-45876
	5874 Cylinder Liner Installer	Detroit Diesel S60	Drive screw and plate forces cylinder liner into correct position. Attaches to engine with three cylinder head bolts. Similar to J-35597-A
	5882 Cam Gear Alignment Tool	Detroit Diesel S60	Properly aligns the cam gear during camshaft assembly installation. Special pin fits into the cam timing hole for correct alignment Similar to J-45946
	5872 Compression Gauge	Detroit Diesel S60I two cycle 53, 71, 92 and 149	Heavy-duty compression gauge with push-button release valve and quick-connect coupler. 0-1150 psi and 0-8000 kPa range. Similar to J-6692-B
	5876 Injector Remover	Detroit Diesel S60	Removes seated injectors correctly. Thrust bearing under puller nut ensures smooth operation and removal. Similar to J-47372



5295
Powertrain Lift

The sliding split table top design of this powertrain lift allows for separation of the engine/transmission assembly or hybrid engine/generator module, making service easier. The unique design also helps handle removal and installation of electric vehicle batteries, fuel tanks, suspension systems and other powertrain assemblies. A generous ground clearance allows for floor crane access while a low collapsed height aids in servicing large components while still on the lift. The table tilts to help properly align components to the vehicle during installation and threaded holes in the tabletop accommodate future adapters and powertrains.

- 1,760-lb capacity
- 36" x 42" tabletop
- 21.5" minimum height
- 70" max height

Similar to GM lift P/N GE-52200 and Honda lift P/N HON52200.

NEW



5295-DA
Powertrain Lift Differential Adapter Set

Adapters mount to OTC 5295 powertrain lift table for proper handling of differential axle assemblies during servicing. Two axle tube stands support each side of the axle housing, while the pinion adapter stabilizes the differential from rotating. The pinion adapter features a reversible head that supports many different pinion and housing shapes and sizes. All adapters are height adjustable and feature hook points to attach the hold down strap to keep the axle assembly firmly positioned.



5080A
Truck Front Leaf Spring, Pin, and Bushing Service Set

- Delivers 10 tons of hydraulic force to remove and install truck front spring eye bushing assemblies quickly and easily.
- Services bushings with diameters from 1-1/4" through 1-7/8", and pin diameters from 7/8" through 1-1/8". Handles all popular OE and aftermarket components, including Horton pin and bushing assemblies.
- Service bushing assemblies, in many cases, without removing leaf spring hangers and spring assemblies from the vehicle.
- All accessories are included except the hydraulic hand pump and hydraulic hose which must be purchased separately.



1770A
1,500 lb. Dual Wheel Dolly

- Hydraulic jack provides almost 5" of lift and tilts wheel assembly 4° to prevent damage to wheel seal.
- Independent lifting rack provides maximum stability; rollers won't catch on load.
- Swivel casters for easy maneuverability.
- Floor space is 45" by 41".
- 6' chain holds load in place.
- Covered by OTC Lifetime Warranty®.



4295
Wheel Stud Service Kit

- Works on most hubs for installation and removal.
 - All sizes of studs.
- Installation done by pushing on the head, eliminating the need for threaded adapters.
 - Reduces number of adapters required
 - Reduces damage to studs
 - Increases ease of use
- Remove and install 10 studs in only 10-15 minutes (compare to 20-30 minutes for more expensive competitive products).
- Can be powered with an impact wrench, no hydraulic power source required.
- No need to remove hub from vehicle.
- Reduces risk of damage to hubs, studs, and bearings when using tool.
- Weighs only 12 lbs., assembled to remove studs and 14 lbs., assembled to install studs.



5038
Brake Anchor Pin and Bushing Service Set

With the No. 5038, there is no need to remove the bearing hub assembly just to replace the pins and bushings on 16-1/2" S-cam trailer and tractor "Q" brake systems. Much less complicated and time consuming!

- Special tooling and our C-frame press get you past the hub assembly, so you can do the job quickly and professionally without damaging other parts.
- Includes everything needed for removal and replacement.



7180
Universal Bearing Cup Installer

This handy, adjustable tool is designed to install wheel-bearing cups in a wide range of heavy-duty axles. Simply adjust and lock the jaws to the cup I.D., slip on the new cup, set it in the bore, and drive it in with a hammer.

- The tool helps eliminate the damage caused by makeshift methods.
- Works on axles from 11,000 to 50,000 lb. capacity.
- Adjusts to fit 3-5/8" to 6-1/2" O.D. bearing cups, which adds up to as many as 30 individual drivers.

1205
Universal Puller for Wet-Type Sleeves

This tool will remove cylinder sleeves faster than ordinary pullers because it requires very little setup time. Cone adjustment positions the puller jaws quickly, locking bar is tightened. The puller features a 5 lb. slide hammer to help bust loose even the most stubborn sleeves.

- Special adapters are unnecessary.
- Adjustable jaws fit sleeves 3" to 6-1/2" in diameter.



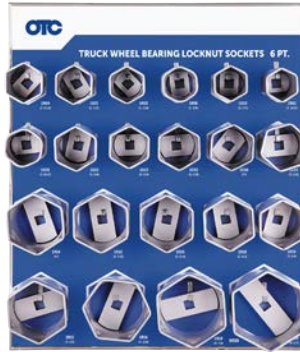
5057
Clevis Pin Press

Removing corroded clevis pins from a brake air-chamber push rod can be a maddening and time-consuming task— unless you're using our clevis pin press. This handy screw-operated tool applies the force just where it's needed. The pin is easily removed from its hole without damaging nearby components.



5190A
Heavy-Duty U-Joint Puller

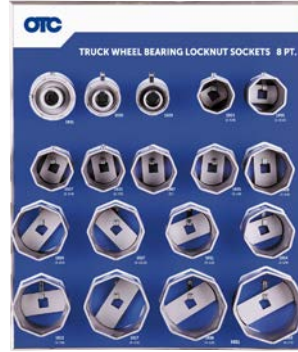
- The ideal tool for disassembling drivelines.
- May be used with up to a one-inch impact wrench.
- Quickly and easily removes sealed U-joint cups without the need for hammering or heat.
- Will not damage the driveshaft, yoke, bearing cups, or joints.
- Fits practically all Class 7 and 8 trucks, including: Spicer driveline 1610, 1710, 1760, 1810, 1880 Spicer SPL 140, 170, and 250 "Life Series" Meritor (Rockwell) 16N, 17N, 18N, 1710 Meritor RPL 20 and 25 "Permalube" Series.



9850
Truck Wheel Bearing Locknut Sockets (6-pt.)

- Wheel bearing locknuts are easy to remove or install with these specially designed sockets. They're made of high-strength steel and resist rounding out.
- 21 wheel bearing locknut sockets (6 pt.) with tool board.
- Sockets are designed for use with 3/4" square-drive manual tools only. Impact tool use voids warranty.

No.	Description
1901	Locknut socket (2-3/32")
1902	Locknut socket (2-3/8")
1904	Locknut socket (2-9/16")
1906	Locknut socket (3")
1908	Locknut socket (3-1/4")
1910	Locknut socket (3-1/2")
1912	Locknut socket (3-7/8")
1914	Locknut socket (4")
1915	Locknut socket (4-1/8")
1916	Locknut socket (4-3/8")
1918	Locknut socket (4-7/8")
1920	Locknut socket (2-1/4")
1921	Locknut socket (2-1/2")
1922	Locknut socket (2-5/8")
1923	Locknut socket (2-3/4")
1926	Locknut socket (3-3/4")
1928	Locknut socket (2-9/16" rounded)
1932	Locknut socket (2-7/8")
1934	Locknut socket (3-1/8")
1936	Locknut socket (2-3/8" rounded)
1939	Locknut socket (5-1/4")



9851
Wheel Bearing Locknut Sockets (8-pt.)

- Wheel bearing locknuts are easy to remove or install with these specially designed sockets. They're made of high-strength steel and resist rounding out.
- 18 wheel bearing locknut sockets (8 pt.) with tool board.
- Sockets are designed for use with 3/4" square-drive manual tools only. Impact tool use voids warranty.

No.	Description
1903	Locknut socket (2-3/8")
1905	Locknut socket (2-9/16")
1907	Locknut socket (3")
1909	Locknut socket (3-1/4")
1911	Locknut socket (3-1/2")
1913	Locknut socket (3-7/8")
1917	Locknut socket (4-3/8")
1919	Locknut socket (4-7/8")
1924	Locknut socket (3-3/8")
1925	Locknut socket (3-3/4")
1927	Locknut socket (3-13/16")
1929	Locknut socket (2-5/8")
1930	Locknut socket (2-7/8")
1931	Locknut socket (3-5/8")
1933	Locknut socket (2-7/8")
1935	Locknut socket (3-1/8")
1937	Locknut socket (2-3/4")
1938	Locknut socket (4-1/2")



9852
Wheel Bearing Locknut Sockets (6-pt.) or (8-pt.)

- Wheel bearing locknuts are easy to remove or install with these specially designed sockets. They're made of high-strength steel and resist rounding out.
- 12 popular sizes in 6- or 8-point.
- Sockets are designed for use with 3/4" square-drive manual tools only. Impact tool use voids warranty.

No.	Description
1904	Locknut socket (2-9/16" hex)
1908	Locknut socket (3-1/4" hex)
1909	Locknut socket (3-1/4" 8 pt.)
1910	Locknut socket (3-1/2" hex)
1913	Locknut socket (3-7/8" 8 pt.)
1914	Locknut socket (4" hex)
1915	Locknut socket (4-1/8" hex)
1921	Locknut socket (2-1/2" hex)
1922	Locknut socket (2-5/8" hex)
1923	Locknut socket (2-3/4" hex)
1928	Locknut socket (2-9/16" hex rounded)
1932	Locknut socket (2-7/8" hex)



5047LP
Lug Nut Cap Remover Locking Pliers

- Designed to remove lug nut caps found on heavy duty truck and trailers quickly and easily without damage.
- Locking plier design with specially coated jaws apply maximum grip on the lug nut caps without damage.



5047
Lug Nut Cap Remover

- Remove chrome-plated lug nut caps from heavy-duty trucks and trailers
- Coated jaws won't slip off caps for fast, damage-free removal

OTC HD Spindle Adapter

5091

HD Spindle Adapter

- Adapter for low lift transmission jacks that holds the spindle assembly firmly in place during king pin service.
- Eliminates the need to completely disassemble the brakes to reduce spindle weight for handling.
- Spindle assembly can be raised to a comfortable working height while replacing king pin bearings or bushings.
- Patented design will work with standard HD truck bolt patterns and wheel stud sizes.
- Adapts to most low lift trans jacks.
- Shown on 1522A low lift transmission jack



Heavy Duty A/C Recovery and Multi-Refrigerant Recover, Recycle and Recharge Machines

34888HD

The Robinair 34888HD heavy duty machine recovers, recycles, evacuates, leak-tests and recharges R-134a with 98.5% efficiency in both small and large mobile air conditioning systems.

- › Large capacity, removable tank and liquid pump for larger A/C systems, typically found in busses
- › Nitrogen port to dry and leak test A/C systems
- › Fully automatic recovery, system evacuation, leak testing, refrigerant charge and oil drain/inject
- › Optional printer for capturing and retaining vehicle service data
- › SAE J2788 certified
- › Uses Robinair 34724 filter and high vacuum pump oil



17800C

The 17800C recovers, recycles, evacuates and recharges, all in one fast and continuous operation through one hook-up. It's ideal for mass transit vehicles, buses, refrigerate trailers or containers and other applications that use refrigerants not typically found in mobile applications.

- › Automatic function with step-by-step user prompts and maintenance reminders
- › Automatically adjusts from liquid to vapor for fast and efficient recovery
- › Electronic scale for precise refrigerant recovery and recharge amount, with overflow protection
- › 5 CFM vacuum pump is large enough to thoroughly evacuate most systems
- › Manual air purge function to remove any non-condensable contaminants
- › Vacuum leak test function allows user to monitor the system for vacuum decay to determine if a leak exists in the A/C system
- › Automatic oil drain allows the user to see amount of oil removed from the system being serviced
- › Heavy-duty filter can handle up to 300 lbs. of refrigerant effectively removing moisture and acid from the refrigerant
- › Easy to view 4.3" color graphic display
- › Maintenance counters to monitor cumulative amounts of refrigerant recovered and charged, as well as other machine operation variables
- › Optional printer can be added to expand capabilities and provide printed record of service performed
- › Compatible with R12, R22, R134A, R401A, R401B, R402A, R402B, R404A, R407A, R407B, R407C, R410A, R500, R502, and R507 refrigerants
- › Cannot be used on refrigerant systems found in Class I – III light-duty passenger vehicles. For mass-transit vehicles and stationary systems using multiple refrigerants only. Not for automotive passenger vehicle systems
- › Uses Robinair 19776 heavy-duty replacement filter and high vacuum pump oil



Features

Fully-Automatic Function: Program to recover, vacuum, leak test and charge without operating panel valves

Automatic Oil Drain: A display reminds you to empty the graduated container to show the amount of oil to replace

Oil Inject: Automatically inject oil back into the vehicle's A/C system

Visual & Audible Alarm: Notifies the user when service is complete, or if a problem has occurred

Nitrogen Port: Inject nitrogen into the vehicle's A/C system to dry or leak check the system

Automatic Air Purge: Eliminates system-damaging air without monitoring gauges or opening valves

Vacuum Feature: Defaults to 15 mins, programmable up to 99 mins. "Remaining time" is displayed

Removal External Tank: The ability to switch tanks when performing multiple recoveries on large mobile A/C systems

Display: Multilingual

Refrigerant Management System: Displays refrigerant use and monitors remaining filter life. Prompts appear when 1/3 of filter life remains

Refrigerant Charging: Select a charge mode from high or low side, or use both sides

Optional: Printer

Specifications

Voltage	115VAC, 60Hz (17800C), 230VAC, 50Hz (17801C)
Operating Temp Range	50 to 105° F (11 to 41° C)
Recovery rate	Vapor, 0.5 lbs./min and Liquid 1 lbs./min
Vacuum Pump	5.0 cfm at 60 Hz
Hose length	18 ft. (5.5 m)
Recycling filter	300 lbs. refrigerant capacity
Dimensions	47" H x 26" W x 30" D
Certification	UL 1963, UL STANDARD FOR SAFETY REFRIGERANT RECOVERY/RECYCLING EQUIPMENT
Weight	230 lbs. (without tank)

MUSCLETEOOLS

Electronic Diagnostics | Special Tools | Shop Equipment | A/C Tools

Q1 2021 Edition

OTC ROBINAIR actron BOSCH

Q1 PROMOTIONS

All promotions valid 1/1/2021 - 3/31/2021, unless otherwise stated. Some restrictions may apply. For promotion details and to redeem. Dated proof of purchase and/or serial number(s) required when registering for rebate. Must redeem within 30 days of promotion end date.

Try a Bosch ADS or ADS X, *risk-free*

Bosch ADS 30-day money back guarantee

If you are not satisfied with your new Bosch ADS tool, return it back to Bosch for a refund.*
For more information about the 30-day money back guarantee, call 1-855-BOSCHTECH (1-855-267-2483)



*Offer valid on Bosch ADS 525X, ADS625X, ADS 325 and ADS 625 tool purchases from January 1, 2021 through June 30, 2021. One return per customer. Bosch ADS or ADS X tool must be registered, updated to latest version of software available and in like-new condition to qualify. Must call 1-855-BOSCHTECH (1-855-267-2483) and provide required information within 30 days of invoice date to start the return process. Refunded amount based on unit price, not to exceed published list price at time of return, plus applicable tax. Shipping, processing or other financial fees not included in refunded amount. Bosch not responsible for finance charges, payment plans. Leased tools and agreements not eligible. Promotions in this offer cannot be combined and not valid with any other promotions offered by Bosch Automotive Service Solutions Inc. Valid in US, the District of Columbia and Canada only. This promotion is void where prohibited, taxed or restricted. Bosch reserves the right to alter or cancel this promotion at any time.

NEW

New A/C machines with integrated scale lock

Lock secures refrigerant scale for safe transport.
Eliminates the need to recalibrate the scale for mobile service.

AC1234-4SL for R-1234yf and 34988NI-SL for R-134a



ROB-34988NI-SL



Sure, calibrate with a tape measure.

Just try not to scrape your knuckles on the ground in the process.

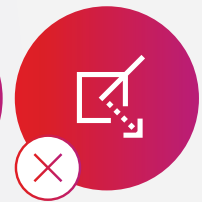
The superior and highly evolved ADAS workflow can guide you from setup through calibration in half the time.



No
tape
measures



No
plumb
bobs



No
mirrors



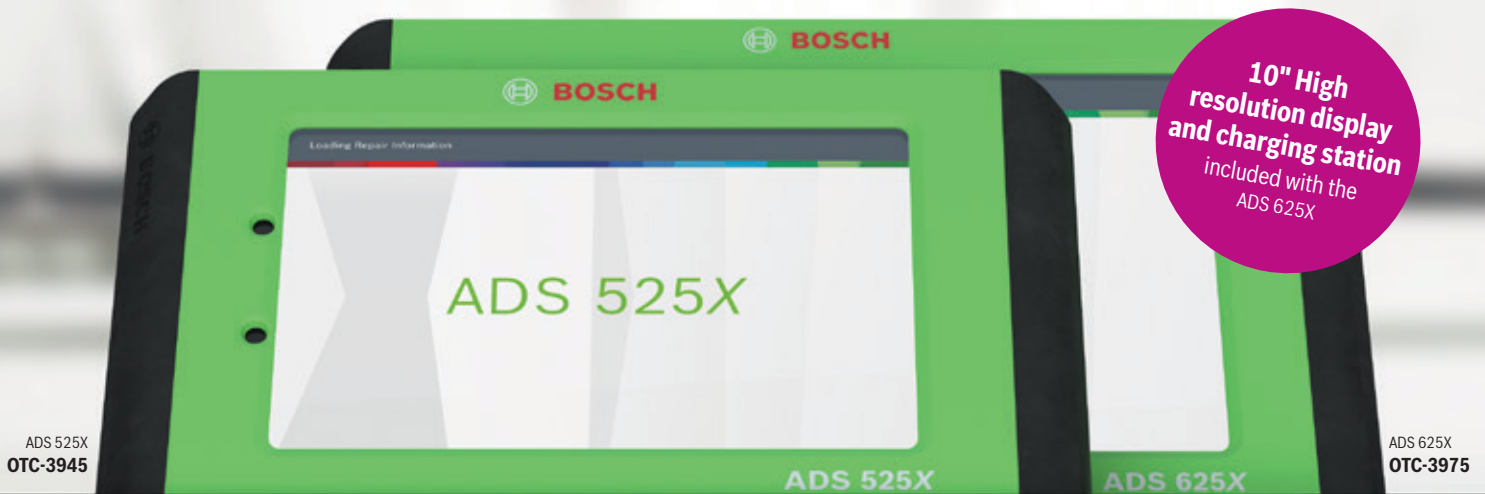
BOSCH

Invented for life

ALL-NEW ADS X

Turn your diagnostic powers into superpowers.

Go from technician to superhuman diagnostic machine with your new secret weapon. Just remember, with great power comes great diagnosability.



Extreme speed

- ▶ All-system scans on average under 60 seconds
- ▶ Redesigned wireless VCI for faster, more efficient diagnosing

Extreme flexibility

- ▶ Battery life for days
- ▶ Modular software subscriptions for what you need most

Extreme access

- ▶ 100% OE-approved for security gateway
- ▶ Industry-leading vehicle coverage back to 1976



BOSCH

Invented for life

Unbeatable coverage for HD trucks, construction equipment and more



New & Improved Windows 10 Touchscreen tablet

Increase Shop Efficiency with the Bosch ESI[truck]

DPF regeneration, component actuation, special tests and automatic module identification for Class 4-8 trucks and more.

OTC-3824A

Truck, engine, and system coverage

- ▶ **Truck brands:** Freightliner, International, Kenworth, Mack, Volvo, Peterbilt, Sterling, Western Star, and more
- ▶ **Engine brands:** PACCAR, Perkins, Detroit Diesel-MBE, Mack, Navistar, Caterpillar, Deutz, MTU, and more
- ▶ **System coverage:** transmissions, brake systems, trailer ABS, exhaust treatment, and more

Expert-level diagnostics

- ▶ Automatic vehicle ID
- ▶ Fault code reading, reporting, clearing
- ▶ Diesel particulate filter (DPF) regeneration
- ▶ Cylinder cut-out
- ▶ Injector coding and trim files
- ▶ Key component actuations
- ▶ Special tests
- ▶ Vehicle parameter modifications

OTC-3824A-TBL

NEW

Heavy Duty Tablet Upgrade

- ▶ Everything you need to upgrade an existing 3824 ESI[truck] Tablet to the new and improved 3824A model.
- ▶ Windows 10 Touchscreen tablet



OTC-3824-08R

Troubleshooting & Repair Subscription

- ▶ Faster, more efficient heavy duty vehicle repairs
- ▶ 13,000+ procedures guide user through each step to troubleshoot vehicle issues
- ▶ Procedures by DTCs or by vehicle symptoms
- ▶ Technical Service Bulletins (TSBs) included

ESI[truck] Off-Highway Upgrade Cable Kit with Introductory Software License (BOS-3824CBL-UPG)

Add off-highway vehicle and machinery coverage for multiple manufacturers to your 3824 or 3824A ESI[truck] scan tool. Coverage included for:

- Construction equipment
 - Agricultural vehicles
 - Stationary engines
 - Street sweepers and more
- ▶ **Manufacturer coverage:** Caterpillar, John Deere, Kubota, Perkins, Volvo, Massey Ferguson, SISU, Deutz, Deutz-Fahr, MTU, and more
 - ▶ **System coverage:** Gearbox, HVAC, engine, steering, hydraulic systems, suspension, electronic modules, antipollution, central computer and more
 - ▶ **Diagnostic coverage:** Manual processes, diagnosis info, measurable values, component actuations, ECU data, parameter IDs (PIDs), calibrations and resets, system technical data, wiring diagrams, vehicle technical data and vehicle maintenance info

OTC-3824CBL-UPG

Kit contents:

- ▶ 10 cables for machinery, construction equipment, agricultural vehicles and more
- ▶ ESI[truck] off-highway software package with full diagnostic capabilities. Introductory off-highway software expires when your ESI[truck] heavy duty truck software expires
- ▶ Software renewals can be done simultaneously, ensuring continuous HD truck and off-highway vehicle coverage

OTC-3824-080HW

ESI[truck] Off-Highway 1-Year Software License

- ▶ 12-months of off-highway diagnostic coverage, including all coverage updates
- ▶ Used to renew initial software included with Off-highway upgrade cable kit with introductory software license



Ask your tool dealer about adding off-highway vehicle coverage to your ESI[truck]



Off-highway cable upgrade kit and off-highway software only compatible with 3824A, 3824 and 3824BSC ESI[truck] diagnostic tools. Customer must first purchase Off-highway upgrade cable kit with introductory software (BOS-3824CBL-UPG) prior to purchasing or activating Off-highway 1-year software license (BOS-3824-080HW)

BOS-3920 VET 100 Circuit Analysis Tool

Quickly identify electrical issues in failed circuits



OTC-3920

Bosch VET 100 Circuit Analysis Tool

- ▶ Perfect tool for Data stream analysis using your scan tool
- ▶ Identify failed circuit component, wiring or PCM
- ▶ Simulates the sensor you are diagnosing by inputting a determined voltage at the sensor location
- ▶ Allows input voltage from .5VDC -7VDC in .5VDC increments
- ▶ Use your scan tool to verify if correct voltage is being applied to circuit
- ▶ Bypass sensor to send desired voltage back to PCM

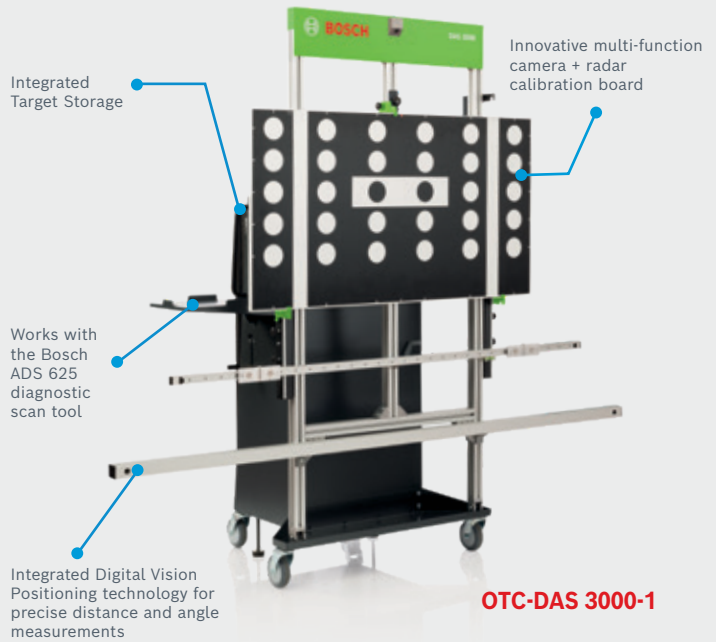
Works on computer controlled components including:

- ▶ Camshaft sensors and Crankshaft sensors
- ▶ Throttle body sensors
- ▶ MAF sensors and MAP Sensors
- ▶ Temperature sensors
- ▶ Parking sensors
- ▶ ADAS sensors
- ▶ Oil pressure sensors
- ▶ Transducer based components
- ▶ EGR signal voltage up to 5VDC
- ▶ Acc pedal voltage up to 5VDC
- ▶ Works with 12V and 24V systems with vehicle voltage displayed. Also includes a "flashing" low battery voltage indicator

DAS 3000-1

ADAS Recalibration System

A complete ADAS recalibration package that enables shops to quickly, easily and precisely recalibrate Automated Driver Assist System



OTC-DAS 3000-1

TPA 300

Grow your aftermarket solution with complete TPMS sensor coverage



NEW



OTC-3934

Pair with any Bosch diagnostic tool to program new sensor IDs via OBD

- ▶ Activate and read TPMS sensor data, program sensors, check remote keyless entry signal and display sensor data in seconds
- ▶ Perform OBD II relearns within minutes when paired with a compatible Bosch manufactured diagnostic scan tool
- ▶ Full database of indirect, manual and auto relearn procedures
- ▶ Intuitive, full-color display with easy vehicle lookup by make, model and year
- ▶ Supports all known OE and aftermarket programmable sensors for all light vehicles
- ▶ New features, vehicles and sensor coverage added regularly
- ▶ Includes 3 years of free software updates

Compatible with any Bosch manufactured diagnostic tool



HDS 250 Heavy-Duty Scan Tool for Class 4-8 Vehicles

Ideal for heavy-duty shops as a second diagnostic tool and mobile repair trucks.

Cost-effective solution for aftermarket shops in need of heavy-duty coverage

HDS 250 Features

- ▶ Brilliant Color Display
- ▶ Rugged enclosure for durability
- ▶ Class 4 - Class 8 truck coverage featuring "Automatic Protocol Search"
- ▶ HD J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage and more
- ▶ Global OBD II Quick Test
- ▶ Works on 12V and 24V systems
- ▶ Gasoline and diesel engine coverage
- ▶ Read and clear diagnostic trouble codes
- ▶ Live vehicle data includes
 - Engine speed
 - Engine ECU temperature
 - Percent acceleration pedal position
 - Engine intercooler temperature
 - Engine coolant temperature
 - Battery voltage
 - Alternator voltage output
 - Ambient air temperature
 - Air inlet temperature
- ▶ On-screen definitions of diagnostic trouble codes

BSD-1699200240



HDS 250 Includes

HD Scan tool, 9 Pin Deutsch Cable, 6 Pin Deutsch Cable, 16 Pin HD/ OBD II Cable, USB Cable, Quick Start Guide, Carrying Case and 1-Year Warranty.



NEW

ROBINAIR

Trusted Robinair platform, new features

**Introducing the new AC1234-4SL
and 34988NI-SL machines with
integrated scale lock**

The mechanical scale lock eliminates the need to recalibrate your refrigerant scale after transporting the machine long distances, saving time.

Special tie-down points and guidelines ensure your machine is safe and secure for mobile service.

Both machines feature legendary Robinair quality, the largest nationwide support and service network, automatic oil drain and patented automatic internal tank refill for more efficient service.



ROB-34988NI-SL

Connected ACS machines

ROB-34998 Connected R-134a RRR machine

- › Meets or exceeds SAE J2788 standards for R-134a recovery
- › Two oil inject bottles; one dye inject bottle

ROB-AC1234-9 Connected R-1234yf RRR machine

- › Meets or exceeds SAE J2843 standards for R-1234yf recovery
- › Integrated refrigerant analyzer protects machine and vehicle system

Both machines feature:

- › Industry-leading 10.5" hi-res touch screen with easy-to-use controls
- › Wi-Fi® and Bluetooth® connectivity for wireless accessories and performance enhancements
- › Legendary Robinair quality, field and service support
- › Made in Owatonna, Minnesota, USA with global components
- › Built-in training videos and speaker with web access for more training and A/C service info
- › ROB-ACS-250 wireless VCI and 80212 Bluetooth temp probe compatible
- › Includes wireless software updates and refrigerant capacity database access*
- › Wireless printing with report export option for customers or insurance companies



* Annual purchase of refrigerant capacity database software card or Product Authorization Code (PAC) code required to download new capacity database

What wireless accessories fit my machine?

A/C Machine	A/C Capacities DB	Cover	Printer
ROB-34788, ROB-34788-H, ROB-34988	ROB-34411-K	ROB-17492	ROB-34988 only
ROB-34288NI, ROB-34788NI, ROB-34788NI-H	ROB-34412-E	ROB-17499	ROB-30038
ROB-34988NI	ROB-34412-E	ROB-17499	Included
ROB-34998	ROB-34001	ROB-17499	Google Cloud Print
ROB-AC1234-4	ROB-34413-C	ROB-17499	ROB-30038
ROB-AC1234-6	ROB-34414-A	ROB-17499	Included
ROB-AC1234-9	ROB-34002	ROB-17499	Google Cloud Print

Non-wireless A/C Machine Wireless Enabled A/C Machine

A/C Machine	VCI	Temp Probes	VCI	Temp Probes
ROB-34288NI, ROB-34788NI, ROB-34788NI-H, ROB-34988NI	ROB-80211VCI	ROB-80211TMP	ROB-ACS-250*	ROB-80213 or ROB-80212*
ROB-34998, ROB-AC1234-9	—	—	ROB-ACS-250**	ROB-80213 or ROB-80212
ROB-AC1234-4	ROB-80211VCI	ROB-80211TMP	ROB-ACS-250*	ROB-80213 or ROB-80212*
ROB-AC1234-6	—	—	—	—

All machines use ROB-34724 filter and ROB-13172 maintenance kit

*Use of ROB-ACS-250, ROB-80212 or ROB-80213 on NI or ROB-AC1234-4 requires machine first be WiFi/Bluetooth enabled using either ROB-80211TMP or ROB-80211VCI master kit

**Database purchase required for vehicle refrigerant capacity



NEW



NEW

ROB-ACS-250 Robinair VCI

- › Wirelessly gather and transmit vehicle year, make and model info to your compatible Robinair machine
- › Works directly with ROB-34998 and ROB-AC1234-9 connected AC machines; will work with NI and ROB-AC1234-4 machines if they have been WiFi/Bluetooth enabled
- › Requires purchase of refrigerant capacity database to show refrigerant capacity, oil type and oil amount
- › Also reads generic OBDII codes to help troubleshoot A/C system issues

ROB-80211VCI Master kit + database

- › Enables WiFi and Bluetooth capabilities on NI and AC1234-4 machines
- › Wirelessly gather and transmit vehicle year, make and model info to your compatible Robinair machine
- › Includes current-year refrigerant capacity database to quickly determine correct refrigerant charge, oil type and oil capacity
- › Also reads generic OBDII codes to help troubleshoot A/C system issues

Bluetooth temp probes

ROB-80212 2-pack

ROB-80213 Single probe

ROB-80211TMP Master kit

- › Read and track temperatures from multiple locations from your A/C machine
- › ROB-80211TMP master kit enables WiFi and Bluetooth capabilities on NI and ROB-AC1234-4 machines and includes 2 probes
- › Use up to 2 probes per compatible Robinair machine
- › ROB-80212 / ROB-80213 work directly with ROB-34998 and ROB-AC1234-9 connected machines

Find leaks and diagnose system issues faster

Connected accessories, leak detectors, refrigerant analyzers and tracer gas detectors for R-134a and R-1234yf service



ROB-LD7 Premium refrigerant leak detector

- › Detects R-1234yf and R-134a leaks for use on most vehicles
- › Sweep, bar graph and line graph modes make finding leaks faster, easier
- › Features audible detection alert, UV LED lights for use with UV dye and inspection light
- › Sensor life up to 10 years for reliable leak detection
- › Available as ROB-LD3 and ROB-LD5 versions



NEW

ROB-LD9-TGKIT Tracer gas leak detector service kit

- › Use inexpensive Tracer gas instead of costly refrigerant to find leaks
- › Tracer gas is a 95% nitrogen, 5% hydrogen mixture and harmless to A/C systems
- › The ROB-LD9-TG detector sniffs out hydrogen, detecting leaks faster and at less cost
- › Kit includes 1234yf coupler, 134a coupler, Tracer gas detector, hose and Tracer gas regulator
- › Available as ROB-LD9-TG, Tracer gas detector only



ROB-16995 R-ID Plus refrigerant analyzer

- › Analyze R-134a and R-1234yf refrigerant for purity and contamination
- › Prevent contaminated refrigerant from being pulled into your machine
- › Includes printer to add refrigerant purity to service report
- › R-134a and R-1234yf tank adapter; R-134a and R-1234yf hoses included
- › Available as ROB-16990 R-ID without printer



NEW

ROB-EVDC[®]100 A/C Electronic Variable Displacement Compressor Tester

- › Eliminates misdiagnosing electronic variable displacement A/C compressors
- › Quickly diagnosis and verify valve function, lowering total repair time and costs
- › Adjustable tester output
- › Includes connect adapters for both old and newer style compressors
- › Heavy duty battery clips and cable provides power from vehicle battery, eliminating the need for batteries
- › Made in the USA

COMBINING SIMPLE OPERATION WITH SUPERIOR ACCURACY

These machines will test, recover and recharge R-134a and R-1234yf automotive A/C system quickly and accurately.



Features	ROB-34288NI	ROB-34788NI	ROB-34788NI-H	ROB-34988NI	ROB-34998	ROB-AC1234-4	ROB-AC1234-6	ROB-AC1234-9
Fully Automatic Function: Program to recover, vacuum, leak test and charge without operating panel valves.	Manual Valves	✓	✓	✓	✓	✓	✓	✓
Automatic fluid drain/inject	Oil drain	Oil drain/inject*	Oil drain	Oil drain/inject, dye inject**	Oil drain/inject, dye inject**	Oil drain	Oil drain	Oil drain
Refrigerant & Oil Database: A/C system capacities for North American market vehicles (Optional – not included with the machine)	ROB-34412-F	ROB-34412-F	ROB-34412-F	ROB-34412-F	ROB-34001	ROB-34413-D	ROB-34414-B	ROB-34002
A/C System Flush: Flushes a vehicle's A/C system with refrigerant, eliminating any residual oil or other liquid. (Flushing adapters not included)	-	-	✓	✓	✓	✓	✓	✓
Save & print before and after service data: Allows the user to store before and after service information by vehicle and print this information to provide to a customer.	-	✓	✓	✓	✓	✓	✓	✓
Visual & Audible Alarm: Notifies the user when service is complete, or if a problem has occurred.	-	✓	✓	✓	✓	✓	✓	✓
Vacuum Leak Test: Monitors level after evacuation, informs of possible leak.	-	✓	✓	✓	✓	✓	✓	✓
Automatic Air Purge: Eliminates system-damaging air without monitoring gauges or opening valves.	✓	✓	✓	✓	✓	✓	✓	✓
Automatic Refrigerant Refill: Maintains a user-selectable amount of refrigerant in an internal vessel and signals when it's time to change supply tank.	-	✓	✓	✓	✓	✓	✓	✓
Vacuum Feature: Defaults to 15 mins, programmable up to 99 mins. "Remaining time" is displayed.	✓	✓	✓	✓	✓	✓	✓	✓
Multilingual display	4.3" color LCD	4.3" color LCD	4.3" color LCD	7" color LCD	10.5" hi-res touch screen	4.3" color LCD	5.7" color LCD	10.5" hi-res touch screen
Refrigerant Charging:	Low only	High, low or both	High, low or both	High, low or both	High, low or both	High, low or both	High, low or both	High, low or both
Refrigerant Management System: Displays refrigerant use and monitors remaining filter life. Prompts appear when 1/3 of filter life remains.	✓	✓	✓	✓	✓	✓	✓	✓
Electric Vehicle: Capable of servicing high voltage electric compressor A/C systems.	-	-	✓	-	-	✓	✓	✓
Printer	ROB-30038	ROB-30038	ROB-30038	Included	Google Cloud Print	ROB-30038	Included	Google Cloud Print
Bluetooth temp probes: Dual-zone temp recording and reporting	ROB-80211TMP	ROB-80211TMP	ROB-80211TMP	ROB-80211TMP	ROB-80212 or ROB-80213	ROB-80211TMP	N/A	ROB-80212 or ROB-80213
Bluetooth VCI: Reads YMME and refrigerant capacity	ROB-80211VCI	ROB-80211VCI	ROB-80211VCI	ROB-80211VCI	ROB-ACS-250***	ROB-80211VCI	N/A	ROB-ACS-250***

* One oil bottle. ** Two oil bottles and one UV dye bottle. ***ROBACS-250 requires purchase of ROB34001 or ROB34002 database to read YMME and display refrigerant capacity

New 2019 A/C system capacity databases

Vehicle Database Screens R-134a Vehicle A/C Refrigerant Database 2020

- Confirm A/C system charge capacities directly from your Robinair A/C RRR machine for R-134a and R-1234yf systems, sold separately.
- Includes charge amounts and component oil capacities for vehicle model years 1997-2020 using R-134a refrigerant and vehicle model years 2013-2020 using R-1234yf refrigerant.
- Database helps ensure the vehicle system is charged with the correct amount of oil, per factory and OEM specification

ROB-34001 – R-134a database for ROB-34998 R-machine

ROB-34411-L – R-134a database for ROB-34788, ROB-34788-H and ROB-34988 machines

ROB-34412-F – R-134a database for ROB-34288NI, ROB-34788NI, ROB-34788NI-H and ROB-34988NI machines

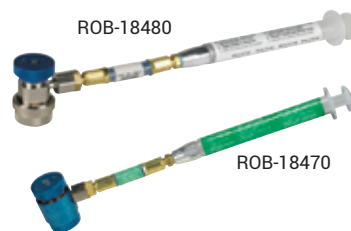
R-1234yf Vehicle A/C Refrigerant Database 2020

ROB-34002 – R-1234yf database for ROB-AC1234-9 machine

ROB-34413-D – R-1234yf database for ROB-AC1234-4 machine.

ROB-34414-B – R-1234yf database for ROB-AC1234-6 machine

Syringe-type Injectors



Use these syringe-type injectors to add oil to a fully pressurized A/C system. Fill the barrel with the amount of oil needed, connect the injector, and press the plunger.

ROB-18480 – R-134A oil injector, PAG labeled

ROB-18490 – R-134A oil injector, POE labeled

ROB-18460 – R1234YF oil injector, generic

ROB-18465 – R1234YF oil injector, PAG labeled

ROB-18470 – R1234YF oil injector, POE labeled

Not recommended for UV dye injection.

Manifolds and Hose Set



ROB-41234 R1234yf Aluminum Manifolds and Hose Set

- Easy-to-read 3-1/8" adjustable gauges.
- Durable aluminum manifold block with fittings.



ROB-45111 2-Way Brass Manifold R134a Manifold Hose Kit

- 90° manual couplers
- 72" R134a hose set

UNDERHOIST AND SUPPLEMENTARY STANDS WITH A LIMITED LIFETIME WARRANTY

MEETS ASME PASE-2019 SAFETY STANDARDS

OTC-UH15 1,500-lb capacity underhoist stand / UH15FP 1,500-lb capacity underhoist stand with foot pedal

- Threaded rod for easy adjustment lowering and raising to work height
- 11-7/8" flat round base makes full ground contact for stability
- Freestanding support stand aids in R&I of transmissions, radiators, driveshafts, exhaust systems and more
- Not intended to stabilize or support vehicles
- UH15FP includes foot pedal for hands-free adjustment and quickly raises saddle to work height

OTC-UH20 2-ton (4,000-lb) capacity high reach supplementary stand

- Designed to stabilize vehicles when lifted on hoists
- Extra-sturdy tripod base prevents tipping and leaning
- Secure support column and speed screw for quick adjustment and reliable holding

SPEC	OTC-UH15	OTC-UH15FP	OTC-UH20
Capacity	1,500 lbs	1,500 lbs	4,000 lbs
Max. Height	80.75"	80.75"	85"
Min. Height	54.25"	54.25"	56-1/4"
Footprint	11-7/8" flat round	11-7/8" flat round	24" triangular tripod base
Adjustment	Threaded rod with T-handle	Foot pedal assist and threaded rod with T-handle	Threaded rod with T-handle
Saddle	5-1/4" x 1-1/4" U-shape	5-1/4" x 1-1/4" U-shape	3-3/16" x 3-3/16"



Power Train Lifts

- These lifts will handle engine and transmission assemblies, gas tanks, drive axle assemblies, engine/transaxle assemblies, electric vehicle batteries, and more.
- Scissors-type design allows access to all four sides of a component.
- Two independent adjusting screws tilt the table $\pm 15^\circ$ side-to-side, or fore and aft. Can be operated manually or with non-impact air wrench.
- 20" x 32" table.
- 8" swivel casters provide enhanced mobility under heavy loads.
- ANSI/PALD compliant.

OTC-5285

Power train lift (1,650 lb. Capacity)

Air / hydraulic operation – Foot control pump with hose allows movement around lift.

- Min. height is 31-1/2"; Max. height is 74-1/2".
- Footprint 33" wide x 48" long.

OTC-1595A

Power train lift (2,500 lb. Capacity)

Powered by an Air/Hydraulic pump.

- Smooth, steady lifting and lowering motion.
- Min. height is 29"; Max. height is 80"
- Footprint 31" wide x 50" long.



5285 extended

Casters provide a 9-1/2" clearance on lower frame



5285 collapsed

Safely lifting and holding Class I, II and III vehicles



OTC-LDJA2-SET

OTC-LDJA2 2-ton aluminum racing jack

- Lift compact sedans to small crossovers
- Light, sturdy aircraft aluminum with carry handles is ideal for service trucks and portability

OTC-SA02 2-ton aluminum jack stands

- Pin-style jack stand for fast, secure vehicle holding
- Aircraft aluminum construction for rust-free performance

OTC-LDJA2-SET 2-ton aluminum jack & stands

- Includes LDJA2 2-ton aluminum jack and SA02 2-ton aluminum stands



OTC-LDJ3

OTC-LDJ3 3-ton steel service jack

- For midsize SUVs and crossovers to full-size pick-ups
- Flanged upper body edge increases strength and durability

OTC-LDJ35 3.5-ton steel service jack

- Safely handles large SUVs and crossovers to 3/4-ton pick-ups
- Rolled edges add strength to resist twisting for larger loads



OTC-S03

OTC-S03 3-ton steel jack stands

- Ratcheting design cannot be released under load
- Formed and welded steel base with baked enamel finish for strength, corrosion resistance
- Sold as a pair



Service jacks

	OTC-LDJA2	OTC-LDJ3	OTC-LDJ35
Capacity	2-ton	3-ton	3.5-ton
Lifting range	3-1/4" (saddle removed) - 18-5/8"	5-3/4" to 18-1/2"	5.2" to 21.9"
Padded handle length	47.6"	39-1/2"	50" spring-loaded padded lower handle
Footprint	11.875" x 25.125"	13.4" x 24.5"	14.5" x 28.5"
Reach	72.75"	63.9"	78.5"
Saddle	4-1/2" dia., round	4" dia., steel crown	6" dia., flat steel, rubberized, pinned to lifting arm
Casters	4; 2.5" front fixed (2), 1.75" rear swivel (2)	4; 3.5" front fixed (2), 2.36" rear swivel (2)	4; 3.15" front fixed (2), 2.5" rear swivel (2)
Frame height	6"	6.3"	6.25"
Jack pack	LDJA2-SET, includes SA02 jack stands, pair	N/A	N/A

Jack stands



	OTC-SA02 (sold as a pair)	OTC-S03 (sold as a pair)
Capacity	2-ton	3-ton
Max height	15.44"	17-11/16"
Min height	9-1/2"	12"
Footprint	7" round base	8-1/4" x 7-1/2" square base; welded foot pads
Adjustment	Pin lock; 6 slots	Ratcheting; 11 teeth
Saddle	Flat-top style, 2.17" x 2"	V-notch style, 1" x 3.5"



OTC-LDJA2-SET
Includes LDJA2 2-ton aluminum jack and SA02 pair of 2-ton capacity aluminum stands

Covering the big classes for lifting it all



OTC-HDJ5

OTC-HDJ5 5-ton hydraulic service jack

- Designed to safely lift step vans and bucket trucks
- 3-position handle lays flat, 45° or 90° for storage and use

OTC-HDJ5P 5-ton hydraulic service jack with air-assist

- Same as HDJ5, with air/hydraulic assist to reduce effort to raise, lower vehicles



OTC-HDJ10

OTC-HDJ10 10-ton hydraulic service jack

- Ideal for bucket trucks and school buses
- Rugged steel frame and extra-large wheels for durability and strength

OTC-HDJ10P 10-ton hydraulic service jack with air-assist

- Same as HDJ10, with air/hydraulic assist to reduce effort to raise, lower vehicles

5, 10, and 20-ton heavy-duty jacks



5, 10, 20-ton heavy-duty jacks	OTC-HDJ5	OTC-HDJ5P	OTC-HDJ10	OTC-HDJ10P
Capacity	5-ton	5-ton air-assist	10-ton	10-ton air-assist
Lifting range	6" to 22"	5-7/8" to 22"	6.3" to 22"	6-3/8" to 22"
Air pressure	-	80-120 PSI	-	80-120 PSI
Handle length	43" 3-position with lock and release controls	45.4" 3-position with lock and release controls	43-1/4" 3-position with lock and release controls	45.4" 3-position with lock and release controls
Footprint	15" x 56"	14.2" x 55.5"	18" x 60"	18.9" x 60.8"
Reach	47"	87"	51"	90"
Saddle	5-1/8" dia., round	5.1" dia., round	6" dia., round	5-3/4" dia., round
Casters	4; 4.4" fixed front (2), 2.8" mid-body swivel (2)	4; 4.4" fixed front (2), 2.8" mid-body swivel (2)	4; 5.6" fixed front (2), 3.6" mid-body swivel (2)	4; 5.6" fixed front (2), 3.6" mid-body swivel (2)
Frame height	7.9"	7.5"	9.8"	9.8"



OTC-S06

OTC-S06 6-ton steel jack stands

Ratcheting design cannot be released under load

- Formed and welded steel base with baked enamel finish for strength, corrosion resistance



OTC-S022

OTC-S022 22-ton steel jack stands

- 11" flat square base prevents sinking into concrete or other surfaces
- Large flat base rated to safely hold up to 44,000 lbs
- Pin Style Stand with 3 adjustment positions

Heavy-duty stands	OTC-S06 (sold as a pair)	OTC-S022 (sold as a pair)
Capacity	6-ton	22-ton
Max height	23-11/16"	19-7/8"
Min height	15-5/8"	13-7/8"
Footprint	11-9/16" x 10-3/8" square base; welded foot pads	11" square base, flat for maximum ground contact
Adjustment	Ratcheting; 11 teeth	Pin-style; 3 slots in 3" increments
Saddle	V-notch style, 1.2" x 4.2"	3" x 3-3/4" V-notch



OTC-UA22

22-ton under-axle hydraulic service jack

- Includes 3 saddle attachments for height adjustment; 3/4" saddle; 1-15/16" saddle; 3-7/8" saddle
- Self-retracting ram activated with handle-end controls

UA22 22-ton under-axle hydraulic service jack	OTC-UA22
Capacity	22-ton
Air pressure	90 - 145 PSI
Max height	20-2/3" with longest saddle
Min height	8.27"
Handle length	47.24" T handle with lowering lever and air-chuck hook
Footprint	22.63" x 11.73"
Reach	69.87"
Saddle	3" dia., round with center notch, includes 3 lengths
Frame height	8.27"
Wheels	2 fixed; 7.88" rubberized steel



OTC-1750A
6000 LB. Revolver Diesel Engine Stand

- 96 to 1 ratio worm and gear set rotates components a full 360°; handle locks in any position.
- Includes 205061 universal mounting plate for use with individual engine adapter plates.

NEW



OTC-1750-47022
Detroit Diesel



OTC-1750-4940 *
Navistar / IH



OTC-1750-4649 *
Navistar / IH



OTC-1750-4789 *
Navistar / IH

New Navistar and Detroit Diesel adapters

Item	Description	Application	Brand	Component	Requires use of 205061 plate *
OTC-1750-4940	Navistar / IH MaxxForce engine adapter plate	2010 - 2016 Navistar MaxxForce DT, MaxxForce 9, MaxxForce 10 engines	Navistar / International Harvester	Engine	Yes
OTC-1750-4649	Navistar / IH MaxxForce engine adapter plate	2004 - 2009 International Harvester DT466, DT570, HT570; Navistar MaxxForce DT, MaxxForce 9, MaxxForce 10 engines	Navistar / International Harvester	Engine	Yes
OTC-1750-4789	Navistar / IH MaxxForce engine adapter plate	2007 - later MaxxForce 11, MaxxForce 13 engines	Navistar / International Harvester	Engine	Yes
OTC-1750-47022	Detroit Diesel MBE 900 engine adapter plate	Detroit Diesel 2004 - 2007 MBE 900 engines	Detroit Diesel	Engine	No



OTC-5015A
Truck Clutch and Flywheel Handler

- Handles 14" and 15-1/2" clutch assemblies weighing up to 150 lbs.
- Lifting range of 9" to 37". Swivel casters provide easy maneuverability.
- Includes a 2" spline shaft with a 1-1/4" pilot to aid in alignment.



OTC-5018A
Truck Clutch and Flywheel Handler

- Replaces 14" & 15-1/2" clutch assemblies weighing up to 250 lbs.
- 13" low point enables access below side faring.
- Linkage raises load from horizontal to vertical position.
- 360 degree swivel head.
- Covered by OTC Lifetime Warranty®.



OTC-5295
Powertrain Lift

The sliding split table top design of this powertrain lift allows for separation of the engine/transmission assembly or hybrid engine/generator module, making service easier. The unique design also helps handle removal and installation of electric vehicle batteries, fuel tanks, suspension systems and other powertrain assemblies.

A generous ground clearance allows for floor crane access while a low collapsed height aids in servicing large components while still on the lift. The table tilts to help properly align components to the vehicle during installation and threaded holes in the tabletop accommodate future adapters and powertrains.

- 1,760-lb capacity • 36" x 42" tabletop • 21.5" minimum height • 70" max height

Similar to GM lift P/N GE-52200 and Honda lift P/N HON52200.

NEW



OTC-600011
Splined Shaft Adapter for 5015A

Optional splined shaft adapter for Eaton Fuller UltraShift Plus Transmission, 14 Spline, 2" OD, 1.18" Pilot. For use with the 5015A Clutch Handler and 1797 Trans Jack HD Clutch Adapter.

OTC-600007
Clutch Handler Shaft Adapter

Adapter for attaching Splined Shafts for the 5015A Clutch Handler to the 5018A Clutch Handler.

NEW



OTC-600005
Splined Shaft Adapter for 5018A

Optional splined shaft adapter for Eaton Fuller UltraShift Plus Transmission, 14 Spline, 2" OD, 1.18" Pilot. For use with the OTC 5018A Clutch Handler. Includes part number 600007 clutch handler shaft adapter allowing splined shafts designed for the 5015A to be used on the 5018A.

NEW



OTC-5295-DA
Powertrain Lift Differential Adapter Set

Adapters mount to OTC 5295 powertrain lift table for proper handling of differential axle assemblies during servicing. Two axle tube stands support each side of the axle housing, while the pinion adapter stabilizes the differential from rotating. The pinion adapter features a reversible head that supports many different pinion and housing shapes and sizes. All adapters are height adjustable and feature hook points to attach the hold down strap to keep the axle assembly firmly positioned.

NEW



OTC-5605-DG

Deluxe Digital Compression Tester Kit

The OTC 5605-DG Deluxe Digital Compression Tester Kit helps determine the mechanical condition of the engines' cylinders. The digital gauge is easy to read and can display pressures in PSI, kPa, bar and kg/c. It also can measure, record and playback compression readings on up to 12 cylinders, for quicker testing and diagnosis. Specialized adapters work on both flat and tapered seat plugs. A convenient push-button side release valve relieves pressure for repeat testing.

The kit includes standard and specialty adapters, including the deep well connector used on recessed plug well style heads and the Ford Triton engine adapter using 16mm thread plugs. Stored in a blow-molded case to organize all adapters and protect the digital gauge head. Works on gasoline engines including domestic, import, motorcycle, marine, snowmobile, ATV's, and small engines.

Features and benefits:

- Corrosion resistant nickel plated finish
- Adapters work on both flat and tapered seat plugs
- Extra long 26" flex hose gauge assembly with quick coupler, allows easy viewing out of cluttered engine compartment
- 2-1/2" digital gauge features a backlit LCD and rugged protective outer boot
- Measurement range of 3-300 PSI and 0-2100 kPa. Also displays in bar and kg/c

NEW



OTC-5606-DG

Digital Compression Tester Kit

The OTC 5606-DG Digital Compression Tester Kit helps determine the mechanical condition of the engines' cylinders. The digital gauge is easy to read and can display pressures in PSI, kPa, bar and kg/c. It also can measure, record and playback compression readings on up to 12 cylinders, for quicker testing and diagnosis. Specialized adapters work on both flat and tapered seat plugs. A convenient push-button side release valve relieves pressure for repeat testing.

The kit includes standard and specialty adapters, stored in a blow-molded case to organize all adapters and protect the digital gauge head. Works on gasoline engines including domestic, import, motorcycle, marine, snowmobile, ATV's, and small engines.

Features and benefits:

- Corrosion resistant nickel plated finish.
- Adapters work on both flat and tapered seat plugs.
- Extra long 26" flex hose gauge assembly with quick coupler, allows easy viewing out of cluttered engine compartment.
- 2-1/2" digital gauge features a backlit LCD and rugged protective outer boot.
- Measurement range of 3-300 PSI and 0-2100 kPa. Also displays in bar and kg/c

NEW



OTC-5606-DGH

Digital Compression Gauge Head and Boot

The OTC 5606-DGH digital compression gauge head can replace analog gauges to provide advanced features, including measure, record and playback of compression readings on up to 12 cylinders, for quicker testing and diagnosis. The gauge head can directly replace any 2-1/2" analog gauge with a 1/4" NPT male thread. Upgrades current compression gauge with exact, numeric measurements. The digital gauge is easy to read and can display pressures in PSI, kPa, bar and kg/c. A convenient push-button side release valve relieves pressure for repeat testing.

Upgrade your 5605 or 5606 compression tester with a digital gauge for easier, faster compression readings. Also fits other compression testers with 14mm thread.

NEW



OTC-6669

Harmonic Balancer Puller Kit

Designed for removing the harmonic balancer in tight engine compartments without removing the radiator. This kit includes an extra set of jaws to cover more applications and vehicles. Kit also contains the 3-jaw puller, four lengths of forcing rods, and a forcing screw with a 3/8" internal square drive for ratchet use, and a 3/4" external hex for wrench or socket use.

NEW



NEW



OTC-6719-1

Locking Plier

10" straight jaw locking pliers include hardened teeth designed to grip a variety of shapes from any angle. Trigger release provides maximum locking force. Constructed of high-grade heat-treated Chromoly alloy steel for durability.

OTC-6719BP

Brake Line Bending Pliers

Specialty locking pliers provide brake line bending on vehicles in tight locations. Bending jaws run perpendicular to plier jaws, allowing for 360-degree bends in brake lines. The included 10" locking plier allows more force to be applied to jaws for easier bending, and adjustable for any degree bend. Integrated magnets hold the bending jaws firmly in place on the plier jaws. Dual slotted bending jaws bend 3/16" (4.75mm) and 1/4" (6mm) diameter copper, brass, aluminum, and steel diameter tubing. Capable of bends with a 5/8" radius to 360 degrees and greater.

NEW



OTC-6719-3

Brake Line Bending Jaw Set

Jaw adapters for bending brake lines in tight locations. Designed for use with 10" straight jaw locking plier for maximum force and easier bending. Integrated magnets hold the jaws firmly in place on the plier jaws



OTC-5610

Transmission/Engine Oil Pressure Kit

The 5610 professional kit can be used for domestic and import applications. High and low pressure gauges make this kit useful for both transmission and engine work. Kit comes complete with adapter for most applications. Designed to be used for both static and on road testing.

Features and benefits:

- Large 3-1/2" gauges feature a chrome bezel and rugged protective outer boot.
- High pressure gauge reads 0-400 psi and 0-2800 kPa. Low pressure gauge reads 0-100 psi and 0-700 kPa.
- Both gauges include rear hook to allow gauge to be hung conveniently out of the way.
- Gauges and hose assembly incorporate quick couplers for easy disconnect.
- Kit includes 13 adapters and a detailed instruction manual.
- Blow molded hard case with removable lid.



OTC-5613

Vacuum/Pressure Gauge Kit

Ideal for testing vacuum lines and components. Accurately tests low-pressure fuel systems. Quickly diagnose internal engine problems such as bad rings, valves and leaking head gaskets. Kit comes complete with adapter for most applications. Pin point hard to find problems such as cracked lines, PCV, fuel pump, fuel filters and more.

Features and benefits:

- Large 3-1/2" gauge features a chrome bezel and rugged protective outer boot.
- Dual purpose gauge reads vacuum and pressure.
- Dual scale gauge reads 0-30 in. Hg vac and 0-70 cm Hg, also reads 0-15 psi and 0-100 kPa.
- Built in rear hook allows gauge to be hung at eye level.
- Adapters for most applications.
- Blow molded hard case with removable lid.
- Detailed instruction chart.



OTC-5604

Motorcycle Compression Tester Kit

Designed specifically for testing motorcycle and small engines, this kit features a specially designed compression gauge and hose assembly, plus three different size hose adapters. Compression Tester and hose lengths are designed for optimal viewing along side engine. Covers most popular motorcycle and small engine plug sizes.

Features and benefits:

- Corrosion resistant nickel plated finish
- 10" flex hose gauge assembly with quick coupler.
- 2-1/2" gauge features chrome bezel and rugged protective outer boot
- Dual scale gauge reads 0-300 psi and 0-2100 kPa
- 12" flex hose -14 mm standard/plus reach (extra length supports V-Twin applications)
- 12" flex hose -12 mm standard reach
- 12" flex hose -10 mm standard reach
- Rugged blow molded hard case with removable lid
- Repair parts kit



OTC-5630

Fuel Pressure Tester Kit

Quickly and easily locate any malfunctioning fuel system component, including fuel filters, pressure regulators, fuel lines, and fuel pumps without removing it from the vehicle.

Features and benefits:

- Large, easy-to-read 0-100 psi scale, 0-700 kPa.
- Solid brass fittings.
- Pressure relief valve for safe, clean testing.



OTC-5607

Compression Tester Ford 14mm Adapter

Use with OTC compression testers to access hard-to-reach spark plug holes.

- Works on 2004 and 2007 Ford 4.6 and 5.4 L, V-8,3 valve engines.
- Easy-to-turn feature makes starting thread fast.
- Use with compression testers with 14 mm thread.



OTC-5608

Compression Tester Ford 12mm Adapter

Use with OTC compression testers to access hard-to-reach spark plug holes.

- Works on 2008 and newer Ford 4.6, 5.4 and 6.8L 3-valve engines with 12mm spark plugs
- Easy-to-turn feature makes starting thread fast



OTC-5603

Compression Tester - Deep Well Connector

Use with OTC compression testers or other compression testers.

- Solid steel 8" length shaft.
- Upper t-wing grip for ease of installation and removal.
- Popular 14 mm thread for both flat and tapered seat plugs.
- Corrosion resistant nickel plated finish.



Electric Vehicle Charging Solutions

OTC-EL-52503 EV400 Series Level 2 charging station

- ▶ 25' cable is the longest available for more versatility and installation locations
- ▶ NEMA 3R-rated enclosure for indoor or outdoor installation (Outdoor installation requires in-use cover over receptacle)
- ▶ SAE J1772 charging connector is compatible with all EVs in North America
- ▶ Movable, plug-in installation allows charging when you need it, leaving an open outlet when not charging
- ▶ Safely charges in all weather conditions - rain, snow, sleet, ice and extreme heat or cold
- ▶ Bracketless mounting for fast and easy installation
- ▶ Clear, bright LEDs indicate charging and power status, stop and reset functions



2010_1480 Muscle Tools Q1 2021 edition, Printed in U.S.A.



OTC-EL-50600-D EV810 Series Level 2 charging station

- ▶ NEMA4X-rated enclosure is weatherproof for safe charging in any weather or location
- ▶ Adjustable charging output allows for installation on circuits as small as 15 Amps, up to 40 Amps
- ▶ SAE J1772 charging connector is compatible with all EVs in North America
- ▶ Hardwire installation with wall-mount or pedestal options for commercial applications
- ▶ Plug-in installation with wall-mount option for household use
- ▶ Movable, plug-in installation option allows charging when you need it, leaving an open outlet when not charging

Bosch charging stations are made in the USA from domestic and global components



OTC-EL-50650-GNT-B EV850 Series Single bollard charging station

- ▶ Includes one EV810 Series charging station in a galvanized steel bollard for parking lot and commercial use - 1/4" thick galvanized steel bollard protects against car bumpers, shopping carts and vandalism, protecting your investment
- ▶ NEMA4X-rated enclosure is weatherproof for safely charging in any weather or location
- ▶ SAE J1772 charging connector is compatible with all EVs in North America
- ▶ Hardwire installation and protective bollard creates safe, tamper-proof setup
- ▶ Also available as EL-50650-GNT-A EV860 Series Dual bollard charging station with two EV810 Series charging stations in a galvanized steel bollard

POWERTRAIN LIFTS



5285
1,650-LB POWERTRAIN LIFT

- Air/hydraulic operation with foot control pump
- Scissor design to access all 4 sides of powertrain



1595A
2,500-LB POWERTRAIN LIFT

- Air/hydraulic operation with foot control pump
- Scissor design to access all 4 sides of powertrain



5295
1,760-LB SPLIT TOP POWERTRAIN LIFT

- Sliding split-top helps separate powertrains, differentials, axles and more
- High ground clearance for floor crane access when collapsed
- Air/hydraulic lifting mechanism smoothly lifts and lowers components
- Large, tilting tabletop to access all sides of components
- Air/hydraulic operation with foot control pump



5130
1,000 LB DRIVELINE LIFT

- Includes 553516 differential adapter
- Pivoting pump handle to raise/lower from multiple positions
- For removal of differentials, light-duty transmissions, auxiliary boxes, drive shafts and more



1585A
1,250 LB POWERTRAIN LIFT

- Ideal for engine and transaxle service
- Moves easily around the shop with compact design and swivel casters
- Air/hydraulic operation

Lift Spec.	Capacity (lbs)	Table size	Tilt side/side	Tilt front/back	Min height	Max height	Caster size
5285	1,650	20" x 32"	15°	15°	31.5"	74.5"	8"
1595A	2,500	20" x 32"	15°	15°	29"	80"	8"
5295	1,760	36" x 42"	N/A	N/A	21.5"	70"	8"
5130	1,000	N/A	15°	15°	7"	30"	4"
1585A	1,250	20.5" x 30.5"	17°	22°	29.5"	68.5"	4"

TRANSMISSION JACKS



5019A 2,200 LB TRANSMISSION JACK

- Includes 540231 adapter for Eaton Fuller RoadRanger transmissions
- Pivoting pump handle to raise/lower from multiple positions



5078 2,000 LB HIGH-LIFT TRANSMISSION JACK

- Air/hydraulic operation with foot control pump
- Includes adapter for Allison 500 and 600-series transmissions



1793A 1,000 LB HIGH-LIFT TRANSMISSION JACK

- Universal mounting head and adjustable brackets for easy transmission alignment
- Foot-operated pump to control height when raising or lowering transmissions



1522A 2,000 LB LOW-LIFT TRANSMISSION JACK

- Includes 220492 adapter for Eaton Fuller RoadRanger transmissions
- Pump handle rotates 360° to raise/lower from multiple positions



1521A 1,000 LB LOW LIFT TRANSMISSION JACK

- Universal mounting head and adjustable brackets for easy transmission alignment
- Pump handle rotates 360° to raise/lower from multiple positions



1794A AIR-ASSIST 1,000 LB HIGH LIFT TRANSMISSION JACK

- Universal mounting head and adjustable brackets for easy transmission alignment
- Air-assist for faster raising via foot pedal

Lift Spec.	Capacity (lbs)	Min height	Max height	Tilt, forward	Tilt, backward	Tilt, side/side
5019A	2,200	8.25"	36.5"	15°	20°	12°
5078	2,000	41.5"	65"	50°	38°	14°
1793A	1,000	35"	71.625"	24°	19°	20°
1522A	2,000	6.875"	35.25"	24°	18°	11°
1521A	1,000	7.5"	29.75"	67°	17°	30°
1794A	1,000	37.625"	76.5"	42°	46°	12°
5237	1,000	34.5"	75"	50°	20°	10°
1728	1,000	34.5"	72"	40°	20°	10°

TRANSMISSION JACKS





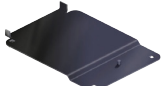
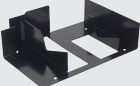


5237 1,000 HIGH LIFT TRANSMISSION JACK

- Universal mounting head and adjustable brackets for easy transmission alignment
- Folding foot pedal for precise control for raising, lowering and positioning
- 34-1/2" min height, 75" max height
- Tilts 50° forward, 20° backward and 10° side-to-side


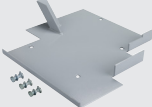







1728 AIR-ASSIST 1,000 LB HIGH LIFT TRANSMISSION JACK

- Air-assist with foot pedal control raises components quickly
- Four ratcheting brackets fit a wide range of transmissions
- 34-1/2" min height, 72" max height
- Tilts 40° forward, 20* backward and 10* side-to-side

COMPATIBILITY ADAPTER	POWERTRAIN LIFTS				DRIVELINE	LOW-LIFT TRANS JACKS			HIGH-LIFT TRANS JACKS				
	5285	1595A	5295	1585A	5130	5019A	1522A	1521A	5078	1793A	1794A	1728	5237
 558382 Auxiliary box adapter					Yes	Yes	Yes		Yes				
 561949 Light duty transmission adapters					Yes	Yes	Yes		Yes				
 528150 Eaton lightning adapter						Yes							
 543284 Roadranger transmission						Yes							
 49611 Eaton Fuller Roadranger auxiliary housing						yes							
 553516 Differential mounting adapter					Yes, included with lift purchase	Yes	Yes		Yes				








COMPATIBILITY ADAPTER		POWERTRAIN LIFTS				DRIVELINE	LOW-LIFT TRANS JACKS			HIGH-LIFT TRANS JACKS				
Adapters		5285	1595A	5295	1585A	5130	5019A	1522A	1521A	5078	1793A	1794A	1728	5237
	314729 Allison 5/0600 series adapter									Yes, included with lift purchase				
	540231 Eaton Fuller Roadranger transmission adapter						Yes, included with lift purchase							
	540232 Mack transmission mounting brackets						yes							
	5091 HD spindle adapter					Yes	Yes	Yes						
	1870 Universal transmission adapter									Yes	Yes		Yes	
	223196 Transmission jack mounting adapter set									Yes	Yes	Yes	Yes	
	1758 Fuel tank handler	Yes	Yes	Yes	Yes					Yes	Yes	Yes	Yes	



FORD, LINCOLN AND MERCURY SPECIALTY TOOLS

BEST-SELLING TOOLS FOR SERVICING SOME OF THE NATION'S MOST POPULAR VEHICLES

	TOOL	APPLICATION	USE
	Ball joint separator 6655	Most Ford, Lincoln and Mercury models including F-Series, E-Series Expedition, Transit Connect, Fusion, Taurus, MKZ, Navigator, Sable, Milan and Mariner	Separates the lower control arm ball joint from the steering knuckle. Similar to 204-592.
	Timing belt holding tool set 6665	2011-Later 1.5L and 1.6L EcoBoost engines found in Ford, Lincoln and Mercury vehicles	Holds the timing belt in three separate locations during water pump removal and installation. Use with Top dead center pin, P/N 567643. Similar to 303-1556.
	Camshaft alignment tool 6671	2010-Later 2.0L Duratec-EcoBoost; 2012 and Later 2.0L GTDI; 2015-Later 2.3L EcoBoost; 2016-Later 3.5L EcoBoost engines found in Ford, Lincoln and Mercury vehicles	Ensures camshaft is in proper position during servicing. Thumb screw holds plate in place. Similar to 303-1565.
	Power steering evacuation cap 6871	Many Ford Crown Victoria, Super Duty, Explorer, E-Series, Taurus and Lincoln/Mercury equivalent models	Allows for removal of air from the power steering system when used with a vacuum pump, helping prevent noise and premature pump failure. Similar to 211-265.
	Locknut pin remover 6879	Application: 2009 - Later select Ford, Lincoln and Mercury vehicles	Removes the locknut roll pin. Threaded tip grips the inside of the roll pin. Slide hammer action pulls the pin out. Similar to 211-061.

TOOL	APPLICATION	USE
 <p>6873</p>	<p>Injector seal installer set</p> <p>2010-Later 3.5L, 3.5L GTDI; 2012-Later 2.0L Duratec, EcoBoost and GTDI; 2013-Later 1.5L and 1.6L EcoBoost; 2015-Later 1.0L and 2.7L EcoBoost engines found in Ford, Lincoln and Mercury vehicles</p>	<p>Sizes and installs the seal on the injector for leak-free operation.</p> <p>Similar to 310-207.</p>
 <p>6875</p>	<p>PTU linkshaft seal and dust cover installer set</p> <p>2007 - 2012 Ford Edge and Fusion; 2008-Later Ford Taurus, Flex and Fusion; 2011-Later Ford Explorer; all Lincoln and Mercury equivalent vehicles</p>	<p>Installs the linkshaft seals and dust covers found on the Power Transfer Unit (PTU).</p> <p>Similar to 205-882 and 205-883.</p>
 <p>6881</p>	<p>Crank sensor alignment tool</p> <p>2012-Later 2.0L Duratec, EcoBoost and GTDI; 2015-Later 2.3L EcoBoost engines</p>	<p>Aligns the crankshaft position sensor properly during installation.</p> <p>Similar to 303-1521.</p>
 <p>6891</p>	<p>Flywheel holding tool</p> <p>Many 1998-Later Ford, Lincoln and Mercury vehicles including F-150, Explorer, Ranger, Mustang, MKZ, Navigator, MKX, Milan, Mountaineer and more</p>	<p>Holds the flywheel during engine service. Tool contacts the flywheel teeth to firmly keep the engine from rotating.</p> <p>Similar to 303-103.</p>
 <p>6893</p>	<p>Input shaft seal remover</p> <p>6-speed PowerShift transmissions; 2011-Later Ford Fiesta, Focus</p>	<p>Removes outer seal on input shaft. The tapered thread end is threaded into the seal inner diameter. Tightening the forcing screw pulls the seal from its seat.</p> <p>Similar to 307-673.</p>
 <p>6911</p>	<p>Transmission shaft seal remover adapter</p> <p>2014-Later 1.5L EcoBoost engines; 6R80, 5R55S, CD4E, ZF 6-speed, AW21, 4R70E/4R75E transmissions found on many Ford F-150, Explorer, Excursion, Mustang, Fusion, Super Duty, Expedition models and Lincoln/Mercury equivalents</p>	<p>Removes the input shaft oil seal. Also used for output shaft seal on select transmissions. Nut has 5/8"-18 thread for use with most slide hammers.</p> <p>Similar to 308-375.</p>
 <p>6913</p>	<p>Extension housing bushing remover</p> <p>Most Ford Ranger transmissions including 4R44E/4R55E, 5R55E, A4LD, C3 and T5OD</p>	<p>Removes the transmission extension housing bushing. The tool is inserted through the bushing. Tightening the drive screw draws the bushing out of the housing.</p> <p>Similar to 308-070.</p>

TOOL	APPLICATION	USE
 <p>6992</p>	<p>Injector sleeve service set</p> <p>2006 - 2009 4.5L diesel and 2004 - 2010 6.0L diesel engines</p>	<p>Set includes tools to remove fuel injector sleeves, clean the injector bore and fuel galley, and install injector sleeve cups. With the head removed, the slide hammer adapter can be installed to pull the injector sleeve. The brush set properly cleans the injector bore which is required for the fuel injector sleeve cup installer to properly seat the cup.</p> <p>Similar to 303-768, 303-767, 303-DS110.</p>
 <p>6999</p>	<p>Fuel injector puller</p> <p>2010-Later 3.5L, 3.5L GTDI; 2012-Later 2.0L Duratec, EcoBoost and GTDI; 2013-Later 1.5L and 1.6L EcoBoost; 2015-Later 2.7L EcoBoost engines</p>	<p>Removes fuel injectors from engine. The puller legs align around the injector base and the collar is slid down to firmly grip the injector. A slide hammer attaches to the puller, which is used to pull the injector from its seat. The injector puller threads onto slide hammers with 5/8"-18 thread, including most OTC slide hammers.</p> <p>Similar to 310-206.</p>
 <p>6895</p>	<p>Crankshaft rear oil seal installer</p> <p>1998-2004 Ford Focus, Maverick, Ranger; 2005-2013 2.0L, 2.3L, 2.5L, 2.0L EcoBoost; 2012-Later 2.0L GTDI; 2004 2.0L Zetec; 2004 SVT Focus</p>	<p>Installs crankshaft rear main oil seal.</p> <p>Similar to 303-328.</p>
 <p>2545</p>	<p>Door flange tool set</p> <p>Ford Econoline; F-Series pickup trucks</p>	<p>For aluminum door repair; aids in R&I of door skins. Includes air hammer adapters and hem flange crimping tool.</p> <p>Similar to 502-080, 501-078 and J-46162.</p>
 <p>6877</p>	<p>Injector bore cleaning brush</p> <p>2010-Later 3.5L, 3.5L GTDI; 2012-Later 2.0L Duratec, 2.0L EcoBoost, 2.0L GTDI; 2013-Later 1.5L & 1.6L EcoBoost; 2015-Later 2.7L EcoBoost</p>	<p>Two-step brush and detachable handle for fuel injector bore cleaning.</p> <p>Similar to 310-205.</p>
 <p>6674</p>	<p>Valve spring compressor</p> <p>1998-2011 4.0L SOHC & 4.6L 2V</p>	<p>Compresses valve springs during R&I of camshaft roller followers with the head on the engine. 3/8" square drive for use with ratchet or breaker bar.</p> <p>Similar to 303-581.</p>

TOOL	APPLICATION	USE
 <p>6867</p>	<p>Hub seal installer</p> <p>1999-Later Dana; Ford 10-1/2" Full Floating Axle</p>	<p>Installs the wheel hub oil seal on single or dual wheel axle assemblies. Seal installer adapter is driven with the included, detachable 7" handle.</p> <p>Similar to 205-422 and 205-153.</p>
 <p>6889</p>	<p>Crankshaft front seal and wear ring installer</p> <p>2008-2010 Ford F,250, F-350, F-450 and F-550; 6.4L Ford PowerStroke; VT365-MaxxForce7; Navistar International engines</p>	<p>Installs the front seal and wear ring on the crankshaft</p> <p>Similar to 303-1259</p>
 <p>6888</p>	<p>Crankshaft front seal and wear ring remover</p> <p>2008-2010 Ford F,250, F-350, F-450 and F-550; 6.4L Ford PowerStroke; VT365-MaxxForce7; Navistar International engines</p>	<p>Removes the front seal and wear ring from the crankshaft.</p> <p>Similar to 303-1260.</p>
 <p>6887</p>	<p>Crankshaft front seal and wear ring installer</p> <p>2003-2007 F-250, F350, F-450, F-550, Excursion; 2004-2007 F-650, F-750; 2004-2010 E150, E-250, E-350, E-450; 6.0L and VT365-MaxxForce7 Navistar International</p>	<p>Installs the front seal and wear ring on the crankshaft.</p> <p>Similar to 303-761; Use OE part number 303-1158 for 4.5L installation.</p>
 <p>6886</p>	<p>Crankshaft front seal and wear ring remover</p> <p>2003-2007 F-250, F350, F-450, F-550, Excursion; 2004-2007 F-650, F-750; 2004-2010 E150, E-250, E-350, E-450; 6.0L and VT365-MaxxForce7 Navistar International</p>	<p>Removes the front seal and wear ring from crankshaft without damage</p> <p>Similar to 303-762</p>
 <p>6885</p>	<p>Crankshaft rear seal and wear ring installer</p> <p>2003-2010 F-250, F350, F-450, F-550, Excursion; 2004-2007 F-650, F-750; 2004-2010 E150, E-250, E-350, E-450, and Low Cab Forward; 4.5L, 6.0L, 6.4L and VT365-MaxxForce7 Navistar International</p>	<p>Installs the rear seal and wear ring on the crankshaft.</p> <p>Similar to 303-770.</p>
 <p>6884</p>	<p>Crankshaft rear seal and wear ring remover</p> <p>2003-2010 F-250, F350, F-450, F-550, Excursion; 2004-2007 F-650, F-750; 2004-2010 E150, E-250, E-350, E-450, and Low Cab Forward; 4.5L, 6.0L, 6.4L and VT365-MaxxForce7 Navistar International</p>	<p>Removes the rear seal and wear ring from crankshaft without damage</p> <p>Similar to 303-771.</p>
 <p>6883</p>	<p>Pinion flange holding tool</p> <p>Most Ford, Lincoln and Mercury vehicles</p>	<p>Holds the pinion drive flange with bolt centerlines up to 2-5/8". Includes 5/16" and 3/8" bolts, nuts and washers to fit most drive pinion flanges.</p> <p>Similar to 303-126</p>

OTC MEANS PULLERS

Trusted pullers with a lifetime warranty to separate rusted, frozen or seized components

GRIP-O-MATIC PULLERS



1020 2-JAW AND 1021 3-JAW 1-TON PULLERS

- 2-1/8" max reach
- 3-1/4" spread
- 5/16"-24 x 3-7/8" forcing screw
- 9/64" thick 1/4" wide jaw



1022 2-JAW AND 1023 3-JAW 2-TON PULLERS WITH REVERSIBLE JAWS

- 3-1/4" max reach
- 4" max spread for 1022;
4-3/4" max spread for 1023
- 3/8"-24 x 4-7/8" forcing screw
- Jaw thickness: 3/16" upper, 1/8" lower
- Jaw width: 1/4" upper, 1/2" lower



1024 2-JAW AND 1026 2/3-JAW 5-TON PULLERS WITH REVERSIBLE JAWS

- 3-1/4" max reach
- 6" max spread for 1024;
7" max spread for 1026
- 9/16"-20 x 6-15/16" forcing screw
- Jaw thickness: 5/16" upper, 1/4" lower
- Jaw width: 3/8" upper, 3/4" lower



1025 2-JAW AND 1027 2/3-JAW 5-TON LONG PULLERS WITH REVERSIBLE JAWS

- 5-1/2" max reach
- 6" max spread for 1025;
7" max reach for 1027
- 9/16"-20 x 6-15/16" forcing screw
- Jaw thickness: 5/16" upper, 1/4" lower
- Jaw width: 3/8" upper, 3/4" lower



1035 2-JAW AND 1037 2/3-JAW 7-TON PULLERS WITH REVERSIBLE JAWS

- 5" max reach
- 9" max spread on 1035;
10-1/2" max spread on 1037
- 11/16"-18 x 9" forcing screw
- Jaw thickness: 5/16" upper, 11/32" lower
- Jaw width: 1" upper, 1" lower



1036 2-JAW AND 1038 2/3-JAW 7-TON LONG PULLERS

- 8-3/4" max reach
- 9-1/2" max spread on 1036;
11" max spread on 1038
- 11/16"-19 x 9" forcing screw
- Jaw thickness: 11/32"
- Jaw width: 1"

GEAR AND PULLEY REMOVAL



522 LARGE GEAR & PULLEY PULLER

- Easily remove gears, pulleys and components with tapped holes
- 2" to 7-3/4" spread
- 3/4"-16 x 11-5/8" forcing screw
- Use cap screws up to 1/2" in diameter



7392 GEAR & PULLEY PULLER

- Remove timing gears, fan pulleys, harmonic balancers
- 1-1/2" to 4-1/4" spread
- 13" long forcing screw
- Includes two hex head cap screws, sized 3/8"-16 x 3"



927 10-TON PUSH PULLER

- Remove and install press-fit parts
- Use with 1123 or 679 bearing splitter attachments
- 2-1/8" to 7-1/4" spread
- 8-1/4" max reach

BEARING SPLITTERS



1123 BEARING SPLITTER

- Knife-like edges seat behind components to separate quickly
- Use with a push-puller or OTC Grip-O-Matic pullers
- 4-5/8" spread; 4-3/8" between screws



1130 BEARING SPLITTER

- Knife-like edges seat behind components to separate quickly
- Use with a push-puller or OTC Grip-O-Matic pullers
- 9" spread; 6" between screws



679 V-BELT PULLEY ATTACHMENT

- Clamps into V-belt groove to securely hold and pull
- Use with a push-puller or OTC Grip-O-Matic pullers
- 5-7/8" spread; 6" between screws

PULLERS AND PULLER SETS



938 17-1/2 TON PUSH-PULLER

- Max reach of 11-1/2" with adjustable spread from 3-1/8" to 11-3/4"
- Heavy-duty capacity will separate bearings, remove shafts and more
- Works with 1124, 1130 bearing splitters or 1150, 1151, 1153, 1165 and 1166 internal puller legs



1150 INTERNAL PULLING ATTACHMENT

- Quickly remove bearing cups, oil seals, bushings and more
- 5/8"-18 cross block thread fits most slide hammers, OTC push-pullers and puller screws
- 4" reach; 1-1/2" to 6" spread



1178 SLIDE HAMMER PULLER SET"

- Set for pulling pilot bearings, oil seals, bushings, timing gears, harmonic balancers and more
- Includes medium jaws, long jaws, puller hook, pilot bearing jaw and two cross blocks



1676 STRONG BOX PULLER SET

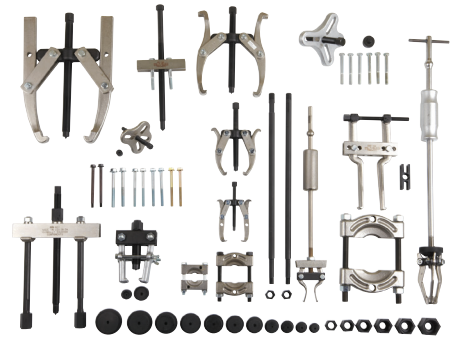
- Includes eight pullers, five attachments and extra puller jaws for most jobs
- Pull gears, flywheels, steering wheels, pitman arms, bearings and more
- Metal storage box keeps pullers organized and accessible



Photo for illustrative purposes only

1682 17-1/2, 30 AND 50-TON MASTER PULLER SET

- The motherlode puller set with pullers, splitters, hydraulic rams, attachments and more
- Includes nearly 50 pullers, splitters and attachments
- 3 hydraulic pumps and 3 rams will break loose nearly any stuck, frozen or rusted components

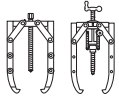


1675 13-TON CAPACITY PULLER SET

- Includes 11 pullers, 3 bearing splitters and nearly a dozen threaded adapters
- Easily pull gears, bearings, shafts, pinions, outer races and more
- A true all makes/models puller set with 13 tons of force

SELECTING THE RIGHT PULLER

The tools to use when pulling something off a shaft:



Jaw-type puller, either manual or hydraulic. (For extra force and convenience use a hydraulic puller.) Both are available in 2- or 3-jaw versions and are used to grip the outer circumference of an attachment.



Bearing pulling attachment. Provides "knife-like" edges to get behind the component, or when there isn't a good gripping area on the part to be pulled. The splitter gets behind the component to prevent damage to the part.



Push-Puller® with attachments. External-internal adapters can thread directly into tapped holes on a component.



Slide hammer puller with selected attachments for multiple light-duty pulling tasks.



A variety of OTC adapters can be used to protect a shaft, bridge a hole, thread into tapped holes, or assist installation.

The tools to use when pulling something out of a hole:



Internal pulling attachments have narrow jaws which extend through the center of the part to be pulled. They provide a straight pull and avoid damage to housings. Designed for use with Push-Pullers or slide hammer pullers.



Push-Puller in combination with internal pulling attachment. Both mechanical and hydraulically powered versions are available.



Here a slide hammer puller is combined with an internal pulling attachment. Ideal for removing parts from blind holes, especially when there is no housing to brace puller legs against.



When there is a shaft to bear against, a forcing screw of the correct size may be used in combination with an internal pulling attachment.

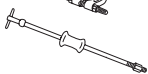
The tools to use when pulling a shaft out of something:



Push-Puller® with threaded adapter. Use a mechanical or hydraulic puller, depending on the size of the shaft to be pulled.



When the housing lacks sufficient surface for the puller legs to bear against, a pulling attachment may be used to provide support.



Slide hammer puller with threaded adapter – either external-internal or internal can be used.



Internal adapters are fastened to the external threaded end of the shaft to pull while pushing against the housing.

External-internal adapters are threaded into the shaft to pull it while pushing against the housing.

Safety Precautions

⚠ WARNING: TO PREVENT PERSONAL INJURY WHEN USING PULLERS,

- Wear approved eye protection, such as safety glasses, goggles, or a face shield.
- Inspect puller for dents, cracks, or excessive wear before use. Inspect forcing screw for signs of galling or seizing. Replace worn or damaged components.
- Do not exceed puller's rated capacity, spread, or reach. Use correct size of puller for application.
- Ensure puller is correctly aligned with application and seated on component to be removed. Jaws must be parallel to forcing screw.
- Do not use wrench extensions when applying a load.
- Cover application with a shield or protective blanket before force is applied to contain flying debris should breakage occur.
- Apply force gradually. Do not use an impact wrench to apply force unless instructions specify use with an impact wrench.
- Do not strike or "sledge" puller or component.
- Do not modify puller by grinding, heating, or other means that could weaken puller strength.

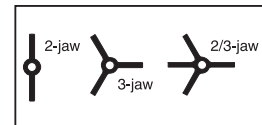
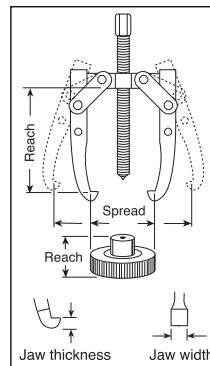


ABOUT MECHANICAL PULLERS

A pulling system can exert tons of force and it is difficult to predict the exact force required for a pulling application. It is important to observe safety precautions when using a puller.

The OTC pulling system is versatile. For that reason, it is possible that various components in a pulling setup will have different tonnage ratings. The lowest capacity component determines the capacity of the entire setup. For example, when an accessory having a capacity of one ton is used with a 10-ton capacity puller, the puller setup can be used at a force of only one ton.

If you are unsure which puller or attachment to select for an application, contact your OTC tool representative.



A full-page background image showing a worker in a hard hat and safety glasses operating a large industrial plating tank. The tank is filled with a bright orange-red liquid, and the worker is using a long tool to handle a component. The scene is dimly lit, with the primary light source being the glowing liquid in the tank. Several large industrial fans are visible in the background. In the bottom left corner, a green barrel is partially visible with the text 'VALI PLATING' on it.

**FIND THE
RIGHT TOOLS,
USE THEM
FOR LIFE**

A12000 T&E PRODUCT CATALOG TABLE OF CONTENTS



Cover: Steve Cross,
Drop Forge Operator of 40 years

"I'M PROUD OF THE OTC BRAND. I'M MAKING A BRAND THAT'S BEEN AROUND A LONG TIME. ANY GUY THAT'S WORKED ON A CAR HAS HEARD OF THE OTC BRAND, AND THEY PROBABLY HAVE USED IT."



ENGINE & EXHAUST SERVICE	1-20	BATTERY SERVICE	86
FUEL SERVICE	21-32	ELECTRICAL SERVICE	87-90
OIL SERVICE	33-38	A/C SERVICE	91-92
COOLANT SERVICE	39-42	BODY SERVICE	93-102
LUBRICATE/AIR SERVICE	43-44	FASTENER SERVICE	103-108
TRANSMISSION SERVICE	45-49	PLIERS & CUTTERS	109-114
DRIVE AXLE SERVICE	50-54	STRIKE/STRUCK	115-117
STEERING SERVICE	55-60	GENERAL PURPOSE	117-118
SUSPENSION SERVICE	61-67	PULLERS	119-136
HUB SERVICE	68-72	MOTORCYCLE/ POWERSPORT	137-158
BRAKE SERVICE	73-79	HEAVY DUTY TOOLS & EQUIPMENT	159-198
WHEEL & TIRE SERVICE	80-84	SHOP EQUIPMENT	199-234

A PROUD HERITAGE

Since 1925



ENGINE SERVICE AUTOMOTIVE SPECIALTY TOOLS

6690

Ford Master Cam Tool Kit

- Contains 40 tools to ensure correct cam timing when servicing timing belts, chains, head gaskets, or other valve train repairs.
- Covers L4, V6, V8, V10 engine with 2V, 3V, 4V valve configurations, model years 1991 – 2014.
- Application guide with diagrams and blow molded case included.



6690-1

Ford Cam Tool Kit Update

- Contains 18 tools, with case locations for addition of the popular 6489 Ford Cam Tools, making a 6690 Kit.
- Ford Cam Tools ensure correct cam timing when servicing timing belts, chains, head gaskets, or other valve train repairs.
- 6690-1 tools cover L4, V6, V8, V10 engines with 3V & 4V valve configurations, model years 2004 – 2014.
- Application guide with diagrams and blow molded case included.



6489

Ford Cam Tool Kit

The OTC Ford cam tools ensure correct cam timing when servicing timing belts, chains, head gaskets, or other valve train repairs.

Ford cam tool kit containing all 22 cam tools covering 1992 thru 2012 for over 50 applications, in a molded storage case.



Ford Comparison Chart

Part No.	Description	Similar to Ford	6486A	6487	6488	6489	6498	6680	6681	6682	6683	6690	6690-1
6009	Cam positioning Tool (pair)	303-380		X			X					X	
6020	Cam Positioning Tool	303-413		X			X					X	
6024	Crankshaft Positioning Tool	303-448				X						X	X
6466	Crankshaft Sensor Positioner	303-354					X						
6467	Cam Sensor Sync Tool	303-358					X						
6468	Cam Pulley Holding Tool	303-398					X						
6469	Cam Sensor Sync Tool	303-562					X					X	
6470	Cam Sensor Sync Tool	303-630					X					X	
6471	Cam Sensor Sync Tool	303-453					X						
6472	Cam Sensor Sync Tool	303-529					X					X	
6473	Cam Sensor Sync Tool	303-589					X					X	
6474	Cam Alignment Tool	303-465	X				X					X	
6475	Crankshaft TDC Timing Pin	303-574	X				X					X	
6476	Cam Positioning Tool Set	303-S568		X			X					X	
6477	Cam Holding Tool	303-557		X			X					X	
6478	Cam Gear Holding Tool	303-564			X		X					X	
6479	Crankshaft Holding Tool	303-573			X		X					X	
6480	Cam Holding Tool Adapter	303-576			X		X					X	
6481	Cam Holding Tool	303-577			X		X					X	
6482	Cam Gear Holding Tool Adapter	303-578			X		X					X	
6483	Cam Sensor Sync Tool	303-638					X					X	
6484	Timing Chain Tensioner Tool	303-571			X		X					X	
6485	Cam Gear Bolt Socket & Ext.	303-565, 303-575			X		X					X	
525216	Camshaft Positioning Tool Assy	303-445				X						X	X
525217	Camshaft Holding Tool	303-446				X						X	X
525218	Camshaft Holding Tool	303-1248				X						X	X
7419	Tensioner Retaining Pin Set	none										X	X
567611	Timing Chain Tensioner Assy	303-1532						X				X	X
567613	Crankshaft Alignment Tool	303-645A						X				X	X
567614	Cam Phaser Holding Tool	303-1046							X			X	X
567617	Timing Chain Locking Tool	303-1175							X			X	X
567618	Camshaft Holding Tool	303-1248								X		X	X
567619	Chain Tensioner Hold Down Tool	303-1530								X		X	X
567620	VCT Alignment Tool	303-1097									X	X	X
567621	Camshaft Holding Timing Tool	303-376B									X	X	X
567622	Crankshaft TDC Timing Pin	303-507	X									X	X
567623	Crankshaft TDC Timing Pin	303-748									X	X	X
567649	Camshaft Holding Tool	303-530						X				X	X



ENGINE SERVICE AUTOMOTIVE SPECIALTY TOOLS



6487 Ford Cam Tool Kit

Ford cam tool kit for 1992 thru 2012 4.6L, 5.4L V8, and 6.8L V10 engines. Contains tool Nos. 6476, 6477, 6009, 6020, and molded storage case.



6680 Ford 3.9L 4V Cam Tool Set

The 6680 is designed to service Ford 3.9L 4V V8 engines used in 2000-2006 Lincoln LS cars.



6681 Ford 4.6L, 5.4L, 6.8L 3V Cam Tool Set

- The 6681 is designed to service;
- Ford 4.6L 3V V8 engines used in 05-10 Mustang, 06-10 Explorer, 09 F-Series trucks.
- Ford 5.4L 3V V8 engines used in 04-12 F-Series, 05-10 Expedition, 05-12 Lincoln Navigator.
- Ford 6.8L 3V V10 engines used in 05-12 F-Series 250-350-450.



6488 Ford Cam Tool Kit

Ford cam tool kit for 1997 thru 2011 4.0L Explorer/Mountaineer SOHC V6 engines. Kit contains tool Nos. 6478, 6479, 6480, 6481, 6482, 6484, 6485, and molded storage case.



6682 Ford 3.5L & 3.7L 4V Cam Tool Set

- Ford 3.5L 4V V6 engines used in 07-12 Edge & MKZ, 07-09 MKX, 08-12 Taurus & Taurus X & Sable, 10-12 Fusion, 10-12 MKZ & MKS & MKT, 11-12 Explorer & F150.
- Ford 3.7L 4V V6 engines used in 09-12 MKS, 10-12 MKT, 11-12 Mustang & F150 & MKZ & Edge.



6683 Ford 1.6L 4V Cam Tool Set

- Works on Ford 1.6L 4V L4 engines used in 11-12 Fiesta.



6486A Ford 2.0L, 2.3L, 2.5L 4V Cam Tool Set

- Ford 2.0L 4V L4 engines used in 94-12 multiple vehicle platforms.
- Ford 2.3L 4V L4 engines used in 05-08 Escape Hybrid, Mariner Hybrid.
- Ford 2.5L 4V L4 engines used in 09-12 Escape & Mariner, 10-12 Fusion & Fusion Hybrid, 11-12 MKZ.



6684 Ford 3V Valve Spring Compressor

- Designed to compress valve springs on a Ford 3V 4.6L & 5.4L.
- Similar to OE p/n 303-1039.

6498 Ford 4.6L & 5.4L 4-Valve Cam Timing Kit

Saves time; all tools required for camshaft timing are in one kit.

Set Includes:

- 525216** – Camshaft positioning tool
- 525217** – Camshaft holding tool
- 6024** – Crankshaft positioning tool
- 525218** – Secondary chain tensioner tool



6024 Ford Crankshaft Positioning Tool

- Designed for use on Ford 1993–2012 4.2L, 4.6L 2-valve, 4.6L 4-valve, 5.4L V8, and 6.8L V10 engines when installing timing chains. These engines are not free wheeling, and if an engine has “jumped time,” it is possible the cylinder heads have to be removed because of damage to the valves or pistons.
- Easily installs over the crankshaft and engine front cover alignment dowel to position the crankshaft at top-dead-center — the correct position for timing chain installation. OTC recommends the No. 6024 be used with Nos. 6009 and 6020 (but it is not required).

Similar to
Ford 303-448

Similar to Ford
303-567



7928 Ford Valve Spring Compressor Tool

Compresses valve springs for quicker, easier camshaft, valve seal, valve spring, or retainer service—because you don’t have to remove the head from the engine first! It’s an OEM-approved tool that you use with a 3/8” ratchet or breaker bar. Works on: 1991–2004 Ford vehicles with 4.6L, two-valve, V8 engines; 4.6 4V, 5.4 V8 and 6.8 V10.



**6918
Ford Spark Plug Remover Kit, 3V Engine**

- Unique design helps prevent breakage by locking the plug porcelain core to the plug hex allowing it to turn as one complete unit.
- Will also pull plug porcelain core if plug hex only is removed.
- Detailed Instructions to maximize success rate.

Works on:

- Ford 4.6L 3V V8 engines used in 2005–2008 Mustang, 2006–2008 Explorer.
- Ford 5.4L 3V V8 engines used in 2004–2008 F-Series, 2005–2008 Expedition, 2005–2008 Lincoln Navigator.
- Ford 6.8L 3V V10 engines used in 2005–2008 F-Series 250–350–450.



**6770
Ford 6.0L Diesel Service Tool Kit**

- 8 of our popular 6.0L Diesel Service Tools in one convenient kit.
- Properly test vehicle systems for leaks and blockage.
- Safely remove and re-install harnesses without damage.
- Fuel Filter Cap Wrench, Glow Plug and Injector Harness Release Tools.
- Oil Line Disconnect Tool, EGR Removal Tool.
- IPR Controller, IPR Socket Tool and Fuel Rail Pressure Adapters.



**7483A
Water Pump Puller Remover/Installer**

Helps remove and install water pump pulleys faster and easier on specific Ford, Lincoln and Mercury 3.0L DOHC engines. The puller works on the below vehicles with a Ford 3.0 DOHC engine:

- Ford Escape 2001–2012
- Ford Fusion 2006–2012
- Ford Taurus 2001–2005
- Lincoln MKZ 2007–2012
- Mercury Mariner/Milan 2006–2011
- Mercury Sable 2001–2005



**6900
Ford Spark Plug Socket**

- This unique design works on 2004–newer Ford vehicles with 5.4L, 4.6L, V8, 6.8L, V10, 3-valve engines.
- Socket end is 9/16". Soft rubber insert holds and protects spark plug during removal and installation.
- Extension is part of the socket. Easily fits down spark plug tube in cylinder head.
- Socket has a 3/8" drive for use with a ratchet or breaker bar.



**5607
Compression Tester Ford 14mm Adapter**

Use with OTC compression testers to access hard to reach spark plug holes.

- Works on 2004 and 2007 Ford 4.6 and 5.4 L, V-8, 3 valve engines.
- Easy-to-turn feature makes starting thread fast.
- Use with compression testers with 14 mm thread.



**5608
Compression Tester Ford 12mm Adapter**

Use with OTC compression testers to access hard-to-reach spark plug holes.

- Works on 2008 and newer Ford 4.6, 5.4 and 6.8L 3-valve engines with 12mm spark plugs
- Easy-to-turn feature makes starting thread fast



Similar to Ford 303-S524

**7834
Ford Rear Crankshaft Seal Installer**

- This installer works on crankshaft rear oil seals that come with or without a metal wear sleeve.
- Designed for use on 1993–1997 Aerostar or 1993–2011 Ranger and Explorer with 4.0L V6 engine.



**7835
Ford Rear Main Oil Seal Kit**

- Works on 1994–2003 7.3L diesel engine in Ford 3/4- and 1-ton trucks.
- A complete kit with the tools you need to correctly remove and install the rear main oil seal and wear ring on the crankshaft.
- Eliminates makeshift methods of seal removal and installation that could damage the new seal or crankshaft.



Similar to Ford 303-178 (T82L-6701-A)

**7786
Ford Rear Main Seal Installer**

This installer is the most accurate way to ensure that the rear main seal is set to the correct depth on the crankshaft. The installer fits over the seal, and with the two bolts included, attaches to the engine crankshaft. By alternately tightening the bolts, the seal is pulled into place quickly, easily, and with no damage to the rear main seal. Works on 2.5L 1998–2002 DOHC engines 3.0L 2000–2012 DOHC engines



**7482
EGR Valve Puller**

- Removes EGR valve.
- Fits Ford 6.4L diesel engines, 2008-2010.
- Similar to 303-1267A



**6768
Ford 6.0L Glow
Plug Release Tool**

Safely remove and install the glow plug harness on 2004-2009 Ford 6.0L Diesel engines.



**6076
Ford Diesel Compression Test Adapter**

When the glow plug is removed from the cylinder, this adapter is used to connect the No. 5021 gauge to perform a compression test.

- Works on 1994-2005 Ford vans and pickups with 7.3L direct-injected turbocharged (DIT) diesel engine.



**6660
Compression Tester**

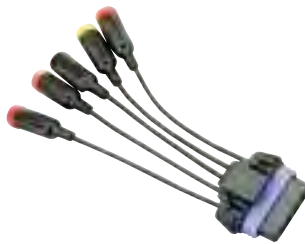
- Use with OTC No. 5021 diesel engine compression gauge.
- Works on 2003-2009 Ford vans and trucks with 6.0L diesel engines.



Similar to Ford No. 303-755

**6594
Ford Oil Line Disconnect Tool for 6.0 L**

- Use to disconnect the high-pressure oil rail supply line from the fuel rail when removing fuel injectors.
- Works on the 6.0: diesel engine found in 2003-2009 F-250, F-350, F-450, F-550 trucks, Excursions and Ford vans.



**6088
Ford 5-pin Connector Harness for Glow Plug Testing**

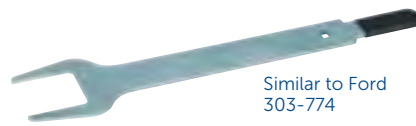
- Provides an easy way to check glow plug resistance without having to remove the valve cover of 1994-98 Ford trucks and vans with 7.3L DIT (direct-injected turbocharged) diesel engines.
- Used with any standard digital volt ohmmeter to check glow plug resistance.



Similar to Ford 303-625

**6595
Ford High Pressure Oil Line Disconnect Tool**

- Use to disconnect the high pressure oil line from the cylinder head.
- Works on 1998 - 2003 Ford vans and trucks with 7.3L direct-injected, turbo-charged (DIT) diesel engines.



Similar to Ford 303-774

**6974
Ford 6.0L Diesel Fan Clutch Wrench**

- Applications: 2003-2009 Ford F-550 & F-650 Super Duty trucks with the 6.0L diesel engine.
- This is a required tool to tighten or loosen the fan clutch on the water pump.
- Wrench has a 68.45 mm (2-11/16") opening



Similar to Ford 303-591

**6068
Ford Diesel Fan Clutch Wrench**

- Designed for use with OTC No. 7205E1 holding tool to remove fan clutch assembly. Has the same size opening as the OTC No. 7205E2 wrench, but has a special bend in the handle to provide clearance for accessories found on some vehicles.

Application: 1998-2003 Ford vans and pickups with 7.3L direct-injected turbocharged (DIT) diesel engine.



**206391
Ford Engine Adapters**

- 6.0L and 6.4L Ford engine adapters.(Works with both the OTC 1735 and OTC 1735A).



206391 Ford Engine Adapters shown mount on OTC's 1735A sold separately.

GM IN-LINE 4-CYLINDER CAM TOOL SET



6685

GM In-line 4-Cylinder Cam Tool Set

- Comprehensive tool kit designed to save time when servicing GM 4-cylinder engines.

GM cam tool application can be found by entering the part numbers into the search bar.

Note: Some applications require more than one tool to accomplish the task.

GM In-line 4-Cylinder Cam Tool Set includes the following:

527045

Camshaft Timing Alignment Pins
Similar to GM J-36008A



536172

Camshaft Holding Tool
Similar to GM J-44221



536186

Timing Chain Holder
Similar to GM J-44217-1



527046

Camshaft Sprocket Wrench
Similar to GM J-36013



6675 (536173)

Timing Belt Adjuster
Similar to GM J-42492A



536187

Timing Chain Holder
Similar to GM J44217-2



527049

Camshaft Sprocket Wrench
Similar to GM J-39579



536174

Camshaft Gear Holder
Similar to GM J-43299



536254

Camshaft Timing Alignment Pin



527056

Camshaft Sprocket Holding Tool
Similar to GM J-43655



536176

Camshaft Gear Holder
Similar to GM J-43299



536255

Timing Chain Tensioner Retainer



532174

Timing Chain Tensioner & Shoe Retainer



536178

Crankshaft Pulley Holder
Similar to GM J-38122



536265

Timing Chain Holder
Similar to GM J-44217-46



532195

Timing Chain Tensioner Retainer
Similar to GM J-36589



536181

Camshaft Sprocket Holding Tool
Similar to GM J-44222



527061-1

Timing Chain Tensioner Loading Tool
Similar to GM J-45027

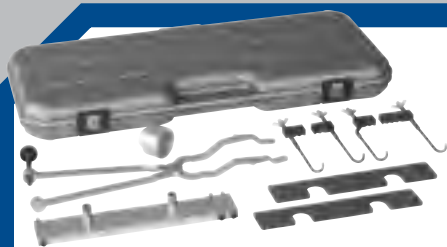


527061-2

Timing Chain Tensioner Loading Tool
Similar to GM J-45027



ENGINE SERVICE AUTOMOTIVE SPECIALTY TOOLS



6686
GM NorthStar V8 Cam Tool Set

- Kit is indispensable for quickly and correctly servicing GM NorthStar 4.0L and 4.6L V8 engines.

Set Includes:

- 527048** Cam Chain Tension Holder
- 527050** Crankshaft Rotation Tool
- 527057** Camshaft Holding Tool (qty. 2)
- 527058** Secondary Drive Sprocket Fixture
- 529636** Timing Chain Retention Tool
- 529637** Timing Chain Retention Tool
- 529638** Timing Chain Retention Tool (qty. 2)



6687
GM 6 Cylinder Cam Tool Set

- Required tools to adjust and hold cam shaft timing on GM 3.0 and 3.2 V-6 engines.
- Kit is designed to save shop time when servicing GM 3.0 and 3.2 V-6 engines.

Set Includes:

- 536594** Camshaft Locking Tool
- 536595** Camshaft Locking Tool
- 536596** Crankshaft Holding Tool
- 536608** Camshaft Alignment Gauge
- 536611** Timing Belt Installation Tool
- 536612** Timing Belt Tensioner Wrench
- 536613** Crankshaft Socket



6744
Tensioner Retaining Pin

- Relieves the tension on the timing chain tensioner for camshaft, actuator, and timing chain service. Engages the tensioner arm and moves it forward to disengage the ratchet mechanism. Similar to EN-50837.
- Applications: 2013-14 Cadillac ATS, 2014 Cadillac CTS, 2013-14 Chevrolet Malibu, 2014 Chevrolet Impala & Buick Regal 2.0L and 2.5L engines.



6688
GM In-line 5, 6, or V6 Cam Tool Set

- Comprehensive tool kit designed to save time when servicing GM 5-, 6-cylinder engines.
- Tools are actually easier to use than the original OE essential tools.

Set Includes:

- 527051** Camshaft Holding Tool
- 527052** Cam Gear Holding Tool
- 527055** Crankshaft Socket
- 527061-1** Timing Belt Tensioner Loading Tool
- 536172** Camshaft Holding Tool
- 536186** Timing Chain Retention Tool
- 536187** Timing Chain Retention Tool
- 536582** Timing Belt Tensioner Pulley Retaining Tool
- 536583** Camshaft Sprocket Holding Tool
- 536584** Camshaft Locking Tool
- 536585** Camshaft Locking Tool
- 536586** Timing Belt Tensioner Pin
- 536587** Timing Chain Tensioner Pins
- 536588** Crankshaft Socket
- 536589** Timing Chain Retention Tool
- 536590** Timing Chain Retention Tool

6060A
GM Water Pump Socket

- Works on 1993–newer Cadillac 4.6L V8 Northstar engine, and 1995–1999 Oldsmobile Aurora 4.0L V8.
- 1/2" sq. drive for use with 1/2" drive breaker bar or ratchet.
- Tool is designed to self-center in the water pump housing, allowing the tangs to fully engage the water pump for removal or installation.



Similar to J-38816A



6746
Timing Chain Holding Tool

- This holding tool retains the timing chain position relative to the crankshaft position. The tool clamps around the timing chain pins on both the intake and exhaust sides of the cylinder head, allowing the cams to be serviced. Similar to EN-50656.
- Applications: 2013-14 Cadillac ATS, 2014 Cadillac CTS, 2013-14 Chevrolet Malibu, 2014 Chevrolet Impala & Buick Regal 2.0L and 2.5L engines.



GM Crankshaft Balancer Puller Kit and Adapter Set

Everything you need to pull harmonic balancers having three tapped holes. The shoulder bolts are designed to prevent them from being installed too deeply, protecting the crank sensor and/or interrupter rings from damage. The spacer adapter gives the puller's forcing screw something to push against. The kit works on 1990–2002 3300 and 3800 V6 engines. The No. 7911 adapter set consists of the spacer adapter and shoulder bolts only, for use with your No. 518 or No. 6930 flange-type puller.

7911 GM crankshaft balancer puller adapter set. Includes shoulder bolts and spacer adapter only.

7912 GM crankshaft balancer puller kit. Includes No. 518 flange-type puller and No. 7911 adapter set.



Similar to J-43651

6616
GM Water Pump Holding Tool

- Holds timing chain in place so water pump can be removed for service.
- Special design allows easy installation regardless of timing chain orientation.
- Simply remove access plate from front cover and install the tool.
- Tool saves costly loss of timing on 2002–2009 GM 2.2L and 2.4L EcoTech engines.



GM Duramax Injector Pullers

- Designed to pull injectors on a GM Duramax 6.6L engines.

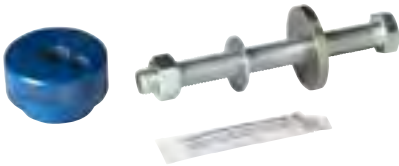
6778 From 2001 - 2004, Similar to J-44639.

6779 From 2005 - 2011, Similar to J-46594.

6754
Diesel Fuel Pressure Gauge

- Designed to test fuel pressure on GM Duramax diesel engines.
- Similar to J-44638.





**6758
Front Crank Seal Installer**

- Installs the front crank seal with the cover on or off the engine. The bolt is threaded into the crankshaft and the nut is tightened to seat the seal. Similar to EN-50820 & EN48034.
- Applications: 2013-14 Cadillac ATS, 2014 Cadillac CTS, 2013-14 Chevrolet Malibu, 2014 Chevrolet Impala and Buick Regal 2.0L and 2.5L engines.



**6788
Pan Seal Cutter**

Designed to separate oil pan seals, the cutter is pressed into the sealant and struck with a hammer to cut through the oil pan seals. Other methods may damage the oil pan and/or sealing surfaces. Similar to J-37228. Works on most vehicles.



**6553
Connecting Rod Guides**

- Set of two connecting rod guides protect the crankshaft bearing surface from damage during piston and connecting rod removal or installation. Guides install onto the connecting rod after the cap is removed and help prevent nicking or scratching. Similar to EN-51454.
- Applications: For use on rods with M8 X 1.0 threads.



**6668
Harmonic Balancer Puller Kit**

A combination puller kit for GM, Ford, and Chrysler. Includes the coverage of the 7912 and 6667 harmonic balancer puller kits.



**6677
Timing Chain Retainer**

The tools retain the timing chain and lower sprocket positions while servicing the upper sprockets, camshafts, valve springs, or valve seals on 2011 and later 2.0L and 2.4L Ecotec engines. The tool has two toothed feet that engage the chain and hold it against the guides to retain tension as the tensioner and upper guide bolt are removed. Also used for cylinder head replacement. Similar to EN-48749.



**6691
Camshaft Retaining Tool**

Oversized retaining plates lock camshafts together at top dead center (TDC) on GM 2.8L 3.0L and 3.6L DOHC engines. Three-plate set is used to tighten both sets of cams to prevent them from turning while setting timing. Extra-large size prevents valve covers from being installed with the plates in place, protecting the engine. Similar to EN-48383.



**6706
Injector Rail Assembly Remover**

- Used for removal of the direct injection fuel rail without damage. The rail assembly must be removed as straight as possible to prevent damaging an injector bore in the cylinder head or the mount assembly.
- Similar to EN-49248.
- Applications: 2007-2014 General Motors Direct Injection Engines including those used in Pontiac, Saturn, Cadillac and Chevrolet vehicles.



**6745
Camshaft Actuator Locking Tool**

This locking tool engages the slots in the face of the actuator and bolts to the cylinder head and cover to hold the actuator in position to remove or install the actuator bolt. Similar to EN-50793. Applications: 2013-14 Cadillac ATS, 2014 Cadillac CTS, 2013-14 Chevrolet Malibu, 2014 Chevrolet Impala & Buick Regal 2.0L, 2.5L engines.

ENGINE SERVICE AUTOMOTIVE SPECIALTY TOOLS



6689 Chrysler/Jeep Cam Tool Set

The Chrysler/Jeep cam timing tools are provided to ensure correct cam timing when servicing timing belts, chains, head gaskets, or performing other valve train repairs. These 15 tools are based on OE designs and are offered to service the following applications: Cam positioning is an important procedure. If cam timing is not correct, the engine may still run, but emissions and mileage will be affected. The engine computer may also initiate the "Check Engine" light.

Set Includes:

- 513990** Crankshaft Damper Puller
- 522888** Camshaft Alignment Tools
- 522889** Camshaft Sprocket Holder
- 522890** Timing Chain Tensioner Reset Tool
- 522891** Harmonic Balancer Holding Ring
- 522892** Timing Chain Wedge
- 522893** Timing Chain Wedge
- 522894** Camshaft Wrench
- 522896** Idler Shaft Remover
- 522897** Tensioner Lock Pin
- 522898** Camshaft Holding Pins
- 522899** Timing Belt Tensioner
- 522900A** Timing Belt Tensioner Tool
- 522901** Timing Belt Wrench
- 522902** Secondary Timing Chain Holder



7222 Injector Tube Remover/Installer

- Removes injector tubes for service and re-installs.
- Fits GM 6.6L Duramax Diesel, 2001 to present.
- Similar to J-45910.



7223 Glow Plug Bore Reamer

- Reams glow plug bores for proper replacement of glow plugs.
- Fits GM 6.6L Duramax Diesel, 2001 to present.
- Similar to EN-51249.



6075 Chrysler Crankshaft Damper Remover/Installer Kit

3-jaw puller is used with the insert to remove the crankshaft damper whenever timing belt, water pump, or front cover service is required. The tool kit includes a damper installing tool with bearing.

- Services Chrysler-built 2.0L, 2.4L, 2.5L, 3.3L and 3.5L engines.
- 1995–2010 3.3L and 3.5L V6 used in Chrysler New Yorker and Concorde, Dodge Intrepid, and Eagle Vision; 1995–newer 2.0L, 2.4L 4-cyl., and 2.5L V6 used in Cirrus, Stratus, and Breeze; 1995–newer 2.0L 4-cyl. used in Neon.



Similar to Miller
No. 6642

7999 Chrysler Camshaft Alignment Tool Set

These special brackets are necessary to ensure exact alignment of the camshaft sprockets during timing belt installation on all 1993–2010 vehicles with a 3.5L OHC engine.



6495 Chrysler Harmonic Balancer Holding Tool

- Designed as a holding ring with three pins to fit into the openings on a harmonic balancer.
- Use with a 1/2" ratchet or breaker bar to hold the harmonic balancer in place when turning the bolt that holds the balancer to the crankshaft. Also use to hold the balancer when removing it from the engine.
- Works on 1990–2010 3.3L V6 vans; 1994–2011 3.8L V6; 1993–1997 3.3L and 3.5L V6 cars; 1998–newer 2.7L, 3.2L, and 3.5L V6 cars.



Similar to Miller
No. C-3053

6293 Distributor Bushing Installer/Reamer

- Used to install the distributor drive shaft lower bushing into the engine block. Then use this same tool to ream the new bushing so the distributor drive shaft correctly fits into the bushing.
- Works on Chrysler, Dodge, and Plymouth 3.9L V6, 5.2L & 5.9L V8 vehicles with distributors.
- Compatible with OEM and aftermarket distributor drive bushings.



6667 Harmonic Balancer Puller

Designed for removing damper pulleys in tight engine compartments, without removing the radiator. Use on the following:

- GM 2000 Generation III 4.8L, 5.3L, 5.7L 6.0L, and 8.1L V8s. Also works on Cadillac 4.5, 4.6, and 4.9L V8s beginning in 1988. Chevrolet trucks 2003–later 4.2L I6, 2004–current 3.5L I5 & 2005–current 2.8L I4.
- Chrysler engines from 1990–later, including 2.0L, 2.4L-cyl; plus 2.5L, 2.7L, 3.3L, 3.5L, and 3.8L V6s.
- Ford 1995–later V8 engines with 3 spoke pressed on damper.
- Mitsubishi Eclipse 1995–1999 2.0L DOHC non-turbo.
- Kit contains the 3-jaw puller, four lengths of forcing rods, and a forcing screw with a 3/8" square drive for ratchet use, and a 3/4" hex for wrench or socket use.

Replacement rods:

- 537757-4** 5/16" x 4"
- 537757-5** 5/16" x 5-13/32"
- 537757-6** 5/16" x 6-1/2"
- 537757-7** 5/16" x 7.13/32"



6284 Harmonic Balancer Puller Set

- Includes No. 6667 puller, which removes the harmonic balancer from the crankshaft; and No. 6495 holding tool, which holds the harmonic balancer when tightening or loosening the crankshaft bolt, or removing the balancer.



Similar to Miller
MD-998767

7997 Chrysler Timing Belt Wrench

Correctly adjusts the timing belt tension on 1991–1994 3.0L DOHC Dodge Stealth, 1992–1994 Eagle Summit, 1992–1994 Dodge Colt, and 1984–1991 2.0L Dodge Colt. For use with a 1/4" drive ratchet.



4731A

Honda/Acura Dampner Holding Tool

- Holds dampner for removal/installation of the crank bolt on Honda/Acura engines.
- 4" offset.
- 1/2" square drive can be used with ratchet or breaker bar.
- 50mm hex with large center hole.
- Will fit around accessories eliminating additional part removal.
- Proper fit for applications and allows use of impact tool to remove bolt.

Works on:

Honda – Accord, Civic, CRV, Del Sol, Element, Fit, Insight, Odyssey, Pilot, Prelude, Ridgeline, S2000. Acura – CL, Integra, Legend, MDX, RL, RSX, TL, TSX.



7447

Cover Alignment Tool

- Aligns front and rear timing chain/crank seal cover.
- Fits GM 4.8L, 5.3L, 5.7L, 6.0L engines, 1996-Present.
- Similar to J-41476.



7481

Supply Tube Removal Tool

- Removes high pressure fuel supply tube.
- Fits Ford 6.0L diesel engines, 2003-2010.
- Similar to 303-1164.



6742

Crankshaft Seal Installer

Installs front crankshaft seal on 2012-2013 Chevrolet Sonic, 2012 Aveo, 2011-2012 Cruze, 2011-2012 Volt. Similar to KM-960.



4732

Honda/Acura Crankshaft and Harmonic Balancer Holder

- Allows the crankshaft pulley and/or harmonic balancer bolt to break loose.
- Includes tool necessary to properly counter the rotation of the crankshaft pulley/harmonic balancer during removal and reinstallation of crank bolt.
- Secures the pulley in place not allowing it to rotate during removal and reinstallation of crank bolt.



7219

Oil Pressure Adapter

- Allows for engine oil pressure to be measured.
- Installs in place of oil filter providing ports to attach oil pressure tester.
- Dual port for bottom or side tester connection.
- Installs with 11/16" (17mm) hex drive socket.
- Fits GM 4.8L, 5.3L, 5.7L, 6.0L engines, 1996-Present.
- Similar to J-42907.



6613

Variable Pin Spanner Wrench

- Universal design fits many different types of pulleys having slots or holes, including camshaft pulleys and crankshaft pulleys.
- Wrench is adjustable from 1-1/4 inch to 5 inches; works with a 1/2 inch ratchet or breaker bar.

Set Includes:

526908-1	3.5 mm pin	526908-5	6 mm pin
526908-2	4 mm pin	526908-6	7 mm pin
526908-3	4.5 mm pin	526908-7	10 mm pin
526908-4	5 mm pin	526908-8	Handle



5940

BMW Head Bolt Socket

- Socket is designed to fit in the cylinder head on M42 and M50 engines to remove and install cylinder head bolts.
- Spring loaded detent ball holds bolt in place.
- Works with 1/2 inch ratchet, breaker bar, or torque wrench. Socket size is E12 for external TORX® bolts.



Similar to Toyota No. 09043-50080

6022

Toyota Head Bolt Socket

- Specially designed socket is needed to tighten or loosen head bolts on Toyota Paseo vehicles with 3S-GE and 3S-FE engines.
- 8 mm socket features a 12-point, 1/2 inch drive socket.



Mirror Finish

6985

Mercedes-Benz and BMW Fan Clutch Service Kit

- Mercedes-Benz fan clutch holding wrench holds the water pump pulley to allow release of the fan.
- BMW Fan clutch holding wrench holds the water pump pulley in place while loosening the radiator fan. Works on BMW M10, M20, M30, & other late model vehicles. (Holes at 38 mm & 44.5 mm.)
- Mercedes-Benz fan clutch wrench removes the thermo-viscous radiator fans found on Mercedes-Benz vehicles. Works on M-B engines: M111, OM604, OM605, and OM606 (C & E Class; 36 mm opening).
- Mercedes-Benz fan clutch wrench is used to remove or install the fan clutch assembly. Slim shaft handle lets you easily work in tight spaces. Works on M-B engines: M103, M104, M119, and M120 (65 mm opening).
- BMW fan clutch wrench is used to remove and install the thermo-viscous fan on BMWs and Fords (32 mm opening).
- Mercedes-Benz Fan Clutch Holding Tool is used to remove / replace thermo-viscous fan coupling with the radiator in place.
- Universal fan belt adjustment wrench services Mercedes-Benz, Nissan Quest, and Mercury Villager radiator fans and pulley belts. It also can be used for loosening the A/C idler pulley tensioner lock nuts for A/C belt adjustment or replacement. Also contains 2.5 mm, 8 mm, and 10 mm Allen keys.

ENGINE SERVICE AUTOMOTIVE SPECIALTY TOOLS



7196 Crank & Cam Seal Service Kit

- Removes and installs camshaft and crankshaft seals on cars, trucks, vans and SUVs without damage.
- Includes a puller coupled with specialized puller legs that hook the seal for quick and easy removal.
- The interchangeable seal install adapters are designed for use with the cam or crank bolt. Kit services seal sizes of 21.5mm to 64mm.



6678 Cam Gear Holder, 2 pack

- The holders clamp between the engine block or head and the back of the gear to lock it in place.
- Use on single, dual, or quad cam engines to hold valve timing during belt replacement.
- Excellent for diesel injection pump belt replacement.
- The cam gear holders universal design are quick and easy to install.



6679 Cam Gear Clamp & Holder Set

- The holders clamp between the engine block or head and the back of the gear to lock it in place. The cam gear clamp is used between two adjacent gears to lock them together and eliminate movement.
- Use on single, dual, or quad cam engines to hold valve timing during belt replacement.
- Excellent for diesel injection pump belt replacement.



7790 Flange-Type Puller Set (Grade 5)

- Versatile puller capable of removing a wide variety of components having tapped pulling holes, including harmonic balancers, gears, crankshaft pulleys, etc.
- Capable of handling 2- or 3-way bolt pulling applications.
- Works on many cars, pickups, SUVs, and small engines.
- Carries the OTC Lifetime Warranty® against defects in workmanship and material.

Contents of set:

- Puller flange: adapts to bolt circle dia. of 1-1/2" to 4-5/8".
- Forcing screw: 5-5/8" lg., 5/8-18 thread.
- Shaft protector: 1-3/16" dia. x 3/4" thick.
- Three each of the following flat washers: 1/4"; 5/16"; 3/8".
- Three each of the following bolt sizes:

1/4"-28 x 3" lg.	3/8"-16 x 3" lg.
5/16"-24 x 3" lg.	3/8"-16 x 4-1/2" lg.
5/16"-18 x 3-1/2" lg.	M8 x 1.25 x 45 mm lg.
5/16"-18 x 6" lg.	M8 x 1.25 x 65 mm lg.
3/8"-24 x 1-1/2" lg.	M8 x 1.25 x 90 mm lg.
3/8"-16 x 2" lg.	M10 x 1.5 x 35 mm lg.



6930 Flange-Type Puller Combination

- Heavy-duty flange puller features a live center forcing screw. Includes two live center forcing screw tips and two sets of commonly used automotive bolts. Puller will work on bolt circles from 1-1/2" to 4-1/4". Three cap screws, 3/8-24 x 3" long, and three cap screws, 3/8-16 x 3" long.



7793 Master Bolt Grip Set (Grade 8)

- Multi-Purpose applications such as steering wheels, flywheels, harmonic balancers, pulleys and gears with tapped holes.
- Includes special stepped bolts for 1990-2005 GM 3300-3800 V6 crankshaft pulleys.

Contents of set:

- 4-way slotted puller yoke and 2 lengths of hardened "live-center" forcing screws - a set of 3 interchangeable forcing screw tips is included to optimize pressure and prevent "walking".
- Blow molded case to prevent spilling and each bolt size is molded into the storage compartment.
- Three each of the following bolt sizes:

M8 x 1.25 x 90mm	3/8-24 UNF x 1.5"
M8 x 1.25 x 45mm	3/8-16 UNC x 2"
1/4-28 UNF x 3"	3/8-16 UNC x 3"
M8 x 1.25 x 65mm	3/8-16 UNC x 4.5"
5/16-24 UNF x 3"	M10 x 1.5 x 35mm
5/16-18 UNC x 3.5"	
- Special Stepped Bolts - 1990 & Newer



525 Flange-Type Puller Combination

- Two specialty pullers in one box. You get a flange-type puller for removal of harmonic balancers, timing gears, and other parts with two or three tapped holes. You also get a steering wheel, pulley, and flywheel puller. 525 includes: flange-type puller and steering wheel puller with four sets of cap screws.



6505

Master Harmonic Balancer Installer

- 13 special adapters make this a complete master harmonic balancer installer set for most car and light truck applications.
- The heavy-duty 7/8" diameter forcing screw has internal threads to fit the threaded adapters.
- Plastic storage tray keeps set components organized for easy selection.



4531

Harmonic Balancer Puller/Installer Set

- For easy removal and installation of most harmonic balancers and drive pulleys which are press-fitted onto the crank-shaft.
- A bearing-centered circular 2/3-way puller flange handles 2-1/2" – 4-1/4" bolt circles. An assortment of metric and fractional bolts and adapters provide wide pulling coverage.
- A heavy-duty, 3/4" dia. forcing screw is internally threaded to fit the eight adapters to install harmonic balancers. Adapter sizes included: M16 x 2.0, M14 x 1.5, M12 x 1.5, 1/2"-20, 7/16"-20, 3/4"-16, 5/8"-18, and 9/16"-18.
- A blow-molded plastic storage case keeps set contents organized and protected from loss.



7654A

Serpentine Belt Installation Tool

- Durable tool provides extra control and reach during serpentine belt installation.
- Works equally well on V-belts and timing belts.
- Three-pin design for immediate push/pull capacity.
- Handle gives technician twisting control to install belts in confined, hard-to-reach areas.



4645

Serpentine Belt Tool

- Fits tensioner pulleys with 13 mm–16 mm, 18 mm hex or 3/8" and 1/2" square drives.
- For hard to access tensioners; there are 13 mm and 15 mm 12-point wrenches built into the handle.
- 13 mm, 14 mm and 15 mm crows foot wrenches also included.



7471A

Cummins Engine Barring Tool

- Need to manually rotate an engine? This tool makes the job easy. Just insert the tool into the flywheel housing until it engages the ring gear, then attach a 1/2" square drive ratchet or breaker bar and turn. The tool's load-bearing collar provides friction-free operation while rotating the tool in the housing.
- Works on Cummins B and C series diesel engines and 5.9L liter diesels used in Dodge pickups.



7161

Cummins Engine Turning Tool

- This tool makes easy work of manually rotating a Cummins 855 cubic inch engine. It's essential hardware when you're bringing pistons to top dead center to adjust injector timing.



7425

Stretch Belt Service Set

- The Stretch Belt Service Set includes an install tool along with a removal tool. Both tools are placed on a pulley which is turned to slip-on or slip-off stretch fit belts without damage.



7424

Belt Holding Tool

- Keeps belt from falling off of a pulley during belt installation.
- Universal design to fit most pulley styles and sizes.
- Super strong magnet to hold the belt firmly on the pulley.
- Multiple holders can be used for belt applications that fit around many pulleys.
- Durable plastic housing with magnet for steel/iron pulley applications.



CLUTCH, PULLEY AND FLYWHEEL SERVICE



**7419
Timing Tensioner Locking Pin Set**

- This pin set is used to lock timing belt or chain tensioners once they have been compressed, required during the service procedure.
- Once the belt or chain service is complete, the pin is simply pulled out to return the tensioner to functional.
- 6 pin set with clip to cover most all applications.



**6673
Universal Belt Tension Gauge**

- Belt tension gauges are used to check drive belt tension on drive belts to ensure maximum belt and bearing life.
- Scale reads 30–180 lbs.



**4652
Adjustable Fan Clutch Holding Tool**

- Adjustable jaws fit various water pump pulley bolt patterns.
- Jaws adjust from 1/2" to 8-5/16" opening.
- Jaws lock in place to securely hold water pump bolts.
- Long handle offers leverage for extra torque.



**4475
Grooved Pulley Strap Wrench**

- Use to hold a grooved pulley when servicing alternators, water pumps, power steering pumps, etc. Also may be used to rotate the camshaft or crankshaft for engine service.
- Holds tighter than a standard strap wrench.



**7403
Steering Wheel, Pulley, and Flywheel Puller**

- Here's a puller that works in a variety of applications. It pulls steering wheels on most late model cars. It also works as a regular 2/3-way puller to remove pulleys and small engine flywheels. Cap screws included (pairs): 3/8-16 x 3-1/2 in.; 5/16-18 x 3-1/2 in.; 5/16-24 x 3-1/2 in.; M8-1.25 x 90 mm; and 5/16-18 x 4 in. (SIR).
- Works on domestic cars with or without collapsible steering columns.



**4754
Universal Pulley Holder**

- Universal design fits many different size pulleys having slots or holes, such as camshaft pulleys or crankshaft pulleys.
- Wrench is adjustable from 1-1/2" to 8-5/8"; four different size step pins are interchangeable.
- Long handle enables technician to easily hold the pulley when tightening or loosening retaining bolts.



**6617
Alternator Pulley Service Kit**

- Overrunning alternator pulley and overrunning alternator decoupler pulley are designed to extend belt life and belt tensioner life. They also make for quieter and smoother accessory drive operation and reduce vibrations in the passenger compartment.
- These tools hold the alternator shaft still so the pulley can be removed or installed.
- A great time saving tool for the technician and the ability to provide a cost saving service for the vehicle owner.

Kit contains:

- | | |
|-------------------------|----------------------------------|
| Decoupler tool assembly | 28 mm / 21 mm hex cap nut driver |
| 17 mm hex drive | 28 mm / 18 mm hex cap nut driver |
| 17 mm Allen wrench | 22 mm hex cap nut driver |
| 110 mm socket extension | |



4603
Frost Plug Remover/Installer Set

- Designed to remove and install frost plugs used in liquid-cooled gas and diesel engines found in cars, trucks, SUVs, agricultural equipment, and construction equipment.
- Simply use a hammer with the driver and appropriate disc to install frost plugs ranging from 1" to 2-3/8" in diameter.

Set contains:

- 4603-1** Installer Handle (18" lg.)
- 4603-2** Frost Plug Remover
- 4603-3** Frost Plug Disc Set (7 ea., plus 1 retaining nut)



4604
Frost Plug Installer Set

- Designed to install frost plugs in liquid-cooled gas and diesel engines found in automobiles, trucks, SUVs, agricultural equipment, and construction equipment.
- Simply use an air hammer with the driver and appropriate disc to install frost plugs ranging from 1" to 2-1/16" in diameter.
- Adapter sizes; 1.24"OD x 0.87" step, 1.48"OD x 1.30" step, 1.81"OD x 1.55" step.

Set contains:

- 4604-1** Driver (14" lg.)
- 4604-2** Frost Plug Disc Set (3 qty.).



4839
Adjustable Piston Ring Expander Pliers

These simple pliers include tips designed to capture the ends of piston rings to hold and expand them securely while installing onto pistons.

4838
Piston Ring Compressor Set, 6 Piece

This 6 ring set covers 2 7/8" thru 4 3/8" piston diameters. The ring compressor pliers feature a ratcheting lock to hold the handles in position for easy piston installation.



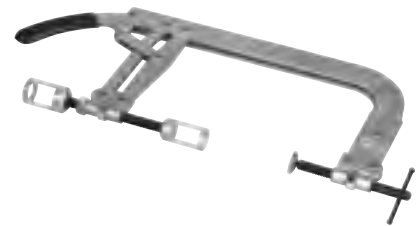
4842
Heavy Duty Valve Spring Compressor

Used to compress valve springs for removal or installation. The heavy duty C-frame has a 9" opening and a 5" throat. Kit includes 16mm, 19mm, 23mm, 25mm, and 30mm valve spring retainer adapters.



4572
Valve Spring Compressor

- Designed to compress valve springs on overhead valve engines.
- Includes two valve spring adapters, which fit valve spring retainers up to 1" (25 mm) and 1-3/16" (30 mm).
- Unique, direct action compressor lever gives better visibility of valve spring retainers located in difficult access areas.
- Jaw opening of 1-3/8" to 5-5/8" (35 mm to 142 mm); throat clearance of 5-7/8" (150 mm).



4840
Piston Ring Compressor Set with Ring Expander

This complete set includes 12 chrome plated compressor sleeves covering 1 3/8" thru 4 3/8" diameter piston applications. Both the ring compressor and ring expander pliers feature a ratcheting lock to hold the handles in position for easy piston and ring installation. Complete with a metal carry case.



ENGINE SERVICE AUTOMOTIVE SPECIALTY TOOLS



4573
Universal Overhead Valve Spring Compressor

- Permits removal and installation of valve springs without removing the cylinder head on many cars and light trucks. Durable steel construction.
- Spring loaded offset jaws easily grip and compress valve springs.



6589
Electronic Ignition Spark Tester

- Check for spark on gasoline engines used in import and domestic cars and trucks, plus small engines.



Similar to Ford 303-567

7928
Ford Valve Spring Compressor Tool

- Compresses valve springs for quicker, easier camshaft, valve seal, valve spring, or retainer service—because you don't have to remove the head from the engine first! It's an OEM-approved tool that you use with a 3/8" ratchet or breaker bar. Works on: 1991–2004 Ford vehicles with 4.6L, two-valve, V8 engines; 4.6 4V, 5.4 V8 and 6.8 V10.



5603
Compression Tester - Deep Well Connector

- Use with OTC compression testers or other compression testers.
- Solid steel 8" length shaft.
- Upper t-wing grip for ease of installation and removal.
- Popular 14 mm thread for both flat and tapered seat plugs.
- Corrosion resistant nickel plated finish.



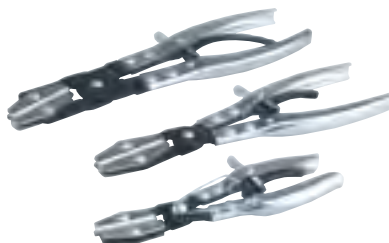
6005A
Glow Plug Remover

- Set includes 10 mm and 12 mm split nuts, three spacers (3/16", 1/4", and 5/16"), plastic storage/organizer case and instructions. The 10 mm split nut will work on Ford 6.9L and 7.3L diesels; GM 6.2L, and 6.5L diesels; and various diesels in import vehicles. The 12 mm split nut works on various diesels in import vehicles, plus many agricultural and construction diesel applications.



4550
Scraper Set

- Scrapers feature polished, heat-treated, stiff, stainless steel blades. Handles are ergonomic two-component plastic and feature a non-slip grip and steel bolstered end.
- Packaged in a storage tray. Includes: 1-1/4" straight blade, 1-1/4" bent blade, and 2" straight blade.



4510
Hose Pinch Off Pliers Set, 3 Piece

- Shuts off flow through vacuum lines, fuel lines, coolant lines, etc.
- Cocking ratchet mechanism holds pivoting jaws tightly in place. Heavy-duty swivel jaws pivot to assure parallel pinching.



4522
Vacuum Hose and Fuel Line Removal Tool

- Designed to remove vacuum hose or fuel lines (3/16" to 1/2") from fittings or tubing.
- Simply place the black jaw on the fitting or tubing – the jaw will grip the material. Then use the silver jaw to push the vacuum hose or fuel line off the fitting or tube.



5606
Compression Tester Kit

Designed for complete compression testing on gasoline engines, including domestic, imports, motorcycles, marine, and small engines. Unique problem solving features for today's limited space engine compartments.

Features and benefits:

- Corrosion resistant nickel plated finish.
- Adapters work on both flat and tapered seat plugs.
- Extra long 25" flex hose gauge assembly with quick coupler, allows easy viewing out of cluttered engine compartment.
- 2-1/2" gauge features chrome bezel and rugged protective outer boot.
- Dual scale gauge reads 0-300 psi and 0-2100 kPa.
- 12" flex-14 mm standard reach.
- 12" flex-14 mm long reach.
- 10 mm, 12 mm, and 18 mm thread adapters.
- Rugged blow molded hard case with removable lid.
- Repair parts kit.



5605
Deluxe Compression Tester Kit

Complete with standard and specialty adapters, this deluxe kit offers a complete package for compression testing on gasoline engines. Kit includes the deep well connector used on recessed plug well style heads and the Ford engine adapter using 16 mm thread plug.

Features and benefits:

- Corrosion resistant nickel plated finish.
- Adapters work on both flat and tapered seat plugs.
- Extra long 25" flex hose gauge assembly with quick coupler, allows easy viewing out of cluttered engine compartment.
- 2-1/2" gauge features chrome bezel and rugged protective outer boot.
- Dual scale gauge reads 0-300 psi and 0-2100 kPa.
- 8" deep well 14 mm connector.
- 5" flex Ford 16mm adapter.
- 12" flex-14 mm standard reach.
- 12" flex-14 mm long reach.
- 10 mm, 12mm, and 18 mm thread adapters.
- Rugged blow molded hard case with removable lid .
- Repair parts kit.



5609
Cylinder Leakage Tester Kit

Quickly diagnose internal engine problems such as bad rings, valves and leaking head gaskets. Kit come complete with adapters for most applications.

Features and benefits:

- Dual 2-1/2" gauges feature chrome bezel and rugged protective outer boot.
- Scales read 0-100 psi and 0-700 kPa.
- Pressure regulated manifold includes quick couplers.
- Long flex 24" 14 mm hose.
- 10 mm, 12 mm and 18 mm thread adapters.
- Blow molded hard case with removable lid.
- Detailed instruction chart.



5610
Transmission/Engine Oil Pressure Kit

This professional kit can be used for domestic and import applications. High and low pressure gauges make this kit useful for both transmission and engine work. Kit comes complete with adapter for most applications. Designed to be used for both static and on road testing.

Features and benefits:

- Large 3-1/2" gauges feature a chrome bezel and rugged protective outer boot.
- Low pressure gauge reads 0-100 psi and 0-700 kPa.
- High pressure gauge reads 0-400 psi and 0-2800 kPa.
- Both gauges include rear hook to allow gauge to be hung conveniently out of the way.
- Gauges and hose assembly incorporate quick couplers for easy disconnect.
- Kit includes 13 adapters and a detailed instruction manual.
- Blow molded hard case with removable lid.



**5613
Vacuum/Pressure Gauge Kit**

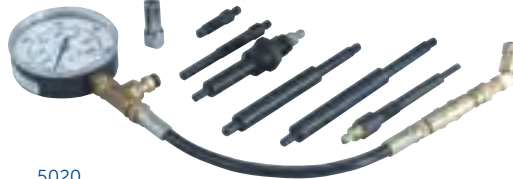
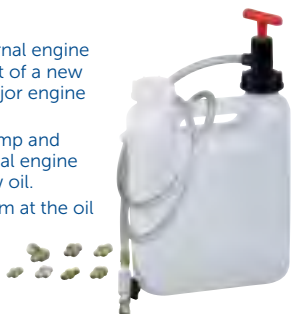
Ideal for testing vacuum lines and components. Accurately tests low-pressure fuel systems. Quickly diagnose internal engine problems such as bad rings, valves and leaking head gaskets. Kit comes complete with adapter for most applications. Pin point hard to find problems such as cracked lines, PCV, fuel pump, fuel filters and more.

Features and benefits:

- Large 3-1/2" gauge features a chrome bezel and rugged protective outer boot.
- Dual purpose gauge reads vacuum and pressure.
- Dual scale gauge reads 0-30 in. Hg vac and 0-70 cm Hg, also reads 0-15 psi and 0-100 kPa.
- Built in rear hook allows gauge to be hung at eye level.
- Adapters for most applications.
- Blow molded hard case with removable lid.
- Detailed instruction chart.

**6492
Engine Preluber Kit**

- Ensures oil is present to internal engine components on the first start of a new or rebuilt engine, or after major engine work is performed.
- Required to prime the oil pump and fill the oil galleries and internal engine components with clean, new oil.
- Connects to engine oil system at the oil pressure sensor on a variety of domestic and import engines.
- Oil pressure sensor adapters included.



5020
Similar to Ford 303-D091
(D93T-6000-A)



5021
Similar to Ford 303-D092
(D93T-6000-B)

Diesel Compression Tester with Adapters

This easy-to-use compression tester is designed for light- and medium-duty diesel engines equipped with glow plugs. A dual-reading gauge, featuring a push-button release valve, measures compression to 1000 PSI and 7000 kPa. The hose end has quick disconnect fittings. The tester comes with glow plug and nozzle adapters in a handy storage case.

Tester services these engines:

- Cummins B and C
- Navistar DT466/DT360
- Ford/Navistar 6.9L & 7.3L
- Detroit 6.2L & 6.5L
- Hino diesel and Mitsubishi Fuso truck engines

5020	Diesel compression tester with adapters.
5021	Universal diesel engine compression gauge.
304802	Replacement gauge.
Replacement Adapters (available separately)	
47484	Hino diesel truck engines with 12 mm x 1.25 thread
217791	Cummins B 3.9L 4 cyl. & 5.9L 6 cyl. '89-'98
308472	Mitsubishi Fuso truck 4D & 6D engines with 10 mm x 1.25 thread
310810	Cummins C 8.3L 6 cyl. '88-'96
310832	Ford/Navistar 6.9L & 7.3L, Detroit 6.2L & 6.5L with 10 mm x 1.0 thread
310840	Navistar DT466/DT360



**4491
Mechanic's Stethoscope**

- Quick and accurate way to locate vehicle noise.
- Spring diaphragm on end of hose amplifies noise.
- Includes two hose ends: long rod helps pinpoint noises in hard-to-access areas; short adapter helps locate noise in a broader area of the vehicle.



6982DEX

3-Piece Double Edge Screw Extractors

Damaged and frozen bolts can ruin a technicians ability to make rate. Now broken bolts and screws can be easily removed with the 6982DEX 3Pc Double Edge Extractor Set from OTC.

These industrial quality extractors are manufactured from high strength steel and feature a tapered flute for safe and secure engagement in the bore hole and a unique hex shank design to prevent rounded corners. The 6982DEX from OTC covers screw sizes from #10/M5 to 1/2"/M12. Pre-drill bore hole with 1/8", 3/16" or 1/4" drill bits (not included). Drive extractor into bore hole for secure engagement. Can be turned in clockwise and counter-clockwise directions for both right and left handed threads.

Be prepared for broken bolts and screws - make sure you have the 6982DEX 3-Piece Double Edge Screw Extractor Set from OTC within arms reach!

6982DEX-1 No. 1 Dual Edge Screw Extractor (#10 - 1/4")

6982DEX-2 No. 2 Dual Edge Screw Extractor (5/16" - 3/8")

6982DEX-3 No. 3 Dual Edge Screw Extractor (7/16" - 1/2")



6982DGS

Drilling Guide System

Removing a broken stud can be a tricky, time consuming undertaking. Pro's know boring a well centered hole is key to using extractors effectively. OTC now offers a solution to assist you with drilling a perfectly centered hole! The 6982DGS from OTC allows you to anchor off a good stud to perfectly center a drilling alignment guide over a broken one. Place the slot of the rail guide over any good hole with appropriate size bushing and loosely secure with good stud. Slide/pivot opening in rail guide over broken stud and insert alignment guide for drilling. Tighten stud to hold alignment and begin drilling.

The OTC 6982DGS comes with 4 alignment guides for "progressive drilling". To cover most applications we also provide 4 bushings in 6mm, 7mm, 8mm, and 10mm sizes. The OTC 6982DGS is another great quality tool you'll want in your tool box. Lifetime Warranty. Made in USA.

6982DGS-1 4-Pc Bushing Set

6982DGS-2 4-Pc Guide Set

6982DGS-3 Replacement Rail



6982ACP

Automatic Center Punch

Make a center punch mark without using a hammer! The 6982ACP Automatic Center Punch from OTC keeps one hand free to help you place this tool right in the cross hairs to accurately mark the spot. Creates a wide profile mark- ideal to keep drill bits from wandering. Rotate the knurled portion to adjust the striking force (60N to 130N).

The OTC 6982ACP Automatic Center Punch helps the accuracy and professional result of your project . Use to mark for precision drilling for tap setting or general boring. This industrial quality tool is made from machine steel and is nickel plated. Hand guard makes for a comfortable use - further ensuring accuracy. Also may be used as an emergency window breaking tool. Lifetime warranty.

ENGINE / EXHAUST SERVICE AUTOMOTIVE SPECIALTY TOOLS



4509 Straight-Blade Hose Cutter

- Cuts rubber hoses ranging from 1/4" to 1-1/2".
- Simply place hose in tool and squeeze handle to cut.
- Replacement steel cutter blade No. 4509-1 is available.

4509-1 Replacement hose cutter blade.



4411 Ratcheting Hose & PVC Cutter (Standard)

- Cuts hose and PVC up to 1-3/8" dia.
- Features metal frame and ergonomic handles for high leverage.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



4412 Ratcheting Hose & PVC Cutter (Heavy Duty)

- Cuts hose and PVC up to 1-3/4" dia.
- Features metal frame and rubber padded ergonomic handles for high leverage and comfort.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



7215 Exhaust Back Pressure Gauge

Quickly read back pressure to determine the amount of restriction in an exhaust system. This gauge accurately measures through the oxygen sensor hole. Its large dial clearly shows pressure from 0–8 psi. The system has a stainless steel braided tube to withstand high-heat conditions.

- Includes a universal adapter for vehicles with thermactor systems.
- Works on domestic & imported vehicles.



6500 Flexihead O2 Sensor Wrench

- Flexible head design assists in the removal of stubborn O2 sensors that are 7/8" in diameter, a common size to most vehicles.
- Features allow extensions or wrenches to apply force in tight areas, even on seized components.
- Pivots to allow more angles of placement.



7807 Heated Oxygen Sensor Socket

We put a slot in the side of this wrench to accommodate connectors on heated oxygen sensors, which usually won't fit in standard sensor wrenches. The extubborn sensors without rounding them off.

- Features 1/2" double square drive, 7/8" hex.



7189 Oxygen Sensor Socket

- Designed to easily remove an oxygen sensor.
- Heat-treated cast steel.
- 7/8" hex, 1/2" square drive (double square for easy access).

Similar to Ford No. T79P-9472-A



6931 Oxygen Sensor Socket

- Works on all domestic and imported vehicles with oxygen sensors.
- Slot in socket's side allows wire clearance.
- Outside rib provides added strength, yet does not restrict access to sensors.
- 1/2" square drive, 1" male hex drive on top, 7/8" six-point opening, 3-7/8" long



7677 Exhaust Hanger Pliers

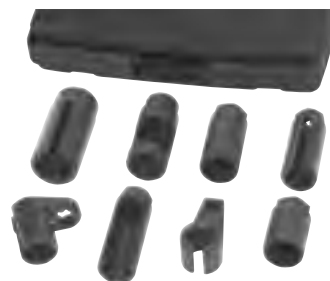
Many cars and trucks have rubber blocks supporting their exhaust system hanger brackets. These pliers will enable you to quickly and easily remove those push-through brackets from their hangers. These pliers feature a two-position slip joint for use on many sizes of hanger blocks.



4673 7-Piece Sensor Socket Set

Includes:

- 4673-1** 29 mm Vacuum Switch and O2 Socket, 1/2" drive
- 4673-2** 7/8" Vacuum Switch and O2 Socket (wide slot), 3/8" drive
- 4673-3** 27 mm Thermal Sensor Switch, 1/2" drive
- 4673-4** 7/8" Vacuum Switch and O2 Socket (narrow slot), 3/8" drive
- 4673-5** 1-1/16" & 1" Oil Pressure Sending Unit Socket, 3/8" drive
- 4673-6** 7/8" O2 Sensor Socket, offset 1/2" drive
- 4673-7** 7/8" O2 Sensor Socket (low profile), offset 3/8" drive.



4437 8-Piece Sensor Socket Set

Includes:

- 4673-1** 29 mm Vacuum Switch and O2 Socket, 1/2" drive
- 4673-2** 7/8" Vacuum Switch and O2 Socket (wide slot), 3/8" drive
- 4673-3** 27 mm Thermal Sensor Switch, 1/2" drive
- 4673-4** 7/8" Vacuum Switch and O2 Socket (narrow slot), 3/8" drive
- 4673-5** 1-1/16" & 1" Oil Pressure Sending Unit Socket, 3/8" drive
- 4673-6** 7/8" O2 Sensor Socket, offset 1/2" drive
- 4673-7** 7/8" O2 Sensor Socket (low profile), offset 3/8" drive.
- 4437-8** 1-1/16" and 1" Oil Pressure Socket (short access), 3/8" drive

FUEL SERVICE AUTOMOTIVE SPECIALTY TOOLS



**HELP ENGINES RUN
BETTER, EXPAND SERVICE
OPPORTUNITIES**

7448A Canister-type Fuel Injector Cleaner

The 7448A is used exactly the same way as our original product was designed. Disconnect the vehicle fuel pump, adapt the 7448A to the vehicle's fuel rail. Add a chemical cleaner like OTC7000A.

Connect to shop air supply and set pressure – open the ball valve and start vehicle. When engine stalls, the cleaning process is complete.

With the addition of a quick connect fitting, the hose is now removable improving storage options – and we include a "blow out" fitting to allow your shops air supply to remove residual cleaners from the line – improving the overall life of the product.

The 7448A now includes our Fuel Injection Application Manual – showing OE fuel pressure specs, fuel pump disconnect points return line information and the adapter reference to OTC pressure adapter kits (6550PRO)! Covers vehicles from 1997 through 2013 model years.

Tool No.	Description
581340	Hose (1/8" NPTF x 6' long) with connector
213299	Air regulator
313575	Gauge 0-100 psi
517145	Gauge cover



6550PRO Pro Master Fuel Injection Service Kit

Covers 100% of vehicles sold in North America market '97-'13.

Perform fuel pressure testing, diagnose weak fuel pumps or restricted filters, test for fuel flow and perform leak-down tests. Use to clean injectors and intake systems. Kit includes:

- 0 – 100 PSI Fuel Pressure Gauge.
- 47 of the popular OTC fuel injection adapters, each equipped with a quick-connect Schrader valve.
- '97 – '13 Fuel Injection Service Application Manual.
- Replacement seal kit also included.











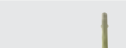












6550 Master Fuel Injection Kit

Test fuel injection systems on most GMs, including GM TBI, Ford, Chrysler, and Jeep vehicles. Also works on imports, including CIS and CISE fuel systems.

- 0–100 PSI fuel pressure gauge.
- 35 of the popular OTC fuel injection adapters, each equipped with a quick-connect Schrader valve.
- '97 – '13 Fuel Injection Service Application Manual.
- Replacement seal kit also included.

CONTENTS OF SETS: ● 6550PRO ■ 6550 (also sold individually)

	518483	Hi-Pressure Gauge 3-1/2", 0-100 psi (0-7 BAR) with quick disconnect, protective gauge boot, and hanger			518482	14 mm x 1.5 External O-ring Plug			518496	M16 x 1.5 External & Internal Swivel Adapter
	518530	Gauge Hose Assembly with Relief Valve			518487	16 mm x 1.5 In-Line Adapter (GM TBI)			549598	M14 x 1.5 Inverted Flare Adapter
	518356	CIS/TBI Hose Assembly with Shutoff Valve			518499	Ford Spring Lock Coupling Adapter			549596	M12 x 1.0 Honda Pulse Damper Adapter
	518477	Seal Kit			518490	M6 x 1.0 External O-ring Adapter			549597	Fuel Pressure Test Adapter, Studded Rail Style (ø.625/16 mm)
	518480	Double Ended Hose Adapter; 5/16", 3/8"			518491	M8 x 1.0 External Banjo Adapter			567840	1/4" T-Fitting Hair Pin Adapter (Honda)
	518478	Single End Hose Adapter; 1/4", 5/16", 3/8"			518492	M10 x 1.0 External Banjo Adapter			549578	Schrader Fitting, 7/16"-20 Internal 90 Degree Elbow
	518495	Schrader Fitting, .308x32 thread (Ford EFI) Ford MPI Adapter			518493	M12 x 1.5 External Banjo Adapter			549579	Schrader Fitting, .308x32 Internal 90 Degree Elbow (Ford)
	518542	Schrader Fitting, 7/16"-20 thread (Chrysler, Jeep & GM)			518494	M12 x 1.25 External Banjo Adapter			528770	Fuel Pressure Test Adapter (ø.430/11 mm)
	518476	5/16" T-Fitting Hair Pin Adapter (Ford)			518501	M14 x 1.50 External Banjo Adapter			528771	Fuel Pressure Test Adapter (ø.580/15 mm)
	518527	3/8" T-Fitting Hair Pin Adapter (Chrysler, Jeep, & GM)			518485	M8 x 1.0 Internal O-ring Adapter (CIS)			528772	Fuel Pressure Test Adapter (ø.625/16 mm)
	518534	5/8"-18 External Flare with Schrader Adapter			518536	M8 x 1.0 External O-ring Adapter (CIS)			528767	M8 x 1.0 External Double Banjo EFI Pressure Test Adapter
	518535	5/8"-18 Internal Flare with Schrader Adapter			518537	M8 x 1.0 Internal long Fitting			528768	M12 x 1.25 External Double Banjo EFI Pressure Test Adapter
	518481	16mm x 1.5 External O-ring Adapter			518488	M8 x 1.0 External O-ring Adapter (CIS) (Long)			528769	M8 Internal Banjo Fitting
	518472	16mm x 1.5 Internal O-ring Adapter			518484	M10 X 1.0 Internal O-ring Adapter (CIS)			528766	M12 Internal Banjo Fitting
	518473	14mm x 1.5 External O-ring Adapter			518489	M10 x 1.0 External O-ring Adapter (CIS)			7666	Decarbonizing Adapter
	518474	14 mm x 1.5 Internal O-ring Adapter			518486	M12 x 1.5 Internal Swivel Adapter (CIS)				
					518498	M14 x 1.5 External & Internal Swivel Adapter				
					518497	1/4" BSPT External & Internal Swivel Adapter				

FUEL SERVICE AUTOMOTIVE SPECIALTY TOOLS



4480 Basic Fuel Injection Service Kit

- Performs running, residual, rail and flow rate pressure tests.
- Kit includes adapters, hoses and fittings to test fuel injection systems.
- Kit includes two popular adapters for import vehicles as well as the GM TBI adapter.
- Professional dual scale gauge reads 0-100 PSI and 0-700 kPa with relief valve, fuel discharge hose and rubber boot.
- Packaged in blow molded carrying case.



7649A Fuel Injector Cleaning Kit

Clogged fuel injectors cause sluggish engine performance, poor fuel economy, and a rough idle. You can easily correct such problems with this injector cleaning kit. It works on a wide range of engines, both domestic and imported. Using our 7000A-1 Pro Inject-R Kleen fluid, you can effectively clean injectors, restore their spray patterns, and prevent recurring deposits. The kit also enables you to do low- and high-pressure fuel system tests. It will also work with your shop's pressurized air supply for more powerful cleaning without expensive propellants.

- Removes carbon from intake and combustion systems when used with fitting No. 7666.
- Includes canister, gauge, hose, fittings, operating instructions.
- 1997 – 2013 Fuel Injection Service Application Manual.



Tool No.	Description
581340	Hose (1/8" NPTF x 6' long) with connector
213299	Air regulator
313575	Gauge 0-100 psi
517145	Gauge cover
518499	Spring lock coupling adapter
518495	EFI quick-disconnect fitting (.307-32 internal; Ford)

Tool No.	Description
518480	Pressure adapter TBI (5/16" and 3/8")
549578	Quick-disconnect 90° elbow fitting (7/16"-20 internal)
528769	Banjo fitting (M8 internal banjo)
314651	Banjo fitting (M10 internal banjo)
518499	Banjo fitting (M12 internal banjo)
47955	Fuel injector cleaner (canister)
7666	Decarbonizing Adapter

6550MAN-13
Pro Fuel Injection Application Manual

Over 200 pages of valuable fuel system service information for professional technicians. English, Spanish and French translations for:

- Safety Precautions.
 - Fuel System Identification.
 - Adapter & Tool Identification.
- General Operation instructions PLUS 1997 to 2013 Make/Model/Year Data points for:
- Fuel Pressure specifications.
 - Fuel Pump Disabling Location and Procedure.
 - OTC adapter reference.
 - Adapter "break-in" location.



7000A-1



7000A

7000A
Pro Inject-R Klean Fluid

Clean fuel injectors mean cleaner running, more efficient engines – and lower emissions. This fluid restores injectors' original spray pattern, helps prevent recurring problems, and reduces intake and port deposits.

- No mixing; use right from the can.
- Pro Inject-R Klean fluid. Case of 12 16-oz. cans.

7000A-1
Pro Inject-R Klean Fluid

- Single can.



4493
Angle-Tip Relay Pliers

- Designed to remove and install relays, which are usually located in confined, hard-to-reach areas.
- Specially coated tips offer a solid grip on the relay.



3054E

3050E
3054E
Noid Lite/IAC Test Kit

Noid Lites are a proven test device to quickly determine if the electrical signal is present at the fuel injector.

- Just plug in and turn over the engine; flashing noid indicates good signal.
- Expanded set of eight Noid Lites cover: GM PFI, Ford TBI, Geo TBI, Bosch PFI, GM TBI, GM SCPI, and now new applications of Bosch 2 and Multec 2.
- Kit comes in molded plastic case and includes a harness extension that allows for convenient remote viewing from the driver's seat.

Tool No.	Description	3050E	3054E
7187	GM TBI Noid Lite	•	•
7188	Bosch PFI Noid Lite	•	•
7601	Ford TBI Noid Lite	•	•
6023	GM Multec 2 Noid Lite	•	•
7602	GM PFI Noid Lite	•	•
7608	Geo TBI Noid Lite	•	•
7828	GM SCPI Noid Lite	•	•
6266	Bosch 2 Noid Lite	•	•
6260	Fiber optic Noid Lite extension	•	•
3052S	'82 and newer GM TBI/PFI IAC tester with square 4-pin connector		•
3053S	'87 and newer Model 700 TBI/PFI with flat 4-pin connector.		•

FUEL SERVICE AUTOMOTIVE SPECIALTY TOOLS



7211 Gauge and Hose Assembly

This gauge is designed to work with any of our fittings for testing fuel injection systems. It features a sturdy 3-1/2" dial that reads 0-100 psi. It also has a built-in (100-150 psi) retard to prevent excess pressure damage. The assembly's disconnect fitting has a check valve to lessen chance of fuel spray.

- Includes 6-ft. bleed hose and 30" pressure hose.
- Bleed valve eliminates air from injection system and can be used to reduce pressure when disconnecting hoses
- Bleed valve also allows gauge assembly to be used to check fuel pump volume.

306905 Optional pressure hose, 70" long.

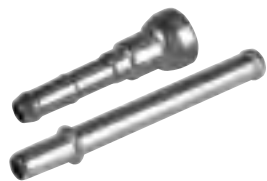


5630 Fuel Pressure Tester Kit

Quickly and easily locate any malfunctioning fuel system component, including fuel filters, pressure regulators, fuel lines, and fuel pumps without removing it from the vehicle.

Features and benefits:

- Large, easy-to-read 0-100 psi scale, 0-700 kPa.
- Solid brass fittings.
- Pressure relief valve for safe, clean testing.



7629 GM Fuel Line Fitting Set (3/8")

- Fits GM vehicles with 3/8" fuel lines.
- Will work on low or high pressure TBI systems.
- Quick, easy, safe. Eliminates makeshift connections that can damage plastic fuel lines or the special connector.
- Use when checking fuel pressure or when cleaning injectors.



7628 GM Fuel Line Fitting Set (5/16")

- Fits GM vehicles with 5/16" fuel lines.
- Will work on low or high pressure TBI systems.
- Quick, easy, safe. Eliminates makeshift connections that can damage plastic fuel lines or the special connector.
- Use when checking fuel pressure or when cleaning injectors.



5613 Vacuum/Pressure Gauge Kit

- Ideal for testing vacuum lines and components. Accurately tests low-pressure fuel systems. Quickly diagnose internal engine problems such as bad rings, valves and leaking head gaskets. Kit comes complete with adapter for most applications. Pin point hard to find problems such as cracked lines.
- Large 3-1/2" gauge features a chrome bezel and rugged protective outer boot.
- Dual purpose gauge reads vacuum and pressure.
- Dual scale gauge reads 0-30 in. Hg vac and 0-70 cm Hg, also reads 0-15 psi and 0-100 kPa.



6703 Line Fluid Stopper Kit

Stop messy fluid leaks and prevent contamination during service.

- Kit seals all types of rubber and steel line found on fuel, brakes, AC, power steering and transmission system.
- Includes two banjo style fitting stoppers, two steel line stoppers, six line plugs, a line disconnect tool, and a long reach line pinch-off tool for hard-to-reach hoses.

6703-1 Banjo Line Fluid Stoppers, 2 pk.

6703-2 Steel Line Fluid Stoppers, 2 pk.

6703-3 Line Plug Fluid Stoppers, 6 pk.

7631 Fuel return line plug (5/16")



7433 Fuel return line plug (3/8")



7342 Quick coupler adapter



528776 Ford EFI adapter



528773 O-ring and washer set for European



528774 O-ring and washer set for Asian



FULL-COVERAGE DISCONNECT TOOL SET



6508

Full-Coverage Disconnect Tool Set

If you're working on Chrysler, Ford, or General Motors vehicles, this set can make your job easier. The tools are designed for heater hoses, transmission oil coolers, air conditioning and fuel lines. They're approved by vehicle manufacturers and will not damage the fittings being disconnected. Tool Nos. 518092, 518896, 518897, 518898, 518899, 518900, and 518901 are spring-loaded in the closed position to deflect any spray that occurs when lines are disconnected.

FULL-COVERAGE DISCONNECT TOOL SET

440384 GM hydraulic clutch line disconnect tool



518583 Fuel line disconnect tool. (Red, 3/8")



519067 5/16" Fuel line disconnect tool



7937 GM transmission oil cooler line



518584 Fuel line disconnect tool. (Black, 1/4")



519068 3/8" Fuel line disconnect tool



519151 Quick disconnect tool



501153 Toyota A/C tool



518896 Fuel line disconnect tool. (Yellow, 3/8")



519152 Oil cooler line disconnect tool



519153 Clutch coupling tool



511410 3/8" & 5/16" Fuel line disconnect tool



518897 A/C spring lock coupling tool. (Black, 5/8")



519154 Fuel line coupling tool



511413 3/8" & 1/2" Fuel line disconnect tool



518898 A/C spring lock coupling tool. (Blue, 1/2")



519155 Chrysler fuel line disconnect tool



518902 Heater hose disconnect tool



518899 Fuel line disconnect tool. (Green, 1/2")



519156 Ford heater hose disconnect tool



519158 Fuel line disconnect tool set



518900 A/C spring lock coupling tool. (Red, 3/8")



519157 GM heater line quick connect separator



518582 Fuel line disconnect tool. (Gold, 5/16")



518901 A/C spring lock coupling tool. (White, 3/4")



519159 Transmission oil line tool



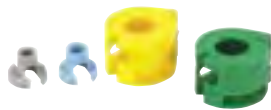
FUEL SERVICE AUTOMOTIVE SPECIALTY TOOLS



6517 Disconnect Tool Set

Designed for A/C lines, fuel lines, and transmission cooler lines.

- Contains 3/8", 1/2", 5/8", and 3/4" spring lock disconnect tools for A/C lines on Ford cars and trucks, Chrysler and Jeep vehicles.
- Contains the 3/8" and 1/2" fuel line disconnect tool for Ford vehicles.
- Contains the 5/16" and 3/8" fuel line disconnect tools for GM and Chrysler vehicles.
- Contains the transmission oil cooler line disconnect tool used on many GM and Ford vehicles.



7363 Fuel Line Disconnect Tool Set

- This set works on quick connect fuel lines on Ford, GM, and Chrysler, and on the spring lock fuel line couplings on Ford's popular PFI system.
- Won't damage fuel line or fuel line connectors.
- Used on 5/16", 3/8", and 1/2" fuel lines.
- Two large tools are spring loaded, durable, and completely enclose the hose, which helps deflect any spray.



7337 Ford Fuel Line Disconnect Tool Set

These tools will easily disconnect the spring lock couplings of fuel lines on Ford's throttle body and port fuel injection systems. The tools are spring-loaded and durable, and they enclose the line to help deflect spray.

- Includes 518896 (3/8" yellow) and 518899 (1/2" green) disconnect tools.



7361 Fuel Line Disconnect Tool Set

These two disconnect tools are designed to fit quick-connect fuel line fasteners. They'll work on Chrysler, Ford, or GM vehicles, and separate fuel lines without damaging the connectors.

- Includes 519067 (5/16" gray) and 519068 (3/8" blue) disconnect tools.

Similar to Ford No. 310-S039 (T90T-9550-S)



6554 Fuel / AC Line Disconnect Kit

- Topside disconnects for AC and Fuel lines.
- Clips, disc, and scissor styles for broad applications.
- Hi-visibility line plugs included.

6603A GM Fuel Line Disconnect Tool

Applications: 2002–newer Tahoe and light-duty trucks with the 5.3L V8 engine.

- This is a required tool to remove the fuel line from the fuel filter.

Similar to Kent-Moore No. J-46363.



519154 Ford Fuel Line Disconnect Tool Set

Here's the best tool for easy, frustration-free fuel line separation. As you put the tool on the fuel line coupling, its fingers depress the retaining collar to release the fuel line, preventing component damage.

- Works on 1990 to 1995 Ford Ranger and Explorer models fitted with 4.0L, 6-cylinder engines.

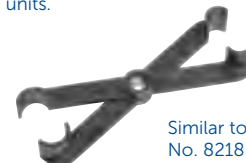


4506 Rubber Line Clamp Set

- Set of two clamps. Used to quickly shut off flow from vacuum, brake, and fuel lines.
- Enables you to clamp and hold hose without damage.

6509 3/8" & 5/16" Fuel Line Disconnect Tool

Special low-profile design works in close quarters on GM, Ford, and Chrysler vehicles where there is limited clearance between the fuel line fittings and fuel filters, fuel rails, or sending units.



Similar to Miller No. 8218

6511 3/8" & 1/2" Fuel Line Disconnect Tool

Special low-profile design works in close quarters on GM, Ford, and Chrysler vehicles where there is limited clearance between the fuel line fittings and fuel filters, fuel rails, or sending units. This tool is designed to access the center port on GM fuel tank sending unit. For 3/8" and 1/2" applications; will also service 2001 thru current 3/4- and 1-ton trucks with the Duramax Diesel engines.



4495 A/C and Fuel Line Disconnect Set

- Used to remove A/C and fuel line quick-disconnect fittings from hard-to-reach areas.
- Six sizes (5/16", 3/8", 1/2", 5/8", 3/4", and 7/8") available to work on many import/domestic vehicles.



**6770
Ford 6.0L Diesel Service Tool Kit**

- 8 of our popular 6.0L Diesel Service Tools in one convenient kit.
- Properly test vehicle systems for leaks and blockage.
- Safely remove and re-install harnesses without damage.
- Fuel Filter Cap Wrench, Glow Plug and Injector Harness Release Tools.
- Oil Line Disconnect Tool, EGR Removal Tool.
- IPR Controller, IPR Socket Tool and Fuel Rail Pressure Adapters.



Similar to Ford No. 303-765 and 303-766

**6763
Ford 6.0L High Pressure Oil Pump Adapters**

Pair of pressure testing adapters for the high pressure oil pump which drives the injectors on the Ford 6.0L.



**6764
Ford 6.0L Diesel IPR Controller**

- When a hard start or no start condition exists, the 6764 allows a technician to close the Injector Pressure Regulator in order to determine if proper injector control pressure is achieved and sustained for the starting process.
- Tactile On/Off switch with LED confirming power to the tool and signal to the Injector Pressure Regulator.
 - Permits a quick initial diagnosis of the pressure regulator when a hard start-no start situation exists.
 - Used in conjunction with any scan tool capable of reading fuel pressure on 6.0L Ford Diesel.



Similar to Ford No. 303-1115

**6766
Ford 6.0L Diesel Terminal Release Tool**

This Terminal Release Tool is required for removal of the vehicle's injector wiring harness without causing damage to the component.



Similar to Ford No. 303-1114

**6768
Ford 6.0L Glow Plug Release Tool**

Safely remove and install the glow plug harness on 2004-2009 Ford 6.0L Diesel engines.



**6760
FORD 6.0L & 7.3L Fuel Filter Wrench**

Designed to remove and install the fuel filters on the Ford 6.0L & 7.3L Power Stroke diesel engines as well as International / Navistar diesel engines.

- Low profile design for easy access in tight areas.
- Reversible Six lug design provides the convenience of two sizes in one tool.
- Light weight low profile for strength and durability.
- 3/8" drive allows the wrench to be used with a variety of drive tools.

**6594
Ford Oil Line Disconnect Tool**

- Use to disconnect the high-pressure oil rail supply line from the fuel rail when removing fuel injectors.
- Works on the 6.0: diesel engine found in 2003-2009 F-250, F-350, F-450, F-550 trucks, Excursions and Ford vans.



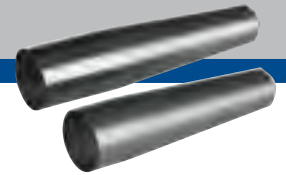
Similar to Ford No. 303-755



Similar to Ford No. 303-769 and 303-1112

**6765
Ford 6.0L Diesel Injector Pressure Regulator Socket**

This Injector Pressure Regulator Socket actually combines two OE tools into one. The socket changed in 2005 – so the socket give you the capability to address either platform.



**6707
Injector Seal Installer Adapters**

Two-piece kit includes tools to properly size the seal and install the seals in the proper groove on the injector tip for leak-free operation. Works to install both seals on the injector tip. Similar to EN-51105.

Applications: 2014-15 Chevrolet Silverado & GMC Sierra V6 and V8, 2015 Chevrolet Suburban/Tahoe, GMC Yukon/XL, 2014 Chevrolet Corvette, 2015 Cadillac Escalade.



**5089
Air Brake Line Release Tools**

Tools used to separate connectors on the P/S system and EGR coolers without damage. Also works on connectors on other liquid and air lines. Each tool has two sizes. 3/8" and 5/8"; 1/2" and 3/4". Similar to J-45666 & J-42971.

Applications: 2003-later Medium Duty trucks.



**6710
Fuel Pump Installation Gauge**

Verifies that the camshaft fuel pump lobe is at base circle position before installing the high pressure fuel pump. Tool indicates the pump may be installed when it is flush to manifold surface. Similar to EN-51092.

Applications: 2014-15 Chevrolet Silverado & GMC Sierra V6 and V8 engines, 2015 Chevrolet Suburban/Tahoe, GMC Yukon/XL, 2014 Chevrolet Corvette, 2015 Cadillac Escalade V8 engines



**6708
Injector Retaining Clip Replacer**

Removes and installs the injector retaining clips without over-spreading to ensure proper retention of the injector to the rail. Similar to EN-51097.

Applications: 2014-15 Chevrolet Silverado & GMC Sierra V6 and V8 engines, 2015 Chevrolet Suburban/Tahoe, GMC Yukon/XL, 2014 Chevrolet Corvette, 2015 Cadillac Escalade V8 engines.

FUEL SERVICE AUTOMOTIVE SPECIALTY TOOLS



6752
Similar to Ford No.
303-D113



6753
Similar to Ford No.
303-D115

Designed for the diesel truck market, this tool will work for just about any injector you need to remove for service or replacement.

6752 Fuel Injector Storage Rack with Protective Cups

Compartment are marked to help keep the injectors organized by the cylinder they came from in order to keep the injector calibration in sync with the vehicles ECM.

6753 Protector Cups.

A set of eight replacement cups for 6752 Fuel injector storage rack.



Similar to Ford
No. 303-491
No. 303-492

6067 Ford Injector Remover / Installer Kit

- Removes and installs injectors without damaging the injector or cylinder head.
- Application: 1994–2003 Ford 3/4- and 1-ton trucks, Super Duty trucks, and vans with 7.3L direct-injected turbocharged (DIT) diesel engine.



7998 Chrysler Fuel Pump Module Spanner Wrench

Removes and installs the fuel pump retaining ring that holds the fuel pump module onto the gas tank. Works on most 1994–2005 Chrysler vehicles, and 1995–2004 Jeep vehicles.

Similar to Miller No. 6856.



6599 Fuel Tank Lock Ring Wrench

Universal design allows tool to fit fuel tank lock rings on Ford, Chrysler, and GM vehicles with gas engines.

- Works on: 2004–newer Ford F-150 trucks; 2004–newer Chrysler / Dodge minivans, PT Cruiser, Dakota, and Durango; 2004–newer Chevy 1/2-ton and 3/4-ton trucks; and 2005–newer Jeep vehicles.
- Fits 7-5/16" diameter lock rings.
- Tool easily removes and installs lock ring on the fuel tank when servicing the fuel pump or fuel sending unit.
- Used with a 1/2" drive ratchet or breaker bar.



6556 Fuel Sender Lock Ring Wrench

Designed for removing the newly-designed 4-1/2" fuel sender lock ring on 2003 - 2011 Cadillac CTS, SRX and STS models. The lock ring requires high torque to loosen and tighten, requiring a specialized tool for service. Standard 3/8" square center drive hole for balance and maximum force available to remove and tighten. Similar to J-45747.

Similar to Ford
303-230



7460 Diesel Fuel Line Wrench

Fuel line nuts are often hard to reach, but this unique 3/8" square-drive tool solve that problem. You can loosen or tighten fuel lines at the fuel injector nozzle or fuel injection pump without damaging the nut.

- Fuel line wrench, 2.6" long. For International 6.9L and 7.3L diesel engines. Fits 5/8" hex nut.



7148 Propane Enrichment Kit

- Ensures a correct idle mixture and compliance with emission standards.
 - Works on domestic or imported vehicles.
 - Uses standard 14-oz. propane cartridge.
- Similar to Ford No. 310-003 (T75L-9600-A).



7667 GM Computer-Controlled Carburetor Tools

These tools are designed to adjust settings on computer controlled Rochester, DualJet, QuadraJet, and VaraJet carburetors on carbureted GM engines.

Applications:

- 2 mm double-D – VaraJet lean authority screw and idle air bleed; and DualJet and QuadraJet mixture control adjusting screw.
- 2.5 mm hex – DualJet and QuadraJet TPS adjusting screw.
- 7 mm double-D – DualJet and QuadraJet main metering jets.
- 10 mm double-D – DualJet and QuadraJet mixture control solenoid-rich screw.



7454 Fuel Injector Nozzle Puller

- Pulls fuel injection nozzles on Ford 6.9L/7.3L and Navistar DT466/9L diesel engines.
- Slide hammer action gives an even, straight pull on the nozzle for fast, easy removal.
- Puller nut screws onto injector nozzle inlet port.



Similar to Miller No. 8318

6069

Cummins Diesel Fuel Injector Remover Kit

Kit contains a fuel injector connector tube remover and fuel injector puller. The fuel injector connector tube must be removed before removal of the injector, or both will be damaged.

Application: 1998-1/2-2002 Dodge pickups and vans with 5.9L 24-valve Cummins diesel turbo engine.



5060

Detroit Diesel Injector Socket

Used on GM 6.2L and 6.5L engines. This 30 mm socket ensures proper fit during nozzle removal and installation. The 3/8" square drive and 7/8" hex permit easy access in tight quarters, and prevent damage to nozzle and related components.



5025

OTC DEF Refractometer

SCR & EPA 2010

EPA regulations require all diesel engines manufactured on or after January 1, 2010 to meet lowered NOx emissions standards.

- Most heavy duty engine (Class 7-8 trucks) manufacturers, have chosen to utilize SCR. This includes Detroit Diesel (DD13, DD15, and DD16 models), Cummins (ISX line), PACCAR, and Volvo/Mack.

Application:

The refractometer is a portable, precision, optical instrument used for measuring the Diesel Exhaust Fluid (DEF) concentration. When a liquid sample is placed on the prism, the light passing through it is bent. The more concentrated the liquid, the more the light will bend. The refractometer contains a reticle, or scale, that is enlarged through the eyepiece to measure this light. The values on the scale have been established to evaluate the DEF condition.



6916

Duramax Water Sensor Wrench

- Used to remove and install the water sensor on the fuel filter.
- Works on 2001 and Newer 6.6L Duramax Diesel found in Chevrolet and GMC Trucks and Vans.
- 3/8" square drive hole.



Similar to Kent-Moore J-41089

Similar to Kent-Moore J-41711

6087

GM Injection Pump Wrench Set

- Use to loosen or tighten injection pump retaining bolts whenever pump timing adjustment or pump service is required. Services 1996-1999 GM full-size 2- and 4-wheel drive trucks, vans, and Suburbans with 6.5L diesel engine.
- Two specially bent wrenches are needed, due to the location of the throttle, cruise control, T.V. cable bracket, cooling system crossover pipe and bracket, and the thermostat housing on vans and pickups.
- Wrenches are 15 mm, 12-point, double box-end type.



6914



6915

Davco Diesel Filter Wrenches

- Found on Caterpillar, Cummins, Detroit Diesel, International, Mack, Mercedes-Benz, Volvo and other engines.
- Durable steel construction.
- Precise, laser-cut angles.
- Opens vent cap also.
- Soft, ergonomic handle.

6914

Fits Davco Diesel filter models, 232-233-234.

6915

Fits Davco Fuel filters 382 & 384.



6754

Diesel Fuel Pressure Gauge

- Designed to test fuel pressure on GM Duramax diesel engines.
- Similar to J-44638.



6778

6779

GM Duramax Injector Pullers

- Designed to pull injectors on a GM Duramax 6.6L engines.

6778 2001 - 2004, Similar to J-44639.

6779 2005 - 2011, Similar to J-46594.

FUEL SERVICE AUTOMOTIVE SPECIALTY TOOLS



4510 Hose Pinch Off Pliers Set, 3 Piece

- Shuts off flow through vacuum lines, fuel lines, coolant lines, etc.
- Cocking ratchet mechanism holds pivoting jaws tightly in place. Heavy-duty swivel jaws pivot to assure parallel pinching.



6512 Heavy-Duty Tubing Cutter

- Works on tubing sizes 1/8" to 1-1/8" O.D. (3mm to 29mm).
- Easily cuts copper, brass, aluminum, and steel brake lines.
- Reamer folds onto cutter body for storage.
- Extra cutting wheel stored under reamer.

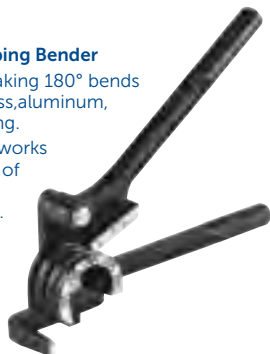


6514 Mini Tubing Cutter

- Works on tubing sizes 1/8" to 5/8" O.D. (3mm to 16mm).
- Easily cuts copper, brass, aluminum, and steel brake lines in hard-to-reach places.
- Extra cutting wheel stored in knob.

6515 3-in-1 180° Tubing Bender

- Capable of making 180° bends in copper, brass, aluminum, and steel tubing.
- Just one tool works on three sizes of tubing: 1/4", 5/16" and 3/8".



4509 Straight-Blade Hose Cutter

- Cuts rubber hoses ranging from 1/4" to 1-1/2".
- Simply place hose in tool and squeeze handle to cut.
- Replacement steel cutter blade No. 4509-1 is available.

4509-1 Replacement hose cutter blade.



4411 Ratcheting Hose & PVC Cutter (Standard)

- Cuts hose and PVC up to 1-3/8" dia.
- Features metal frame and ergonomic handles for high leverage.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



4412 Ratcheting Hose & PVC Cutter (Heavy Duty)

- Cuts hose and PVC up to 1-3/4" dia.
- Features metal frame and rubber padded ergonomic handles for high leverage and comfort.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



4522 Vacuum Hose and Fuel Line Removal Tool

- Designed to remove vacuum hose or fuel lines (3/16" to 1/2") from fittings or tubing.
- Simply place the black jaw on the fitting or tubing – the jaw will grip the material. Then use the silver jaw to push the vacuum hose or fuel line off the fitting or tube.



4723 Ear-type CV Boot Clamp Pliers

- Designed to crimp the ear-type CV boot clamps used on front-wheel drive vehicles.
- May also be used to crimp the type of clamps used on fuel and cooling system hoses.
- Ensures even, precise crimping, and eliminates possibility of damage to the clamp, boot, or hose.



4721 CV Boot Clamp Cutter

- Designed to easily cut the CV boot clamp without damaging the boot.
- Will cut boot clamps up to 10 mm wide and .7 mm thick.
- Handles are spring loaded to the open position to allow easy access to the clamp.



4403 Tubing Bender

- For 3/16" and 1/4" dia. tubing.
- Can bend up to 180+ degrees.
- Quick release handle to easily remove tubing from bender.
- Sturdy steel construction.



4404 Tubing Bender

- For 5/16" and 3/8" dia. tubing.
- Can bend up to 180+ degrees.
- Quick release handle to easily remove tubing from bender.
- Sturdy steel construction.



8260

Hose Removal Set, 6 Piece

- Consisting of six (6) hose removal tools which consists of three (3) 10", soft-handled tools and three (3) 15", soft-handled tools, each with a hard end-cap.
- They are made of heat-treated, chrome steel with assorted tip shapes.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Hose removal tools can also be used on upper and lower radiator hoses, clips, washers, gaskets and other items.
- Packaged in a molded tray which can be placed in tool drawer.



**HOT OIL IN THE PAN,
NOT ON YOUR HAND**



Strong magnetic end.

**5911A
Drain Plug PRO**

- The OTC 5911A magnetically attaches to pre-loosened oil pan drain plugs so you can remove them without dropping and avoid getting burned with hot oil.
- The patented design provides universal application to hex heads. A flexible shaft can be used in virtually any location and still turn the plug as desired.
- An added feature of the 5911A is a removable magnetic end with 1/4" square drive. When removed, the drain plug pro becomes a flexible-shaft 1/4" bit driver.
- Use for sockets and bit holders to get into hard-to-reach places including under dashboards and in engine bays to remove bolts once loosened. Designed for repetitive daily use with a Lifetime warranty.



5961

**5961
Drain Plug PRO Kit**

The original innovation meets customer feedback for the broadest application possible! The 5961 Drain Plug PRO kit from OTC utilizes:

- 1/4" square drive.
- Mounted on a practical flexible cable.
- A variety of attachments.

All these components combine to give you safe removal of automotive drain plugs in any market!

Includes:

- Standard drain plug attachment.
- Low profile drain plug attachment.
- 17mm hex attachment for internally driven drain plugs.
- 5/16" bit driver attachment.
- All are conveniently stored in socket rail fashion.

Protect your hands and arms from hot oil in any application! Save time by preventing a dropped or lost drain plug. Never fish a dropped drain plug from a pan full of hot oil again! And, you can use the 1/4" square drive with any 1/4" drive socket you already own, to start bolts in hard to reach locations. The handy 5/16" bit driver lets you start screws in hard to reach places as well.



5961HD

**5961HD
Heavy-Duty Drain Plug Pro™**

- For Agricultural, Commercial, and Heavy-Duty Vehicle Applications
- Remove fluid drain plugs without touching the plug or hot fluids!
- No touching hot plugs.
- No hot fluids on hands.
- Removable attachment permits use with common 3/8" square drive sockets. Great for starting bolts in hard-to-reach places.
- Attach to pre-loosened drain plugs and rotate to remove.
- Magnetic attachment for internal 1/2" square drive drain plugs.
- Magnetic attachment for large drain plugs.

OIL SERVICE AUTOMOTIVE SPECIALTY TOOLS



6784 Euro/GM Oil Socket Kit

Popular oil filter wrenches for the GM, BMW, Audi, and VW. High quality, 3/8" drive, forged sockets designed to last a lifetime.

3-piece oil socket kit contains:

- 27 mm socket for the Cadillac STS 3.2L V6 and the Mercedes-Benz 1.8L I4.
- 32 mm socket for the 2.2L GM Ecotec and Saabs.
- 36 mm for the BMW M52, M60, M62, M70, & M73 engines; M-B OM604, 605, & 606 engines; VW/Audi VR6 engine.



6786 Oil Filter Cartridge Set

- Fits today's oil filter cartridge style filter applications.
- Short socket style allows for proper clearance when removing the filter element.
- 24mm – Cadillac, BMW. • 27mm – Cadillac, Mercedes, Buick, Saturn, Saab, Smart, VW.
- 29mm – Dodge.
- 32mm – Saturn, Saab, various GM.
- 35/36mm – Ford, Mini Cooper, Mercedes, BMW, VW/Audi, Mack Truck.
- 38mm – small Diesel engine applications.

Similar to Kent-Moore No. J-29142.



6901 GM Oil Filter Socket

Applications: 1999–2002 Olds Intrigue and 2001–2002 Olds Aurora with 3.5L V6 engine.

- This is a required tool to remove the oil filter cap from the oil pan to access the filter cartridge.



6903 Ford / Mazda Oil Filter Socket—75.6 mm, 14 Flutes

- Designed at 75.6 mm to fit 2.3L 4-cylinder engines.
- Works on Ford Fusion, Mercury Milan, Mazda 3, Mazda 5, and Mazda 6.



6904 Hyundai and Kia Oil Filter Socket—88.5 mm, 15 Flutes

- Works on newer Hyundai Sonata and Santa Fe 3.3L V6 engines.
- Works on newer Hyundai Azera, Veracruz and Entourage 3.8L V6 engines.
- Works on newer Kia Amanti, Sedona and Sorrento 3.8L V6 engines.



6905 Oil Filter Socket

- Socket fits between the exhaust manifold and the oil filter for easy removal and installation of the filter.
- Fits 66.5mm oil filters with 14 flutes.



6906 Toyota Oil Filter Socket—65 mm, 14 Flutes

- Avalon
- 2005–'07 V6 3.5L (2GR-FE), 1995–2004 V6 3.0L (1MZ-FE)
- Camry
- 2007 V6 3.5L (2GR-FE), 2004–'06 V6 3.3L (3MZ-FE), 1994–2006 V6 3.0L (1MZ-FE)
- Camry Solara
- 2004–'07 V6 3.3L (3MZ-FE)
- Highlander
- 2004–'07 V6 3.3L (3MZ-FE) — also works on the hybrid version of this engine
- 2001–'03 V6 3.0L (1MZ-FE)
- RAV4
- 2006–'07 V6 3.5L (2GR-FE)
- Sienna
- 2007 V6 3.5L (2GR-FE)
- 2004–'06 V6 3.3L (3MZ-FE)
- 1998–2003 V6 3.0L (1MZ-FE)



6908 Toyota Tundra 4.7L Oil Filter Socket—73 mm, 14 Flutes



4568

Three-Leg Oil Filter Wrench

- Fits filters ranging from 2-1/2" to 5-1/4" (65 mm to 135 mm) in diameter.
- To turn the tool, use a 1/2" ratchet in the ratchet drive or a 13/16" wrench on the nut.
- Knurled legs provide extra gripping power.



4440

Heavy-Duty 3 Leg Filter Wrench Standard

- Self gripping design for true universal fit from 3" to 4-3/4".
- Heavy duty knurled leg design for extra grip and strength.
- 1/2" square drive with 21mm hex option.



4441

Heavy-Duty 3 Leg Filter Wrench Large

- Self gripping design for true universal fit from 4" to 6 1/2".
- Heavy duty knurled leg design for extra grip and strength.
- 1/2" square drive.



4582

Jointed Jaw Standard Filter Pliers

- Jointed jaws rotate 180 degrees providing access where standard pliers do not.
- Slip joint handle design provides a range from 2-1/4" to 4-3/4".
- Jaw teeth and cushioned handles provide maximum gripping power for slip free operation.



4561

4562

Adjustable Oil Filter Pliers Set (4560 and 4561)

- Forged jaws with sure-grip teeth grab the filter for easy removal.
- Slip-joint ratchet and lock mechanism allows a secure grip on filter diameters of 2-1/4" to 7" (57 mm to 178 mm).



4560

4560

Small adjustable oil filter pliers.

- Pliers is 13-1/2" long; fits filters ranging from 2-1/4" to 5" (57 mm to 127 mm) in diameter.

4561

Large adjustable oil filter pliers.

- Pliers is 18" long; fits filters ranging from 3-3/4" to 7" (95 mm to 178 mm) in diameter.



4584

Jointed Jaw Large Filter Pliers

- Jointed jaws rotate 180 degrees providing access where standard pliers do not.
- Slip joint handle design provides a range from 3-1/8" to 7-1/2".
- Jaw teeth and cushioned handles provide maximum gripping power for slip free operation.



4555



4556



4557

Heavy-Duty Oil Filter Wrenches

- Fit filters ranging from 4-1/8" to 5-3/4" (105 mm to 145 mm) in diameter.
- Feature a 1-1/2" wide steel band that can stand up to the high torque needed to remove filters from trucks, tractors, and other heavy equipment.
- Use with a 1/2" drive ratchet or breaker bar.

4555

Heavy-Duty Oil Filter Wrench

- Fits filters ranging from 4-1/8" to 4-3/4" (104 mm to 120 mm) in diameter.

4556

Heavy-Duty Oil Filter Wrench

- Fits filters ranging from 4-1/2" to 5-1/4" (115 mm to 135 mm) in diameter.

4557

Heavy-Duty Oil Filter Wrench

- Fits filters ranging from 5" to 5-3/4" (125 mm to 145 mm) in diameter.

Swivel Handle Oil Filter Wrenches

- Fit filters ranging from 2-1/2" to 4-3/8" (73 mm to 111 mm) in diameter.
- Feature a 1" wide stainless steel band for positive grip on the filter; swivel handle makes it easy to turn filters in hard-to-reach areas.

- 4565 Swivel handle oil filter wrench.** Fits filters ranging from 2-1/2" to 3-1/8" (64 mm to 80 mm) in diameter.

- 4566 Swivel handle oil filter wrench.** Fits filters ranging from 3-1/8" to 3-3/4" (80 mm to 95 mm) in diameter.

- 4567 Swivel handle oil filter wrench.** Fits filters ranging from 3-3/4" to 4-3/8" (95 mm to 111 mm) in diameter.



4565

4566

4567

OIL SERVICE AUTOMOTIVE SPECIALTY TOOLS



Similar to Ford No.
D79L-6731-A

7062A Universal Filter Wrench

This filter wrench will stand up to the job of removing nearly any spin-on filter (up to 6"). Universal design permits use on most vehicles. The tough 2" wide nylon strap holds firmly. In fact, the more leverage applied, the tighter it grips.

- Accommodates a 3/8" drive ratchet.



6914



6915

Davco Diesel Filter Wrenches

- Found on Caterpillar, Cummins, Detroit Diesel, International, Mack, Mercedes-Benz, Volvo and other engines.
- Durable steel construction.
- Precise, laser-cut angles.
- Opens vent cap also.
- Soft, ergonomic handle.

6914

Fits Davco Diesel filter models, 232-233-234.

6915

Fits Davco Fuel filters 382 & 384.



4848 Flexible Spout Funnel

Many oil, transmission, and coolant fluid fill caps are located in hard to access areas. This aluminum 5 1/2" funnel features a removable debris screen in the base flowing to a 25" flexible spout designed to reach these difficult fill locations.



4673 7-Piece Sensor Socket Set

Includes:

4673-1
29 mm Vacuum Switch and O2 Socket, 1/2" drive.

4673-2
7/8" Vacuum Switch and O2 Socket (wide slot), 3/8" drive.

4673-3
27 mm Thermal Sensor Switch, 1/2" drive.

4673-4
7/8" Vacuum Switch and O2 Socket (narrow slot), 3/8" drive.

4673-5
1-1/16" & 1" Oil Pressure Sending Unit Socket, 3/8" drive.

4673-6
7/8" O2 Sensor Socket, offset 1/2" drive.

4673-7
7/8" O2 Sensor Socket (low profile), offset 3/8" drive.



4437 8-Piece Sensor Socket Set

Includes:

4673-1
29 mm Vacuum Switch and O2 Socket, 1/2" drive.

4673-2
7/8" Vacuum Switch and O2 Socket (wide slot), 3/8" drive.

4673-3
27 mm Thermal Sensor Switch, 1/2" drive.

4673-4
7/8" Vacuum Switch and O2 Socket (narrow slot), 3/8" drive.

4673-5
1-1/16" & 1" Oil Pressure Sending Unit Socket, 3/8" drive.

4673-6
7/8" O2 Sensor Socket, offset 1/2" drive.

4673-7
7/8" O2 Sensor Socket (low profile), offset 3/8" drive.

4437-8
1-1/16" and 1" Oil Pressure Socket (short access), 3/8" drive

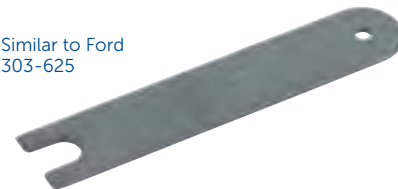
Similar to Ford No.
303-755



6594 Ford Oil Line Disconnect Tool for 6.0 L

- Use to disconnect the high-pressure oil rail supply line from the fuel rail when removing fuel injectors.
- Works on the 6.0: diesel engine found in 2003-2009 F-250, F-350, F-450, F-550 trucks, Excursions and Ford vans.

Similar to Ford
303-625



6595 Ford High Pressure Oil Line Disconnect Tool

- Use to disconnect the high pressure oil line from the cylinder head.
- Works on 1998 - 2003 Ford vans and trucks with 7.3L direct-injected, turbo-charged (DIT) diesel engines.



6703-3

6703-1

6703-2



6703 Line Fluid Stopper Kit

Stop messy fluid leaks and prevent contamination during service.

- Kit seals all types of rubber and steel line found on fuel, brakes, AC, power steering and transmission system.
- Includes two banjo style fitting stoppers, two steel line stoppers, six line plugs, a line disconnect tool, and a long reach line pinch-off tool for hard-to-reach hoses.

6703-1 Banjo Line Fluid Stoppers, 2 pk.

6703-2 Steel Line Fluid Stoppers, 2 pk.

6703-3 Line Plug Fluid Stoppers, 6 pk.



8100



8101

Fluid Evacuation / Brake Bleeding Tools

- Use to bleed brake systems and remove a variety of fluid from vehicles, such as antifreeze, oil, transmission fluid, gear lube, etc.
- Quick connect locking hose adapters and ball-style on/off valve on hose prevent fluid leakage.
- Equipped with a relief valve to prevent over-pressurizing the tank.

8100 Operates by shop air or a hand pump; shipped complete with a brake bleeding hose, fluid evacuation hose, and two suction hoses (6 mm & 7 mm); 10-liter capacity tank.

8101 Operates with shop air; shipped with a brake bleeding hose and fluid evacuation hose; 6-liter capacity tank.



5077A

5097

Transfer Tankers

- Draining oil from a large displacement engine and getting it to your bulk storage container is a snap with OTC's Transfer Tankers.
- Used oil is collected in a reservoir, and then rolls smoothly on 4" free-wheeling casters to your storage location.
- Pump moves five gallons a minute through the 8-foot transfer hose to the a 15-gallon reservoir.
- Handle is removable for easy storage.
- Screen attached to reservoir allows assembly to be stored on its side.
- Can also be used for transferring antifreeze.

5077A **Low profile Transfer Tanker** is only 7-1/2" from floor to top of reservoir. Comes equipped with an electric pump (No. 528093).

5097 **Low profile Transfer Tanker** is only 7-1/2" from floor to top of reservoir. Comes equipped with a pneumatic pump (No. 529966).

1577 Low Profile Fluid Receiver

- Designed for receiving waste fluid during a wide range of repair jobs.
- Fluid capacity: 7.5 gallons.
- Constructed of polyethylene plastic for heavy-duty use—yet, only weighs 13 pounds.
- Low profile, only 5" high, it easily slides under passenger cars.
- Designed with four casters to provide efficient maneuverability.
- Suitable for cooling system repair jobs—can be used for antifreeze.
- Includes splash screen to prevents pillage and splashing.
- Two-year warranty.





1821
10-Ton Capacity, Air-operated Automotive Oil Filter Crusher

- Crushes up to four automotive filters (3-7/8" dia. x 9" high) at one time, in approximately 20 seconds. Engineered and built for dependable operation. Covered by OTC Lifetime Warranty®.
- 100% air operation eliminates electrical connections. Generous size of crushing chamber easily accommodates the largest automotive spin-on filters.
- Includes mounting stand. No wall mounting or time consuming installation required.



1877
25-Ton Capacity Heavy-Duty Oil Filter Crusher

- Handles the big filters (up to 6" dia. and 12-1/2" long) found in trucks, construction equipment, farm implements, etc. May also be used for automotive and light truck filters. It does it all!
- Crushes filters to 1/4 of original size, removing up to 95% of filter's oil capacity. Automatic cycle feature: load the filter, push a button, and walk away.
- Air/hydraulic pump works on standard shop air (requires 9 CFM at 100 psi). Special valving returns ram automatically at the end of each cycle. No electrical connections needed.
- Built-in floor stand (completely assembled). Whole unit requires just 5 square feet of floor space.
- Covered by OTC Lifetime Warranty®.



Shipped assembled

1896
25-Ton Capacity High-Speed Heavy-Duty/Automotive Oil Filter Crusher

- Automotive and heavy-duty filters up to 15-1/4" long and 6" diameter are crushed in approximately 8 to 16 seconds. Filters are reduced to 20% of original size, with 95% of residual oil removed.
- Automatic cycle feature lets you load the filter, push a button, and walk away.
- Powered by 2 hp electric/hydraulic pump, 230 volt, 20 amp, 60 cycle, single phase, 3,450 rpm. Has a 2-gallon reservoir.
- Built-in, heavy-duty floor stand with leveling pads is designed to accept a 30-gallon drum for oil drainage. Comes assembled. Covered by OTC Lifetime Warranty®.



**SEE PAGE 35
FOR OIL FILTER
WRENCHES**

Oil Filter Crusher Comparison Chart

No.	Tonnage	Pump	Crushing Time	% Oil Removed	Filter Size	Stand Dimensions
1821	10-ton	Air	20 Seconds	95%	Chamber: 8" x 8" x 9" H.	18-1/2" W x 24" D x 63-1/2" H
1877	25-ton	Air/Hyd.	80 Seconds	95%	6" Dia. - 12-1/2" Long	18-1/2" W x 30" D x 74-1/2" H
1896	25-ton	Elec./Hyd.	16 Seconds	95%	6" Dia. - 15-1/4" Long	27" W x 30" D x 78" H

Note: Crushing times are approximate; crushing times may vary depending on air pressure available, size of filter, type of filter, etc.



7991
Cooling System Pressure Tester

Now you can pressure test the cooling system on most cars, light commercial trucks, motorcycles, and even marine applications. The tester's universal fit eliminates the need for multiple adapters.

Note: Will not work on Saturn and Kia cars or Jeep with the plastic reservoir.

7991-2 O-ring repair kit

7991-4 Gauge spare parts

7991-3 Pump parts kit

7991-7 Main body repair kit



CAP ADAPTERS NOT REQUIRED

6977
Universal Cooling System Pressure Test Kit

A Cooling System Pressure Test Kit with a truly universal approach to testing vehicle cooling system pressure. The tester adapts to cooling system hoses from 1/4" to 5/8" in diameter. Find a coolant hose connection and insert the adapter to match hose diameter, couple the hand pump with integrated gauge to the adapter and you're ready to test. When finished, relieve system pressure by slowly loosening the cap on the "degas" bottle. Eliminate the search for the right cap adapter and test cooling systems faster.

The hand pump features an easy to read integrated pressure gauge, a padded base to set against vehicle surfaces without scratching and a 36" integrated hose with a quick-coupler mated to the adapters. The hose adapters use durable brass fittings and include a banded spring clamp for easy attachment. A radiator cap adapter with quick connect fitting is included for older vehicles. Every adapter includes a Schrader valve to prevent spray when disconnecting.

This Cooling System Pressure Test Kit covers virtually any make and model that enters your shop and is stored in convenient blow molded case. Covered by OTC's Lifetime Warranty.

Product Features

- Hand Pump with integrated gauge
- Dedicated pressure hose with quick-connect
- Raised gauge to reduce chance of damage if tipped
- Padded base to prevent damage to painted vehicle surfaces
- 4 adapters (1/4", 5/16", 1/2" and 5/8") with Schrader valves to prevent spray
- Includes a cap adapter
- Blow molded storage case



COOLANT / BRAKE SERVICE AUTOMOTIVE SPECIALTY TOOLS



6975 Vacuum/Pressure System Tester

The 6975 Vacuum/Pressure System Tester can immediately diagnose leaks in pressure or vacuum systems. The patented design includes an intuitive rotary dial for quick switching between pressure and vacuum and an ergonomic pistol grip with lever. High-quality hoses with quick-couple fittings make quick work of hose/adaptor changes and are leak-free under pressure or vacuum.

An integrated rear-mounted gauge provides optimal viewing with testing up to 30 PSI pressure and up to 28 in Hg vacuum. It includes hose adapters, rubber adapters and plastic attachments for diagnosing EGR valves, fuel pressure regulators, thermal and electric vacuum switches, turbocharger waste gates, heating and ventilation control valves, central locking systems, MAP sensors and more. Stored in a convenient blow molded case. Covered by OTC's Lifetime warranty.

Includes:

- Quick Dial Diagnostic Pump Tool
- Silicon-like Hoses (3)
- Black Rubber adapters (2)
- Blue Plastic Adapters (8)



6043 Cooling System Power Flush Gun

Perfectly suited for quick and efficient cooling system flushing. Simply attach it to radiator or heater hoses and you're in business. Also usable in washing engines and even shop floors. Two simple connections: one to shop air and one to a typical water faucet. No. 6043 creates a unique vortex air/water blast for powerful cleaning applications.

Note: While normal water pressure will handle the majority of a cooling system flush, short blasts are sometimes needed to loosen some contaminants from within the system.



6976 Cooling System Refilling Gun

The 6976 Cooling System Refilling Gun can eliminate airlocks during cooling system refilling and eliminates the need for system bleeding. Small and large rubber cones suit both passenger and commercial vehicles with no additional adapters needed. Attach the Cooling System Refilling Gun to your shop air supply then insert the nozzle into the cooling system, like the opening on a radiator and establish vacuum. Insert hose into your new coolant reservoir and switch device to vacuum. It will pull air out of the coolant system while new coolant is added.

Avoid wasting time finding a pocket of trapped air that can cause cooling system failures and inaccurate sensor readings. Packaged in a convenient blow molded storage case. Covered by OTC's Lifetime Warranty.

Includes:

- Refilling gun with integrated hose assembly
- Rubber adapter "stepped" for 1/2" to 1-1/2" diameter opening
- Rubber adapter "stepped" for 1" to 2" diameter opening
- Blow Molded Storage Case
- Operating Instructions



8104A Vacuum Brake Bleeder

This one man brake bleeding system allows for fast and efficient vacuum brake bleeding. Universal rubber fitting holds securely on brake bleeder screw. Attach shop air and use the quick release trigger for on-demand vacuum and hands free operation. Compact size and 17 oz. (500ml) capacity.



6978 TestVac Vacuum Test Kit

OTC 6978 Test-Vac Vacuum Test Kit allows fast, efficient testing and monitoring of many vacuum operated components and also allows one man brake bleeding. The new kit can help find vacuum leaks, test fuel, engine and exhaust valves, door locks, and heating/cooling system performance. Included in the kit are the vacuum pump, fluid container, transfer cap, hoses and fittings, packaged in a convenient blow molded storage case and covered by OTC's Lifetime Warranty.

Includes:

- Vacuum pump with integrated vacuum gauge
- Fluid container with transfer cap
- 2 lengths of vacuum hose
- 12 assorted vacuum hose fittings
- 3 brake bleed fittings
- Instruction Manual
- Blow Molded Storage Case

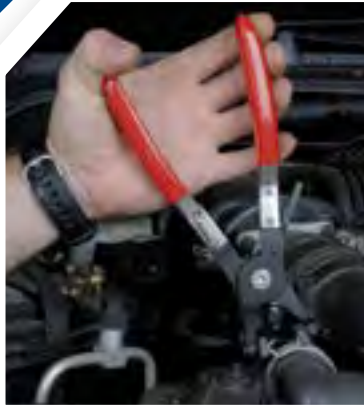


8104A-SET Brake Bleeder with Auto Filler Set

This one man brake bleeding system allows for fast and efficient vacuum brake bleeding. The Vacuum Brake Bleeder has a universal rubber fitting that holds securely on brake bleeder screw. Attach shop air and use the quick release trigger for on-demand vacuum and hands free operation.

Compact size and 17 oz. (500ml) capacity.

The Master Cylinder Auto Filler automatically refills the brake fluid reservoir during brake bleeding. Base plate retaining clip and height adjustment allows fit on all reservoir types. On/Off tap allows installation and storage without drips or spills. 20 oz. (600ml) capacity.



**4502
Hose Clamp Pliers Set (2 piece)**

- Includes a cross-slotted jaw pliers and a wide, flat-band hose clamp pliers. Services most ring-type or flat-band hose clamps.
- The clamps are held open with a ratchet locking mechanism. Jaws swivel to access hose clamps in any position.



**4496
Hose Clamp Pliers Set**

- Contains five different styles of hose clamp pliers, which will service most flat-band and ring-style hose clamps. Also contains a hose removal tool.

Set Contains:

- Straight hose clamp pliers set
- Hose removal tool
- Flat-type hose clamp pliers
- Offset hose clamp pliers
- 45° hose clamp pliers



**4597
Flexible Hose Clamp Pliers with Memory**

- A heavy duty 24" cable flexes to almost any shape and holds it.
- Pliers have locking mechanism to hold clamp in the open position, making removal and installation of clamp easier.
- Allows technician to access the flat type hose clamps located in hard-to-reach areas.



**4523
Offset Hose Clamp Pliers**

- Head is offset from handle to allow access to hard-to-reach clamps.
- Swivel jaws allow pliers to be used on many different flat-band and ring-type hose clamps.



**4723
Ear-type CV Boot Clamp Pliers**

- Designed to crimp the ear-type CV boot clamps used on front-wheel drive vehicles.
- May also be used to crimp the type of clamps used on fuel and cooling system hoses.
- Ensures even, precise crimping, and eliminates possibility of damage to the clamp, boot, or hose.



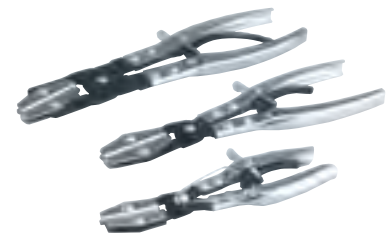
**4525
Flexible Hose Clamp Pliers**

- Heavy-duty, 24" cable flexes to almost any position.
- Pliers have locking mechanism to hold clamp in the open position, making removal and installation of clamp easier.
- Allows technician to access the flat type hose clamps located in hard-to-reach areas.



**4524
45° Hose Clamp Pliers**

- Jaws are bent at a 45° angle and pliers tips swivel to allow easy access to confined areas.
- Ratchet lock mechanism holds jaws open.
- Works on most flat-band hose clamps.



**4510
Hose Pinch Off Pliers Set, 3 Piece**

- Shuts off flow through vacuum lines, fuel lines, coolant lines, etc.
- Cocking ratchet mechanism holds pivoting jaws tightly in place. Heavy-duty swivel jaws pivot to assure parallel pinching.

COOLANT SERVICE AUTOMOTIVE SPECIALTY TOOLS



4509 Straight-Blade Hose Cutter

- Cuts rubber hoses ranging from 1/4" to 1-1/2".
- Simply place hose in tool and squeeze handle to cut.

4509-1 Replacement hose cutter blade.



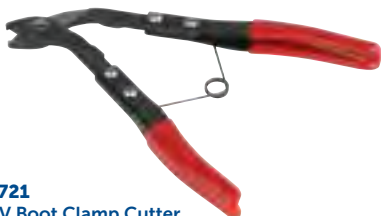
4411 Ratcheting Hose & PVC Cutter (Standard)

- Cuts hose and PVC up to 1-3/8" dia.
- Features metal frame and ergonomic handles for high leverage.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



4412 Ratcheting Hose & PVC Cutter (Heavy Duty)

- Cuts hose and PVC up to 1-3/4" dia.
- Features metal frame and rubber padded ergonomic handles for high leverage and comfort.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



4721 CV Boot Clamp Cutter

- Designed to easily cut the CV boot clamp without damaging the boot.
- Will cut boot clamps up to 10 mm wide and .7 mm thick.
- Handles are spring loaded to the open position to allow easy access to the clamp.



4522 Vacuum Hose and Fuel Line Removal Tool

- Designed to remove vacuum hose or fuel lines (3/16" to 1/2") from fittings or tubing.
- Simply place the black jaw on the fitting or tubing – the jaw will grip the material. Then use the silver jaw to push the vacuum hose or fuel line off the fitting or tube.



4521 Hose Removal Tool

- Unique tip easily fits between hose and fitting to break stubborn hoses loose.
- Large handle provides a good grip on tool during hose removal.
- Works on radiator hoses, heater hoses, transmission lines – any place a rubber hose is clamped to a fitting.



8260 Hose Removal Set, 6 Piece

- Consisting of six (6) hose removal tools which consists of three (3) 10", soft-handled tools and three (3) 15", soft-handled tools, each with a hard end-cap.
- They are made of heat-treated, chrome steel with assorted tip shapes.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Hose removal tools can also be used on upper and lower radiator hoses, clips, washers, gaskets and other items.
- Packaged in a molded tray which can be placed in tool drawer.



Similar to Ford
T85T-18539-AH

519156 Ford and Chrysler Heater Hose Disconnect Tool Set

- Quickly and easily removes heater hose from heater core tube without damaging coupling retainer or hose.
- This set includes the heater hose disconnect tool for 5/8" and 3/4" heater hoses with quick connect couplings at heater core, and an extension handle for easier access.
- For use on 1986-current Aerostar vans and 1991-current full-size vans, 1987 to current Dodge Caravan and Plymouth Voyager vans.



Similar to
Kent-Moore J-43181

6046 GM Heater Line Quick-Connect Release Tool

- Specially designed for separating quick-connect fittings on heater lines of 1999–2006 Chevy and GMC C/K trucks.
- Tool snaps around the hose and simultaneously depresses the locking tabs to disengage the fitting.



Similar to Kent-
Moore J-38723

519157 GM Heater Line Quick Connect Separator

- When you need to get at and release the quick connect fitting that connects the heater hose to the engine block and thermostat housing, this little tool is great for saving time and aggravation.
- Works on 1991-current GM vehicles with 3.1L, 3.4L, and 3800 engines.



2300

Professional Lever Grease Gun

- Heavy Duty Die Cast Aluminum Grease Gun Head.
- Grease Gun Head Fitted with Automatic Air Bleeder.
- Large Diameter Piston for working in cold.
- Built-In variable stroke for greasing fittings with limited access.
- Includes 6" Bent Steel Extension, Easy access 24" High Pressure Hose & 3 Jaw Slim Coupler.
- 10,000 PSI.
- For use with 14 oz. grease cartridge.



2304

Professional Pistol Grease Gun

- Heavy Duty Die Cast Aluminum Grease Gun Head with integrated die cast Fixed Handle.
- Grease Gun Head Fitted with Automatic Air Bleeder.
- Large Diameter Piston for working in cold.
- Built-In variable stroke for greasing fittings with limited access.
- Includes 4" straight steel extension, easy access 24" High Pressure Grease Hose and 3 Jaw Slim Coupler.
- 7500 PSI.
- For use with 14 oz. grease cartridge.



2332

Quick Connect Greasing Accessory Kit

- 7 piece Quick Connect Greasing Accessory Kit
- Includes 1 each of the following Quick Connect Accessories:
 1. Recessed Lube Adapter.
 2. Angle Lube Adapter.
 3. Narrow Needle Nose Adapter.
 4. Seal Off Dispenser.
 5. Right Angled Grease Coupler.
 6. Heavy Duty Hose fitted with Spring Guard and Slim Coupler.
 7. Grease Injector Needle 1.42" Long x 18G.



2310

Air Operated Grease Gun- Continuous Flow

- Heavy Duty Die Cast Aluminum Grease Gun Head.
- Grease Gun Head Fitted with Automatic Air Bleeder.
- Larger Pumping Chamber, honed for rapid operation.
- Includes 6" Bent Steel Extension, Easy Access 24" High Pressure Grease Hose and 3 Jaw Slim Coupler.
- 4800 PSI.
- For use with 14 oz. grease cartridge.



2359

Suction Oil Gun

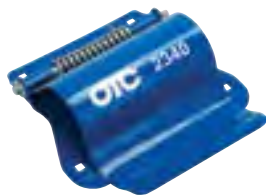
- For use with gear oils to get them both into/out of gear boxes, transfer cases and differentials.
- 16 oz capacity and 14" hose.



2326

24 inch Grease Gun Hose

LUBRICANT & AIR SERVICE AUTOMOTIVE SPECIALTY TOOLS



2340
Heavy Duty Grease Gun Holder

- Great Grease Gun Storage accessory.
- Can be mounted to walls, machinery, or heavy equipment.
- Design to retain your grease gun in high vibration environments.
- Works with all standard 14 oz. Grease Guns and 16 oz. Suction Guns.



2357
Brass Transfer Pump

- Drain oil from crankcase or ATF through dipstick tube – from underhood – not undercar.
- Includes 24" x 1/2" dia discharge hose
- Includes 40" x 1/4" dia suction hose
- Pumps 3.2 oz per stroke.



2352
Lever Action Bucket Pump

- Fits 5 gallon pails.
- Includes 12" Drum cover.
- 3 Position Handle for different fluid viscosity.
- Steel Discharge Spout.
- Supplied with 5' Hose.
- Up to 4.6 oz. / stroke.
- For use with transmission differentials and heavier oils.

SmartTech™ Technician Gloves

- Works with touchscreen technology.
- Washable synthetic leather palm with padding ensures comfort and a secure grip.
- Polyester and Lycra material around fingers offer a durable lightweight cover that stretches for a great fit.
- PVC cushions help protect knuckles from injury due to slippage.
- Comfortable polyester back panels include webbing for improved ventilation.



5801SGLV-L



- 5801SGLV-L** Large
- 5801SGLV-XL** Extra large



2423
Stainless Steel Tip Blow Gun

- OTC 2423 is designed for operating pressure of 50 PSI to 235 PSI and temperature range of 14° to 158°F
- When inlet pressure is 90 PSI, venting design prevents pressure exceeding 30 PSI if tip becomes blocked - conforming to OSHA Std 1-13.1
- When inlet pressure is 100 PSI, the noise level is held below 80 db conforming to OSHA Std 1910-95 (b), quieter than an electric drill
- 4-1/2" Stainless Steel Nozzle and Variable Speed Trigger for full control of amount of air dispensed
- Impact & Weather resistant materials and drop resistant construction
- Brass threaded air inlet

2424
PRO Series Safety Blow Gun (Standard Tip)

- Die Cast Aluminum body is non corroding and made to last in the harshest environments
- Ergonomic body design and dip coated operating lever reduce fatigue
- Exclusive venturi mechanism uses side ports to create higher volume of usable output
- Tamper-Proof design reduces output to safe levels if ports are blocked
- Meets OSHA standards for Safety and Noise

TRANSMISSION SERVICE AUTOMOTIVE SPECIALTY TOOLS



7445 Chrysler Transmission Dipstick

The OTC 7445 is for the Chrysler vehicles that didn't come with factory installed dipsticks. Fits Dodge Sprinter and Chrysler Crossfire transmissions, 2003 to current.



7446 Chrysler Transmission Dipstick

The OTC 7446 is for the Chrysler vehicles that didn't come with factory installed dipsticks. Fits Chrysler, Dodge, Jeep and Volkswagen with NAG1, 42RLE, CV Transmissions, and 62TE Transaxle.



5610 Transmission/Engine Oil Pressure Kit

This professional kit can be used for domestic and import applications. High and low pressure gauges make this kit useful for both transmission and engine work. Kit comes complete with adapter for most applications. Designed to be used for both static and on road testing.

Features and benefits:

- Large 3-1/2" gauges feature a chrome bezel and rugged protective outer boot.
- Low pressure gauge reads 0-100 psi and 0-700 kPa.
- High pressure gauge reads 0-400 psi and 0-2800 kPa.
- Both gauges include rear hook to allow gauge to be hung conveniently out of the way.
- Gauges and hose assembly incorporate quick couplers for easy disconnect.
- Kit includes 13 adapters and a detailed instruction manual.
- Blow molded hard case with removable lid.



6792 Transmission Fluid Fill/Extract Kit with Adapters

Designed for undercar transmission fluid service. The 6-liter sealed reservoir is used with shop air to extract or dispense transmission fluid with a simple control valve. A safety relief valve ensures safe operation. Includes a general universal adapter and storage case with 14 OE-style adapters with easy to read application information. Adapters cover most vehicles. All connections are simply press-on quick connects for ease of use. Pictorial operating instruction decals are on the reservoir - keeping important how to and safety information with the product.

6792-EDB Extraction Dispenser Bottle

- Connect to shop air supply to extract or dispense fluids
- Automatic pressure relief for safe operation
- Switch between Dispensing and Extraction by simple turn of valve
- Easy "Push On" quick connects, and Trigger lock for continuous flow
- Includes universal flexible nozzle

6792-TFA Transmission Fluid Adapters

- 14 piece "OE style" ATF adapters
- Vehicle application reference included
- Convenient storage case



4528 Clutch Alignment Tool Set (17 piece)

- Essential for clutch installation on virtually all cars and light-duty trucks. Aligns clutch plate by using tapered cones and pilot adapters.
- Includes seven fractional pilot adapters, 1", 13/16", 25/32", 3/4", 11/16", 5/8", 19/32" one clutch disc centering adapter, and one alignment shaft.
- Includes five metric pilot adapters, 19mm, 17mm, 16mm, 14mm, 12mm, two clutch disc centering adapters, and one alignment shaft.
- Housed in a blow-molded storage case.

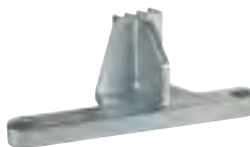
Similar to Ford
308-182 & Chrysler
MLR-6638A



7646A Clutch Coupling Tool

- Disconnects the hydraulic clutch line from the clutch slave cylinder on the following vehicles with manual transmissions and hydraulic clutches: 1988-2012 F-series trucks, Bronco II, Ranger, Explorer, 1989-1997 Ford Thunderbird and Mercury Cougar and 1992-2010 Chrysler PT Cruiser.
- Wedge-shaped design allows easy removal of clutch line without damaging clutch line, coupling, or slave cylinder. No need to pry the coupler apart.

Similar to
J-44643.



7221 Flywheel Holder

- Holds flywheel in a locked position for servicing.
- Fits GM 6.6L Duramax Diesel, 2001 to present.



Similar to Ford
T65L-77515-A

7024 Automatic Transmission Clutch Spring Compressor

- This is a handy, adjustable tool for removing or installing the snap ring on a transmission rear clutch piston. It applies pressure to the clutch drum's retaining washer to compress piston return springs.
- For use on most American cars and light trucks.

6604 Ford Transmission Fluid Fill Adapter

- Use to fill or add fluid to the automatic transmission.
- Works on the 5R55W transmission in Ford trucks.



Similar to Ford
307-437



6714
Input Shaft Seal Installer

Two-function seal installer. One end installs the input shaft seal into the main housing to the proper depth. The opposing end of the installer installs the side extension housing seal to the proper depth. Similar to DT-50840 & J-8092. Applications: 2013-Later Chevrolet Trax and Buick Encore.



6715
Torque Converter Seal Installer

Installs torque converter seals without damage in 1990 - 2011 GM 4T60 and 4T60E automatic transmissions found on most GM front wheel drive vehicles. Similar to J-28540-A. Applications: 1990-2011 GM 4T60 and 4T60E automatic transmissions used on most General Motors front wheel drive vehicles, including from Buick, Chevrolet, Pontiac, Cadillac, Oldsmobile.



6716
Shift Rail Seal Installer

Installs the shift seal on the Tremec TR 3160 manual transmission to the proper depth to ensure optimal seal life. Includes a removable pilot to allow for use both on-vehicle and during unit repair, with the shift shaft in place or removed. Similar to DT-51077. Applications: 2013 and later Cadillac ATS manual transmission, 2016 and later Chevrolet Camaro, 2016 and later Ford Mustang Shelby GT350



6702
Transmission Adapter Plate Bushing Replacer

Replaces the mount bushing on the transmission adapter plate. Adapter has a window for verifying the bushing position during installation, and is deep enough for bushing removal. Similar to DT-50839 & CH-50342. Applications: 2013-Later Chevrolet Trax, Buick Encore



6724
Trans Mainshaft Bearing and Gear Installer

Designed for use on 2014 and later Chevrolet Corvette 7-speed manual transmission. Kit contains tools to install mainshaft cone bearing, mainshaft rear support roller bearing inner race, countershaft rear bearing cone, and 3rd, 4th, 5th, 6th, 7th, and Reverse gears. Includes a tube installer with a supplied threaded rod assembly, a double end threaded adapter, and tube adapters. These tools prevent damage to components and are necessary as the transmission assembly cannot be mounted in a press or hammered into place. Similar to DT-51076 & DT-51076-10.



4508
Professional Style Seal Puller

- Designed to remove oil and grease seals when servicing cars, SUVs, and light trucks without damaging the housing or bearing.
- Hook tips in two sizes and professional handle design allows removal of hard-to-get-at seals by getting under them.
- The tool is 12" long and the hook tip is double-secured (versus competitors' designs), for durability.
- An extra blade is included, and additional replacements (No. 4508-1) may be ordered.

4508-1 Replacement blade for 4508



Similar to Ford T85T-18539-AH

519156
Ford and Chrysler Heater Hose Disconnect Tool Set

- Quickly and easily removes heater hose from heater core tube without damaging coupling retainer or hose.
- This set includes the heater hose disconnect tool for 5/8" and 3/4" heater hoses with quick connect couplings at heater core, and an extension handle for easier access.
- For use on 1986-current Aerostar vans and 1991-current full-size vans, 1987 to current Dodge Caravan and Plymouth Voyager vans.



Similar to Kent-Moore J-38723

519157
GM Heater Line Quick Connect Separator

- When you need to get at and release the quick connect fitting that connects the heater hose to the engine block and thermostat housing, this little tool is great for saving time and aggravation.
- Works on 1991-current GM vehicles with 3.1L, 3.4L, and 3800 engines.



Similar to Kent-Moore J-42371, J-36221

7910
GM Hydraulic Clutch Line Disconnect Tool

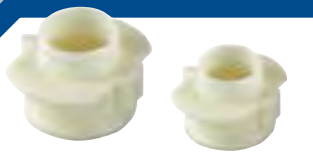
- This is a versatile tool for disconnecting clutch lines when you're working on clutch assemblies or slave and master cylinders. The bent end, intended for NVG3500 and NV4500 manual transmissions, works on 1996 to 2012 full-size 2WD and 4WD trucks, Chevrolet S-10 Blazer, and pickups. The straight end is for 1993 to '94 Chevrolet Lumina sedan, 1995 to 2000 Chevrolet Monte Carlo, 1993 to '99 Buick Regal, 1998 to 2002 Olds Intrique, 1993 to '97 Olds Cutlass Supreme and Pontiac Grand Prix.



7937
GM Transmission Oil Cooler Line Disconnect Tool

- Specially designed to work in tight places. So simple to operate, you can do it with just one hand.
- After insertion into the quick-connect fitting on 1/2" dia. lines, a quarter turn of the tool quickly and easily releases the fitting on the transmission end of the transmission-to-radiator oil cooler line.
- Works on 2WD and 4WD pickups and vans with electronic shift overdrive automatic transmissions: 1991- newer 4L80E transmissions, and 1993- newer 4L60E transmissions.

TRANSMISSION SERVICE AUTOMOTIVE SPECIALTY TOOLS



1/2" is similar to Ford 307-459.

3/8" is similar to Ford 307-441.

6593 Ford Transmission Cooler Line Disconnect Set

- Tool snaps around cooler line and, when pushed into the fitting, releases the fitting. The cooler line can then be removed.
- 3/8" disconnect is used on 2003–newer Ford Explorers with the 5R55W transmission.
- 1/2" disconnect is used on 2003–newer Ford Super Duty trucks with the 4R100 transmission.

Similar to Kent-Moore J-44822



6611 Transmission Line Disconnects

- Used on 2001 to current Chevrolet Corvette with the 4L60E transmission, and 2003 to current Cadillac CTS with the 5L40E transmission.
- 6 per pack.

6579 Transmission Disconnect (2 pack)

- Designed to disconnect transmission lines on Ford Taurus/Explorer 2005 and newer.
- Similar to OE p/n 307-569.



6517 Disconnect Tool Set

Designed for A/C lines, fuel lines, and transmission cooler lines.

- Contains 3/8", 1/2", 5/8", and 3/4" spring lock disconnect tools for A/C lines on Ford cars and trucks, Chrysler and Jeep vehicles.
- Contains the 3/8" and 1/2" fuel line disconnect tool for Ford vehicles.
- Contains the 5/16" and 3/8" fuel line disconnect tools for GM and Chrysler vehicles.
- Contains the transmission oil cooler line disconnect tool used on many GM and Ford vehicles.



519154 Ford Fuel Line Disconnect Tool Set

Here's the best tool for easy, frustration-free fuel line separation. As you put the tool on the fuel line coupling, its fingers depress the retaining collar to release the fuel line, preventing component damage.

- Works on 1990 to 1995 Ford Ranger and Explorer models fitted with 4.0L, 6-cylinder engines.



See page 27 for complete details.

6508 Full-Coverage Disconnect Tool Set

If you're working on Chrysler, Ford, or General Motors vehicles, this set can make your job easier.



6703 Line Fluid Stopper Kit

- Kit seals all types of rubber and steel line found on fuel, brakes, AC, power steering and transmission system.
- Includes two banjo style fitting stoppers, two steel line stoppers, six line plugs, a line disconnect tool, and a long reach line pinch-off tool for hard-to-reach hoses.

6703-1 Banjo Line Fluid Stoppers, 2 pk.

6703-2 Steel Line Fluid Stoppers, 2 pk.

6703-3 Line Plug Fluid Stoppers, 6 pk.

Transmission Line Disconnect Tools

519152 Oil cooler line disconnect tool.

519153 Clutch coupling tool.

519159 Transmission oil line tool

519378 Chrysler/Jeep oil cooler line disconnect tool

6511 3/8" & 1/2" Fuel line disconnect tool



8101

8100

Fluid Evacuation / Brake Bleeding Tools

- Use to bleed brake systems and remove a variety of fluid from vehicles, such as antifreeze, oil, transmission fluid, gear lube, etc.
- Quick connect locking hose adapters and ball-style on/off valve on hose prevent fluid leakage.
- Equipped with a relief valve to prevent over-pressurizing the tank.

8100

Operates by shop air or a hand pump; shipped complete with a brake bleeding hose, fluid evacuation hose, and two suction hoses (6 mm and 7 mm); 10-liter capacity tank.

8101

Operates with shop air; shipped with a brake bleeding hose and fluid evacuation hose; 6-liter capacity tank.



4848 Flexible Spout Funnel

Many oil, transmission, and coolant fluid fill caps are located in hard to access areas. This aluminum 5 1/2" funnel features a removable debris screen in the base flowing to a 25" flexible spout designed to reach these difficult fill locations.

6514 Mini Tubing Cutter

- Works on tubing sizes 1/8" to 5/8" O.D. (3mm to 16mm).
- Easily cuts copper, brass, aluminum, and steel brake lines in hard-to-reach places.
- Extra cutting wheel stored in knob.



6512 Heavy-Duty Tubing Cutter

- Works on tubing sizes 1/8" to 1-1/8" O.D. (3mm to 29mm).
- Easily cuts copper, brass, aluminum, and steel brake lines.
- Reamer folds onto cutter body for storage.
- Extra cutting wheel stored under reamer.





4422 Pilot Bearing Puller

- Use to pull a pilot bearing from the end of the crankshaft.
- A restriction plate catches the bridge and prevents the jaws from spinning when force is engaged.
- The "Tee Handle" design is easy-to-use and eliminates need for other tools.
- Spread covers ranges of 1/2" to 1-1/2".
- Reach has a min/max range of 3/16" to 1".



4420 Pilot Bearing Puller Attachment

- Use to pull a pilot bearing from the end of the crankshaft.
- Interchangeable jaws. One set of jaws covers a spread of 1/2" to 1-1/2". Other set of jaws covers a spread of 3/8" to 1-3/8". Both sets of jaws have a reach of 1".
- Reach has a min/max range of 3/16" to 1".
- Puller attaches to OTC and other slide hammers with 5/8"-18 thread.



4421 Pilot Bearing Puller Attachment

- Removes pilot bearings, thrust washers, and smaller bearings hidden in a shaft or housing.
- Jaws require a minimum of 5/8" opening and can range up to a max of 1-1/2" diameter.
- Min/Max reach is 1/8" to 1".
- Works with both 5/8-18 as well as M18-1.5 threaded hammer shanks.



Fed. Spec.: GGG-W-665b

885 Adjustable Hook Spanner Wrench

Here's a tool that's needed wherever turret adjusting nuts or packing gland nuts are used.

- Capacity is 1-1/2" to 4".
- Handle is 24" long, 11/16" diameter.

Pilot Bearing Pullers

Designed to pull flywheel pilot bearings in close quarters where a slide hammer cannot be used. Operates on many models with engine in chassis.

7318

Pilot bearing puller. Capacity: 1/2" to 1-1/2". I.D. reach: 3/4".

7319

Pilot bearing puller. Capacity: 7/8" to 2". I.D. reach: 1".



Similar to Ford D80L-522-A, 303-D025



522

Large Gear and Pulley Puller

Using this tool, you can easily remove a wide range of gears, pulleys, or other parts that have tapped holes.

- The puller will spread from 2" to 7-3/4". Its block is 8-1/4" wide, and its forcing screw is 3/4" - 16 x 11-5/8" long.
- Accommodates any cap screws up to 1/2" diameter.

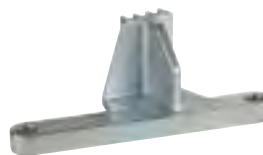


Similar to EN-50792.

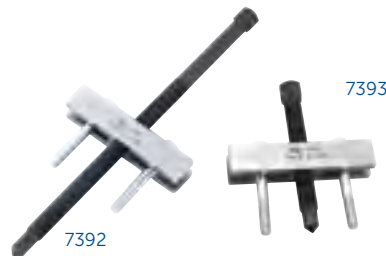
6759

Flywheel Holding Tool

Holds the flywheel in place for servicing the balancer or flywheel bolts. Mounts in place of the starter and engages the flywheel ring gear teeth. Applications: 2013-14 Cadillac ATS, 2014 Cadillac CTS, 2013-14 Chevrolet Malibu, 2014 Chevrolet Impala & Buick Regal 2.0L, 2.5L engines.



Similar to J-44643



Gear and Pulley Pullers

These tools are perfect for removing timing gears, fan pulleys, harmonic balancers, and many other parts having tapped holes.

- Each puller will spread from 1-1/2" to 4-1/4". The puller blocks are 4-7/8" wide, tapped 5/8" - 18 UNF.
- Both include two hex head cap screws, 3/8" - 16 x 3" long.

7392 Puller with 13" long screw.

7393 Puller with 5-1/2" long screw.



7040

Trans Case Holding Fixture

This holding fixture has an adjustable design for adapting to multiple transmission case configurations and other components. Safety handles components up to 250 lbs and offers 360-degree rotation with positive stops at 90-degree increments. Includes 7040-1 fixture and 34607 base. Similar to J-36842.

7040-1 For use with base p/n 34607.

7118

Transmission Adapter Kit

Converts your OTC engine stand into a transmission service stand.

- Kit replaces the adjustable arms of the stand to hold and position the transmission at workbench height for repair.
- The transmission is held with three sides fully exposed for working convenience, and can be rotated a full 360° for complete access to all parts.



7020 Similar to Ford T57L-500-B, 307-003

7020

Bench-Mounted Holding Fixture

Here's a helpful device that enables you to securely hold and rotate small engines, transmissions, and other components while you're working on them.

- This holding fixture will handle pieces weighing up to 250 lbs., and it offers 360° of rotation with positive stops at 90° increments.
- Three sides of the mounted unit remain fully exposed.

34607

Base assembly only.

34607 Similar to Ford D83L-500-B1, 300-D041



7221

Flywheel Holder

- Holds flywheel in a locked position for servicing.
- Fits GM 6.6L Duramax Diesel, 2001 to present.

DRIVE AXLE SERVICE AUTOMOTIVE SPECIALTY TOOLS



4543A Locknut Socket Set – 4WD (6 piece)

- Chrome vanadium steel sockets cover most SUV and light truck applications.
- Sockets have 1/2" square drive, allowing use of a torque wrench, ratchet, or breaker bar.

Contents of set:

4543A-1 Toyota 4-lug locknut socket.
Services high-torque locknuts on Toyota 4WD vehicles having free-wheel (lock out) hubs: 1995–newer Tacoma; 1996–newer T100 and 4Runner.

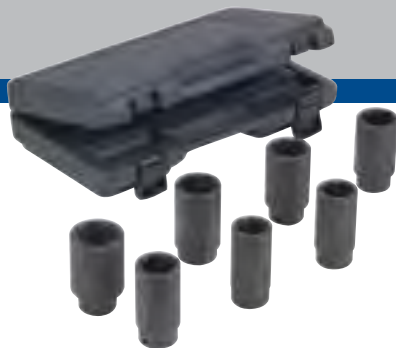
4543A-2 Ford 4-lug locknut socket for high-shear rotating nuts on 1985–newer F-250 and F-350 truck rear axles, and Dana 80 rear axles of Ford Super Duty trucks.

4543A-3 4-lug socket for removing and installing 4-slot front axle locknuts on 1986–newer F-Series 1/2-ton trucks, full-size Bronco with Dana 44 axle, 1984–92 Ford Ranger, and Bronco II with manual hubs. Also, Dodge trucks using Dana 44 axle with automatic hubs.

4543A-4 6-lug socket for removing and installing 4-slot front axle locknuts on 1978–84 Ford F-Series 4WD heavy-duty 3/4- and 1-ton trucks; 1973–81 GM 4WD 3/4- and 1-ton trucks.

4543A-5 4-lug socket for removing and installing 4-slot front axle locknuts on 1993–newer Ford Ranger, Bronco II, and Explorer with manual hubs; 1995–newer F-Series 1/2-, 3/4-, and 1-ton trucks and full-size Bronco with manual hubs; 1959–85 F-Series 1/2- and 3/4-ton trucks and full-size Bronco; 1960–90 GM 1/2-ton trucks and full-size Blazer/Jimmy; 1969–72 International 1/2-ton trucks; 1969–89 Dodge 1/2-ton trucks with manual hubs.

4543A-6 FWD front spindle puller Removes front spindle to access needle bearing, when lubricating and aligning front wheels. 5/8"-18 fine thread permits use with OTC No. 1155 slide hammer. Fits spindle thread sizes 2"-16, 1-5/8"-16 and 38 mm-1.5. Applications: Full-size GM, Ford, Jeep, and International pickups with Dana front axles, plus Ranger and Bronco II.



4547A Axle Nut Socket Set – FWD (7 piece)

- Extra long, 1/2" drive chrome molybdenum sockets for heavy-duty use in removing/installing axle nuts.
- Use with a ratchet, breaker bar, or torque wrench.
- Contained in a blow-molded plastic storage case.

Contents of set:

4547A-29 29 mm FWD axle nut socket.

4547A-30 30 mm FWD axle nut socket.

4547A-32 32 mm FWD axle nut socket.

4547A-34 34 mm FWD axle nut socket.

4547A-35 35 mm FWD axle nut socket.

4547A-36 36 mm FWD axle nut socket.

4547A-38 38 mm FWD axle nut socket.



4542 7-Piece Wheel Bearing Locknut Socket Set

- For use with 1/2" ratchet or breaker bar.

Contents of set:

519097-1 2-3/8" hex locknut socket works on 1984–92 Ford Rangers and Bronco IIs with automatic locking hubs. Similar to Ford 205-040 (T70T-4252-B).

519097-2 2-9/16" rounded hex locknut socket works on 1990–93 Dodge trucks with Dana 60 manual hubs.

519097-3 2-1/2" hex locknut socket fits the hex nut found on rear axles and various front axle applications on light-duty trucks.

519097-4 2-3/4" rounded hex locknut socket works on 3/4-ton and 1-ton Ford F-250 and F-350 trucks with automatic locking hubs. Similar to Ford No. 205-349 (T95T-1197-B).

519097-5 2-1/2" rounded hex locknut socket works on 1995–96 Ford F-150 trucks and full-sized Broncos with automatic locking hubs. Similar to Ford 205-348(T95T-1197-A).

519097-6 2-3/8" rounded hex locknut socket works on 1990–newer Ford Rangers, Bronco IIs, and Explorers with automatic locking hubs.

519097-7 55 mm hex locknut socket designed for use on front wheel adjusting nuts found on Toyota models FJ, LN, and RN.

Similar to Ford 205-039 (T70T-4252-B)

1902 Locknut Socket - Ford Drive 3/4" (6 pt.) 2-3/8" Hex

- This high-grade truck wheel bearing locknut sockets are made of high-strength steel and resist rounding out.
- Services 1984–92 Ford Ranger and Bronco II with automatic hubs; 1993–1997 Ford Ranger, Bronco II, and Explorer with automatic hubs.
- For manual use only, impact wrench voids warranty.

Similar to Ford 205-043 (T70T-4252-W)

Fits special "rounded" hex nut found on Dana axles of some Ford trucks. Depth of locknut sockets is 5".

1928 Locknut Socket - Ford, Dodge Drive 3/4" (6 pt.) 2-9/16" Hex

- This high-grade truck wheel bearing locknut sockets are made of high-strength steel and resist rounding out.
- Services 1990–93 Dodge truck with Dana 60 manual hubs. 3/4" sq. drive.
- For manual use only, impact wrench voids warranty.

Fits special "rounded" hex nut found on Dana axles of some Ford trucks. Depth of locknut sockets is 5".

1936 Locknut Socket - Ford Drive 3/4" (6 pt.) 2-3/8" Hex

- This high-grade truck wheel bearing locknut sockets are made of high-strength steel and resist rounding out.
- Services 1990–newer Ford Ranger, Bronco II, and Explorer with automatic hubs.
- For manual use only, impact wrench voids warranty.

7269 Locknut Socket Ford, GM

- Services 1985–newer Ford F-series 3/4- and 1-ton trucks with Dana 80 rear axle.

1/2" sq. drive.

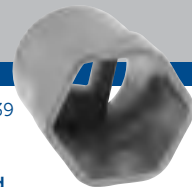
Similar to Ford 205-282 (T88T-4252-A) Kent Moore J-42855

6601 Locknut Socket - Ford

- Services 2003–newer Ford F-250, F-350, and F-450 Super Duty trucks with 10-1/2 inch rear axle.

1/2" sq. drive.

Similar to Ford 205-448

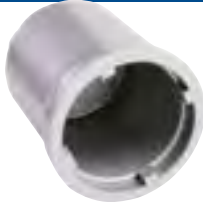


2-3/4"



2-3/4" O.D.

2-1/4"



7157

Locknut Socket Ford, Dodge, GM

- Services 1993–newer Ford Ranger Bronco II and Explorer with manual hubs; 1995–96 Ford F-series 1/2-ton truck and full-size Bronco with manual hubs; 1995–newer Ford F-series 3/4-ton and 1-ton trucks with manual hubs; 1959–85 Ford F-series 1/2- and 3/4-ton trucks and full-size Bronco; 1960–90 GM 1/2-ton truck and full-size Blazer/Jimmy; 1969–89 Dodge 1/2-ton truck with manual hubs; 1969–72 International 1/2-ton truck.
- 1/2" sq. drive.
- Similar to Ford 205-192 (T83T-1197-B)

7158

Locknut Socket Ford, Dodge, GM

- Services 1985-1/2–95 Ford F-series H.D. 3/4- and 1-ton Dana 50 IFS of Dana 60 front axle; 1982–90 GM H.D. 3/4- and 1-ton trucks, 1994–newer Dodge Dana 60 with Cummins.
- 1/2" sq. drive.
- Similar to Ford 205-D065 (D85T-1197-A)



2-1/2"

6006

Locknut Socket - Dodge

- Services 1994–newer Dodge 1/2-ton 4x4 pickups with Dana 44 front axle and Dana 60 axle with vacuum disconnect front axle.
- 1/2" sq. drive.



1-11/16" 43 mm

7612

Locknut Socket Toyota

- 54 mm hex socket fits front wheel bearing adjusting nut of Toyota FJ, LN, and RN. Has 1/2" square drive end, permitting use of a torque wrench.
- 1/2" sq. drive.



2-1/8" 54 mm

7698

Locknut Socket Isuzu, Honda, Jeep

- Services 1988–1995 Isuzu Trooper, Rodeo, Amigo, and pickup; 1989–1995 Honda Passport; Jeep J20 pickups with Dana 60 axle.
- 1/2" sq. drive.



2-1/4"

7795

Locknut Socket Ford

- Services 1995–1996 Ford F-series 1/2-ton trucks and full-size Bronco with automatic hubs.
- 1/2" sq. drive.
- Similar to Ford 205-348 (T95T-1197-A)



2-1/2"

7796

Locknut Socket Ford

- Services 1995–1998 Ford F-series 3/4- and 1-ton trucks with automatic hubs.
- 1/2" sq. drive.
- Similar to Ford 205-349 (T95T-1197-B)



2-3/4"

7941

Locknut Socket Toyota

- Specially designed to fit 4WD lock-out hubs on Toyota's 1995–2002 Tacoma, and 1996–2002 T100 and 4Runner.
- 1/2" sq. drive.
- Similar to Toyota 09318-12010-01.



2.366 center to center on pins

7090A

Locknut Socket Ford, GM

- Services 1978–84 Ford F-series H.D. 3/4- and 1-ton 4WD trucks; 1973–81 GM 3/4- and 1-ton 4WD trucks.
- 1/2" sq. drive.
- Similar to Ford 205-D001 (D78T-1197-A)



2-5/8"



2-3/8"

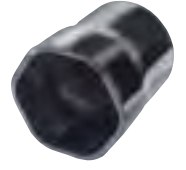
7270A

Locknut Socket Ford, Dodge

- Services 1984–92 Ford Ranger and Bronco II with manual hubs; 1986–95 Ford F-series 1/2-ton truck; full size Bronco with Dana 44 front axle; 1990–93 Dodge trucks with Dana 44 automatic hubs.
- 1/2" sq. drive.
- Similar to Ford 205-244 (T86T-1197-AR)



6612, 6921



6796, 6928

- 6612 54 mm hex locknut socket** designed for use on front wheel adjusting nuts found on Toyota FJ, LN, and RN models.
- 6921 2-1/2" hex locknut socket** its hex nut found on rear axles and various front axle applications on light-duty trucks.
- 6796 2-3/4" rounded hex locknut socket.** Works on 3/4- and 1-ton Ford F-250 and F-350 trucks with automatic locking hubs. (Ford No. T95T-1197-B & 205-349).
- 6928 2-9/16" rounded hex locknut socket.** Works on 1990–93 Dodge trucks with Dana 60 manual hubs.

7217

Axle Nut Socket

- Designed to fit the axle nut on Chevy Topkick/Kodiak, 2003 - Newer.
- Similar to J-44275.



7218

Axle Hub Nut Socket

- Removes/installs the axle hub bearing retaining nut.
- Fits GM 11-1/2" rear axle found on 2011 and newer trucks.
- 9 Pin socket, 1/2" drive.
- Similar to CH-50636.



DRIVE AXLE SERVICE AUTOMOTIVE SPECIALTY TOOLS



6694 Axle Seal Installer

- Designed to install the axle seal on GM Trucks with 10-1/2" ring gear.
- Similar to J-24428-A.



7248 C-Frame Press

The C-Frame used in conjunction with OTC Ball Joint Adapters. Can also be used for removing/installing; universal joints with needle bearings, pressed in wheel studs, and brake anchor pins on heavy-duty vehicles. Suitable for general pressing operations.



7917 Live Center Forcing Screw Plug

This plug replaces the existing forcing screw on the No. 7248 C-frame to allow its use on heavy-duty ball joints. The shorter length gives the C-frame a wider opening to accommodate the larger ball joints on 3/4- and 1-ton trucks.



6935 U-Joint Service Adapter

For use with the 7248 C-Frame to service the u-joints found on Dana 60 4WD front drive axles.

Application Examples:

- 1977-1991 Chevrolet and GMC 1 Ton
- 1975-2010 Dodge 3/4 and 1 Ton
- 2000-2002 Ford Excursion
- 1999-2010 F250
- 1985-2010 F350
- 1999-2008 F450
- 1999-2004 F550



6541 Pulling Hook

- This slide hammer puller attachment is used to remove seals, bearings, and other press-fit parts.
- Designed to be used with OTC No. 1155 (5 lb.) or No. 1156 (2-1/2 lb.) slide hammer, or other slide hammers having 5/8-18 threads.



7792 Rear Axle Service Set

The tools you need for flange-type rear axle and bearing removal on most late model passenger cars and light trucks. The axle bearing pullers, used with the slide hammer, make short work of removing semi-floating rear axle bearings. Consists of:

- 7374** Rear axle pulling plate with 5 lb. slide hammer.
- 7495A** Rear axle bearing puller. Fits min. bearing tube I.D. of 1" and max. axle tube I.D. of 1-7/8".
- 7496A** Rear axle bearing puller. Fits min. bearing tube I.D. of 15/16" and max. axle tube I.D. of 2-3/8".
- 7497A** Rear axle bearing puller. Fits min. bearing tube I.D. of 1-3/8" and max. axle tube I.D. of 2-7/8".
- 27315** Puller hook for use with the 5 lb. slide hammer. Removes oil seals, bearings, etc.



6540 Rear Axle Bearing Puller Set

- Set contains slide hammer and popular attachments needed for servicing flange-type, floating rear axle bearings and seals in most late model, rear-wheel drive cars and light trucks; comes in a molded case.
- Rear axle bearing puller fits min. bearing tube I.D. of 1" and max. axle tube I.D. of 1-7/8".
- Rear axle bearing puller, fits min. bearing tube I.D. of 1-5/16" and max. axle tube I.D. of 2-3/8".
- Rear axle bearing puller fits min. tube I.D. of 1-3/8" and max. axle tube I.D. of 2-7/8".
- Slide hammer tee bar, slide hammer 5 lb. weight, pulling hook, rear axle pulling plate, bearing cup remover.



Slide Hammer Rear Axle Puller

This puller will enable you to remove flange-type rear axles from most late model cars and light trucks. It works on axles having bolts and studs up to 9/16" diameter.

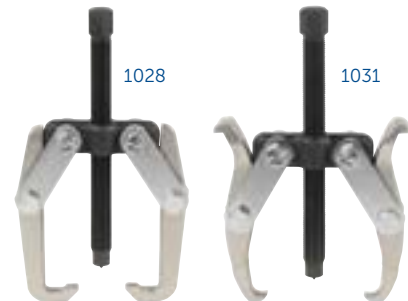
- Fits 4-, 5-, or 6-bolt patterns and stud circles from 4-1/4" to 5-9/16".
- 7372** Rear axle pulling plate.
- 7374** Rear axle pulling plate with 5-lb. slide hammer assembly.



7494A Rear Axle Bearing Service Set

Designed to make the removal of semi-floating rear axle bearings easier. Allows you to capture the bearing firmly, distributing the pulling force over the entire bearing. This reduces damage and increases the amount of applications. Set includes three pullers to service most domestic cars. Use with OTC Nos. 1155 or 1156 slide hammer with 5/8"-18 UNF thread. Pullers also available separately.

- 7495A** Rear axle bearing puller. Fits minimum bearing tube I.D. of 1" and maximum axle tube I.D. of 1-7/8".
- 7496A** Rear axle bearing puller. Fits minimum bearing tube I.D. of 1-5/16" and maximum axle tube I.D. of 2-3/8" including 1988-2000 Chevrolet and GMC 8-1/2", 1/2-ton rear axle bearing.
- 7497A** Rear axle bearing puller. Fits minimum bearing tube I.D. of 1-3/8" and a maximum axle tube I.D. of 2-7/8".



Differential Bearing Pullers

For removing differential side carrier bearings on a wide variety of passenger cars and light trucks. Use with step plate adapter Nos. 8060, 8061, 8063, and 8064. (Step plate adapters are not included with 1028 or 1031. See page 125.)

- 1028** Puller with a 3-1/2" maximum reach, 1-1/4" to 4-1/2" spread. Primarily for servicing Ford products.
- 1031** Puller with a 3-1/4" maximum reach, 6" maximum spread. For servicing most General Motors, American Motors, and Chrysler products.



6602 Differential Bearing Preload Wrench

- Use to adjust differential bearing free play on Chrysler/Dodge vehicles with 7-1/4", 8-1/4", 8-3/4", and 9-1/4" rear axles.
- Tool fits inside axle tube to access the threaded adjusters.

Similar to Miller C-4164



4520

Differential Side Bearing Pullers

- Use to remove differential side carrier bearing. Works on a wide variety of cars and light-duty trucks.
- Includes four step plate adapters to fit carrier bearings.
- Reach: 1-5/8". Spread: 2-5/8" to 3-3/8". Forcing screw is 3/4"-16 x 6-11/16" lg.
- Set includes:

4520-1 Forcing Screw / Cross Block Assembly

4520-2 Puller Jaws / Pins (set of two each)

4520-3 Puller Jaws Retaining Yoke

4520-4 Step Plate Adapters (set of four)

- 15/16" – 1-11/32" diameter,
- 1-1/8" – 1-1/2" diameter
- 1-1/4" – 1-5/8" diameter,
- 1-1/8" – 1-3/4" diameter

Specifications

Reach: 1-5/8"
Spread: 2-5/8" on inside holes in crossbar
3-3/8" on outside holes in crossbar
Forcing screw: 3/4"-16 mm x 6-11/16" lg.
Adapter sizes: 15/16" to 1-3/4" diameter



4508

Professional Style Seal Puller

- Designed to remove oil and grease seals when servicing cars, SUVs, and light trucks without damaging the housing or bearing.
- Hook tips in two sizes and professional handle design allows removal of hard-to-get-at seals by getting under them.
- The tool is 12" long and the hook tip is double-secured (versus competitors' designs), for durability.
- An extra blade is included, and additional replacements (No. 4508-1) may be ordered.

4508-1 Replacement blade for 4508



7140

Ford Half-Shaft Remover/Differential Rotator

No. 7140 is essential when removing the left-hand half-shaft from Escort/Lynx transaxles. It ensures correct removal and allows the technician to turn the differential.

Similar to Ford D80L-522-A, 303-D025

522

Large Gear and Pulley Puller

Using this tool, you can easily remove a wide range of gears, pulleys, or other parts that have tapped holes.

- The puller will spread from 2" to 7-3/4". Its block is 8-1/4" wide, and its forcing screw is 3/4"-16 x 11-5/8" long.
- Accommodates any cap screws up to 1/2" diameter.



Gear and Pulley Pullers

These tools are perfect for removing timing gears, fan pulleys, harmonic balancers, and many other parts having tapped holes.

- Each puller will spread from 1-1/2" to 4-1/4". The puller blocks are 4-7/8" wide.
- Both include two hex head cap screws, 3/8"-16 x 3" long.

7392 Puller with 13" long screw.

7393 Puller with 5-1/2" long screw.



Inner CV Joint Puller

This is the puller needed to remove inner CV joints that are held in with axle shaft retaining rings. The slide hammer feature allows removal of the axle assembly from the transaxle without causing damage to the aluminum transmission case or other components. Damage can result by using other prying methods.

7507 CV Joint Fork. Used with No. 1155 Slide Hammer, No. 7508 Slide Hammer Extension, or both.

7508 Optional 17-1/2"-long Slide Hammer Extension.

7509 Inner CV Joint Puller. Includes No. 1155 Slide Hammer and No. 7507 CV Joint Fork.



Similar to Ford 204-D020 (D93T-3206-A)

7502

4WD Front Spindle Puller

This puller enables you to remove the front spindle on light-duty 4WD trucks. It's designed for full-size Ford, GM, International, and Jeep pickups with Dana front axles. Also works on Ford Ranger and Bronco II.

- 5/8" fine thread makes it ideal for use with our No. 1155 slide hammer.
- Fits spindle thread sizes 2"-16, 1-5/8"-16 and 38 mm-1.5.



6712

Axle Seal Protector (10 pack)

Protects seal from being cut or nicked, both of which can cause immediate or eventual leaks. Similar to J-44394-A.

Applications: 2011 and later drive axles on most GM vehicles



6713

Seal Protector

Protects the transfer case Intermediate Drive Shaft (IDS) seal from the splines of the IDS during shaft removal or installation. Similar to DT-50937. Applications: 2013-Later Chevrolet Trax, Buick Encore.



6723

Inner Pinion Bearing Race Installer

Installs inner pinion bearing race to desired position on 1998 - 2006 Chevrolet Suburban and Tahoe. Similar to J-45870 & J-8092.

DRIVE AXLE SERVICE AUTOMOTIVE SPECIALTY TOOLS



4722
Heavy-Duty CV Boot Clamp Installer

- Designed to clamp the ear-type CV boot clamps used on front-wheel drive vehicles.
- May also be used to crimp the clamps used on fuel and cooling system hoses.
- Ensures even, precise crimping, and eliminates possibility of damage to the clamp, boot, or hose.



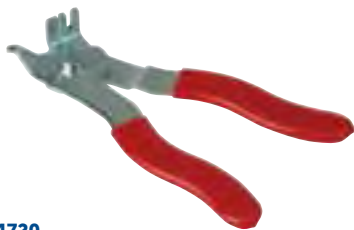
4623
CV Joint Banding Tool and Cutter

- Use to install and tighten the "band-it" or strap style clamps on CV joint boots, or on power steering rack and pinion steering gear boots.
- Once installed into the tool, tighten the band by turning the handle on the tool; use a socket or wrench on the handle to torque the band to OE specifications.
- When the boot clamp has been tightened to specs, cut the band to the correct length by flipping the lever (at the front of the tool) forward.



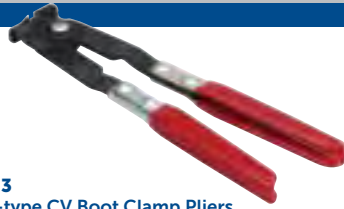
4724
CV Boot Clamp Pliers

- Special tips work on the ear-less type CV boot clamps.
- Grips clamp in many positions to tighten clamp around boot.



4720
Boot Clamp Pliers – Chrysler

- Required tool for correct installation of strap-and-buckle style CV boot clamps.
- Works on A.C.I. and G.K.N. boots found on various Chrysler, Plymouth, and Dodge front-wheel drive vehicles.
- Prevents damage to CV boot and clamp during installation.



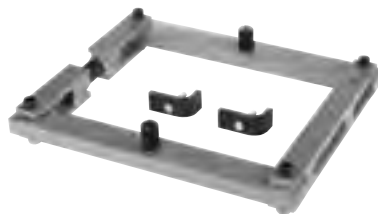
4723
Ear-type CV Boot Clamp Pliers

- Designed to crimp the ear-type CV boot clamps used on front-wheel drive vehicles.
- May also be used to crimp the type of clamps used on fuel and cooling system hoses.
- Ensures even, precise crimping, and eliminates possibility of damage to the clamp, boot, or hose.



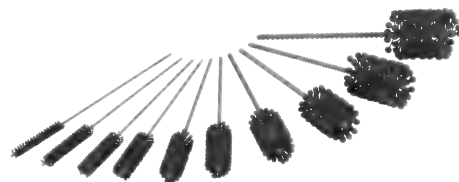
4721
CV Boot Clamp Cutter

- Designed to easily cut the CV boot clamp without damaging the boot.
- Will cut boot clamps up to 10 mm wide and .7 mm thick.
- Handles are spring loaded to the open position to allow easy access to the clamp.



7011
Differential Housing Spreader

Here's a tool that eases the job of removing or installing differential ring-gear assemblies on Dana axle models 30 through 70. It's a heavy-duty device using mechanical screw power to spread the housing. It helps prevent the component damage that often results from the use of homemade devices.



7011
Ball Hone Set, 10 piece

- Ball Hones can be used for refinishing and resizing bores such as found in brake calipers, engine lifters, and u-joint yokes. Also useful for any bearing or bushing application.
- All hones are 180 grit Silicone Carbide for excellent cutting and finish.



8100
8101

Fluid Evacuation / Brake Bleeding Tools

- Use to bleed brake systems and remove a variety of fluid from vehicles, such as antifreeze, oil, transmission fluid, gear lube, etc.
- Quick connect locking hose adapters and ball-style on/off valve on hose prevent fluid leakage.
- Equipped with a relief valve to prevent over-pressurizing the tank.

8100 Operates by shop air or a hand pump; shipped complete with a brake bleeding hose, fluid evacuation hose, and two suction hoses (6 mm and 7 mm); 10-liter capacity tank.

8101 Operates with shop air; shipped with a brake bleeding hose and fluid evacuation hose; 6-liter capacity tank.



4295
Wheel Stud Service Kit

- Works on most hubs for installation/removal.
 - All sizes of studs.
- Installation done by pushing on the head, eliminating the need for threaded adapters.
 - Reduces number of adapters required
 - Reduces damage to studs
 - Increases ease of use
- Remove and install 10 studs in only 10-15 minutes (compare to 20-30 minutes for more expensive competitive products).
- Can be powered with an impact wrench, no hydraulic power source required.
- No need to remove hub from vehicle.
- Reduces risk of damage to hubs, studs, and bearings when using tool.
- Weighs only 12 lbs., assembled to remove studs and 14 lbs., assembled to install studs.

Tool No.	Size
7011-1	.375" 10 mm
7011-2	.500" 13 mm
7011-3	.625" 16 mm
7011-4	.750" 19 mm
7011-5	.875" 22 mm
7011-6	1.00" 25 mm
7011-8	1.25" 32 mm
7011-10	1.50" 38 mm
7011-12	1.75" 44 mm
7011-14	2.00" 51 mm

STEERING SERVICE AUTOMOTIVE SPECIALTY TOOLS



6295 Front End Service Set

Kit includes five popular tools used for servicing Pitman arms, ball joints, and tie rods on most vehicles.

Set includes:

- 7314A – Pitman arm puller.
- 7315A – Tie rod end remover.
- 7503 – Outer tie rod remover/ball joint separator.
- 6296 – Pitman arm/tie rod end puller.
- 6297 – Ball joint separator.



7314A Pitman Arm Puller

This puller will handle nearly any Pitman arm job on passenger cars and light trucks. It features special forged jaws shaped to fit the job, ensuring a positive grip every time. Spread between jaw tips: 1-5/16".

7315A Tie Rod End Remover

Redesigned to use on imports and many front wheel drive vehicles, including SUVs with rack and pinion steering. Live center tip on forcing screw swivels to align tool to tie rod stud to ease in removal and prevent damage to stud. Similar to Ford 211-001 (TOOL-3290-D)



6496 Pitman Arm Puller

Cuts Removal Time from 3 1/2 Hours to 40 Minutes

- Labor intensive removal of steering sector not necessary.
- Compact design allows easy access to the Pitman arm.
- Works on most domestic SUVs and pickups.
- Live center on forcing screw and use of a standard wrench results in less effort required.
- Tool is forged steel for durability and long life.



6296 Pitman Arm/Tie Rod End Puller

The versatile design allows this tool to be used as a Pitman arm remover for many small, domestic rear wheel drive vehicles, or as a tie rod end puller for many domestic and import vehicles. The jaws, with a spread of 1", give a positive grip in tight work places.



6297 Ball Joint Separator

This tool is used to separate the ball joint from the spindle support arm. It works on many domestic and import front wheel drive vehicles, and is adjustable up to 2" for different size ball joints.



7503 Outer Tie Rod Remover/Ball Joint Separator

This tool is a must when you're servicing outer tie rods and ball joints. It works on imported and domestic models, front or rear wheel drive, cast or stamped-steel steering knuckles.

- Handles up to 5 tons of force.
- Jaws spread to 3" and has a 4" reach.
- Jaws, once tightened, won't slip on the knuckle.



Works on the following four-wheel-drive vehicles

1998 – 2003	Ford Navigator
1997 – 2004	Ford F-150 and Expedition
1991 – 2004	Oldsmobile Bravada
1992 – 2011	Chevy Suburban
1988 – 2005	S-10 / S-15 GMC Trucks & Chevy Blazers
1988 – 2011	GMC & Chevy 1/2, 3/4, & 1 ton pickups
1995 – 2011	Chevy Tahoe and GMC Yukon/Denali

6497 Super-Duty Pitman Arm Puller

- Works on 2005 and newer Ford F-250 and F-350 four-wheel-drive Super Duty trucks.
- Allows the Pitman arm to be removed from the steering gear while the steering gear is still in the vehicle.
- Two clamp bolts lock the jaws on the Pitman arm, ensuring a solid grip.
- Maximum jaw spread is 3-1/4".



7311A Similar to Ford No. 211-003(T64P-3590-F)

Pitman Arm Pullers

These pullers are designed for the toughest Pitman arm jobs. They're adjustable and have rugged forged jaws shaped to fit the job. Two clamp bolts lock the jaws on the Pitman arm, ensuring a solid grip. Puller No. 7310A includes an adapter for added versatility. Both pullers cover a variety of pulling jobs.

7310A

Pitman arm puller for medium- and heavy-duty trucks. Max jaw spread: 2-1/4".

7311A

Pitman arm puller for cars and light trucks to 3/4 ton. Max jaw spread: 2-1/8".





8149
Pitman Arm Puller

The 8149 conical tool is designed to fit Pitman arms on compact and intermediate cars.

- Conical design gives increased strength, stability, and fits securely on a Pitman arm.
- Spread is 1-1/4" with a reach of 2-1/4".
- 3/4-16 x 4-3/4" forcing screw provides enough power to remove stubborn Pitman arms.

8150
Pitman Arm Puller

The No. 8150 conical tool is designed to fit Pitman arms on domestic cars and light-duty trucks.

- Conical design gives increased strength, stability, and fits securely on a Pitman arm.
- Spread is 1-1/2" with a reach of 2-1/2".
- 3/4-16 x 4-3/4" forcing screw provides enough power to remove stubborn Pitman arms.



7503HD
Heavy Duty Tie Rod and Ball Joint Remover

A universal heavy-duty puller that removes a wide range of tie rods and ball joints from a variety of cars, trucks, SUVs and heavy-duty vehicles. The 7503HD has a 10-ton pulling capacity, twice the force applied by the original 7503. Jaw spread and reach are increased to 3 and 4 inches for a wider variety of applications and larger vehicles. A heavier duty forcing screw is used, measuring 3/4" - 10, 6 1/2" long with interchangeable tips including cone, flat and cup for multiple applications. The tool will also remove pitman arms and can be used in many pulling situations that require a 2 jaw puller on other vehicles types and machinery.

6531
Pitman Arm Separator

Separating Pitman arms on cars and light trucks is quick and easy with this wedge and an appropriate sized hammer.

- 11" long and has a 1-1/8" fork spread.



6532
GM Pitman Arm Remover

Removes Pitman arms on pickups and sport utility vehicles. The wedge end is placed between the Pitman arm and steering gear box, and with just a few hammer blows, it separates them. Works on 1988 and newer Chevrolet and GMC 1/2- and 3/4-ton 4WD pickups, Suburban, Tahoe, and Yukon.

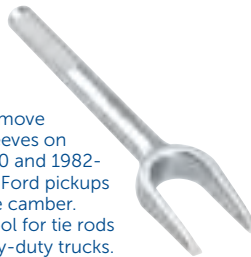
- 11-3/4" long with a 1-5/8" fork spread.



6533
Separator Tool

This handy tool is multipurpose. It will remove camber adjustment sleeves on 1980-86 F-150 & F-250 and 1982-88 Bronco II & Ranger Ford pickups that have an adjustable camber. It's also a separating tool for tie rods on medium- and heavy-duty trucks. And it works as a Pitman arm wedge on light trucks.

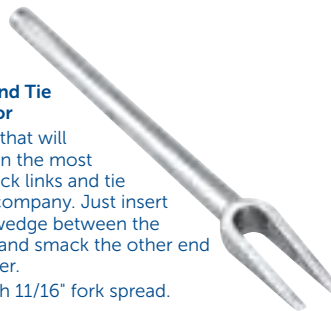
- 11-5/8" long with a 1-7/16" fork spread.



6534
Shock Link and Tie Rod Separator

Here's a tool that will convince even the most stubborn shock links and tie rods to part company. Just insert the tapered wedge between the seized parts, and smack the other end with a hammer.

- 16" long with 11/16" fork spread.



6535
Ball Joint Separator

Ball joint service is easier with this tool. It was designed to remove ball joints from spindle support arms, and can be used on a wide variety of vehicles, from compact cars to light-duty trucks.

- 16" long and has a 15/16" fork spread.



6299
Separator Set (5 piece)

- Features five popular "pickle forks" in a blow-molded case.
- Used to remove shock linkage, tie rods, and ball joints. Also for general service on many cars and light trucks.

Includes:

- 6531 – Size 11" x 1-1/8" Fork Spread.
- 6532 – Size 11-3/4" x 1-5/8" Fork Spread.
- 6533 – Size 11-5/8" x 1-7/16" Fork Spread.
- 6534 – Size 16" x 11/16" Fork Spread.
- 6535 – Size 16" x 15/16" Fork Spread.



4559
Manual / Pneumatic Pickle Fork Set

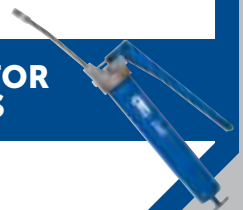
- Use to separate ball joints, tie rods, and Pitman arms.
- Set contains two handles: knurled handle allows use of a hammer; smooth handle fits in a pneumatic hammer.
- Three sizes of pickle forks included: 1-1/8", 15/16", and 11/16".

Set contains:

- 4559-1**
Fork heads (set of three: 11/16", 15/16", and 1-1/8").

- 4559-2**
Handles (set of two: knurled handle for use with a hammer; smooth handle for use with an air hammer).

SEE PAGE 43 FOR GREASE GUNS



STEERING SERVICE AUTOMOTIVE SPECIALTY TOOLS

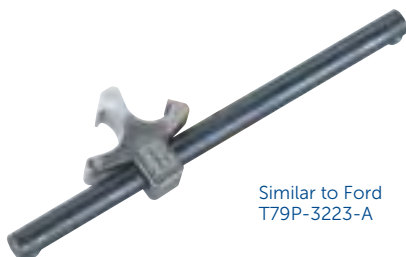


6275 Tie Rod/Pitman Arm Adjusting Set

These tools have a unique design that permits 360° rotation of the adjusting sleeve, even where space is limited.

- Accommodates 1/2" drive ratchet or breaker bar.
- Set consists of the following tools in a blow-molded case:

- 7095** For compact cars with 3/4" diameter adjusting sleeves.
- 7096** For full size cars with 7/8" diameter adjusting sleeves.
- 7097** For light trucks with 1-1/8" diameter adjusting sleeves.
- 6274** For Ford 3/4-ton and 1-ton trucks with 1-13/16" diameter adjusting sleeves.
- 6084** Pitman arm adjusting tool for Ford F-250 thru F-450 trucks with 1-7/16" dia. adjusting sleeves.



Similar to Ford T79P-3223-A

7023 Tie Rod Adjusting Tool

Here's a tool that will fit most models of compact and standard-size cars and light trucks. It has a four-position feature and 360° rotation that lets you locate the tool to grip the sleeve correctly, even when access is limited.

5068 Truck Tie Rod Socket

Designed to withstand the force of a 3/4" drive impact wrench, this rugged socket makes truck tie-rod end removal quick and simple.

- Works on inner and outer tie rod ends on 12,000 to 16,000 lb. truck axles.
- Socket I.D. 2-3/4"



6065 Tie Rod Socket for Medium-Duty Trucks

Here's a heavy-duty tool for removing tie rod ends on Chrysler, Ford, and GM 1-ton trucks. It also works on many medium-duty trucks, Class 2 through 6.

- Accommodates a 1/2" drive impact wrench.



7484 Standard



7500 Standard



7501 Heavy-Duty

Inner Tie Rod Wrenches (Standard & HD)

Universal wrench will fit on all styles and allow the technician to un-screw the tie rod link for replacement.

7484 Unique lever design will turn hex rack ends or hex shafts from 1" to 1-5/8" (25-41mm).

7500 Unique cam design cover sizes from 1-1/4" to 1-5/8" (33-41mm) hex, 2 flats, round or any style rack ends.

7501 Unique cam design cover sizes from 1-1/2" to 1-7/8" (38-48mm) hex, 2 flats, round or any style rack ends.

Similar to Ford 211-D029(D93L-3395-A)



7595A Inner Tie Rod Removal Set

Remove and install inner tie rods without removing steering gear. The adapters fit into the tie rod socket, and a 1/2" drive ratchet or breaker bar fits the drive end.

- Services both old and new style inner tie rods.
- For use on most Chrysler, Ford, and GM vehicles.
- The socket is 16" long and is "stepped" to accept 1-3/16" tie rods and 1-5/16" tie rods.
- Adapters fit into socket and work on 1-3/16", 1-5/16", and 1-7/16" tie rods.

Important: When removing and installing inner tie rods, hold steering rack shaft to prevent damage to pinion gear.



Similar to 211-185

7771A Ford Power Steering Pump Pulley Installer

Installs power steering pump pulleys on 1992–newer Ford Crown Victoria and Mercury Grand Marquis with 4.6 V8 engine, 1997–newer Ford truck with 4.2 & 4.6 V6, 5.4 V8, and 6.8 V10 engines.

- 8 mm x 1.25" threads fit Ford's C111 pump.

6695 Similar to Ford 205-429



6697 Similar to Ford 205-830

6698 Similar to Ford 205-831

Ford Axle Shaft Seal Installers

Correctly installs the seal onto the axle shaft and into the wheel knuckle, preventing front hub vacuum leaks that would cause the 4WD to not engage.

6695 Ford Axle Shaft Seal Installer. Works on 1998-2004 Ford F-250, F-350, F-450, and F-550 4X4s having the vacuum-operated front axle.

6697 Ford Axle Shaft Seal Installer. Works on 2005–newer Ford F-250, F-350, 4X4s having the vacuum-operated front axle.

6698 Ford Axle Shaft Seal Installer. Works on 2005–newer Ford F-450, F-550, 4X4s having the vacuum-operated front axle.



**7220
Power Steering Bleeder Adapter**

- Allows for air to be bled out of power steering systems.
- Used in conjunction with the a vacuum hand pump or brake bleeder.
- Fits GM and other makes power steering reservoirs.
- Similar to J-43485.



**7209
GM Power Steering Pump Pulley Installer**

This tool offers easy, damage-free installation of power steering pump pulleys. It works on 1988–95 GM Quad 4 engines; 1990–94 Chevrolet Lumina APV, Oldsmobile Silhouette, and Pontiac Trans Sport vehicles; 1990–94 3.1L V6 engines; 1994–newer 3100 GM V6; 1999–newer 3400 GM V6. Threads are 3/8–16" to fit pulley shaft threads.



**7362
GM Power Steering Pump Pulley Service Kit**

Remove and install the power steering pump pulley easily and without damaging the pump shaft or pulley.

- Includes remover and installer.



**4681
Power Steering Pump/Alternator Remover/Installer Tool**

- Reversible 2-in-1 tool removes and installs press-fit alternator and power steering pump pulleys.
- Also removes and installs other press-fit pulleys with a hub diameter of 1-1/8" (28 mm), 1-1/4" (32 mm), 1-5/16" (34 mm), or 1-3/8" (35 mm).



Similar to Ford 211-016(T69L-10300-B)



**7185
Power Steering Pump/Alternator Pulley Remover**

This puller removes pulleys on most Chrysler, Ford, GM, and VW vehicles fitted with Saginaw, Thompson, or Ford's C2 and C111 power steering pumps; GM belt-driven vacuum pumps on cars; and press-on water pump pulleys on GM 4- and 6-cylinder engines. It works on pulleys with hub diameters of 1-1/8", 1-1/4", 1-5/16", and 1-3/8".

- Designed to ensure damage-free removal.



**4529
Power Steering / Alternator Pulley Puller/Installer Set**

- Properly replaces pressed-on power steering and alternator pulleys on Ford, Chrysler, and late GM engines.
- Housed in a blow-molded plastic storage case.



**7830A
Power Steering Pump Pulley Kit**

This kit has nearly everything you need to remove and install power steering pump pulleys in Chrysler, Ford, and GM vehicles with Saginaw, Thompson, and Ford C111 and C2 power steering pumps. Fits 1-1/8", 1-1/4", 1-5/16" and 1-3/8" pulley hub diameters, including 1988–newer GM cars equipped with Quad 4 engines; 1991–94 GM 3.1L V6; 1991–newer 3800 V6 engines; 1994–newer GM 3100 V6; 1999–newer GM 3400 V6, and 1992–newer Ford Crown Victoria and Mercury Grand Marquis with 4.6 V8 engine, 1997–newer Ford truck with 4.2 & 4.6 V6, 5.4 V8, and 6.8 V10 engines.

- Also includes No. 7931 spacer for work on Chrysler Cirrus, Dodge Stratus, and Plymouth Breeze.



Similar to Ford 211-009(T65P-3A733-C)

**7005
Power Steering Pump Pulley Installer**

This is an ideal companion to our No. 7185 pulley remover. It's a real time saver for installing power steering pump pulleys and GM press-on water pump pulleys.

- Designed to ensure damage-free installation.
- Internal roller bearing allows for easy turning.
- Threads are 3/8"-16 to match pulley shafts.



**4530
Power Steering Pump Pulley Service Set**

- A complete set of tools required to remove and install power steering pump pulleys of most domestic vehicles.
- Fits pulley hubs with diameters of 1-1/8", 1-1/4", 1-5/16" and 1-3/8".
- Includes the necessary adapters for servicing: GM 3.1L, 3100, 3400, and 3800 V6 engines, GM 2.3L Quad 4 four-cylinder engines, and Ford 4.6L and 5.4L V8, 6.8 V10 engines.



Similar to Kent Moore J-21854-A

**7889
Steering Pivot Pin Remover**

Tilt steering columns are much easier to service when your tool box has one of these pivot pin removers in it. Works on GM, Chrysler, and Ford vehicles with Saginaw tilt steering columns.

**7122R
Ford Lock Pin Remover**

Removes tie rod inner socket retaining pin on Ford vehicles with rack and pinion power steering. Replacement tips available separately.

37907 Tip for 7122R

Similar to Ford 211-D002



STEERING SERVICE AUTOMOTIVE SPECIALTY TOOLS



7984 Master Steering Wheel Service Set

- This master set is used for steering column service on most cars and light trucks, domestic and imports.
- This set includes components for steering wheel, lock plate removal, and pivot pin removal.
- Special 5/16-18 x 4" shoulder bolts allow removal of GM steering wheels without damaging the SIR module. Also use the 5/16-18 x 4" shoulder bolt for earlier models without SIR module.
- This set includes a lock plate compressor with M14 x 1.5 and 9/16-18 forcing screws for steering column shafts on GM S.I.R., as well as older GM, AMC, and Chrysler vehicles with tilt, telescoping, and conventional steering columns. Use on steering columns with or without air bags.
- Includes a screw to contain the telescopic steering column on older GM vehicles.
- The pivot pin remover covers tilt steering pivot pins on 1969 and newer GM, Ford, and Chrysler vehicles with Saginaw steering columns.
- Two hook-shaped puller legs and special forcing screw adapter remove the steering wheels without tapped pulling holes.

This set includes three each of the following hardened bolts:

- Washer Head Bolts (Grade 8) 1/4-28 UNF x 3"
- Hex Head Flange Bolts 3/8-16 UNC x 3.5"
- Hex Head Flange Bolts 5/16-24 UNF x 3.5"
- Hex Head Flange Shoulder Bolts 5/16-18 UNC x 4"
- Hex Head Flange Bolts M8 x 1.25 x 90mm

7929A Steering Wheel Puller Leg Set

- Particularly useful during steering wheel removal when there are no tapped holes in the assembly.
- The 7929A is designed for use with either the No. 7245 or No. 7403 OTC steering wheel puller.
- These legs get behind the steering wheel assembly to provide an even, straight pull. The collar is designed for use on Ford and Chrysler vehicles.
- Works on:
 - 1988-1993 Pontiac LeMans
 - 1997-newer GM cars, SUVs, and light trucks
 - 1997-newer Ford SUVs and light trucks
 - 1999-newer Jeep Grand Cherokee
 - 2003-newer Jeep Liberty
 - 2004-newer Dodge Sprinter van



4-1/2" reach



7790 Flange-Type Puller Set (Grade 5)

- Versatile puller capable of removing a wide variety of components having tapped pulling holes, including harmonic balancers, gears, crankshaft pulleys, etc.
 - Capable of handling 2- or 3-way bolt pulling applications.
 - Works on many cars, pickups, SUVs, and small engines.
 - Carries the OTC Lifetime Warranty® against defects in workmanship and material.
- Contents of set:
- Puller flange: adapts to bolt circle dia. of 1-1/2" to 4-5/8".
 - Forcing screw: 5-5/8" lg., 5/8-18 thread.
 - Shaft protector: 1-3/16" dia. x 3/4" thick.
 - Three each of the following flat washers: 1/4"; 5/16"; 3/8".
 - Three each of the following bolt sizes:

- 1/4"-28 x 3" lg.	- 3/8"-16 x 2" lg.
- 5/16"-24 x 3" lg.	- 3/8"-16 x 3" lg.
- 5/16"-18 x 3-1/2" lg.	- 3/8"-16 x 4-1/2" lg.
- 5/16"-18 x 6" lg.	- M8 x 1.25 x 45 mm lg.
- 3/8"-24 x 1-1/2" lg.	- M8 x 1.25 x 65 mm lg.
- M8 x 1.25 x 90 mm lg.	
- M10 x 1.5 x 35 mm lg.	



7927A Steering Wheel Remover/Lock Plate Compressor Set

With this set, it's easy to remove the steering wheels of most domestic and imported vehicles, with or without tilt steering columns. Also accesses the turn signal switch and SIR modules on current GM vehicles.

- Includes No. 7815 steering wheel lock plate remover, No. 7889 steering pivot pin remover for Saginaw steering columns, No. 7245 steering wheel puller, plus four sets of cap screws (2 of each size: M8-1.25 x 90 mm, 3/8"-16 x 3-1/2", 5/16"-24 x 3-1/2", and 5/16"-18 x 4").
- Contained in convenient plastic blow-molded case.



6930 Flange-Type Puller Combination

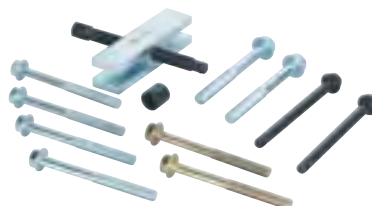
Heavy-duty flange puller features a live center forcing screw. Includes two live center forcing screw tips and two sets of commonly used automotive bolts. Puller will work on bolt circles from 1-1/2" to 4-1/4". Three cap screws, 3/8-24 x 3" long, and three cap screws, 3/8-16 x 3" long.



7815 Steering Wheel Lock Plate Remover

This is an essential tool for compressing steering wheel lock plates on AMC, Chrysler, and GM vehicles, with or without tilt steering columns. It's also necessary for accessing the turn signal switch and SIR modules on GM vehicles.

- Also works on metric columns.



7245 Steering Wheel Puller

This puller removes steering wheels on most domestic and imported vehicles, with or without telescoping steering columns. Five sets of cap screws are included for various thread requirements. The forcing screw features a swivel end to protect steering shaft. Cap screws included (pairs): 3/8-16 x 3-1/2"; 5/16-18 x 3-1/2"; 5/16-24 x 3-1/2"; M8-1.25 x 90 mm; 5/16-18 x 4 (SIR). Bar measures 4" x 1" x 1".



7403 Steering Wheel, Pulley, and Flywheel Puller

Here's a puller that works in a variety of applications. It pulls steering wheels on most late model cars. It also works as a regular 2/3-way puller to remove pulleys and small engine flywheels. Cap screws included (pairs): 3/8-16 x 3-1/2 in.; 5/16-18 x 3-1/2 in.; 5/16-24 x 3-1/2 in.; M8-1.25 x 90 mm; and 5/16-18 x 4 in. (SIR).

- Works on domestic cars with or without collapsible steering columns.

STRUT TAMER II EXTREME

THE 6637 STRUT TAMER II EXTREME SETS A NEW STANDARD IN STRENGTH AND SAFETY FOR STRUT SPRING COMPRESSORS.

- New forged locking jaws includes larger pads and offset to clamp onto and compress springs even tighter than before.
- New extra thick 5/8" compression arms for superior strength, stability and safety.
- New locking trunions for optimal stability during spring compression.
- New Lock rings to hold arms in position - standard. This eliminates arms from spreading or sliding when compressing offset or unique strut configurations. No tools needed to adjust.
- New Spring capacity of 2-1/2" - 10" diameter, 1-1/4" - 24" vertical stroke.
- Extreme duty design to handle the heavier springs found on mid- and some full-size truck strut assemblies.



Locking trunions increase stability during spring compression

Extra-thick 5/8" compression arms for strength, stability and safety

Stand with wheels for portability (OTC6637-ST only)

During compression, the wheels lift off the floor, and four no-slip rubber pads keep the stand firmly in place

2:1 reduction gearbox - standard. Allows for a 2:1 torque compression increase when compressing struts.

New forged locking jaws include larger pads to clamp and compress springs tighter

Spring capacity of 2-1/2" - 10" diameter, 1-1/4" - 24" vertical stroke

New arm-locking rings hold strong without needing tools to adjust

✓ MEETS THE NEW ASME PASE SAFETY STANDARDS FOR SPRING COMPRESSION
✓ CAPABLE OF SAFELY COMPRESSING THE LARGEST STRUT SPRINGS



Strut assembly not included

6637-ST
StrutTamer II Extreme
with stand Height 54" (1372 mm)
(36" without handle)
Width 22-1/2" (572 mm)
Depth 32" (813 mm)



6637
StrutTamer II Extreme
Height 29" (736 mm)
Width 21" (533 mm)
Depth 20" (508 mm)



6582
StrutTamer Stand
Height 44" (1118 mm)
Width 22-1/2" (572 mm)
Depth 32" (813 mm)



6591-1
Upper Arm Clamps



6587
2:1 Reduction Gearbox
• Allows a 2:1 torque compression increase when compressing struts. Fits on StrutTamer™ Extreme or StrutTamer™ HD.

6494
Clamshell Strut Spring Compressor
Servicing MacPherson struts is convenient and affordable with this compressor. It fits a wide range of struts and requires no special adapter shoes.

- Locking pins hold the compressor jaws in place.
- Tool compresses springs of 4 in. to 9 in. O.D., with diameters of 7/16" to 11/16".
- Built to use with an impact wrench.

Note: Not to be used on conventional coil springs.



6583
StrutTamer™ Compressor Bridge Accessory

- Used to compress strut springs if technician prefers to press on the top plate of the strut rather than attaching the locking jaws to the top coils of the spring.
- Attaches to the locking jaws and is manually adjusted to bridge the strut top plate to be compressed. Lower part of spring is still held in the two lower locking jaws.

SUSPENSION SERVICE AUTOMOTIVE SPECIALTY TOOLS



6559 Ball Joint Master Service Kit. The ultimate ball joint service kit!

- The 6559 Ball Joint Master Service Kit offers complete coverage of Car and Truck/Van/SUV applications. With 70+ adapters, c-frame and application guide means there is nothing else to add for servicing ball joints.
- The majority of vehicles have press-in ball joints, so stop searching for make-shift solutions for servicing these vehicles – everything required is laid out in this one complete kit.
- With a kit of this magnitude, finding the correct adapters and using them correctly is key to minimizing service time. That is exactly what the included ball joint application guide is designed to do – contains application charts and diagrams with step-by-step instructions.



6529 Car Ball Joint Master Service Kit.

- This 50+ adapter kit is the most complete Car ball joint service kit available, and the first of it's kind on the market.
- With 70% of OEM's having cars with press-in ball joints, this kit is designed to service those applications.
- This kit is a subset of the 6559 and includes 50+ adapters, C-Frame, Ball Joint Application Guide, and Location Card all provided in 2 cases.



6539 Truck Ball Joint Master Service Kit.

- This 55+ adapter kit is the most complete Truck/Van/SUV ball joint service kit available.
- With the majority of Truck/Van/SUV applications having press-in ball joints and universal joints, this kit is designed to service those applications. (note; covers same applications as the 8031 Chrysler/Jeep Truck/Van/Suv Ball Joint Kit without requiring larger C-Frame).
- This kit is a subset of the 6559 and includes 55+ adapters, C-Frame, Ball Joint Application Guide, and Location Card all provided in 2 cases.



6530 Ball Joint Intermediate Service Kit

- This 20+ adapter kit covers many Truck/Van/SUV applications and some car applications.
- With the majority of Cars and Truck/Van/SUV applications having press-in ball joints and universal joints, this kit is designed to service many of those applications.
- This kit is a combination of 7249, 7918, and 7996 kits, and includes 20+ adapters, C-Frame, and Application Diagrams all provided in a case.



8031 Chrysler/Jeep Truck/Van/SUV Service Kit

- This 18 adapter kit covers Chrysler/Jeep Truck/Van/SUV 2WD and 4WD applications.
- Includes Large C-Frame for use with the OEM size ball joint adapters.
- Includes 18 adapters, Large C-Frame, application chart and instructions all provided in a case.



7249 Ball Joint Starter Service Kit

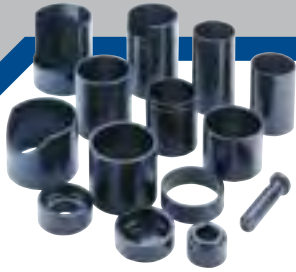
- This starter kit is the backbone to ball joint, U-joint, anchor pins, and many other general pressing operations. Kit includes 5 adapters and C-Frame provided in a case.

7248 U-Joint Removing/Installing Tool

This helpful tool uses a forcing-screw press to safely remove and replace automotive universal joints with needle bearings, including GM plastic pin CV U-joints.

Similar to Ford 205-086 (T74P-4635-C)





7918
Ball Joint Update Adapter Set

- This adapter set will update a 7249 Ball Joint Starter Service Kit to a 6530 Ball Joint Intermediate Service Kit, less the 7996 Honda Ball Joint Lower Ball Joint Adapter Set. Greatly expands the application coverage.



6529-1
BMW Car Ball Joint Adapter Set

- 11 adapters included to remove & install ball joints.
- Works on upper and lower ball joints on: 1992 – 1999 318 series, 1998 – 1999 323 series, 1996 – 1999 328 series, 1996 – 1999 M3.
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.



6529-2
Chrysler/Mitsubishi Car Ball Joint Adapter Set

- 20 adapters included to remove and install ball joints.
- Works on upper and lower ball joints on Chrysler, Dodge, Plymouth, and Mitsubishi cars with press in ball joints
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.

8033
Chrysler Ball Joint Socket

- Removes and installs the screw-in type ball joints used on mid-size, rear-wheel drive Chrysler cars.
- Similar to Miller Tools No. C-3560.
- Socket is 2" long with a 3/4" drive; fits 1-59/64" ball joints.



6529-3
Ford/Mazda Car Ball Joint Adapter Set

- 25 adapters included to remove & install ball joints
- Works on upper and lower ball joints on Ford, Lincoln, Mercury, and Mazda cars with press in ball joints
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.



8032A
Ford/Mercury Car Ball Joint Adapter Set

- Allows easy removal and installation of the lower ball joint on 1996–2009 Ford Taurus and Mercury Sable vehicles.
- Lower ball joint can now be replaced without having to replace the entire spindle assembly saving up to an hour of labor.
- Adapters are used with OTC No. 7248 C-Frame.



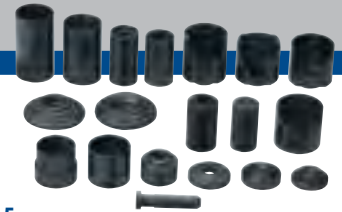
6648
Ford Transit Connect Van Ball Joint Adapter Set

- This 4-adapter set is used in conjunction with the 7248 C-frame to remove and install ball joints on Ford Transit Connect Vans. Set contains adapter part numbers 580517, 580526, 581646, and 581647 for use on 2010-2013 Ford Transit Connect Vans.



6529-4
GM Car Ball Joint Adapter Set

- 18 adapters included to remove & install ball joints.
- Works on upper and lower ball joints on Chevrolet, Buick, Pontiac, Oldsmobile, and Cadillac cars with press in ball joints
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.



6529-5
Honda/Acura Car Ball Joint Adapter Set

- 19 adapters for removing & install ball joints
- Works on upper and lower ball joints on Honda and Acura cars with press in ball joints
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.

7996
Honda Car Ball Joint and Adapter Set

- Use with ball joint service set Nos. 6530, 7248, and 7249 to remove and install lower ball joints on Honda 1986–97 Accord, 1988–00 Civic, 1993–99 del Sol, 1988–91 CRX, and 1983–99 Prelude.



6734
Honda/Acura Car Ball Joint Adapter Set

- Use this three-piece tool kit, along with OTC C-frame No. 7248, to remove and install lower ball joints on the following Honda and Acura vehicles:
- Honda Accord Sedan '03-'08
 - Honda Accord Coupe '03-'08
 - Acura TSX '04-'08



6653
Acura/Honda Ball Joint Adapter Set

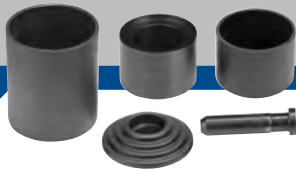
- This 4-adapter set is used in conjunction with the 7248 C-frame to remove and install ball joints on select Acura and Honda vehicles. Set contains adapter part numbers 580518, 554419, 554414 and 313967 for use on:
- 2009-2014 Acura TL and TSX
 - 2008-2012 Honda Accord
 - 2010-2011 Honda Accord Crosstour
 - 2012-2014 Honda Crosstour



6529-6
Import Car Ball Joint Adapter Set

- 15 adapters for removing & install ball joints.
- Works on upper and lower ball joints on Toyota, Hyundai, Kia, Infinity, Saab, and Nissan cars with press in ball joints
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.

SUSPENSION SERVICE AUTOMOTIVE SPECIALTY TOOLS



6649 Chevy/GMC Ball Joint Adapter Set

This unique 3-adapter set is used in conjunction with the 7248 C-frame to remove and install ball joints on Chevy and GMC vehicles. Set contains adapter p/n's 580524, 305227 and 580523 for use on 2011-2017 2500HD and 3500HD:

- Chevrolet Suburban, Avalanche and Silverado
- GMC Sierra and Yukon XL

6652 Subaru Ball Joint Adapter Set

This 3-adapter set is used in conjunction with the 7248 C-frame to remove and install ball joints on select Subaru vehicles. Set contains adapter part numbers 581996, 581995 and 581994 for use on:

- 2005-2006 Baja
- 2016-2017 Crosstrek
- 1998-Present Forester
- 1993-Present Impreza
- 1990-Present Legacy
- 2000-Present Outback
- 2015-Present WRX
- 2014-2015 XV
- 2013-2015 XV Crosstrek
- 2006-2007 B9 Tribeca
- 2008-2014 Tribeca



6647 Lexus/Toyota Ball Joint Adapter Set

This 4-adapter set is used in conjunction with the 7248 C-frame to remove and install ball joints on select Lexus and Toyota vehicles. Set contains adapter part numbers 222307, 305227, 204508A and 580569 for use on:

- Lexus - 2003-2009 GX470
- Toyota - 2003-2017 4Runner, 2007-2014 FJ Cruiser



6646 Lexus/Hyundai/Kia Ball Joint Adapter Set

This 4-adapter set is used in conjunction with the 7248 C-frame to remove and install ball joints on Lexus, Hyundai and Kia vehicles.

Set contains adapter part numbers 554413, 580570, 581426 and 38355A for use on:

Lexus	Hyundai
2006 GS300	2006-2011 Azera
2007-2011 GS350	2006-2010 Sonata
2006-2015 IS250	Kia
2016-2017 IS300	2007-2009 Amanti
2011-2017 IS350	



6529-10 Car Ball Joint Master Set Upgrade for 6539

- 14 additional adapters required to complete a 6529 Car Ball Joint Master Set when added to the 6539 Truck Ball Joint Adapter Set.



6651 Mazda CX7 & CX9 Ball Joint Adapter Set

This 4-adapter set is used in conjunction with the 7248 C-frame to remove and install ball joints on Mazda CX7 and CX9 vehicles. Set contains adapter part numbers 580585, 554413, 531739 and 554414 for use on 2007-2012 CX7 and 2007-2014 CX9.



6539-1 Import Truck Ball Joint Adapter Set

- 35 adapters included to remove & install ball joints.
- Works on upper and lower ball joints on Toyota, Honda, Acura, Hyundai, KIA, Infinity, Isuzu, and Nissan Trucks, Vans, and SUV's with press in ball joints.
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.

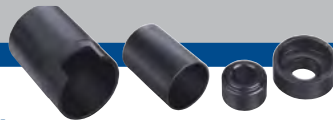


6539-2 Chrysler/Mitsubishi Truck Ball Joint Adapter Set

- 35 adapters included to remove and install ball joints.
- Works on upper and lower ball joints on Chrysler, Dodge, Jeep, Plymouth, and Mitsubishi Trucks, Vans, and SUV's with press in ball joints.
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.

8034 Chrysler Ball Joint Socket

- Removes and installs the screw-in type ball joints used on Chrysler / Dodge light trucks and vans.
- Similar to Miller Tools No. C-3561.
- Socket is 2" long with a 3/4" drive; fits 2-9/64" ball joints.



7894 Dodge/Jeep Truck, SUV Ball Joint Adapter Set

Use with ball joint service set Nos. 6530, 7248, and 7249 to remove or install aftermarket and original equipment upper and lower ball joints, and the offset ball joints used to change caster/camber. Works on '84-'89 "downsized" Jeep Wagoneer, Cherokee and Comanche; '87-'08 Wrangler; '93-'04 Grand Cherokee; '94-'99 Dodge Ram 4WD 1/2-ton pickup.



6735 Sprinter Van Ball Joint Kit

- Eight piece kit contains the tools needed to service lower ball joints on '04-'09 Dodge and '04-'12 Freightliner® Sprinter vans: tie rod remover / separator; wheel alignment studs; ball joint remover; driver, receiver, and installing rings.
- Use this kit with OTC No. 6736 C-frame.

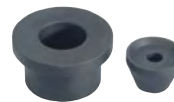
6736 Large C-Frame

- Required for use with No. 6735 Sprinter Van Ball Joint Kit.
- When used with OTC No. 6730 Update Kit, you can expand the applications of OTC Nos. 7249, 7918, 6529, 6539 and 6530 Ball Joint Kits.



6730 C-Frame Update Kit

Kit contains two adapters which, when coupled with the large C-frame 6736 included in OTC No. 8031 SUV Ball Joint Kit, make it possible to use any adapter designed for use with the smaller OTC No. 7248 C-frame.



6539-3 Ford/Mazda Truck Ball Joint Adapter Set

- 32 adapters included to remove and install ball joints.
- Works on upper and lower ball joints on Ford, Lincoln, Mercury, and Mazda Trucks, Vans, and SUV's with press in ball joints.
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.



**6731
Ford Truck Ball Joint Adapter Update Kit**
Three-piece kit contains specialty ball joint adapters for use with the industry standard OTC No. 7248 C-frame. Designed to work with the following Ford vehicles: F-150 '97-'03, F-250 '97-'99, Expedition '97-'02, Explorer '95-'05, Ranger '98-'08.



**7825
Ford Van Ball Joint Adapter**
This tool enables you to quickly remove the lower ball joint on '92 to '08, 3/4- and 1-ton vans (E-250 and E-350) when used with ball joint service set Nos. 6530, 7248, and 7249.



**7919
Ford 2WD Van Ball Joint Adapter Set**
This set is designed to remove/install press-fit upper and lower ball joints. Fits most Ford '92 to '04 2WD 3/4- and 1-ton vans.



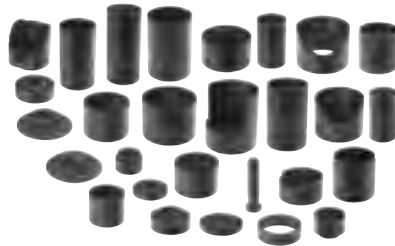
**6733
Honda/Toyota Truck/Van/SUV Ball Joint Adapter Set**
Two-piece kit contains specialty ball joint adapters for use with the industry standard OTC No. 7248 C-frame. Designed to work with the following Honda and Toyota vehicles:

- Honda CR-V '97-'06, Honda Odyssey '95-'06
- Toyota 4 Runner '96-'02, Toyota Sequoia '01-'08
- Toyota Tacoma '95-'04



**6529MAN-17
Ball Joint Application Guide**
Reference all ball joint adapter applications. Can be used with all ball joint kits and adapter sets.

- New application guide to cover Car and Truck/Van/SUV makes and models thru 2017.
- References Bolt In/Press Fit, Removal/Install adapter p/n's, and replace control arm applications.
- Includes Remove/Install diagrams with adapter p/n's to eliminate guess work.
- Quick Reference Chart to quickly determine if tools are required and which kit contains them.



**6539-4
GM Truck Ball Joint Adapter Set**

- 28 adapters included to remove & install ball joints.
- Works on upper and lower ball joints on Buick, Cadillac, Oldsmobile, Pontiac, Chevrolet, GMC, and Hummer Trucks, Vans, and SUV's with press in ball joints.
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.

**6732
GM Truck/SUV Ball Joint Adapter Set**
Four-piece kit designed to be used with the industry standard OTC No. 7248 C-frame. Contains specialty ball joint adapters to fit the following GM vehicles:
TrailBlazer & Envoy '02-'08, 1500 Silverado '99-'06, Suburban & Tahoe '95-'06, Avalanche '02-'08, Escalade '99-'07 Express & Savana '03-'08, Hummer H2 '03-'07.

**7920
GM 4WD Truck/SUV GM Ball Joint Adapter Set**
Use with ball joint service set Nos. 6530, 7248, and 7249 to service GM's 1996 to 1999 4WD 1/2- and 3/4-ton pickups, and Suburban, Yukon, and Tahoe SUVs. Easily remove or install either aftermarket or original equipment press-fit lower ball joints.



**6539-10
Truck Ball Joint Master Set Upgrade for 6529**
18 additional adapters required to complete a 6539 Truck Ball Joint Master Set when added to the 6529 Car Ball Joint Adapter Set.



**7704
Domestic 4WD Truck Ball Joint Adapter Set**
This kit is used with ball joint service set Nos. 6530, 7248, and 7249 to remove and install upper and lower ball joints on '67 to '92 1/2- and 3/4-ton 4WD vehicles fitted with Dana 44 front axles (found on Ford, Dodge, GM, International, and Jeep vehicles).



**7080
Domestic 4WD Truck Ball Joint Spanner Wrench**
Designed for removal and installation of ball joint adjusting sleeves on 1/2-, 3/4-, and 1-ton Dana 44 open yoke front axles found on Chrysler, Ford, GM, International, and Jeep 4WD vehicles.

- Permits easy torquing with 1" socket for correct upper ball-joint preload.



Vehicle	Year	Kit	Notes
Ford	F-150	6731	'97-'03
Ford	F-250	6731	'97-'99
Ford	Expedition	6731	'97-'02
Ford	Explorer	6731	'95-'05
Ford	Ranger	6731	'98-'08
GM	TrailBlazer	6732	'02-'08
GM	Envoy	6732	'02-'08
GM	1500 Silverado	6732	'99-'06
GM	Suburban	6732	'95-'06
GM	Tahoe	6732	'95-'06
GM	Avalanche	6732	'02-'08
GM	Escalade	6732	'99-'07
GM	Express	6732	'03-'08
GM	Savana	6732	'03-'08
GM	Hummer H2	6732	'03-'07
Honda	CR-V	6733	'97-'06
Honda	Odyssey	6733	'95-'06
Toyota	4 Runner	6733	'96-'02
Toyota	Sequoia	6733	'01-'08
Toyota	Tacoma	6733	'95-'04

Sample of Diagram and Application Chart

SUSPENSION SERVICE AUTOMOTIVE SPECIALTY TOOLS



7068 Upper Control Arm Bushing Service Set

Now you can easily replace press-in type upper control arm bushings on most rear wheel drive Chrysler, Ford, and GM vehicles. Mechanical screw power does the work. Set includes C-frame, screw assembly, and all adapters needed for quick removal or installation of bushings without removing or damaging the control arm.

Similar to
Kent Moore J-42393



7822A GM Torsion Bar Unloading Tool

This rugged tool is built for 2010 and older GM K-3500 series trucks with heavy-duty chassis and a larger torsion bar. It features a larger C-frame opening to accommodate beefier torsion bars. The tool holds the torsion bar while you make adjustments. It also works on 1988 to 2012 GMC and Chevrolet 1/2-, 3/4-, and 1-ton pickups; the S-10 Blazer and S-15 Jimmy, 4WD pickups with 4.3L V-6 engines; and 1991 to 2001 Oldsmobile Bravada.



7832 GM Torsion Bar Unloader

- Larger design to also cover the newer GM truck applications.
- Application; 2011 & newer HD C/K trucks, 2010 and older GM K3500 series trucks with heavy-duty chassis and a larger torsion bar. 1988 to 2003 GMC and Chevrolet 1/2-, 3/4-, and 1-ton pickups; the S-10 Blazer and S-15 Jimmy, 4WD pickups with 4.3L V-6 engines; and 1991 to 2001 Oldsmobile Bravada.

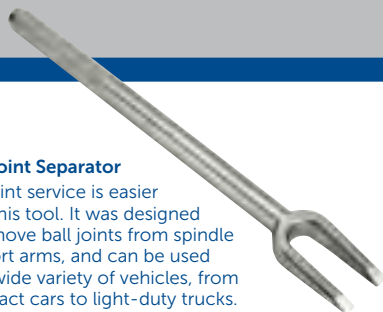
- 7832-1** GM Torsion bar unloader
- 7832-2** Forcing screw

Similar to
Ford 204-185
(T95T-5310-AR)



7816 Ford Torsion Bar Adjustment Tool

Before servicing a torsion bar on 1995–2001 Ford Explorer and 1998–2001 Mercury Mountaineer vehicles, you must first contain the bar to avoid possible damage. This tool securely accomplishes that task, allowing you to make adjustments.



6535 Ball Joint Separator

Ball joint service is easier with this tool. It was designed to remove ball joints from spindle support arms, and can be used on a wide variety of vehicles, from compact cars to light-duty trucks.

- 16" long and has a 15/16" fork spread.



6297 Ball Joint Separator

This tool is used to separate the ball joint from the spindle support arm. It works on many domestic and import front wheel drive vehicles, and is adjustable up to 2" for different size ball joints.

7534



7537

Upper Arm Alignment Wrenches

These specialized 1/2" drive wrenches provide easy access to the upper control arm bolts for front wheel alignment jobs.

7534 22 mm hex wrench for use on 1990–2005 2WD Chevrolet Astro and GMC Safari, and 1991–2005 AWD Chevrolet Astro and GMC Safari vans.

7537 18 mm hex wrench for use on U.S.-built 1985 to '90 GM Astro vans.



7917 Live Center Forcing Screw Plug

This plug replaces the existing forcing screw on the No. 7248 C-frame to allow its use on heavy-duty ball joints. The shorter length gives the C-frame a wider opening to accommodate the larger ball joints on 3/4- and 1-ton trucks.

6007 Lower Control Arm Prying Tool

Installing a ball joint on a lower control arm typically requires the effort of two people. However, with this tool and our No. 7420 or 7421 pry bar – or any 7/8" diameter pry bar – it's a one-person job.



7826 Ford Truck Torsion Bar Tool

This tool firmly holds the torsion bar on Ford light-duty trucks while you adjust or service the front suspension. Without it, a torsion bar could unwind and possibly cause damage. The tool fits 1997–2003 Ford F-150 4WD pickups, 1995–2001 Ford Explorer 4WD, 1998–2001 Mercury Mountaineer, and 1998–2001 Ford Ranger.



Similar to Kent Moore J-38658

7840 GM Caster/Camber Adjusting Tool

This tool is designed to make caster/camber adjustments quick and easy. Simply place it into the holes in the cross-member and lower control arm, then turn the tool's turnbuckle nut to hold the correct adjustment. This allows you to tighten the adjusting bolts. For use on 1993 to 2000 Chevrolet Camaro and Pontiac Firebird. Also works on 1986–92 Buick Riviera, Cadillac Seville, Oldsmobile Toronado, and 1986–91 Buick Regal.



7829

This wrench is specially bent to fit on the caster/camber adjusting cam on 1995 to 2001 Ford Explorer 4WD SUVs, and 1997 2WD and 4WD F-150 pickups. You can use it on the nut to loosen the adjusting cam, and on the bolt to set the caster/camber.

- Has a 21 mm, 12-point design.
- Accommodates a 1/2" drive ratchet or breaker bar.



Similar to Ford
204-D019(D93T-
3000-A)

7588A Ford 4WD Caster/Camber Sleeve Puller

Rusted or seized bushings are no match for this puller. It easily pulls most aftermarket and OEM bushings on Ford 4WD vehicles. It's the only tool that works on any angle OEM bushing, removing it quickly and without damage. For 1980 to '96 Ford Broncos, full-size E- and F-series vans and pickups; 1983 to '89 Ranger and Bronco II. The puller comes with adapters to pull most aftermarket bushings having removable retaining rings.

221476 Arnwood-style bushing adapter.



**6939
Broken Bolt Extractor Tool**

- Remove frozen, broken or cut off bolts within steering or suspension bushings.
- Can also be used to remove and install wheel studs and other general pressing needs.



**6939-1
Broken Bolt Extractor Adapter Set**

Available for use with the 7248 C-Frame.



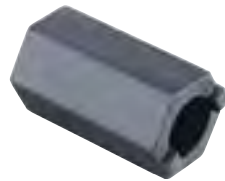
**5057
Broken Bolt/Clevis Pin Extractor Tool**

Used for smaller application.



**7544
Strut Rod Nut Socket (24 mm)**

This specially designed socket is needed to loosen and tighten the top strut nut when servicing the strut spring or strut cartridge. The socket is used with a 1/2" ratchet or breaker bar to turn the strut nut while holding the strut rod with the appropriate wrench. The socket fits 24 mm strut rod nuts found on many domestic FWD vehicles including 1988–96 Pontiac Grand Prix, 1988–98 Oldsmobile Cutlass Supreme, 1988–99 Chevrolet Lumina sedan, 1995–99 Chevrolet Monte Carlo, and 1988–96 Buick Regal.



**7707
VW and Audi Strut Nut Socket**

This 1-3/4" long socket is built for VW and Audi FWD cars in which the top shock-retaining nut is recessed inside the strut tower. The tool's center bore allows you to hold the strut shaft from turning, using a 7/8" (22 mm) hex key and appropriately sized wrench.



**7491C
GM Upper Control Arm Knock-Out Tool**

Here's the tool you need to remove the inserts on the upper control arm alignment brackets of light-duty GM trucks. It features an indexed forcing bolt that pulls straight and evenly, and works with off-center knock-outs. The tool fits 1989–2001 Chevrolet and GMC 1/2-, 3/4-, and 1-ton trucks, two- or four-wheel drive. Also works on 1990–2001 all-wheel drive Chevrolet Astro vans and GMC Safari vans. 1997–2002 1/2-, 3/4-, and 1-ton full size vans.



**6578
Pinch Mount Expander Kit**

- For servicing struts, ball joints, or steering knuckles with pinch bolt mounts.
- Remove most stubborn struts and ball joints with ease.
- This separator mounts in the pinch bolt holes and drives the anvil into the pinch slot, expanding the mount for easy component removal.
- Use on aluminum or cast iron pinch mounts; includes 2 dowel sizes.



**4533
GM W-Body Strut Tool Kit**

- Includes one T50 TORX® bit, a universal drive handle, and a double-ended socket.
- Use one end of the socket to remove/install the jounce bumper; the other end to remove/install the strut cap nut.

Works on GM W-body vehicles:

- 1988–96 Pontiac Grand Prix
- 1988–98 Olds Cutlass Supreme & Chevrolet Lumina Sedan
- 1995–99 Chevrolet Monte Carlo
- 1988–96 Buick Regal



**7045B
Front Coil Spring Compressor**

This compressor fits most late-model rear wheel drive domestic vehicles in which the coil springs are between the upper and lower control arms. The tool features four case-hardened, self-aligning plates to ensure correct load distribution under tension. Includes two 3-3/8" ID plates and two 4" ID plates. Will not work on Mercedes-Benz vehicles.



**7294
MacPherson Strut Spring Hook Compressor**

These devices quickly and easily compress most sizes of MacPherson strut springs. Setup is fast and simple. Compression is achieved by alternating from one assembly to another. Each device has a heat-treated alloy thrust screw (5/8"–11 x 12") with forged hooks.

HUB GRAPPLER™



CUT SERVICE TIME DRAMATICALLY

Complete solution for servicing wheel hubs and bearings on the vehicle without removing the steering components or knuckle, eliminating unnecessary alignments or the use of a shop press.

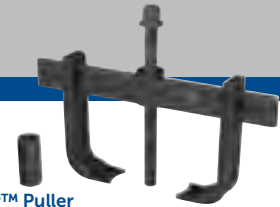
6575 Hub Grappler™ Kit

- Jaws designed and sized to properly fit hub applications and is quickly located on the puller bar without the use of fasteners.
- 3/4" custom drive screw coupled with the special equalizer washer provides smooth operation while proprietary heat treating extends its life 5-10 longer than similar designs.
- Six adapters increase application coverage. Includes tie rod/ball joint tool and two Ford axle installers.
- Included Application Guide is the most comprehensive on the market.



6575H Hydraulic Hub Grappler™ Kit

- An economical way to increase the performance and speed of wheel bearing and hub service.
- Kit includes a through hole 9-ton ram, OTC 2510A air/hydraulic pump, 6 ft. hose with couplers, drive screw and nut.
- Jaws designed and sized to properly fit hub applications and is quickly located on the puller bar without the use of fasteners.
- 3/4" custom drive screw coupled with the special equalizer washer provides smooth operation while proprietary heat treating extends its life 5-10 longer than similar designs.
- Six adapters increase application coverage. Includes tie rod/ball joint tool and two Ford axle installers.
- Included Application Guide is the most comprehensive on the market.



6575-1 Hub Grappler™ Puller

- The new Hub Grappler Puller is specifically designed to apply maximum force with minimal effort from an impact gun to also minimize service time.
- The new jaws are designed and sized to properly fit hub applications and can be quickly located on the puller bar without the use of fasteners.
- The new 3/4" custom drive screw coupled with the special equalizer washer provides smooth operation while the proprietary heat treating extends its life 5-10 times longer than similar designs.



6575-2 Hub Tamer™ to Grappler Update Kit

- This kit includes everything to update the previous Hub Tamer Kit to the New Hub Grappler kit.
- Includes the Hub Grappler Puller, 6 new adapters, misc. hardware and the new Hub Grappler Application Guide.

6575-2C

- Same as above, also includes Hub Grappler case 6575-4.



6575-3 Hub Grappler™ Hydraulic Kit

- The Hub Grappler Hydraulic Option is an economical way to increase the performance and speed of wheel bearing and hub service.
- Kit includes a through hole 9-ton ram, OTC 2510A air/hydraulic pump, 6 ft. hose with couplers, drive screw and nut.



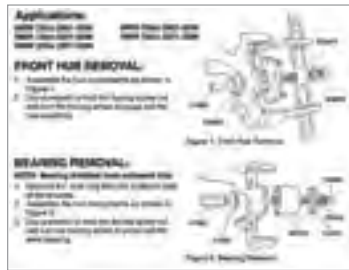
6575-4 Hub Grappler™ Case

- Fits the Hub Grappler puller and adapters.



6575MAN-09 Hub Grappler™ Application Guide

- The Hub Grappler Application Guide is the most comprehensive hub and bearing service guide on the market. Developed to be the first tool used in the kit, it provides quick reference to the other tools in the kit required to do the job, eliminating guesswork and saving time.
- Comprehensive application guide includes diagrams and instructions showing how and where every adapter is used from 1996–2009.
- Application Chart references front/rear, hub/bearing removal and installation adapter part numbers based on vehicle make, model, and year.
- Application Diagrams show puller and adapters properly mounted on steering knuckle with p/n call outs, eliminating trial-and-error.



Samples of Application Diagram and Chart.



6290A Front Hub Puller for 4WD Vehicles

- For removal of the front hub assembly, necessary for wheel bearing or brake rotor service. Provides the mechanical advantage and straight pull not possible with a slide hammer.
- Will not work on trucks with dual rear wheels.

Services:

- 1988–2014 GM 1/2-ton, 3/4-ton, and 1-ton trucks, Tahoe, Suburban, and Yukon.
- 1994–2014 Dodge 3/4-ton and 1-ton Ram trucks.
- 1998–2014 Ford 3/4-ton and 1-ton trucks, Excursion.



7901 Front Hub Puller for 4WD Vehicles

This puller is required for removing a front hub assembly in 3/4- and 1-ton 4WD pickups with 8-bolt hubs. It works on 1994 to 2014 Dodge Ram and 1988 to 2014 Ford and GM.

- Fits bolt hole pattern 8 x 6.5".
- Will not work on trucks with dual rear wheels.
- Use with our No. 7703 10-lb. slide hammer for maximum pulling force.



6574 Universal Hub Puller HD with Plate

- Universal Hub Puller HD – the “Final Answer” to frozen hubs, axle shafts, and other tough pulling applications.
- Adjustable sliding puller legs can be positioned anywhere on the puller center hub for a true universal fit on wheel hubs with 5"-8"+ bolt circles.
- Pulling plate allows for quick attachment and an even pull on the popular 5 bolt hubs with 4"-5" bolt circles.
- Forged puller assembly coupled with a 1" drive screw capable of 20 tons of force.
- Drive screw approved for use with an impact gun and can be struck with a hammer.
- Additional puller legs may be added to the center hub for special applications.



7394 Universal Hub Puller

With its adjustable sliding arms, this puller makes wheel-hub removal quick, easy, and damage free. It has maximum bolt circle of 7-1/2".

- The No. 32937 puller leg is available separately to complete the five necessary for Cadillac and Jeep hub removal.
- Includes striking wrench and puller screw.

32937 Puller leg

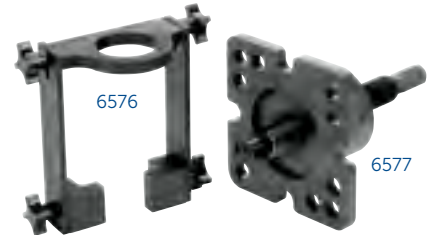
6574-1 Puller Plate Optional Puller plate with screws for 7394.



7208A Hub remover to push the axle shaft from the front hub.

7135A Installer is used to pull the axle shaft into the front hubs on Ford Taurus/Sable vehicles. Fits axle shafts with 20 mm x 1.5 thread.

7924A Installer is used to pull the axle shaft into the front hub. Fits axle shafts with 22 mm x 1.5 thread on Ford Contour/Mystique, Probe, and Focus.



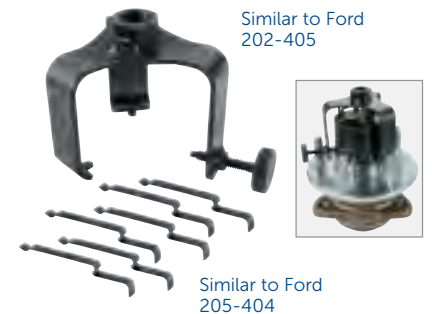
6576S includes both 6576 & 6577

6576S Dodge Hub Service Set

- Removes stubborn hubs, using 2 methods.
- First, the 6576 Hub Pressing Tool is used to press off the hub with the aid of the power steering. The tool locates spacers between the U-joint yoke and axle housing. Unique design makes this a one person operation to remove the hub with the bearing in tact.
- In the event the Hub Pressing Tool does not budge the hub, the 6577 Hub & Bearing Housing Puller is used. This may separate the bearing, but the unique dual pattern design fits both the wheel hub and bearing housing, capable of applying 20 tons of force.
- Will not work on trucks with dual rear wheels.

6576 Hub Pressing Tool, Fits Dodge 3/4 & 1 Ton 4WD 1994-Later applications.

6577 Hub & Bearing Housing Puller, Fits Dodge 3/4 & 1 Ton 4WD 1994-Later applications. Also fits GM and Ford 4WD Truck hubs.



Similar to Ford 202-405

Similar to Ford 205-404

7932 Ford Vacuum Front Hub Release Tool Set

Here's the equipment you need to safely remove the plastic vacuum hubs on Ford pickups. Standard tools won't work for the job, but this set has special clips that slip into slots on the hub to release it.

- For use on 1998 to 2000 4WD Ranger with vacuum front hubs.

HUB SERVICE AUTOMOTIVE SPECIALTY TOOLS

6695

Similar to Ford
205-429



6697

Similar to Ford
205-830



6698

Similar to Ford
205-831



Ford Axle Shaft Seal Installers

Correctly installs the seal onto the axle shaft and into the wheel knuckle, preventing front hub vacuum leaks that would cause the 4WD to not engage.

6695 Ford Axle Shaft Seal Installer. Works on 1998-2004 Ford F-250, F-350, F-450, and F-550 4X4s having the vacuum-operated front axle.

6697 Ford Axle Shaft Seal Installer. Works on 2005-newer Ford F-250, F-350, 4X4s having the vacuum-operated front axle.

6698 Ford Axle Shaft Seal Installer. Works on 2005-newer Ford F-450, F-550, 4X4s having the vacuum-operated front axle.

8342

Hub Resurfacing Kit

- Fits your power drill to quickly sand rust off studs and mounting surfaces where it is important to have a clean and debris free surface.
- The tool features a 1/4" dia. shank and a stud clearance pilot hole that accepts up to 1/2" studs.
- Sanding pads attach with Half turn thread.
- Includes holder and five sanding discs.
- Run at speeds between 5,000 - 20,000 rpm or less for best results.



552948

10 pack of replacement sanding pads



6541

Pulling Hook

- This slide hammer puller attachment is used to remove seals, bearings, and other press-fit parts.
- Designed to be used with OTC No. 1155 (5 lb.) or No. 1156 (2-1/2 lb.) slide hammer, or other slide hammers having 5/8-18 threads.



27315

Pulling Hook

- This slide hammer puller attachment is used oil seals and bearing in situations where conventional methods won't work.
- Designed to be used with OTC No. 1155 (5 lb.) or No. 1156 (2-1/2 lb.) slide hammer, or other slide hammers having 5/8-18 threads.



6578

Pinch Mount Expander Kit

- For servicing struts, ball joints, or steering knuckles with pinch bolt mounts.
- Remove most stubborn struts and ball joints with ease.
- This separator mounts in the pinch bolt holes and drives the anvil into the pinch slot, expanding the mount for easy component removal.
- Use on aluminum or cast iron pinch mounts; includes 2 dowel sizes.

1181

Multipurpose Puller Set

This assortment of puller tools gives you a wide range of job versatility. You get a 5 lb. slide hammer puller, hub puller, two sizes of OTC Grip-O-Matic® jaw-type pullers, a bearing pulling attachment, plus a cross-bar gear and pulley puller, all contained in a handy plastic storage case.

Set No. 1181 consists of:

No.	Description
1177	Slide hammer puller with a 5 lb. hammer, 2-way and 3-way heads. Reversible: either two or three jaws may be used to handle both "inside" and "outside" pulling jobs.
7208A	Front hub puller for servicing front-wheel-drive cars. Includes a spare locknut, which permits use with a No. 1177 slide hammer for rear axle flanges.
1023	2-ton combination 2- or 3-jaw Grip-O-Matic puller. Has 3-3/8" max. reach, 4-3/4" max. spread.
1027	5-ton combination 2- or 3-jaw Grip-O-Matic puller. Has 5-1/2" max. reach, 7" max. spread.
7393	Bar-type gear and pulley puller with a 5-1/2" long screw. Includes two hex head cap screws, 3/8"-16 x 3" long. Spread range: 1-1/2" to 4-1/4".
1122	Bearing pulling attachment for use with No. 1027 and No. 7393 pullers. Has 2" max spread, 1/8" min. spread.

4579

9-Way Slide Hammer Puller Set

- Pulls flange-type rear axles and most front-wheel drive hubs.
- Internal and external jaws provide a variety of combinations to pull bearings, gears and seals.
- Two- and three-way cross blocks and cone provide the perfect jaw configuration for most jobs.
- Set also includes a grip wrench adapter and a dent puller attachment for sheet metal or other unique pulling requirements.
- Designed for use with other OTC 5/8"-18 thread slide hammer attachments.
- Packaged in blow-molded case.



4508

Professional Style Seal Puller

- Designed to remove oil and grease seals when servicing cars, SUVs, and light trucks without damaging the housing or bearing.
- Hook tips in two sizes and professional handle design allows removal of hard-to-get-at seals by getting under them.
- The tool is 12" long and the hook tip is double-secured (versus competitors' designs), for durability.
- An extra blade is included, and additional replacements (No. 4508-1) may be ordered.

4508-1 Replacement blade for 4508



(7208A)



(1122)



(7393)



(1177)

5 lb. Hammer in Polished Chrome Finish.





7948

Ten-way slide hammer puller set

- 2-3/8" Jaw (3 each)
- 3-3/4" Jaw (3 each)
- 6-1/2" Jaw (3 each)
- 3-Way Puller Head
- Adjusting Cone
- Hex Jam Nut, 5/16-24
- Hex Head Cap Screw, 5/16-24 x 11/8"
- 5 Lb. Hammer
- Shank and Tee Bar Assembly
- Cross Block
- Forcing Screw, 7/16-20 x 6.5"
- Puller Head
- Hex Jam Nut, 5/8-18
- Forcing Screw, 5/8-18 x 5"
- Sleeve
- Grip Wrench Adapter
- Dent Puller
- Retainer
- Self-Tapping Screw, 1/4" x 2"
- Puller Adapter
- Seal Hook
- Plastic carry/storage case



Bearing Cup Remover

Ideal for servicing hubs on today's popular front-wheel-drive small cars. The cone holds the jaws in place during pulling. Perfect for pulling internal bearing cups, seals, bushings, etc. Jaw spread: 15/16" to 3-1/4", reach to 3-1/2". Use with any slide hammer having a 5/8"-18 thread (OTC No. 1155 or No. 1156 or the No. 927 Push-Puller).

6542 Bearing Cup Remover

7136 Bearing Cup Remover. Similar to Ford 308-047.



Slide Hammer Rear Axle Puller

This puller will enable you to remove flange-type rear axles from most late model cars and light trucks. It works on axles having bolts and studs up to 9/16" diameter.

- Fits 4-, 5-, or 6-bolt patterns and stud circles from 4-1/4" to 5-9/16".

7372 Rear axle pulling plate.

7374 Rear axle pulling plate with 5-lb. slide hammer assembly.



4507

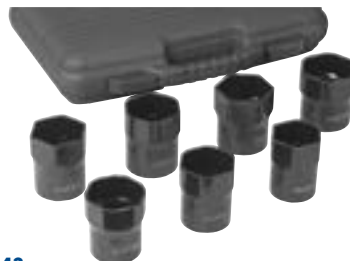
Bearing Race and Seal Driver Set (10 piece)

- This aluminum constructed set permits installation of tapered bearing races and seals without damage to the component or housing.
- Tapered side of driver is used to install races. Invert the driver to the flat side to install seals.
- Housed in a blow-molded plastic storage case.
- Includes driver handle with bolt, plus these tool sizes: 1.565", 1.750", 1.965", 1.965", 2.325", 2.470", 2.555", 2.830", 2.995", and 3.180".

4406

Adjustable Bearing Race and Seal Driver

- Universal and fully adjustable.
- Twist head to adjustable from 3/4" to 3.5" (19mm to 89mm).
- Lock bolt holds jaws to preferred diameter.
- Steel striking cap mounted on aluminum handle and head provides a weight under 2 lbs.



4542

7-Piece Wheel Bearing Locknut Socket Set

For use with 1/2" ratchet or breaker bar. Set contains:

- 519097-1 2-3/8" hex locknut socket** works on 1984-92 Ford Rangers and Bronco IIs with automatic locking hubs. Similar to Ford 205-040 (T70T-4252-B).
- 519097-2 2-9/16" rounded hex locknut socket** works on 1990-93 Dodge trucks with Dana 60 manual hubs.
- 519097-3 2-1/2" hex locknut socket** fits the hex nut found on rear axles and various front axle applications on light-duty trucks.
- 519097-4 2-3/4" rounded hex locknut socket** works on 3/4-ton and 1-ton Ford F-250 and F-350 trucks with automatic locking hubs. Similar to Ford No. 205-349 (T95T-1197-B).
- 519097-5 2-1/2" rounded hex locknut socket** works on 1995-96 Ford F-150 trucks and full-sized Broncos with automatic locking hubs. Similar to Ford 205-348(T95T-1197-A).
- 519097-6 2-3/8" rounded hex locknut socket** works on 1990-newer Ford Rangers, Bronco IIs, and Explorers with automatic locking hubs.
- 519097-7 55 mm hex locknut socket** designed for use on front wheel adjusting nuts found on Toyota models FJ, LN, and RN.



1912

6-pt. Locknut Socket

- This high-grade truck wheel bearing locknut socket is made of high-strength steel.
- NOTE: Sockets are designed for use with 3/4" square-drive manual tools only. Impact tool use voids sockets' warranty.
- Opening size (6 pt.) 3-7/8"

Similar to Ford 205-039 (T70T-4252-B)

1902

Locknut Socket - Ford

- Drive 3/4" (6 pt.) 2-3/8" Hex
- This high-grade truck wheel bearing locknut sockets are made of high-strength steel and resist rounding out.
- Services 1984-92 Ford Ranger and Bronco II with automatic hubs; 1993-1997 Ford Ranger, Bronco II, and Explorer with automatic hubs.
- For manual use only, impact wrench voids warranty.



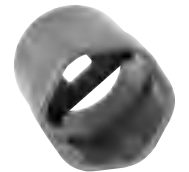
Similar to Ford 205-043 (T70T-4252-W)

Fits special "rounded" hex nut found on Dana axles of some Ford trucks. Depth of locknut sockets is 5".

1928

Locknut Socket - Ford, Dodge

- Drive 3/4" (6 pt.) 2-9/16" Hex
- This high-grade truck wheel bearing locknut sockets are made of high-strength steel and resist rounding out.
- Services 1990-93 Dodge truck with Dana 60 manual hubs. 3/4" sq. drive.
- For manual use only, impact wrench voids warranty.

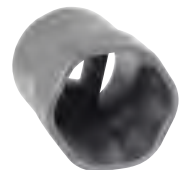


Fits special "rounded" hex nut found on Dana axles of some Ford trucks. Depth of locknut sockets is 5".

1936

Locknut Socket - Ford

- Drive 3/4" (6 pt.) 2-3/8" Hex
- This high-grade truck wheel bearing locknut sockets are made of high-strength steel and resist rounding out.
- Services 1990-newer Ford Ranger, Bronco II, and Explorer with automatic hubs.
- For manual use only, impact wrench voids warranty.



HUB SERVICE AUTOMOTIVE SPECIALTY TOOLS

1-11/16" 43 mm



6006 Locknut Socket - Dodge

- Services 1994–newer Dodge 1/2-ton 4x4 pickups with Dana 44 front axle and Dana 60 axle with vacuum disconnect front axle.

6601 Locknut Socket - Ford

- Services 2003–newer Ford F-250, F-350, and F-450 Super Duty trucks with 10-1/2 inch rear axle.
- 1/2" sq. drive.

Similar to Ford 205-448



2-3/4" O.D.



2-1/4"

7157 Locknut Socket Ford, Dodge, GM

- Services 1993–newer Ford Ranger Bronco II and Explorer with manual hubs; 1995–96 Ford F-series 1/2-ton truck and full-size Bronco with manual hubs; 1995–newer Ford F-series 3/4-ton and 1-ton trucks with manual hubs; 1959–85 Ford F-series 1/2- and 3/4-ton trucks and full-size Bronco; 1960–90 GM 1/2-ton truck and full-size Blazer/Jimmy; 1969–89 Dodge 1/2-ton truck with manual hubs; 1969–72 International 1/2-ton truck.

- 1/2" sq. drive.

Similar to Ford 205-192 (T83T-1197-B)

7158 Locknut Socket Ford, Dodge, GM

- Services 1985-1/2–95 Ford F-series H.D. 3/4- and 1-ton Dana 50 IFS of Dana 60 front axle; 1982–90 GM H.D. 3/4- and 1-ton trucks, 1994–newer Dodge Dana 60 with Cummins.

- 1/2" sq. drive.

Similar to Ford 205-D065 (D85T-1197-A)



2-1/2"

7269 Locknut Socket Ford, GM

- Services 1985–newer Ford F-series 3/4- and 1-ton trucks with Dana 80 rear axle.

- 1/2" sq. drive.

Similar to Ford 205-282 (T88T-4252-A) Kent Moore J-42855



2-3/4"

7612 Locknut Socket Toyota

- 54 mm hex socket fits front wheel bearing adjusting nut of Toyota FJ, LN, and RN. Has 1/2" square drive end, permitting use of a torque wrench.

- 1/2" sq. drive.

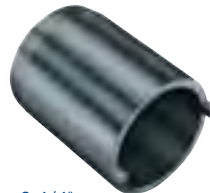


2-1/8" 54 mm

7698 Locknut Socket Isuzu, Honda, Jeep

- Services 1988–1995 Isuzu Trooper, Rodeo, Amigo, and pickup; 1989–1995 Honda Passport; Jeep J20 pickups with Dana 60 axle.

- 1/2" sq. drive.



2-1/4"

7795 Locknut Socket Ford

- Services 1995–1996 Ford F-series 1/2-ton trucks and full-size Bronco with automatic hubs.

- 1/2" sq. drive.

Similar to Ford 205-348 (T95T-1197-A)



2-1/2"

7796 Locknut Socket Ford

- Services 1995–1998 Ford F-series 3/4- and 1-ton trucks with automatic hubs.

- 1/2" sq. drive.

Similar to Ford 205-349 (T95T-1197-B)



2-3/4"

7941 Locknut Socket Toyota

- Specially designed to fit 4WD lock-out hubs on Toyota's 1995–2002 Tacoma, and 1996–2002 T100 and 4Runner.

- 1/2" sq. drive.

Similar to Toyota 09318-12010-01.



2.366 center to center on pins

7090A Locknut Socket Ford, GM

- Services 1978–84 Ford F-series H.D. 3/4- and 1-ton 4WD trucks; 1973–81 GM 3/4- and 1-ton 4WD trucks.

- 1/2" sq. drive.

Similar to Ford 205-D001 (D78T-1197-A)



2-5/8"



2-3/8"

7270A Locknut Socket Ford, Dodge

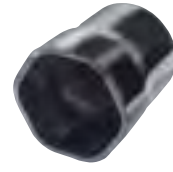
- Services 1984–92 Ford Ranger and Bronco II with manual hubs; 1986–95 Ford F-series 1/2-ton truck; full size Bronco with Dana 44 front axle; 1990–93 Dodge trucks with Dana 44 automatic hubs.

- 1/2" sq. drive.

Similar to Ford 205-244 (T86T-1197-AR)



6612, 6921



6796, 6928

- **6612** 54 mm hex locknut socket designed for use on front wheel adjusting nuts found on Toyota FJ, LN, and RN models.

- **6921** 2-1/2" hex locknut socket its hex nut found on rear axles and various front axle applications on light-duty trucks.

- **6796** 2-3/4" rounded hex locknut socket. Works on 3/4- and 1-ton Ford F-250 and F-350 trucks with automatic locking hubs. (Ford No. T95T-1197-B & 205-349).

- **6928** 2-9/16" rounded hex locknut socket. Works on 1990–93 Dodge trucks with Dana 60 manual hubs.



7217 Axle Nut Socket

- Designed to fit the axle nut on Chevy Topkick/Kodiak, 2003 - Newer.

- Similar to J-44275.



7218 Axle Hub Nut Socket

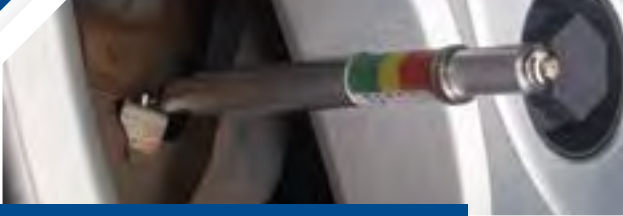
- Removes/installs the axle hub bearing retaining nut.

- Fits GM 11-1/2" rear axle found on 2011 and newer trucks.

- 9 Pin socket, 1/2" drive.

- Similar to CH-50636.

BRAKE SERVICE AUTOMOTIVE SPECIALTY TOOLS



SPEED UP YOUR INSPECTION PROCESS.

6596 Brake Pad Gauge

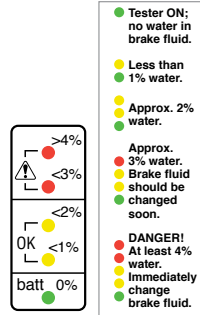
- The 6596 Brake Pad Gauge allows for a definitive measurement of brake pads to determine remaining life.
- Unique design allows for measurement on the vehicle without the removal of any components in most cases (wheel assembly or brake caliper).
- Quick reference of brake pad condition via color code scale.

Barrel Measurement	Quick Reference Color	Brake Pad Condition
8 mm or more	Green	No replacement necessary
3 mm to 8 mm	Yellow	Suggest replacement soon
0 mm to 3 mm	Red	Recommend replacement



6980 Brake Drum and Rotor Puller

- Handles large components such as brake drums, rotors, drive wheels, gears, flywheels, and pulleys.
- One person can easily set the tool in place and use for tough pulls even where there is little access to insert the jaws.
- Spread to 12-3/4" and 5" of reach.
- 7-tons of force, yet weighs less than 10 pounds.
- Can be used with air tools to reduce time and fatigue.



Brake Fluid Tester

- Tester determines quality of brake fluid.
 - One battery included: 1.5V AAA.
1. Remove cap from brake fluid reservoir.
 2. Remove probe cap from brake fluid tester.
 3. Press power button on top of tester. Green LED lights up.
 4. Dip entire length of metal probes into brake fluid.
 5. After one second, match color of LEDs with color chart to determine brake fluid quality.
- Tester automatically powers off after twelve seconds of inactivity.

4598-DOT3 Tester calibrated with DOT 3 fluid.

4598-DOT4 Tester calibrated with DOT 4 fluid.



6979 Brake Drum and Rotor Puller

- Designed for Medium/Heavy Duty Brake Drums/Rotors
- Accommodates brake drums and rotors up to 17.5" diameter
- Two screws included for standard and tall drum applications
- Puller reach is 12.25"



4589

Disc Brake Piston Tool

- This "cube" tool rotates pistons back into brake calipers when replacing brake pads on vehicles with rear wheel disc brakes.
- Tool has 3/8" square drive, provides six drive pin configurations to fit most cars and light trucks. This updated version fits more applications than many competitors' tools.



6093

Disc Brake Pad Spreader

- Can be used on or off the vehicle during brake pad replacement to push the piston back into the caliper. Thick pushing plate (3/16") and wide, threaded collars are designed for heavy-duty applications.
- Works on single and dual piston calipers.
- Slotted plate design provides universal fit on dual piston caliper applications.



6703

Line Fluid Stopper Kit

- Stop messy fluid leaks and prevent contamination during service.
- Kit seals all types of rubber and steel line found on fuel, brakes, AC, power steering and transmission system.
- Includes two banjo style fitting stoppers, two steel line stoppers, six line plugs, a line disconnect tool, and a long reach line pinch-off tool for hard-to-reach hoses.

6703-1 Banjo Line Fluid Stoppers, 2 pk.

6703-2 Steel Line Fluid Stoppers, 2 pk.

6703-3 Line Plug Fluid Stoppers, 6 pk.



Similar to Ford 206-D001

7034

Disc Brake Pad Spreader

- For use on all standard and four-piston caliper disc brakes.
- Retracts piston and holds pads snugly in place for easy assembly of caliper over rotor.
- An extremely rugged tool that's easy to use.



7317A

Disc Park Brake Caliper Tool Kit

Includes caliper piston adapter from 1-1/2" to 2-1/2" to service most Audi, Chrysler, Ford, GM, Honda, Jaguar, Mazda, Mitsubishi, Nissan, Saturn, Subaru, Toyota, VW, Volvo, Saab vehicles with 4 wheel disc brakes.



4743

Motorcycle Brake Caliper Spreader

- Compresses the brake pistons on most style calipers for easy pad replacement.
- Fits all front and some rear disc brakes.
- Range: .25" (5 mm) to 2.25" (58 mm). Works on all automotive applications in this range.



4799

Brake Piston Removal Locking Pliers

This specially designed locking pliers allows the removal of brake caliper pistons during service or rebuild. The pliers is simply clamped into the I.D. of the caliper piston allowing it to be pulled out of the caliper. Range; 5/8" to 2-1/4" diameter pistons.

BRAKE SERVICE AUTOMOTIVE SPECIALTY TOOLS



6516 Brake Tool Set (8 piece)

- Set contains the most popular brake tools for servicing drum brakes on many import and domestic vehicles.
- Includes three different brake spoons to adjust most brake drums, five different brake spring tools that will service most drum brakes.



4590 Brake Spring Pliers and Claw

- Effectively removes and replaces shoe return springs of drum brakes on domestic cars and trucks. Thin, narrow point provides straight, in-line pull on spring.
- Robust handle provides powerful leverage. Double-ended design. Plated steel resists corrosion.



4591 Brake Spring Compressor Tool

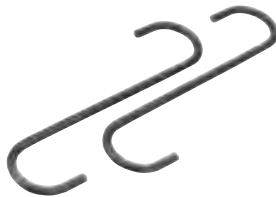
- Provides leverage to remove and install stubborn hold down springs of drum brakes on cars and light trucks.
- Special beveled cup end and notched design grips the retaining washers (11/16" to 7/8") used to hold the springs in place. Comfortable handle and knurled base for solid gripping.



Similar to Ford
206-D004

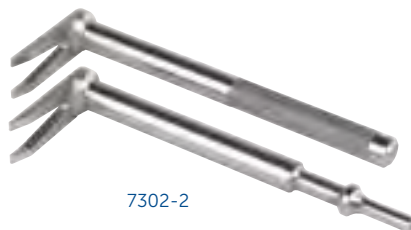
7299 Ford Caliper Pin Remover

This is the damage-free way to remove brake caliper pins on 1986 to '88 Aerostar, Bronco, and E- and F-series pickups; 1983 to '88 Ranger; and 1984 to '88 Bronco II.



7661 Caliper Hanger Set

These hangers are designed to hold brake calipers out of your way during brake, bearing, suspension, or axle work. In doing so, they make the jobs easier and faster, and reduce possible brake hose damage.



7302-2

7302 Brake Caliper Pin/Bolt Remover Set

- Allows for removal of inboard facing pins or bolts to be removed from the outboard side of the brake caliper or vehicle component.
 - For caliper pin removal, simply back the pin bolt out half way and place the tool over the bolt shank to strike against the bolt head.
 - Fits all sizes of pins or bolt shanks ranging from 1/4" (6mm) to 5/8" (16mm).
- Set includes

- 7302-1** A striking version.
- 7302-2** Air hammer adapter.



6720 Flare Nut Locking Pliers Set (3 pcs.)

- Designed for use on new or damaged flare nuts that have been rounded or rusty.
- Fits Standard or Metric nuts and bolts.
- Angled jaws allow for clearance around frames and bulkheads.

6720-1 Covers 1/4" to 5/16" (6mm to 8mm).

6720-2 Covers 3/8" to 7/16" (9mm to 11mm).

6720-3 Covers 1/2" to 5/8" (12mm to 16mm).



6720-4 Flare Nut Locking Pliers

- Designed for use on new or damaged flare nuts that have been rounded or rusty.
- Fits Standard or Metric nuts and bolts.
- Angled jaws allow for clearance around frames and bulkheads.
- Covers sizes 11/16" to 7/8" (17mm to 22mm).



6722 Brake Spring Locking Pliers

- Designed to compress parking brake springs and hold them in a compressed position while servicing the brake cable or other brake components.
- Ford and Dodge applications.



**4503
Double Flaring Tool Kit**

- Designed for double or single flare in copper, aluminum, soft steel brake line, and brass tubing (to 45 degrees).
- Includes five adapters 3/16" through 1/2" (4.8 mm through 12.7 mm).
- Chrome swivel, made of alloy steel, reduces friction. Forged yoke made of heat-treated steel. Housed in a blow-molded storage case.



**4504
Bubble (I.S.O.) Flaring Tool Kit**

- Designed for crack-free bubble flares on soft steel tubing used in automotive brake systems.
- Includes four dies: 4.75, 6, 8, and 10 mm adapters.
- Forged steel yoke, flaring bar, and all the adapters needed for ISO bubble flaring.
- The most economical "Bubble" flare tool to date. Housed in a blow-molded storage case.



**6504
Bubble (I.S.O.) Flaring Tool Set with Cutter**

- Designed for metric, steel brake lines where an ISO or bubble flare is required.
- Includes the No. 6514 tubing cutter and adapters for 4.75 mm, 6 mm, 8 mm, and 10 mm tubing.
- Housed in a plastic blow-molded case.



**6506
Metric Double Flaring Tool Set with Cutter**

- Designed for metric, steel brake lines where double flaring is required.
- Also performs 45° single flares on 4 mm, 4.75 mm, 6 mm, 8 mm, 10 mm, 12 mm, and 14 mm copper, aluminum, brass, and magnesium tubing.
- Includes the No. 6514 tubing cutter and adapters for double flaring 4 mm, 4.75 mm, 6 mm, 8 mm, and 10 mm tubing.
- Housed in a plastic blow-molded case.



**6503
Double Flaring Tool Set with Cutter**

- Designed for steel brake lines where double flaring is required.
- Also performs 45° single flares on 3/16", 1/4", 3/8", 7/16", 1/2", and 5/8" copper, aluminum, brass, and magnesium tubing.
- Includes the No. 6514 tubing cutter and adapters for double flaring 3/16", 1/4", 5/16", 3/8", and 1/2" tubing.
- Housed in a plastic blow-molded case.



**6502
Master Brake Flaring Tool Kit**

- Covers Single, Double, and Bubble type flares:
- Single Flare Standard Lines 3/16" – 1/2".
 - Single Flare Metric Lines 4mm – 14mm.
 - Double Flare Standard Lines 3/16" – 1/2".
 - Double Flare Metric Lines 4mm – 10mm.
 - Bubble Flare Standard Lines 3/16" – 1/2".
 - Bubble Flare Metric Lines 4.75mm – 10mm.
 - Kit contains flaring bar, arbor press, adapters, tube cutter, deburring tool, all in a hard case.



**6514
Mini Tubing Cutter**

- Works on tubing sizes 1/8" to 5/8" O.D. (3mm to 16mm).
- Easily cuts copper, brass, aluminum, and steel brake lines in hard-to-reach places.
- Extra cutting wheel stored in knob.



**6512
Heavy-Duty Tubing Cutter**

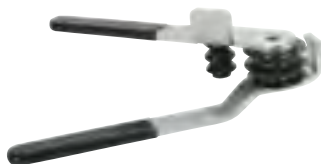
- Works on tubing sizes 1/8" to 1-1/8" O.D. (3mm to 29mm).
- Easily cuts copper, brass, aluminum, and steel brake lines.
- Reamer folds onto cutter body for storage.
- Extra cutting wheel stored under reamer.

BRAKE SERVICE AUTOMOTIVE SPECIALTY TOOLS



4403 Tubing Bender

- For 3/16" and 1/4" dia. tubing.
- Bend die approximately 1/2" radius.
- Can bend up to 180+ degrees.
- Quick release handle to easily remove tubing from bender.
- Sturdy steel construction.



4404 Tubing Bender

- For 5/16" and 3/8" dia. tubing.
- Bend die approximately 3/4" radius.
- Can bend up to 180+ degrees.
- Quick release handle to easily remove tubing from bender.
- Sturdy steel construction.



6515 3-in-1 180° Tubing Bender

- Capable of making 180° bends in copper, brass, aluminum, and steel tubing.
- Just one tool works on three sizes of tubing: 1/4", 5/16" and 3/8".



4401 Tube Bending Pliers

- Bends tubing from the side allowing for use in limited access areas.
- 3/16" and 1/4" dia. tubing.

8106 Master Cylinder Auto Filler

- Automatically refills the brake fluid reservoir during brake bleeding.
- Base plate retaining clip provides positive attachment to all master cylinder reservoir types.
- Positive venting system supplies unbroken, continual fluid flow.
- Height adjustment allows user to maintain correct fluid level on all reservoir types.
- On/Off tap allows installation and storage without drips or spills.
- Suitable for use on any level controlled re-filling application (eg. clutches).



8101-SET Brake Bleeder/Fluid Evacuation with Auto Filler Set

This one man brake bleeding system allows for fast and efficient vacuum brake bleeding. The Vacuum Brake Bleeder/Fluid Evac. has a universal rubber fitting that holds securely on brake bleeder screw. Attach shop air and use the ball valve for on-demand vacuum and hands free operation. 6 L capacity.

The Master Cylinder Auto Filler automatically refills the brake fluid reservoir during brake bleeding. Base plate retaining clip and height adjustment allows fit on all reservoir types. On/Off tap allows installation and storage without drips or spills. 20 oz. (600ml) capacity.



8104A-SET Brake Bleeder with Auto Filler Set

This one man brake bleeding system allows for fast and efficient vacuum brake bleeding. The Vacuum Brake Bleeder has a universal rubber fitting that holds securely on brake bleeder screw. Attach shop air and use the quick release trigger for on-demand vacuum and hands free operation.

Compact size and 17 oz. (500ml) capacity.

The Master Cylinder Auto Filler automatically refills the brake fluid reservoir during brake bleeding. Base plate retaining clip and height adjustment allows fit on all reservoir types. On/Off tap allows installation and storage without drips or spills. 20 oz. (600ml) capacity.



8104A Vacuum Brake Bleeder

This one man brake bleeding system allows for fast and efficient vacuum brake bleeding. Universal rubber fitting holds securely on brake bleeder screw. Attach shop air and use the quick release trigger for on-demand vacuum and hands free operation. Compact size and 17 oz. (500ml) capacity.



Fluid Evacuation/Brake Bleeding Tools

- Use to bleed brake systems and remove a variety of fluid from vehicles, such as antifreeze, oil, transmission fluid, gear lube, etc.
- Quick connect locking hose adapters and ball-style on/off valve on hose prevent fluid leakage.
- Equipped with a relief valve to prevent over-pressurizing the tank.

8100 Operates by shop air or a hand pump; shipped complete with a brake bleeding hose, fluid evacuation hose, and two suction hoses (6 mm and 7 mm); 10-liter capacity tank.

8101 Operates with shop air; shipped with a brake bleeding hose and fluid evacuation hose; 6-liter capacity tank.



**7488A
Brake Pressure Test Kit**

- Complete set of fittings and gauges for pressure testing ABS and conventional brake systems on Chrysler, Ford, GM, Jeep, and import vehicles.

Kit contains:

Two 0–3,000 psi gauges, 16 adapter fittings, two Bosch ABS adapters, one Teves/Delco Powermaster III adapter, one Ford (Teves) adapter, one 90° elbow fitting, one 45° elbow fitting, bleeder, organizer case and instructions.

7486 Gauge Assembly, 0–3000 PSI (1 only).

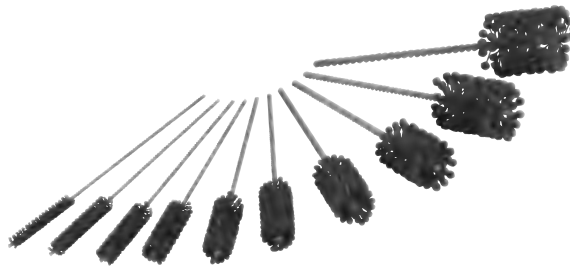


Similar to Kent-Moore J-35856

**7853
ABS Brake Proportioning Valve Depressor**

The proportioning valve depressor works on various GM utility vehicles, vans, and pickups fitted with Kelsey Hayes anti-lock brake systems. It also works on rear-wheel anti-lock brakes.

- Two depressors work best for four-wheel anti-lock systems.



**7011
Ball Hone Set, 10 piece**

- Ball Hones can be used for refinishing and resizing bores such as found in brake calipers, engine lifters, and u-joint yokes. Also useful for any bearing or bushing application.
- All hones are 180 grit Silicone Carbide for excellent cutting and finish.

Tool No.	Size
7011-1	.375" 10 mm
7011-2	.500" 13 mm
7011-3	.625" 16 mm
7011-4	.750" 19 mm
7011-5	.875" 22 mm
7011-6	1.00" 25 mm
7011-8	1.25" 32 mm
7011-10	1.50" 38 mm
7011-12	1.75" 44 mm
7011-14	2.00" 51 mm



One-Man Brake Bleeder Hose

- Removes air from brake system, one wheel at a time, and eliminates the need for an assistant.
- Hose easily attaches to bleeder screw, which holds hose in place and prevents leaking.
- Check valve on end of hose prevents air from entering brake system when pumping brake pedal.

4599 One-man brake bleeder hose, one only.

4809 One-man brake bleeder hose, set of four. Do all the wheels at the same time. Includes four of the No. 4599.



**4546
Steering Wheel Holder & Pedal Depressor Kit**

- This kit has two applications: 1) holds steering wheel in position for alignment adjustments, and 2) depresses brake pedal for various brake checks, including brake lamp operation.
- Rod easily slides in actuator for fast, easy installation of tool on brake pedal or steering wheel. Simply hand squeeze the actuator to accomplish fine adjustments.
- Kit includes: actuator assembly; extension rod for actuator (use when depressing brake pedal); hook assembly (hooks on steering wheel when depressing brake pedal or holding steering wheel); and flat pad (rests on front seal when holding steering wheel).

4546-1 Handle and Rod.

4546-2 Steering wheel and pedal holder.



WHEEL & TIRE SERVICE AUTOMOTIVE SPECIALTY TOOLS



5713 Tire Bead Seater

The Tire Bead Seater is used when a tire, new or used, is mounted on a wheel and the tire bead does not touch both sides of the wheel, making inflation possible. The air trigger on this tool expels a tremendous burst of air that inflates the tire to seat it to the wheel rim. This allows the tire to be inflated to the recommended pressure through the tire valve.

- The Tire Bead Seater is equipped with unique configurations that enhance ease of use, productivity and safety for technicians looking to get the job done right every time.
- Unlike other options out there, the Tire Bead Seater's ASME certified 13-gallon tank is designed with a nozzle and valve connected via hose assembly, giving the user more control rather than requiring them to hold the weight of the tank.
- The trigger style discharge valve allows for optimum airflow control while allowing both hands to firmly hold the nozzle/valve assembly, critical for effective and safe use. Wheels and handle function in either the vertical or horizontal position for easy mobility and storage.
- Unique nozzle design significantly reduces "blowback recoil" and contains discharge holes strategically placed for optimum inflation of a wide range of the tire sizes and wheel diameters.
- Air valve included for filling tank, which also provides compressed air for filling the tire while seating the bead, optimum for on-the-road service.

All these unique features combine to provide an industry leading bead seater with multiple tire capacity (up to 5 tires) on one tank fill.



5702 Tire Bead Seater

The 5702 OTC Tire Bead Seater provides many of the great features of it's 5713 big brother, at a more economical price!

- The trigger style discharge valve allows for optimum airflow control while allowing both hands to firmly hold the tank/valve assembly, critical for effective and safe use.
- Unique nozzle design significantly reduces "blowback recoil" and contains discharge holes strategically placed for optimum inflation of a wide range of tire sizes and wheel diameters.
- Inline design allows for a comfortable distance from the tire and wheel while seating.
- ASME approved 2-gallon tank with inlet valve, pressure gauge, and relief pressure valve for safety.



5700A Accessory Tire Bead Seater

- Provides the ability to control the blast with both hands firmly on the nozzle assembly, increasing effectiveness and safety.
- Includes all the fittings to adapt the hose to most surge tanks found on tire changers. A tank hook is also included to hang the nozzle when not in use.
- Long 6-1/2' hose will reach all positions on the tire.

5735-PACK Tire Spoon Pack with Hang Rack

An upgraded pack of popular tire spoons features the 35" Double End Tire Spoon with Grip Grooves (5735 35G), 35" Curved/Flat Tip Curved Tire Spoon (5735-35) and 30" Curved Tire Spoon (5736-30), along with a FREE rack (5715) that can be hung on a toolbox or wall for easy organization.

*Tool chest not included



5715 Tire Spoon Rack

- Designed to hold OTC Tire Spoons by the handle upset.
- Also holds tools with 3/4" or smaller diameter shafts.
- Can be hung on end of tool box or mounted to the wall via holes on 16" center.



5789-PACK Tire Service Display

Includes 23 popular tools for changing a tire:



Part Number	Qty
5716	1
5720	1
5724	1
5728	1
5729	1
5731	1
5732	1
5733	1
5735-35	2
5735-42	2
5735-42K	1
5736-24	1
5736-30	1
5737-30	1
5739-24	1
5739-30	1
5758	2
5047LP	1
5789ID-520	1
5789ID-1032	1
5700-DISPLAY	1

5700-DISPLAY Hammer & Tire Service Display Rack

- Designed to display various products in the framed rack, complete with removable rear sign holder.
- Sturdy display framed with heavy 5/16" rod with heavy steel base eliminates tipping.
- Black powder coat finish for a rust free, durable finish.
- Contains 2" x 2" = 52 slots and 2" x 4" = 6 slots.
- Assembled dimensions; W 18.5", D 19", H 44".



5693 Dual/Single Wheel Separator

Quickly separate rusted, frozen or seized outside dual wheels or single wheels from the wheel hub. The unique outer drive hook has an offset handle to easily align the tool on the rim to break wheels loose, with a flat side to eliminate turning during use. Outer drive hook has two grooves for 16" - 17" wheels and 19.5" to 24.5" wheels. Force is applied directly to the wheel rim and not the wheel lip, preventing damage and bending of the wheel.

Includes four adapters to fit most wheel shapes and sizes: Dual wheel outer, long cupped dual wheel inner, short cupped single wheel and flat.



Convex Slip Head - Unique "Convex Slip Head" curved design allows the spoon to slide easily into the tire bead while the spoon bump limits the depth for quick-and-easy operation.



Grip grooves - Eliminate spoon slippage on the wheel rim while mounting or demounting the tire. The grooves also limit the depth of the spoon to help eliminate pinching tire tube applications.

5716 HD Sliding Tire Spoon 38" extends to 52", 3/4" diameter. Inner slide bar provides hammer action to easily insert and remove the spoon.



5716G HD Sliding Tire Spoon with Grip Grooves 38" extends to 52", 3/4" diameter. Inner slide bar provides hammer action to easily insert and remove the spoon.



5720 Sliding Dual Tire Spoon 35" and 3/4" diameter. Unique configuration provides mount and demount heads on either end with the aid of a slide hammer mounted mid bar, allowing for hammering either end in or out of the tire bead. Twist-lock feature locks 3.5 lb. slide weight in position.



5724 Extending Tire Spoon 22" extends to 34", 3/4" diameter. Twist-lock feature allows the spoon to be extended to any length and locked into position with a twist of the collar.



5734-18 Tire Machine Spoon, Double End, 18" Has a curved end and a bent tip end for starting the bead on a tire changing machine.



5734-18G Tire Machine Spoon, Double End with Grip Grooves, 18" Has a curved end and a bent tip end for starting the bead on a tire changing machine.



5735-18 Double End Curved & Flat Tip Curved Tire Spoon, 18" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



5735-18G Double End Tire Spoon with Grip Grooves, 18" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



5735-35 Double End Curved & Flat Tip Curved Tire Spoon, 35" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



5735-35G Double End Tire Spoon with Grip Grooves, 35" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



5735-42 Double End Curved & Flat Tip Curved Tire Spoon, 42" Same great design as the original double end mount/demount tire spoon, but in a 42" length for added leverage. 3/4" diameter.



5735-42K Double End Tire Spoon with Kick Start, 42" Includes kick loops to allow the spoon to be forced into tight bead locations with the help of foot pressure. 3/4" diameter.



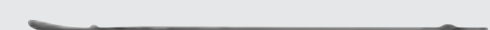
5736-18 Curved Tire Spoon, 18" Handle knob enables easier spoon pick up. 3/4" diameter.



5736-18G Curved Tire Spoon with Grip Grooves, 18" Handle knob enables easier spoon pick up. 3/4" diameter.



5736-24 Curved Tire Spoon, 24" Handle knob enables easier spoon pick up. 3/4" diameter.



5736-24G Curved Tire Spoon with Grip Grooves, 24" Handle knob enables easier spoon pick up. 3/4" diameter.



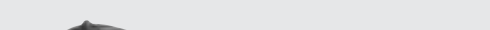
5736-30 Curved Tire Spoon, 30" Handle knob enables easier spoon pick up. 3/4" diameter.



5737-30 Flat Tip Curved Tire Spoon, 30" Handle knob enables easier spoon pick up. 3/4" diameter.



5739-24 Curved Shank Tire Spoon, 24" The curved shank allows improved access for the spoon head around the tire bead or wheel rim. Handle knob enables easier spoon pick up. 3/4" diameter.



5739-30 Curved Shank Tire Spoon, 30" The curved shank allows improved access for the spoon head around the tire bead or wheel rim. Handle knob enables easier spoon pick up. 3/4" diameter.



WHEEL & TIRE SERVICE AUTOMOTIVE SPECIALTY TOOLS



5789ID-1032

5789ID-520

Tire Service Hammers, Indestructible Handle

- Indestructible handle - never needs replacement!
- Ergonomic rubber grip handle reinforced with steel bars resists breaking while absorbing impact and vibration.
- Drop-forged head is induction-hardened for long life, and contains steel locking plates that are specially bonded to ensure the head never becomes loose.
 - Use top hook as a wheel tipper; sledge end hook to drag tire into position.
 - Bead breaking wedge has grooves and a convex shape to help drive tire lube into the bead.

5789ID-520 5 lb. head, handle length 20", total weight 7.3 lbs.

5789ID-1032 10 lb. head, handle length 32", total weight 14.4 lbs.



5728 Tire Bead Breaker

- This tool will break beads in applications where other bead breakers have failed. A tire with a very weak or damaged sidewall due to a zipper rupture, or driven too far while flat, can be near impossible to break the bead with conventional bead breakers. Other applications like extremely soft sidewall tires, such as ATV tires, is where this unique bead breaker works and other do not.
- Unique head is designed to provide a large striking area for all angles, while providing the mass needed to break the tire bead.
- This design puts the force exactly where it's required and eliminates the possibility of accidentally hitting the wheel, problems typically encountered while using larger swing hammer style bead breakers.



5752 Wheel Loader & Tipper

- The new ergonomic wheel loader and tipper integrates two very helpful tools into one.
- The wheel loader feature allows a technician to lift various sizes and types of wheels and tires in and out of a truck bed.
- The wheel tipper feature allows the technician to flip a wheel over during tire service, or just tip up a wheel and tire to move.
- Both of these features allow the technician to easily and safely service and lift wheels by eliminating the need to bend over to lift, dramatically reducing the risk of back injury.
- Works on steel or aluminum wheels, inflated or deflated.



5750 Wheel Tipper

- This ergonomic wheel tipper allows the technician to flip a wheel over during tire service, or just tip up a wheel and tire to move.
- Allows the technician to easily and safely service wheels by eliminating the need to bend over to lift, dramatically reducing the risk of back injury.
- Works on steel or aluminum wheels, inflated or deflated.



5727 Sliding Bead Breaker

- The unique wedge design allows for consistent and accurate impact angle without adjusting the handle angle.
- The split head design provides wider tire force area while reducing drag on the wheel rim.
- Foot loops allows for extra foot pressure for bead breaking with fewer strikes.
- The head is also designed to tip tires from either side of the wheel. Includes wheel tipping slots to easily flip 250 lb. tires without hurting your back.
- Hammer shaft does not fall out of hammer body like competitive units.



5729 Outside Dual Wheel Bead Breaker

- Breaks the inner bead on the outside tire without removing the wheel from the truck.
- Unique design places pressure in the exact location required to quickly and easily break the inner bead.
- Simply pull up on the handle and the bead is forced off the wheel rim.



5047LP Lug Nut Cap Remover Locking Pliers

- Designed to remove lug nut caps found on heavy duty truck and trailers quickly and easily without damage. Caps can be easily damaged by prying or using standard cap removers.
- Locking pliers design with specially coated jaws apply maximum grip on the lug nut caps without damage.

5047 Lug Nut Cap Remover

- Chrome-plated lug nut caps found on many heavy-duty trucks and trailers can be tough to remove, and they're easily damaged if you pry them off or use an ordinary cap remover. This tool avoids those problems. It is ruggedly built and features specially coated jaws that won't slip off the caps, no matter how much squeezing force you apply.
- Features cushioned handles.





5731

Tire Bead Locking Pliers

- Prevents the tire from slipping while mounting the top bead.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.
- Prevents tire from contacting costly TPM Sensors.



5732

Tire Spoon Holding Pliers

- Tire Spoon Holding Pliers is the 3rd hand needed to ease mounting and demounting of tires with tire spoons.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.



5733

Tire Bead Wedge Pliers

- Tire Bead Wedge Pliers keeps the tire in the bead drop area to ease mounting and demounting of larger truck and agricultural tires.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.



7248

C-Frame Press

- The C-Frame used in conjunction with OTC Ball Joint Adapters. Can also be used for removing/installing; universal joints with needle bearings, pressed in wheel studs, and brake anchor pins on heavy-duty vehicles. Suitable for general pressing operations.

5726

Bead Breaking Tool

Designed to break down motorcycle, ATV and small garden tractor tires. The two-tool set includes a locking pliers and pry tool to quickly and easily break the bead. The locking pliers clamps to the wheel rim by forcing the wedged jaw into the tire bead. The pry tool incorporates a second wedge and a loop that quickly hooks to the locking pliers wedge jaw. The pry tool is then pushed down, breaking the tire bead.



5730

Motorcycle Bead Holding Pliers

Specialty locking pliers designed to hold the tire bead either up or down when mounting or demounting a tire. Clamp the non-marring pliers onto the wheel rim and use tire spoons to mount or demount the tire. The pliers eliminate the need to leave a tire spoon in position to hold the tire bead.



Motorcycle Tire Bead Holding Tool

This tool allows the tire bead to be held in the drop center of the wheel when changing the tire or installing an inner tube. The slot slides over the spoke and the opposite end is depressed to push the tire into position.

4777

For use on wheels with 1 5/8" maximum side profile height.

4775

For use on wheels with 3/4" maximum side profile height.



5758

Hub Cap Removal Tool

- Unique slide hammer design eliminates prying against the wheel finish and potential scratches.
- Opposite end has a rubber bumper used to re-install cap with a simple tab.

5758-1 Hub cap removal tool tip.



4771

Motorcycle Tire Bead Alignment Tool

This aluminum tool will hold a tire bead into the drop center of the wheel when changing the tire or installing an inner tube. The nylon thumbscrew will not damage the wheel finish.



4770

Motorcycle/ATV Tire Spoon with Grip

This 13" curved tip tire spoon is strong yet comfortable to use with the form fit hand grip. The rounded head prevents puncturing the tube.



4769

Motorcycle/ATV Wheel Rim Protector Set, 3 piece

Fits over the wheel rim to protect the wheel from being scratched or damaged while using tire spoons. Set of three.



5759

Bolt Circle Gauge

- Universal and fully adjustable.
- Measures 4, 5, 6, & 8 bolt patterns on wheels and hubs.
- Measurement units in Inches and MM.

WHEEL & TIRE SERVICE AUTOMOTIVE SPECIALTY TOOLS



5747 Tire Valve Stem Punch Kit

- Quickly and easily remove old valve stems from a wheel with a swing of a hammer.
- Simply place the punch tip on the inside of the valve stem and strike the punch to force the old valve stem out of the wheel.
- The unique punch tip is heat treated and shaped to remove all types of valve stems, including 10mm nickel plated, steel, and brass.
- Works on 412, 413, and 418 valve stems.
- Includes hand protecting grip with interchangeable 5" and 8" punch adapters for car and truck wheel applications.

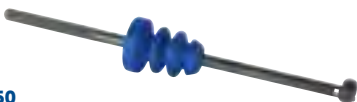
5747-2 Tire valve punch tip, 5"

5747-3 Tire valve punch tip, 8"



5745 Hands Free Air Chuck

- Perfect for applications where the tire valve is facing the floor while seating the tire bead, such as most dual wheel configurations.
- Hooks on the top bead seat of the wheel and the spring pressure holds the chuck on the tire valve pointing to the opposite side.
- Ball valve included to allow inflation only when needed.
- Allows for safe tire inflation when used with a 6" to 8" inflation hose.



4750 Tire Valve Installer/Remove Tool

This 14" steel tire valve tool includes a stepped rubber sleeve that can be positioned on the handle for optimum pulling angle of the valve, while protecting the wheel finish. Removes and installs snap-in style tire valves.



5744 TPMS Tire Deflator/Locator;

- Evacuates air from the tire without removing the valve core.
- Tire location is marked on the color coded deflators so TPMS sensors can be replaced to the original location, eliminating the need for resetting.



4751 Tire Pressure/Tread Depth Gauge

This 3-in-1 gauge will measure tire pressure, lower tire pressure, and measure tread depth all in one gauge. Rugged cast housing for strength and long life.



5776 Preset Torque Wrench Set;

These color coded click torque wrenches are preset to the most common lug nut torque settings, making them perfect for tire shops.

- No need for adjustments
- Durable satin finish
- 1/2" Drive, 36 tooth
- Quick release ratchet head
- Perfect for Wheel / Tire shop
- Accuracy better than $\pm 3\%$ CW

Sold Individually:

5776-1 Preset Torque Wrench, 1/2" 65 lb-ft

5776-2 Preset Torque Wrench, 1/2" 80 lb-ft

5776-3 Preset Torque Wrench, 1/2" 100 lb-ft

5776-4 Preset Torque Wrench, 1/2" 120 lb-ft

5776-5 Preset Torque Wrench, 1/2" 140 lb-ft



5095A

Easy Lever Wheel Dollies

Gives technicians the leverage they need to easily remove or install truck tire-and-wheel assemblies.

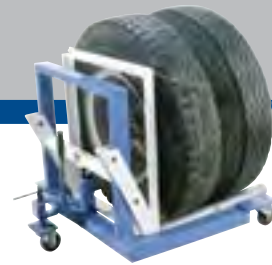
- Heavy-duty construction capable of toting 300 pounds.
- Onboard rollers make stud-hole alignment a snap.
- Spring-loaded kickstand for handy parking.
- Rugged tubular steel construction.
- Two models that, together, can accommodate tire diameters from 24 to 48 inches.

5095A Easy Lever wheel dolly. With a width of 22", this dolly handles tire diameters of 24" to 36".

5096A Heavy-duty Easy Lever wheel dolly. With a width of 26", this dolly handles tire diameters of 36" to 48".



5096A



1770A 1,500 lb. Capacity Dual Wheel Dolly

- Hydraulic jack provides almost 5" of lift and tilts wheel assembly 4° to prevent damage to wheel seal.
- Independent lifting rack provides maximum stability; rollers won't catch on load.
- Swivel casters for easy maneuverability.
- 6' chain holds load in place.
- Covered by OTC Lifetime Warranty®.



5105B 1,100 lb. Capacity High-Lift Dual Wheel Dolly

- Effortless air-powered hydraulic lift system for a variety of applications.
- 0 to 42" lifting range.
- Six-inch lateral adjustment.
- Tilt adjustment of +15° to -8° ensures easy alignment.
- Features four swivel casters, two locking, for enhanced mobility.



5100 Wheel Mate™ Wheel Handler

- Enables truck technicians to easily remove, install, rotate, and transport single tire-wheel assemblies. Internal ratcheting jack with 14 inches of vertical travel —almost a foot higher than conventional dollies.
- U-shaped chassis that provides close, unhindered access to work area.
- A design that accommodates—and securely holds—almost any truck wheel, including wide-based singles, without restraining chains.
- Heavy-duty ball-bearing wheels mounted under ball bearing swivel casters for maximum maneuverability.
- Foot-operated wheel lock.
- Rugged structural steel tubing construction that meets the demands of the toughest shop environments.

BATTERY SERVICE AUTOMOTIVE SPECIALTY TOOLS



4611 Battery Terminal Puller

- Designed to remove the battery cable clamp from the post without causing damage to the battery.
- Spring-loaded sharp jaws get under the clamp for a secure grip.

4612 3-Way Battery Post Cleaner

- Steel blades quickly clean top-post battery terminals and cable clamps; cleaners are marked "positive" and "negative."
- Ream is tapered to clean both positive and negative battery cable clamps.



4613 Battery Pliers

- Serrated jaws firmly grip the battery terminal nut or bolt.
- Offset handles allow access in hard-to-reach areas.
- Works on top-post and side-post battery terminals.



4614 Side Terminal Battery Wrench

- Designed for use on GM side-terminal batteries, or any 5/16" hex head battery bolt.
- 5/16", 6 point, box end, 5-1/2" long, ratcheting wrench; insulated handle.



4615 Long-Side Terminal Battery Wrench

- Designed for use on GM side-terminal batteries, or any 5/16" hex head battery bolt.
- Long handle allows access to hard-to-reach battery terminal bolts.
- 5/16", 6 point, box end, 10" long, ratcheting wrench; insulated handle.



4616 Battery Terminal Wrench – 10mm

- Designed for use on 10 mm battery terminal bolts found on many import and domestic vehicles.
- 10 mm, 12 pt., box-end ratcheting wrench; 5-1/2" long with insulated handle.



4617 Side Terminal Battery Brush

- Designed to clean corrosion from side post batteries.
- One brush used to clean battery terminals; other brush used to clean battery cable ends.
- Plastic handle resists battery acid.



4618 Battery Brush

- Cleans dirt and corrosion from positive and negative battery posts and cable clamps.
- Plastic case resists battery acid and most cleaning solvents.



4619 Professional Battery Hydrometer

- Displays a battery's specific gravity on an easy-to-read float; scale ranges from 1.100 to 1.300.
- Thermometer indicates what must be added or subtracted from the float reading to arrive at an accurate specific gravity reading for each battery cell.
- Flexible tip offers easy access to the battery cells while the battery is still in the vehicle.

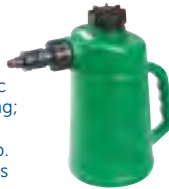
4620 Battery Carrier

- Use to lift and install most top post and side terminal batteries.
- Designed to transfer lifting force to a secure hold on the battery; teeth on jaws offer a secure grip.
- Vinyl strap resists battery acid and will not conduct electricity.



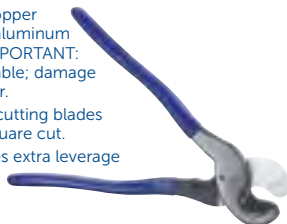
4621 Two-Liter Battery Filler

- Replenish battery water the easy way! The fill nozzle on this container has an automatic shut-off that prevents overfilling; the handle on the side of the container makes the job a snap. Container holds up to two liters of distilled water.



4622 Battery Cable Cutter

- Designed to cut copper battery cable and aluminum electrical cable. **IMPORTANT:** Do not cut steel cable; damage to blades will occur.
- Precision-ground cutting blades provide a clean, square cut.
- 7" long handle gives extra leverage when cutting.



4477 3/8" Cable Cutters

- Perfect choice for cutting heavier copper and aluminum cables.
- This tool is especially valuable for battery service where replacing a terminal is required.
- Clean cut with minimal mashing of wire strands.



4639 Battery Terminal Service Kit (7 piece)

- 4611 – Battery terminal puller.
- 4612 – 3-way battery post cleaner.
- 4613 – Battery pliers.
- 4614 – Side terminal battery wrench.
- 4615 – Long-side terminal wrench.
- 4616 – Battery terminal wrench - 10mm.
- 4617 – Side terminal battery brush



4631 Battery Terminal Service Kit (8 piece)

- Kit includes:
- 4611 – Battery terminal puller.
 - 4612 – 3-way battery post cleaner.
 - 4613 – Battery pliers.
 - 4614 – Side terminal battery wrench.
 - 4615 – Long-side terminal wrench.
 - 4616 – Battery terminal wrench - 10mm.
 - 4617 – Side terminal battery brush
 - 4622 – Battery Cable Cutter

7645 Parasitic Draw Test Switch

- Finding electrical problems that drain the battery is getting harder all the time. But using No. 7645 with your digital amp meter takes the guesswork out of a complicated job. Attach the test switch between the negative battery cable and the battery, and then road-test the vehicle. Next, connect an amp meter to the switch to determine the parasitic amperage draw, and locate the excessive electrical drain on the battery. Works on any vehicle with side- or top-post batteries.



6945 Parasitic Draw Test Switch

- Test switch is used with an amp meter to isolate parasitic amperage draws on all GM vehicles or any vehicle with a side- or top-post battery. This tool attaches between the negative battery lead and the battery, then the vehicle road is tested. The next step is to connect an amp meter to each side of the switch, thereby allowing all available current to pass through the meter. Fuses are then removed one at a time until the circuit source of the parasitic draw is located. Similar to J-38758.





5950K

CrimPro™ 4-in-1 Wire Service Set

CrimPro™ 4-in-1 Wire Service Set includes both the OTC 5950S CrimPro™ 4-in-1 Wire Tool and OTC 5950A CrimPro™ 4-in-1 Angled Wire Tool.

5950S

- Compact 7-inch design used 4 ways.
- Gripping nose - to pull, twist, bend, and shape.
- Crimper - crimps 12-20 AWG insulated and non-insulated wire.
- Stripper - strips 12-20 AWG wire.
- Cutter - ability to make cuts below pivot.

5950A

- The angled feature allows access to close quarters and facilitates superior crimps.
- Compact 7-inch design used 4 ways.
- Gripping nose - to pull, twist, bend, and shape.
- Crimper - crimps 12-20 AWG insulated and non-insulated wire.
- Stripper - strips 12-20 AWG wire.
- Cutter - ability to make cuts below pivot.



4468

9" Self Adjusting Wire Stripper

- Strips insulating sheathing from wires ranging from 10 ga. to 22 ga.
- Easy-to-use, just insert wire and squeeze.
- Also cuts and crimps.



4497A

Ratcheting Terminal Crimper

- Heavy-gauge steel crimping tool designed for insulated wire terminals.
- Ratcheting action crimps terminal to correct tightness on the wire, making crimping fast and easy.
- For wire sizes: AWG 22-18 (0.6 mm-1.0 mm) red terminal; AWG 16-14 (1.3 mm-1.6 mm) blue terminal; AWG 12-10 (2.0 mm-2.6 mm) yellow terminal.
- Insulated handles with compound mechanical leverage for power.



5912

Crimpwell™ Angled Crimping Pliers

- Universal crimping design accommodates soft wire - solid or stranded - 10-22 AWG.
- Cutting feature included for quicker preparation.
- 9" (228mm) in length, with protective grips to increase leverage and secure crimp.
- Angled design keeps the connector, the wire, and the crimper "in-line" - improving visibility and access in hard to reach places.
- Designed to not pierce connector insulation and also works on un-insulated connectors.
- Service tech can use as much force as desired to ensure connection and it will not damage connector insulation.
- Easy-to-use: Simply insert the connector into the crimping feature, slip over the connector and squeeze.



4467

Automatic Wire Stripper

- Quick removal of insulation on wire AWG 12-20.
- Comes with adjustable depth gauge (8mm to 12mm).
- Sharp v-shaped tooth easily removes insulation without any damage to soft wire strands.
- Cutting tool stored below the stripper.
- Features a space saving locking mechanism for pockets or tool drawer storage.



4498A

7-in-1 Wire Stripper and Crimper

- Strips insulation off electrical wires ranging from 10 AWG-22 AWG (0.6mm-2.6mm) in diameter. Pliers on tip of jaw for looping or grabbing wire in tight places.
- Heat-treated steel jaws cut solid or multi-strand wire.
- Screw cutter shears screws clean, with no thread clean-up required. Works on machine screw sizes 4-40, 5-40, 6-32, 8-32, 10-24, and 10-32.
- Crimps insulated and non-insulated wire terminals, 7mm-8mm spark plug wire connectors.



4484

Weather Pack Ratcheting Crimper Kit

Manage environmentally-sealed connection systems with the OTC 4484 Weather Pack Crimper Kit. Weather pack connection systems are designed to protect against exposure to heat, moisture and contaminants. Includes:

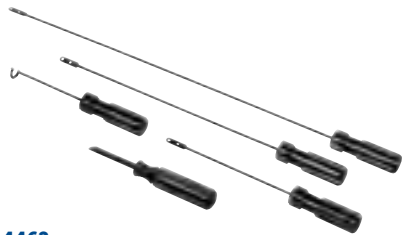
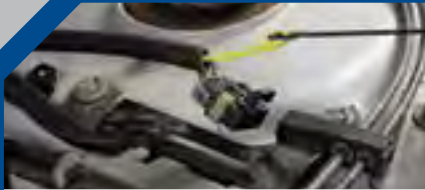
- Two interchangeable crimping dies coverage wire range AWG 22 / 20-18 (DIN: 0.35 / 0.5-0.8mm) and AWG 16-14 / 12 (DIN: 1.0-2.0 / 3.0mm).
- Dies are magnetically secure and easily changed.
- Instructions clearly illustrate how to create a weather-proof seal.
- Connections found on motorcycles, Class 7 - 8 tractors, automobiles and more.

4484-1 Ratcheting Weather Pack Crimper Chassis

4484-2 H6 Die AWG: 22/20-18 (Din 0.35/0.5-0.8 mm²)

4484-3 H7 Die AWG: 16-14/12 (Din 1.0-2.0/3.0 mm²)

ELECTRICAL SERVICE AUTOMOTIVE SPECIALTY TOOLS



4462 Wire Loom Threading Kit

The 4462 Wire Loom Threading Kit from OTC is a clever grouping of wire fishing tools for the automotive technician. Whether general wiring R&R - or adding Gauge Packs, Sound Systems, Vehicle Security and Camera Systems, these tools simplify placing the wiring within the protection of existing wiring looms, without cutting tape or zip ties and without damage to other wires.

There are 3 wire pulling tools in 15", 10" and 5.5" lengths for common automotive applications, the grommet insertion tool allows the wire to be captured within the tool to hold once it is placed, so you can grab from the opposite side of the firewall - and the pigtail tool assists when building a new harness on the workbench.

5953 Dual End Wire Holder

- Holds wire and connectors solidly during soldering or other wire service.
- Unique design allows connection to be held firmly on both sides with infinite adjustability.
- Insulated clips act as heat sinks to protect shrink tubing or other sensitive parts from heat.



5955 Magnetic Clamp Wire Holder

- Holds wire and connectors solidly during soldering or other wire service.
- Unique design allows connection to be held firmly on both sides with infinite adjustability.
- Insulated clips act as heat sinks to protect shrink tubing or other sensitive parts from heat.
- Clamp with magnet allows for attachment to a work bench, vehicle, or any other object for a firm base.



4472 Cordless Solder Tool Kit

- Cordless, hands-free operation.
 - Safety switch prevents inadvertent ignition.
 - Fuel-level sight window.
 - Use as a - solder tool, heat tool or an torch tool.
- Kit Includes: Soldering iron, conical tip 2.4 mm, chisel tip 2.4 mm, hot knife tip, deflector tip, sponge, wrench, and soldering wire.

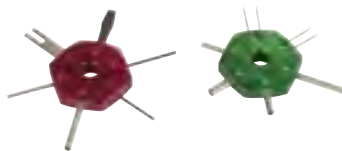
4470 Butane-Power Flameless MicroTorch

- Cordless 650° (1250°F) flameless heat.
- Waterproof piezo electronic ignition with locking trigger.
- Refillable fuel cell uses standard butane lighter fluid (butane NOT included).
- Ideal for automotive and heat shrink projects.



4822 Wire Connector Tool Set, 2 Piece

Designed to remove terminals from connector housing without damage to the terminal or connector. Set provides 12 different tool styles fit most common connectors.



4782 Wire Pulling Tool

This tool contains an 18" cable with a "T" handle at one end and wire mesh at the other. By threading the cable through a difficult to reach area such as a motorcycle frame, wires or connector can be hooked to the end allowing the wiring to be pulled through.



4813 Heat Shrink Tubing Set (171 Piece)

Protection and insulation for solder connections and components. 2 to 1 shrink ratio with flame or heat gun.



4814 Waterproof Heat Shrink Tubing Set (106 Piece)

Waterproof protection and insulation on solder connections and components. Adhesive lined inner wall to seal out moisture. 3 to 1 shrink ratio with flame or heat gun.



4460 2-Piece Electrical Connector Separator Tool

- Releases locking tabs on electrical connectors, component connections & wiring harness connectors.
- Eliminates damage to the tab or connector.
- This pair of tools permits access to electrical connectors in any position.



4493
Angle-Tip Relay Pliers

- Designed to remove and install relays, which are usually located in confined, hard-to-reach areas.
- Specially coated tips offer a solid grip on the relay.



4448
Door Buzzer Shutoff Tool

- This simple tool allows for work with the vehicle door open without the annoying door buzzer on.
- High tension spring can be placed in the door jamb to close the door buzzer switch typically found by the hinges.



4712
Euro Radio Removal Tool Kit

- Includes the popular tools needed to remove the radio from the dash on the following European vehicles: BMW, VW, Audi, and Mercedes-Benz.
- Easily removes the radio without damaging the radio or the dash panel.



4461
Terminal Release Tool Set

- Save time and money. Repair or rebuild a wiring harness without having to order the entire OE replacement.
- Services most OE terminal connectors. Insert the appropriate release tool to depress the locking tab and the individual wire slides out for service or replacement.

Kit includes:

- 7737** Computer edge board and header release tool. Each end of the tool works on different terminal connector configurations. Works on various domestic and import models.

- 7738** Weather Pack sensor terminal release tool. Works on various domestic and import models.

- 7740** Micro-style terminal release tool. Works on various domestic and import vehicles.

- 7741** Specifically designed to release ID computer terminals on 1988 thru current GM W bodies, 1990 thru current Chevrolet Lumina sedans, and various other domestic and import vehicles.

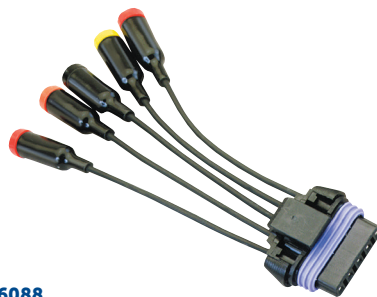
- 7742** Universal harness release tool designed for the RWAL (rear wheel anti-lock) microprocessor found on 1988 thru current GM pickups. Also works on various other domestic and import vehicles.

- 7743** Releases terminals on most body wiring connectors on various domestic and import vehicles, including cold start injector and timer, water, O₂, vacuum, and air temperature sensors.



4711
Deluxe Radio and Antenna Service Kit

- Eleven-piece kit in molded case.
- Universal antenna wrench.
- Ford radio removal tool.
- Deep sockets to remove and install the tamper-proof radio nuts from many GM, Chrysler, and other aftermarket radios.
- Antenna nut sockets cover most import and domestic antenna nuts.



6088
Ford 5-pin Connector Harness for Glow Plug Testing

- Provides an easy way to check glow plug resistance without having to remove the valve cover of 1994–98 Ford trucks and vans with 7.3L DIT (direct-injected turbocharged) diesel engines.
- Used with any standard digital volt ohmmeter to check glow plug resistance.



4715
Deluxe European Radio Tool Set

- 18-piece set of tools used to remove radios on most European vehicles sold in the U.S. and Europe.
- Quickly and easily removes the radio from the dash without damage to the radio or dash.

Replacement Parts

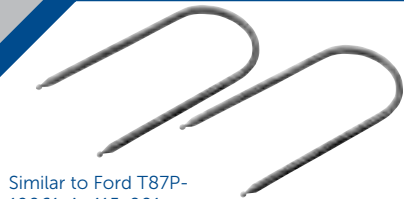
- 4715-1** Removal Keys (4 pieces) Audi, Becker, Mercedes-Benz, VW.
- 4715-2** Removal Keys (2 pieces) Becker, Mercedes-Benz, Porsche.
- 4715-3** Removal Keys (2 pieces) VW.
- 4715-4** Removal Keys (2 pieces) Skoda.
- 4715-5** Removal Keys (2 pieces) Becker.
- 4715-6** Pentagon Wrench BMW.
- 4715-7** Bent U-hook (2 pieces) Blaupunkt.
- 4715-8** U-hook (2 pieces) Audi, Blaupunkt, Ford, Grundig, VW.
- 4715-9** Allen Hex Wrench BMW, Opel.



7744
Anti-Static Wrist Strap

- Virtually eliminates the possibility of static electricity causing damage while working on electronic components.
- One-size-fits-most adjustable wrist strap.
- Includes a 6' coil cord with alligator clip.

ELECTRICAL SERVICE AUTOMOTIVE SPECIALTY TOOLS



Similar to Ford T87P-19061-A, 415-001

7575 Ford Radio Removal Tool Kit

These dual-purpose tools release the retaining clips of a radio faceplate so you can pull the radio from the instrument panel. For use on 1987 to current Mustang; 1988 and newer Tempo/Topaz; 1989 to current Lincoln Continental; 1990 to current Taurus/Sable, Ranger/Bronco II, Probe, Lincoln Town Car, Mark VII, Crown Victoria/ Grand Marquis, Thunderbird/Cougar, F-series pickups and E-series vans; 1991 to current Explorer; 1995 to 2003 Windstar.



6711 Mercedes-Benz Dashboard Service Tool Kit

- 8-piece tool kit contains:
 - (2) removal tools for ignition lock on model W126.
 - (2) removal tools for ignition locks on models W124 & W201.
 - (2) removal hooks for instrument cluster on models W107, W116, W123, W124, W126, W140, and W201.
 - (2) radio removal tools on models W129, W140, W202, and W210.
 - Covers virtually all Mercedes-Benz models since 1992.



5945 Air Bag Release Tool Kit

- Use to remove the air bag module from the steering wheel.
- Work on many GM, Ford and Mercedes Benz vehicles.

Applications:

- Ford 2000-2004 Taurus/Sable, 1999-2003 Windstar Van.
- GM 1999-2005 Chevrolet Impala, Lumina, Monte Carlo, Venture, Pontiac Bonneville, Grand Prix, Montana, Buick LeSabre, Century, Regal, Olds Intrigue, Cadillac El Dorado, Deville, STS, SLS.
- Mercedes Benz Models 107, 123, 124, 126, 129, 140, 163, 164, 170, 201, 202, 203, 208, 209, 210, 211, 215, 219, 220, 221 and 463.



7956 Air Bag Simulator

Ford air bag simulator. Special two-ohm resistor for use on 1993 and newer Ford system II air bags. When plugged into the vehicle harness connector, power is restored to simulate a complete circuit for diagnostic purposes.



Similar to Ford No. 303-1115

6766 Ford 6.0L Diesel Terminal Release Tool

This Terminal Release Tool is required for removal of the vehicle's injector wiring harness without causing damage to the component.



6768 Ford 6.0L Glow Plug Release Tool

Safely remove and install the glow plug harness on 2004-2009 Ford 6.0L Diesel engines.



6764 Ford 6.0L Diesel IPR Controller

- When a hard start or no start condition exists, the 6764 allows a technician to close the Injector Pressure Regulator in order to determine if proper injector control pressure is achieved and sustained for the starting process.
- Tactile On/Off switch with LED confirming power to the tool and signal to the Injector Pressure Regulator.
 - Permits a quick initial diagnosis of the pressure regulator when a hard start-no start situation exists.
 - Used in conjunction with any scan tool capable of reading fuel pressure on 6.0L Ford Diesel.



7739 GM Code Retrieval Key

- This key retrieves trouble codes from pre-OBD II model GM vehicles.
- ECM code retrieval key. Jumps between A and B terminals on ALDL connector to retrieve trouble codes from the ECM.



4536
A/C Clutch Pulley Puller Set

- For removal of stubborn air conditioning clutch pulleys. Also used on many alternator, generator, power steering, and crankshaft pulleys, harmonic balancers, and fiber timing gears.
- Set includes drop-forged components: one 3/4"-16 x 5" live-center forcing screw, 5-1/2" crossbar with three spread settings, two pairs of jaws, and a clamp bolt.
- Spread: 3" to 5"; Reach: 1" to 5".
- Includes blow-molded plastic case.



4537
A/C Clutch Holding Tool

- This three-stud spanner wrench keeps the A/C clutch from turning when loosening or tightening the retaining nut. Adjusts quickly with brass thumbscrews to fit various styles of A/C compressors used on GM, Ford, and Chrysler vehicles. Also fits a variety of other pulleys.



6515
3-in-1 180° Tubing Bender

- Capable of making 180° bends in copper, brass, aluminum, and steel tubing.
- Just one tool works on three sizes of tubing: 1/4", 5/16" and 3/8".



4535
A/C Clutch Hub Remover/Installer Set

- For damage-free removal and installation of the clutch hubs on these air conditioning compressors: GM-Harrison DA-6, HR-5, V-5, A-6, and early R4; Nippondenso Ford/Chrysler A590, C171, FS-6, 6P148A (new style); Sanden & Sankyo; York/Tecumseh HR980; Zexel/Mitsubishi CH series.
- Set includes a removing flange, plus forcing screws and adapter assemblies to remove and install virtually all clutch hubs.
- Includes blow-molded plastic case.



6720-4
Flare Nut Locking Pliers

- Covers sizes 11/16" to 7/8" (17mm to 22mm). Fits nut sizes found on power steering and AC lines.
- Designed for use on new or damaged flare nuts that have been rounded or rusty.
- Fits Standard or Metric nuts and bolts.
- Angled jaws allow for clearance around frames and bulkheads.



6512
Heavy-Duty Tubing Cutter

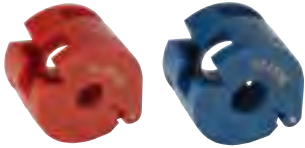
- Works on tubing sizes 1/8" to 1-1/8" O.D. (3mm to 29mm).
- Easily cuts copper, brass, aluminum, and steel brake lines.
- Reamer folds onto cutter body for storage.
- Extra cutting wheel stored under reamer.



6514
Mini Tubing Cutter

- Works on tubing sizes 1/8" to 5/8" O.D. (3mm to 16mm).
- Easily cuts copper, brass, aluminum, and steel brake lines in hard-to-reach places.
- Extra cutting wheel stored in knob.

A/C SERVICE AUTOMOTIVE SPECIALTY TOOLS



A/C spring lock coupling tool

Spring-loaded in the closed position to deflect any spray that occurs when lines are disconnected.

518900 – Red, 3/8" **518898** – Blue, 1/2"



A/C spring lock coupling tool

Spring-loaded in the closed position to deflect any spray that occurs when lines are disconnected.

518897 – Black, 5/8" **518901** – White, 3/4"



7238 Spring Lock Coupler Disconnect Set

Set includes four sizes for use on 3/8", 1/2", 5/8", and 3/4" tubes. Allows quick, safe disconnect of spring lock couplers on late model Ford systems and Tecumseh HR980 compressors.

518900 3/8" (red) Same as Ford 412-026 (T81P-19623-G1).

518898 1/2" (blue) Same as Ford 412-027 (T81P-19623-G2).

518897 5/8" (black) Same as Ford 412-038 (T83P-19623-C).

518901 3/4" (white) Same as Ford 412-040 (T85L-19623-A).

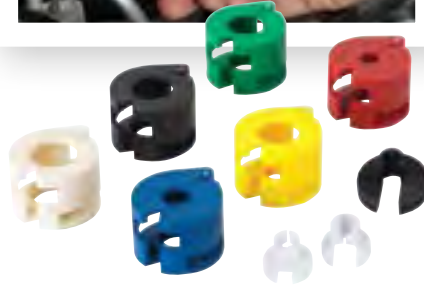
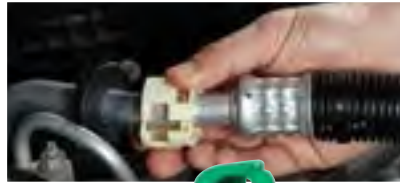


7242



7239

7242 A/C Spring lock coupler 1/2"
7239 A/C Spring lock coupler 3/4"



6517 Disconnect Tool Set

Designed for A/C lines, fuel lines, and transmission cooler lines.

- Contains 3/8", 1/2", 5/8", and 3/4" spring lock disconnect tools for A/C lines on Ford cars and trucks, Chrysler and Jeep vehicles.
- Contains the 3/8" and 1/2" fuel line disconnect tool for Ford vehicles.
- Contains the 5/16" and 3/8" fuel line disconnect tools for GM and Chrysler vehicles.
- Contains the transmission oil cooler line disconnect tool used on many GM and Ford vehicles.



6073 Toyota A/C Disconnect Tool

- Used to release the plastic quick-connect fittings on the high- and low-pressure air conditioning lines at the evaporator.
- Services 1998–newer Toyota Corolla, 1998–newer Geo Prizm, 1998-1/2–newer Toyota Land Cruiser and Lexus LX470, 1999–newer Toyota Avalon, Camry, Solara, and Sienna mini vans.
- Easy to use: Plastic fitting on A/C line is rotated to show access to the two release holes in the fitting; tool is inserted into release holes, and pushed to release the fitting.



6509 3/8" & 5/16" Fuel Line Disconnect Tool

Special low-profile design works in close quarters on GM, Ford, and Chrysler vehicles where there is limited clearance between the fuel line fittings and fuel filters, fuel rails, or sending units.



6508 Full-Coverage Disconnect Tool Set

If you're working on Chrysler, Ford, or General Motors vehicles, this set can make your job easier. The tools are designed for heater hoses, transmission oil coolers, air conditioning and fuel lines. They're approved by vehicle manufacturers and will not damage the fittings being disconnected. Tool Nos. 518902, 518896, 518897, 518898, 518899, 518900, and are spring-loaded in the closed position to deflect any spray that occurs when lines are disconnected.

SEE PAGE 27 FOR COMPLETE DETAILS



6703 Line Fluid Stopper Kit

Stop messy fluid leaks and prevent contamination during service.

- Kit seals all types of rubber and steel line found on fuel, brakes, AC, power steering and transmission system.
- Includes two banjo style fitting stoppers, two steel line stoppers, six line plugs, a line disconnect tool, and a long reach line pinch-off tool for hard-to-reach hoses.

6703-1 Banjo Line Fluid Stoppers, 2 pk.

6703-2 Steel Line Fluid Stoppers, 2 pk.

6703-3 Line Plug Fluid Stoppers, 6 pk.



4495 A/C and Fuel Line Disconnect Set

- Used to remove A/C and fuel line quick-disconnect fittings from hard-to-reach areas.
- Six sizes (5/16", 3/8", 1/2", 5/8", 3/4", and 7/8") available to work on many import/domestic vehicles.

BODY SERVICE AUTOMOTIVE SPECIALTY TOOLS



2549 Cigarette Lighter Socket Remover

Universal tool removes cigarette lighter socket without damage to socket or dash. Tool end lines up with the two tab windows of the lighter socket for easy, damage-free removal. Handle hole allows for easy hanging or can be used as leverage point for difficult to remove sockets. Similar to J-42059.



2550 Key Fob Fixture

Used for removal and installation of the key blade pins in GM flip key fobs when replacing the fob and retaining the original key blade. Includes holding tray and drift pin for use with a hammer. Eliminates damage to all parts. Similar to BO-51098.



6644 Door Handle Spring Retainer

This tool allows for door handle replacement without having to remove the interior door panel on 2014 and later Cadillac ATS and Escalade, Chevrolet Colorado, Impala, Silverado, Suburban and Tahoe models.

The tool installs into the door handle cavity and under the handle return spring to prevent it from unloading. Similar to BO-51363.



2551 Steering Column Anti-Rotation Pin

Installs into the steering column of most General Motors vehicles to keep the steering wheel orientation correct. Similar to J-42640.



2497 3 Piece Push Pin/Body Clip Pliers Set

Remove plastic body fasteners and clips faster in nearly any location. A set of three push pin / body clip pliers includes straight, 45° and 90° jaws to reach in wheel wells, under bumpers and behind the dash to remove retaining clips. The various jaw angles help access hard-to-reach places while providing maximum leverage to remove clips quickly and without damage. The unique design lifts the center pin and pulls body clips without damaging anchors, eliminating the need to provide replacement clips. Reusing these fasteners saves money and time searching for replacements of various shapes and sizes. The 3-piece set comes with an OTC lifetime warranty against defects in material or workmanship.



4492 E-Clip Tool Set, 5-piece

- Dual operation tool: one end of tool releases e-clip; other end of tool installs e-clip.
- Tools fit four sizes of e-clips: 6 mm, 7 mm, 8 mm, and 9 mm.
- Each tool easily locks into handle provided.



4549 Door Panel & Upholstery Tool Set Heavy-duty door panel and upholstery tools

- 4549-1 Removes window and door handle clips, and upholstery tucking.
- 4549-2 V-notched door panel clip removal tool
- 4549-3 U-notched door panel clip removal tool



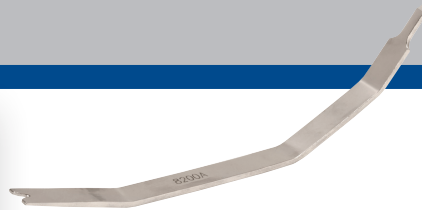
4551 Door Panel & Upholstery Tool Set

Heavy-duty U-notched and V-notched tools with stainless steel blades used for removing small door panels and upholstery clips.



4489 Trim Fastener and Molding Removal Set

- Set includes five different sizes and styles of tools that allow easy removal of trim fasteners, moldings, and wheel hubs.
- Tools are made of plastic to prevent damage to trim, moldings, alloy wheels, or vehicle paint.
- Can be used on trim fasteners and moldings inside, or outside, the vehicle.



8200A
Ford Mirror Removal Tool

Save shop labor time and cost by allowing mirror to be removed without damaging or removing the mirror assembly.

Works on these outside door mirrors:

Windstar, Crown Vic, Grand Marq, Marauder, Taurus, Sable, Mustang, Town Car, Ranger, Excursion, Super Crew (F-250-F-550), F-650, F-750, Escape, Thunderbird, Explorer, Mountaineer, Expedition, Navigator, F-150, E-Series van, LS, Explorer Sport, Explorer Sport Trac, Aviator, Dual arm mirror used on Excursion, Super, Crew (F-250-F-550), F-650, F-750

- Also works on 1999 and newer Ford interior / rearview.



5945
Air Bag Release Tool Kit

- Use to remove the air bag module from the steering wheel.
- Work on many GM, Ford and Mercedes Benz vehicles.

Applications: Ford 2000-2004 Taurus/Sable, 1999-2003 Windstar Van, GM 1999-2005 Chevrolet Impala, Lumina, Monte Carlo, Venture, Pontiac Bonneville, Grand Prix, Montana, Buick LeSabre, Century, Regal, Olds Intrigue, Cadillac El Dorado, Deville, STS,SLS Mercedes Benz Models 107, 123, 124, 126, 129, 140, 163, 164, 170, 201, 202, 203, 208, 209, 210, 211, 215, 219, 220, 221 and 463.



6642
Trim Tool Kit, 11-Piece

Includes 11 specialty tools designed to remove trim strips, panels, wheel caps, bezels, liners, shrouds, fascia, and more...

- Tools are constructed of durable, impact-resistant nylon that will not damage non-metal interior trim surfaces.
- Cloth pouch rests flat on a dashboard or fender for easy access to tools and then folds up with tools inside for storage.
- Kit has multiple applications in the automotive, aviation marine, and other industries.



6785
Euro Door Handle Kit

- This kit contains the tools needed to service most door hinges and door handles on Audi, Mercedes-Benz, Porsche, and Volkswagen vehicles.
- Kit includes: A ratchet wrench with three 12-point bits (4 mm, 8 mm, 10 mm), one T40 and one T45 TORX® bit; a T30 TORX® long handled driver; and a T20 TORX® T-handle driver.
- T30 driver, 14" long; T20 driver, 9-1/2" long; hex ratchet, 9-1/2" long.



4680
Wiper Puller

The 4680 Wiper Puller from OTC has a unique design where jaws are forged with radius to hug the center screw for minimal spread, and for accessing recessed components. The radius also ensures optimal contact with object being pulled. It comes with 2 pair of legs - 9/16" width and 1" width - for many types of small component applications. The leg shoulders fit easily over the hex bar and can be snugged into position with a simple turn of a wing nut. Where there is minimal clearance, or deeply recessed access, the 4680 is a great tool choice to overcome these obstacles. Spread: 1" to 2-1/2"; Reach: 2-1/2". Lifetime Warranty.



4658
Windshield Spray Nozzle Needle

- Makes quick work of clearing obstructions from the windshield washer spray nozzle.
- Easily pierces corrosion or remove blockage.
- The barrel is knurled for grip and control.
- Threaded end caps keep the needle points covered when not in use. The pocket clip keeps the tool handy.



6676
Truck Windshield Wiper Puller, 18mm

- Designed to remove aluminum wiper arm from the steel stud that often galvanizes, locking the arm and stud together.
- Investment cast design is strong, easier to use, and saves time.
- Live center and more precise alignment save labor. Works on these and many other vehicles: Jeep Liberty, Grand Cherokee, Dodge Caravan, Stratus, Ram Diesels, Dakota & PT Cruiser, Chrysler LHS, Town & Country, Saturn Vue Buick Rendezvous, Cadillac CTS, Ford Focus, Ford Windstar, Honda Civic, Odyssey Toyota Camry.



4676
Windshield Wiper Puller

- Removes wiper arms on many foreign and domestic cars and light trucks.
- Will not damage wiper arm or hood cowl during removal.
- Simply place puller feet under wiper arm and tighten forcing screw against wiper shaft.

BODY SERVICE AUTOMOTIVE SPECIALTY TOOLS



4448 Door Buzzer Shutoff Tool

- This simple tool allows for work with the vehicle door open without the annoying door buzzer on.
- High tension spring can be placed in the door jamb to close the door buzzer switch typically found by the hinges.



4449 Air Wedge Lockout Tool

- Air wedge is designed to create working room around the window frame when using other lockout tools.
- Adjustable inflation and release valve provides versatile use.



7956 Air Bag Simulator

Ford air bag simulator. Special two-ohm resistor for use on 1993 and newer Ford system II air bags.

When plugged into the vehicle harness connector, power is restored to simulate a complete circuit for diagnostic purposes.



4452 Master Lockout Tool Set

Set includes:

- Lock Knob Puller
- Slide Lock Linkage Hook
- Under Window Knob Puller
- Under Window Lock Button Depressor
- Under Window Slide Lock Puller
- Lockout Wedge
- Porsche Lock Button Depressor
- Toyota/Chrysler Key Hole Lever
- GM/Ford Linkage Slider
- Ford Vent Window Lever
- Vent Window Button Depressor
- Vent Window Lever Puller
- Bell Crank Thin Bar
- Bell Crank Wide Bar
- Mercedes/Vovlo Lock Linkage Puller
- 119-2 Gas Cap Key.
- Instruction Manual



4450 Lockout Tool Set, 6-piece

Set includes:

- Lockout Wedge
- Lock Knob Hook
- Slide Lock Linkage Hook
- Toyota/Chrysler Key Hole Lever
- Vent Window Lever Puller
- Bell Crank Thin Bar
- Instruction Manual



4546 Steering Wheel Holder & Pedal Depressor Kit

- This kit has two applications: 1) holds steering wheel in position for alignment adjustments, and 2) depresses brake pedal for various brake checks, including brake lamp operation.
- Rod easily slides in actuator for fast, easy installation of tool on brake pedal or steering wheel. Simply hand squeeze the actuator to accomplish fine adjustments.
- Kit includes: actuator assembly; extension rod for actuator (use when depressing brake pedal); hook assembly (hooks on steering wheel when depressing brake pedal or holding steering wheel); and flat pad (rests on front seal when holding steering wheel).

4546-1 Handle and Rod.

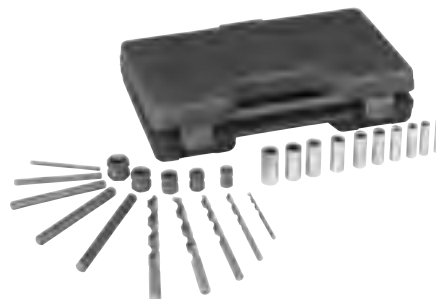
4546-2 Steering wheel and pedal holder.



4485 Spot Weld Cutter Set

- Use with electric drill or air drill to cut 5/16" and 3/8" spot welds.
- Cutter bits have cutting teeth on each end.
- Replacement kit No. 4485-1 consists of (3) 5/16" cutter bits; (3) 3/8" cutter bits; and (4) centering tips.

4485-1 Spot weld cutter bits



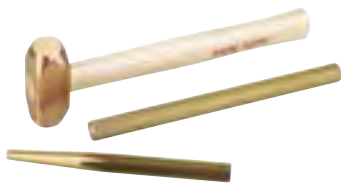
4651 Screw Extractor Set

- Removes broken studs and bolts.
- Includes ten guide bushings, five drill bits and five screw extractors with extractor nuts.
- Drill bits are left handed to help removal.



4602
Brass Punch Set (2 piece)

- Two large, brass non-sparking punches. Ideal for use near precision parts or in locations where sparks from ferrous metal could be hazardous.
- Includes an 8" punch (5/8" hex, tapered to 3/8") and 10" straight punch (3/4" dia., chamfered at both ends).



4606
Brass Hammer and Punch Set

- Brass-head hammer and punches are ideal to use where sparks from ferrous metals would be hazardous, or where precision metal parts could be damaged by steel tools.
- Hammer head weighs 24 oz.; brass drift punch is 10" x 3/4" diameter; brass tapered punch is 8" x 5/8" hex tapered to 3/8" diameter point.



6627
Grip Wrench Adapters

- For grip wrenches using single-lead thread adjusting screw.
- Adapter threads onto a slide hammer with a 5/8"-18 thread.

205378 Grip wrench threads onto a 7/16"-14 end of adapter for pulling use.

557479 Grip wrench threads onto a 5/16"-18 end of adapter for pulling use.

557480 Grip wrench threads onto a 1/4"-20 end of adapter for pulling use.



4383
Hole Punch Kit

- Easy, smooth operation. Will pierce up to 14 gauge steel.
- 7 sets punches and dies. Sizes: 3/32", 1/8", 5/32", 3/16", 7/32", 1/4", and 9/32".



4629
Brass Hammer and Punch Set

- Brass-head hammer and punches are ideal to use where sparks from ferrous metals would be hazardous, or where precision metal parts could be damaged by steel tools.
- Two hammer head weighing 24 and 12 oz.
- Two tapered punches 14" x 5/8", 10" x 5/8".
- One hex tapered punch 8" x 5/8".
- Two drift punches 10" x 3/4", 8" x 1/2".
- Two pin punches 6" x 3/8", 4" x 1/4".



898A
Body and Fender Dent Puller

Often, the biggest time-consuming part of dent removal is the removal and installation of interior panels and upholstery. This tool eliminates those steps. Simply drill a hole at the base of the dent and thread in the tool's self-tapping screw. A few sharp blows of the slide hammer will pull the dent out.

- Puller is 17" long with Pyralin handle grip.
- Replaceable self-tapping screw. Instructions included. 104427-PK5 – Replacement screws (5 pack).



5900A-PLUS
Master Torx Bit Socket Set, 53-piece

Updated 53-piece Master Torx Bit Socket Set plus special 24mm External Torx PLUS Socket (p/n 5932-24) required for Ford Super Duty pick-up beds starting model year 2017. Socket kit includes various sizes of Torx, Torx PLUS, Tamper Resistant Torx, Bit Sockets and External Torx Sockets in 1/4", 3/8" and 1/2" square drive. Stored in a convenient hard plastic clamshell case for protection and organization. Not rated for use with impact tools.

Sizes included:

- Standard Torx: 1/4" Sq Dr T6, T8, T10, T15, T20, T25, T27, T30
- Standard Torx: 3/8" Sq Dr T40, T45, T50, T55
- Standard Torx: 1/2" Sq Dr T60, T70
- External Torx: 1/4" Sq Dr E4, E5, E6, E7, E8
- External Torx: 3/8" Sq Dr E10, E12, E14, E16
- External Torx: 1/2" Sq Dr E18, E20, E22, E24
- Torx PLUS: 1/4" Sq Dr TP8, TP10, TP15, TP20, TP25, TP27, TP30
- Torx PLUS 3/8" Sq Dr TP40, TP45, TP50, TP55
- Torx PLUS 1/2" Sq Dr TP60
- Torx Tamper Resistant 1/4" Sq Dr TT8, TT10, TT15, TT20, TT25, TT27, TT30
- Torx Tamper Resistant 3/8" Sq Dr TT40, TT45, TT50, TT55
- Torx Tamper Resistant 1/2" Sq Dr TT60
- External Torx PLUS 1/2" Sq Dr EP24



4784
Profile Gauge, 10"

This 10" gauge provides an exact copy of a contour or profile needed during bodywork or fabrication. The plastic fingers will not scratch original finish.

BODY SERVICE AUTOMOTIVE SPECIALTY TOOLS



4509 Straight-Blade Hose Cutter

- Cuts rubber hoses ranging from 1/4" to 1-1/2".
- Simply place hose in tool and squeeze handle to cut.
- Replacement steel cutter blade No. 4509-1 is available.

4509-1 Replacement hose cutter blade.



4411 Ratcheting Hose & PVC Cutter (Standard)

- Cuts hose and PVC up to 1-3/8" dia.
- Features metal frame and ergonomic handles for high leverage.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



4412 Ratcheting Hose & PVC Cutter (Heavy Duty)

- Cuts hose and PVC up to 1-3/4" dia.
- Features metal frame and rubber padded ergonomic handles for high leverage and comfort.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



4818 Multi-purpose Scissors

Will cut hose, wire and cables, wood dowel, PVC, and thin sheet metals in addition to general cutting. The hardened stainless steel blades have an angle ground into one that eliminates slipping when cutting round materials.



Hydraulic Spreaders

- Included as standard equipment with our collision sets, these versatile hydraulic spreader tools are also available individually. Ideal for removing dents and creases, performing straightening jobs, or for use as a clamp. Makes working in tight spots easy.
- Maximum spread is 3-1/4".

9101B

1/2-ton spreader with 1/4" NPT ram half coupler

9102

1/2-ton spreader with 3/8" NPT ram half coupler



4085

Hydraulic Spreader, 1-ton Capacity

This hydraulic spreader is rated at a full 1-ton capacity at 10,000 PSI and that's enough for a wide variety of jobs. Working in tight spots is no problem—it needs only a 9/16" clearance to engage the jaws. With a big 4" spread, it's ready for a variety of applications: straightening work, removing dents and creases from sheet metal, or as a clamp. The device's spring-return jaws are made of high-strength alloy steel. It can be dead-ended at 4" spread under full load. Ideally suited to work with No. 4012 hand pump (not included).



Hydraulic Rams for Collision Repair Sets

These premium quality rams are designed for long, trouble-free service. Backed by a life-time warranty, they are ideal replacements for worn-out, leaky rams. They feature a special piston rod that permits their use with the snap-together components of OTC's collision repair sets, or with most similar competitive products.

4082B

4-ton ram with 5" stroke and special piston rod end designed to fit most collision repair set components.

4083C

10-ton ram with 6-1/8" stroke and special piston rod end designed to fit most collision repair set components.

Specifications

	4082B	4083B
Min. height	10-7/8"	14-5/8"
Max. height	15-7/8"	20-3/4"
Spring return	Yes	Yes
Rod end dia.	.86"	1.3"
Max. operating. Pressure	8,950	9,186
Oil cap. (cu. in.)	4.78	13.69
Oil port	1/4" NPT	1/4" NPT



Hydraulic Rams for Collision Repair Sets

These premium quality rams are designed for long, trouble-free service. Backed by a two-year warranty, they feature a special piston rod that permits their use with the snap-together components of OTC Stinger's new collision repair sets, or with most similar competitive products.

9104B

4-ton ram with 4" stroke and special piston rod end designed to fit most collision repair set components.

9110B

10-ton ram with 6" stroke and special piston rod end designed to fit most collision repair set components.

Specifications

	9104B	9110B
Min. height	10-3/8"	15"
Max. height	14-3/8"	21"
Spring return	Yes	Yes
Rod end dia.	.874"	1.310"
Max. operating. Pressure	8,950	8,950
Oil cap. (cu. in.)	4.97	13.69
Oil port	1/4" NPT	1/4" NPT



1513B – 4-Ton



1515B – 10-Ton

Collision Repair Sets, Stinger Series 4- and 10-Ton

- Very competitively priced, yet high quality sets include single-speed hydraulic hand pump, hose, and ram.
- Components snap together for quick setups to apply pushing, spreading.
- Components include: hydraulic pump, hose, and ram; ram flat base; extension tubes (4); 1/2-ton spreader; tube coupling; ram toe; wedge head; serrated saddle; flex head; plunger toe; 90° wedge head; storage case. The case for the 10-ton set has wheels for mobility.

- 1513B** 4-ton collision repair set. Has single speed hydraulic hand pump and ram with 4" stroke.
- 1515B** 10-ton collision repair set. Has single speed hydraulic hand pump and ram with 6" stroke.



1517B – 4-Ton



1519B – 10-Ton

Collision Repair Sets, OTC Series 4- and 10-Ton

- We've matched our OTC hydraulics with versatile tooling.
- Components snap together, permitting you to apply pushing, spreading.
- Components include: hydraulic pump, hose, and ram; ram flat base; 1/2-ton hydraulic spreader; extension tubes (4); tube coupling; ram toe; wedge head; serrated saddle; flex head; plunger toe; 90° wedge head; storage case. The case for the 10-ton set has wheels for mobility.

- 1517B** 4-ton collision repair set. Has single speed hydraulic hand pump (4000A) and ram (4082B) with 5" stroke.
- 1519B** 10-ton collision repair set. Has two-speed hydraulic hand pump (4012A) and ram (4083C) with 6-1/8" stroke.

**5086
Collision Repair Set, 10-Ton**

- Exert hydraulic force just where it's needed to lift, spread, bend, or straighten. Handles the high-force jobs you face daily in trailer maintenance or other applications.
- Includes reliable components including 10-ton, 10-1/8" stroke hydraulic ram; air/hydraulic pumping unit; hydraulic hose; four snap-together extension tubes; extension tube coupling; serrated saddle; flat base; 90° wedge head; flex head; storage case.
- All set components are covered by OTC Lifetime Marathon Warranty®.



BODY SERVICE AUTOMOTIVE SPECIALTY TOOLS



7176 4 Piece Rolling Head Pry Bar Kit

Here's a set of tools anyone working in the trades will appreciate owning: The 7176, 4 Pc Rolling Head Pry Bar set from OTC! OTC has manufactured some of the very best pry bars in the business and these rolling head designed pry bars are no exception.

Forged, and swaged processing creates the tool, then our special thermal treating process locks in the strength you count on. Won't bend, or break. Backed by our lifetime warranty Includes:

- 7162** 6" Rolling Head Pry Bar
- 7163** 12" Rolling Head Pry Bar
- 7164** 16" Rolling Head Pry Bar
- 7179** 21" Rolling Head Pry Bar
- 5801SGLV-L** SmartTech Work Glove



7179 21-Inch Rolling Head Pry Bar

The OTC 7179 is a 3/4" bar featuring an upset rolling head on one end and an alignment drift on the other.

Made in USA and Lifetime Warranty



7703 Slide Hammer Puller, Ten-Pound

This heavy-duty slide hammer puller gets tough with those really stuck parts. It has all the features of our smaller versions – heat treated, 24" long, and a 5/8"–18 threaded end to adapt to any of OTC's pulling attachments. The difference is the ten-pound hammer that gives you the extra muscle for really stubborn pulling jobs.



Basic Slide Hammer Units

May be used with an OTC internal pulling attachment (page 127), or with internal or external-internal threaded adapters (page 125).

- 1155** Slide hammer unit is 24" long with a 5 lb. hammer, 5/8"–18 threaded end.
- 1156** Slide hammer unit is 24" long with a 2-1/2 lb. hammer, 5/8"–18 threaded end.



7177 Heavy Duty Extendable Indexing Pry Bar

Designed for heavy duty uses such as positioning/repositioning engines or equipment, aligning heavy steel plates or panels, prying large heavy objects such as decking, grates, covers and general movement of obstructions. The combination extendable reach and pivoting head permits access to many jobs where traditional pry bars may be limited. The prying head is 13/16" wide and can be extended from 34" to 53" using 31 preset positions set in 5/8" increments. Extension and indexing adjustments are done with separate oversized pins allowing length and angle adjustments to be made quickly.

Optimal loading of 1500 lbs. to 2200 lbs. is made possible by the bar's heavy duty 13/16" steel bar and 1-3/8" tubular extension. Knurling has been added at the base of the handle for a strong, secure grip. A must have tool for the next time you need serious leverage for service and maintenance in industry, automotive, construction, agriculture, rigging, or any heavy duty vocational application. Covered by the OTC Limited Lifetime Warranty.



8203L 3-piece Long Handled Pry Bar Set

A set of 3 made-in-the-USA pry bars with comfortable, sturdy rubberized grips. Each bar is drop-forged in Minnesota with a hand-ground chisel end for wedging into tight spaces. Special tempered steel provides extra strength, durability and leverage for tough jobs. A dedicated striking cap provides a big target to drive the pry bar in to help separate components faster. Includes lifetime warranty.

- 8224** 24" handled pry bar
- 8236** 36" handled pry bar
- 8248** 48" handled pry bar



8203S 3-Piece Short Handled Pry Bar Set

A 3-piece Handled Pry Bar Set that includes 8", 12" and 18" lengths for moving or separating components with maximum leverage. Each bar is made from tempered square steel for durability and strength. The dual durometer handle provides a comfortable and secure grip, reducing hand fatigue. A black chrome striking cap will take hammer blows without handle damage, and a polished tip and black oxide finish resists rust and wear during use. Covered by OTC's Lifetime Warranty.

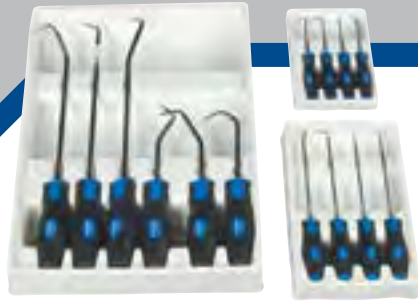
- 8208** 8" handled pry bar
- 8212** 12" handled pry bar
- 8218** 18" handled pry bar



7175 Indexing Pry Bar Set, 3-piece

- Sizes 10", 12" and 15".
- Indexible to 180° for better access.
- 14 locking positions for leverage in multiple applications.
- Knurled handle assures a sure grip.
- Meets or exceeds ANSI specifications for pry bars

- 7172** 10" Indexing Pry Bar
- 7173** 12" Indexing Pry Bar
- 7174** 15" Indexing Pry Bar



EASILY REMOVE HOSES, CLIPS, WASHERS AND GASKETS

8260M
Short Pick, Long Pick and Hook Set (14-piece)

- Combines 8260, 8262 and 8263 sets.
- Packaged in molded trays which can be placed in tool drawer.



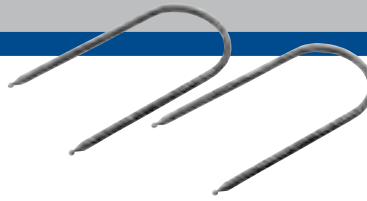
8263
Long Pick and Hook Set (4-piece)

- Consisting of four (4), 6.5", soft-handled picks.
- They are sturdy, with both stainless steel shafts and tips, with assorted tip shapes designed for marking, removing o-rings, accessing snap ring and other assorted applications.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Multi-use tools to scribe, align pierce, clean or remove o-rings, shaft seals, cv boot and motorcycle fork seals and dust hoods.
- Packaged in a molded tray which can be placed in tool drawer.



4515
Mini Pick and Hook Set – 4-piece

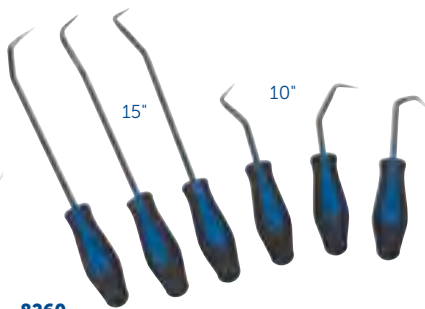
- Sturdy stainless steel points and shafts designed for marking, removing o-rings, accessing snap rings, and performing other tasks. Assorted angle tips allow you to reach awkward locations.
- Knurled shaft design enhances finger control for delicate jobs.



Similar to Ford T87P-19061-A, 415-001

7575
Ford Radio Removal Tool Kit

These dual-purpose tools release the retaining clips of a radio faceplate so you can pull the radio from the instrument panel. For use on 1987 to current Mustang; 1988 and newer Tempo/Topaz; 1989 to current Lincoln Continental; 1990 to current Taurus/Sable, Ranger/Bronco II, Probe, Lincoln Town Car, Mark VII, Crown Victoria/ Grand Marquis, Thunderbird/Cougar, F-series pickups and E-series vans; 1991 to current Explorer; 1995 to 2003 Windstar.



8260
Hose Removal Set, 6-piece

- Consisting of six (6) hose removal tools which consists of three (3) 10", soft-handled tools and three (3) 15", soft-handled tools, each with a hard end-cap.
- They are made of heat-treated, chrome steel with assorted tip shapes.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Hose removal tools can also be used on upper and lower radiator hoses, clips, washers, gaskets and other items.
- Packaged in a molded tray which can be placed in tool drawer.



4706
Universal Lift Support Clamp (pair)

- Easy-to-use clamps designed for placement on hood/lid strut rods preventing the body component from falling or sagging.
- Great for vehicles & shrouds with weak or dry struts.
- Simply place over strut rod and tighten.
- Small design keeps access to the compartment unobstructed.



4711
Deluxe Radio and Antenna Service Kit

- Eleven-piece kit in molded case.
- Universal antenna wrench.
- Ford radio removal tool.
- Deep sockets to remove and install the tamper-proof radio nuts from many GM, Chrysler, and other aftermarket radios.
- Antenna nut sockets cover most import and domestic antenna nuts.



4712
Euro Radio Removal Tool Kit

- Includes the popular tools needed to remove the radio from the dash on the following European vehicles: BMW, VW, Audi, and Mercedes-Benz.
- Easily removes the radio without damaging the radio or the dash panel.



4715
Deluxe European Radio Tool Set

- 18-piece set of tools used to remove radios on most European vehicles sold in the U.S. and Europe.
 - Quickly and easily removes the radio from the dash without damage to the radio or dash.
- Replacement Parts

- 4715-1** Removal Keys (4 pieces) Audi, Becker, Mercedes-Benz, VW.
- 4715-2** Removal Keys (2 pieces) Becker, Mercedes-Benz, Porsche.
- 4715-3** Removal Keys (2 pieces) VW.
- 4715-4** Removal Keys (2 pieces) Skoda.
- 4715-5** Removal Keys (2 pieces) Becker.
- 4715-6** Pentagon Wrench BMW.
- 4715-7** Bent U-hook (2 pieces) Blaupunkt.
- 4715-8** U-hook (2 pieces) Audi, Blaupunkt, Ford, Grundig, VW.
- 4715-9** Allen Hex Wrench BMW, Opel.

BODY SERVICE AUTOMOTIVE SPECIALTY TOOLS

OTC BFH HAMMERS

- Indestructible handle - never needs replacement!
- Ergonomic rubber grip handle reinforced with steel bars resists breaking while absorbing impact and vibration.
- Drop-forged head is induction-hardened for long life, and contains steel locking plates that are specially bonded to ensure the head never becomes loose.



5791ID-412



5792ID-216



5793ID-2414

OTC No.	Head Weight	Handle Length	Total Weight
---------	-------------	---------------	--------------

Club/Hand Drill Hammer, Indestructible Handle

5791ID-312	2.5 lbs.	12"	4 lbs.
5791ID-412	4 lbs.	12"	5.1 lbs.
5791ID-416	4 lbs.	16"	5.5 lbs.

Cross Peen Hammer, Indestructible Handle

5792ID-216	2 lbs.	16"	4.5 lbs.
5792ID-316	3 lbs.	16"	5.4 lbs.

Ball Peen Hammer, Indestructible Handle

5793ID-2414	24 oz.	14"	2.6 lbs.
5793ID-3214	32 oz.	14"	3.0 lbs.



5912

Crimwell™ Angled Crimping Pliers

- Universal crimping design accommodates soft wire – solid or stranded – 10-22 AWG.
- Cutting feature included for quicker preparation.
- 9" (228mm) in length, with protective grips to increase leverage and secure crimp.
- Angled design keeps the connector, the wire, and the crimper "in-line" – improving visibility and access in hard to reach places.
- Designed to not pierce connector insulation and also works on un-insulated connectors.
- Service tech can use as much force as desired to ensure connection and it will not damage connector insulation.
- Easy-to-use: Simply insert the connector into the crimping feature, slip over the connector and squeeze.



4468

Self Adjusting Wire Stripper, 9"

- Strips insulating sheathing from wires ranging from 10 ga. to 22 ga.
- Easy-to-use, just insert wire and squeeze.
- Also cuts and crimps.



5950K

CrimPro™ 4-in-1 Wire Service Set

CrimPro™ 4-in-1 Wire Service Set includes both the OTC 5950S CrimPro™ 4-in-1 Wire Tool and OTC 5950A CrimPro™ 4-in-1 Angled Wire Tool.

5950S

- Compact 7-inch design used 4 ways.
- Gripping nose - to pull, twist, bend, and shape.
- Crimper - crimps 12-20 AWG insulated and non-insulated wire.
- Stripper - strips 12-20 AWG wire.
- Cutter - ability to make cuts below pivot.

5950A

- The angled feature allows access to close quarters and facilitates superior crimps.
- Compact 7-inch design used 4 ways.
- Gripping nose - to pull, twist, bend, and shape.
- Crimper - crimps 12-20 AWG insulated and non-insulated wire.
- Stripper - strips 12-20 AWG wire.
- Cutter - ability to make cuts below pivot.



4467

Automatic Wire Stripper

- Quick removal of insulation on wire AWG 12-20.
- Comes with adjustable depth gauge (8mm to 12mm).
- Sharp v-shaped tooth easily removes insulation without any damage to soft wire strands.
- Cutting tool stored below the stripper.
- Features a space saving locking mechanism for pockets or tool drawer storage.



5900A-PLUS Master TORX® Socket Set

52-piece, professional socket set in a blow-molded case.

Hundreds of applications from front to rear on cars and trucks:

- Seat belt bolts
- Interior and exterior trim screws
- Engine assemblies
- Tail lamp lenses & assemblies
- Bumpers
- Headlight bezels
- Door strikers & latches
- Brake rotor bolts
- GM front-wheel drive front wheel bearings
- Truck box liners

- Styles available: TORX bit sockets, TORX PLUS bits sockets, tamper-resistant TORX bits, and TORX sockets for external bolts.
- Made from superior S2 steel to meet or exceed torque specifications.
- Includes free 5932-24 external TORX plus.

Master Torx Socket Set includes:

TORX® Bit Socket Set T6 to T60 (15-piece)			TORX PLUS® Bit Sockets TP8 to TP60 (12-piece)			TORX® External Socket E4 to E24 (13-piece)			TORX® Tamper-Resistant Bits TT8 to TT60 (12-piece)		
Part No.	Size	Sq. Drive	Part No.	Size	Sq. Drive	Part No.	Size	Sq. Drive	Part No.	Size	Hex Insert
5906	T6	1/4"	5918	TP8	1/4"	5934	E4	1/4"	5919	TT8	1/4"
5908	T8	1/4"	6181	TP10	1/4"	5935	E5	1/4"	5920	TT10	1/4"
6101	T10	1/4"	6182	TP15	1/4"	6151	E6	1/4"	5921	TT15	1/4"
6102	T15	1/4"	6183	TP20	1/4"	6152	E7	1/4"	5922	TT20	1/4"
6103	T20	1/4"	6184	TP25	1/4"	6153	E8	1/4"	5923	TT25	1/4"
6104	T25	1/4"	6185	TP27	1/4"	6154	E10	3/8"	5924	TT27	1/4"
6105	T27	1/4"	6186	TP30	1/4"	6155	E12	3/8"	5925	TT30	1/4"
6106	T30	1/4"	6187	TP40	3/8"	6156	E14	3/8"	5926	TT40	3/8"
6107	T40	3/8"	6188	TP45	3/8"	6157	E16	3/8"	5927	TT45	3/8"
6108	T45	3/8"	6191	TP50	3/8"	5936	E18	1/2"	5928	TT50	3/8"
6109	T47	3/8"	6192	TP55	3/8"	5937	E20	1/2"	5929	TT55	3/8"
6110	T50	3/8"	6193	TP60	1/2"	5938	E22	1/2"	5930	TT60	1/2"
6111	T55	3/8"				5939	E24	1/2"			
6112	T60	1/2"									
6198	T70	1/2"									

6100 Standard TORX® Socket Set T10 to T60 (12-piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6101	T10	1/4"
6102	T15	1/4"
6103	T20	1/4"
6104	T25	1/4"
6105	T27	1/4"
6106	T30	1/4"
6107	T40	3/8"
6108	T45	3/8"
6109	T47	3/8"
6110	T50	3/8"
6111	T55	3/8"
6112	T60	1/2"



6145 Tamper-Resistant TORX® Socket Set (7-piece)

Set includes one each of the following:

No.	Size	Sq. Drive
5920	TT10	1/4"
5921	TT15	1/4"
5922	TT20	1/4"
5923	TT25	1/4"
5924	TT27	1/4"
5925	TT30	1/4"
5926	TT40	3/8"



FASTENER SERVICE AUTOMOTIVE SPECIALTY TOOLS

6160 Fraction Hex Socket Set (7-piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6161	1/8"	3/8"
6162	5/32"	3/8"
6163	3/16"	3/8"
6164	7/32"	3/8"
6165	1/4"	3/8"
6166	5/16"	3/8"
6167	3/8"	3/8"



5905 Tamper-Resistant TORX® Plus Socket Set (11-piece)

Set includes one each of the following:

No.	Size	Sq. Drive
5905-8	8IPR	1/4"
5905-10	10IPR	1/4"
5905-15	15IPR	1/4"
5905-20	20IPR	1/4"
5905-25	25IPR	1/4"
5905-27	27IPR	1/4"
5905-30	30IPR	1/4"
5905-40	40IPR	3/8"
5905-45	45IPR	3/8"
5905-50	50IPR	3/8"
5905-55	55IPR	3/8"



6170 Metric Hex Socket Set (7-piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6171	3 mm	3/8"
6172	4 mm	3/8"
6173	5 mm	3/8"
6174	6 mm	3/8"
6175	7 mm	3/8"
6176	8 mm	3/8"
6177	10 mm	3/8"



5931 External Torx® Plus Socket Set (8-piece)

Set includes one each of the following:

No.	Size	Sq. Drive
5931-6	6EP	3/8"
5931-7	7EP	3/8"
5931-8	8EP	3/8"
5931-10	10EP	3/8"
5931-11	11EP	3/8"
5931-12	12EP	3/8"
5931-14	14EP	3/8"
5931-16	16EP	3/8"



6150 External TORX® Socket Set (7-piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6151	E6 x 25	1/4"
6152	E7 x 25	1/4"
6153	E8 x 25	1/4"
6154	E10 x 32	3/8"
6155	E12 x 32	3/8"
6156	E14 x 32	3/8"
6157	E16 x 32	3/8"



5942 XZN Super Short Socket Bit Set (8-piece)

Set includes one each of the following:

No.	Size	Sq. Drive
5942-4	SP4	1/4"
5942-5	SP5	1/4"
5942-6	SP6	1/4"
5942-8	SP8	1/4"
5942-10	SP10	3/8"
5942-12	SP12	3/8"
5942-14	SP14	3/8"
5942-16	SP16	3/8"



6180 TORX® Plus Socket Set (9-piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6181	TP10	1/4"
6182	TP15	1/4"
6183	TP20	1/4"
6184	TP25	1/4"
6185	TP27	1/4"
6186	TP30	1/4"
6187	TP40	3/8"
6188	TP45	3/8"
6191	TP50	3/8"



5933 MortorQ® Super Bit Set (5-piece)

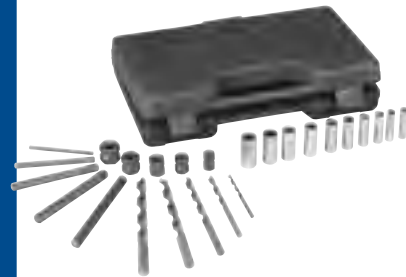
Set includes one each of the following:

No.	Size	Sq. Drive
5933-0	MTS 0	3/8"
5933-1	MTS 1	3/8"
5933-2	MTS 2	3/8"
5933-3	MTS 3	3/8"
5933-4	MTS 4	3/8"



5940 BMW Head Bolt Socket

- Socket is designed to fit in the cylinder head on M42 and M50 engines to remove and install cylinder head bolts.
- Spring loaded detent ball holds bolt in place.
- Works with 1/2 inch ratchet, breaker bar, or torque wrench. Socket size is E12 for external TORX® bolts.



4651 Screw Extractor Set

- Removes broken studs and bolts.
- Includes ten guide bushings, five drill bits and five screw extractors with extractor nuts.
- Drill bits are left handed to help removal.

Similar to Toyota No. 09043-50080



6022 Toyota Head Bolt Socket

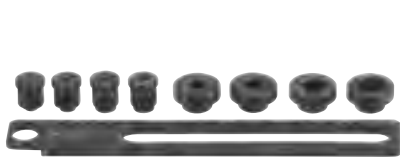
- Specially designed socket is needed to tighten or loosen head bolts on Toyota Paseo vehicles with 3S-GE and 3S-FE engines.
- 8 mm socket features a 12-point, 1/2" drive socket.



**5943
9-Piece Power Driver Socket Extensions**

The new 5943, 9 piece Power Driver Socket Extension set from OTC adds versatility to your existing power tools and socket sets. Each extension uses a 1/4" hex shank for adjustable chuck drills with 1/4", 3/8" or 1/2" square drive on the other end for sockets. 3 square drive sizes - 1/4", 3/8" and 1/2" and 3 lengths for each - 2" 6" and 12". Now use your sockets with your cordless power tools for short, medium and long reach applications. The 5943 is a great choice for running up multiple bolts like oil and transmission pans or rear ends instead of ratcheting each one by hand. Save your time for proper torquing instead of hand turning your bolts. Limited lifetime warranty.

- 5943-1** Three 1/2" square drive socket extensions in 2", 6" and 12" lengths
- 5943-2** Three 3/8" square drive socket extensions in 2", 6" and 12" lengths
- 5943-3** Three 1/4" square drive socket extensions in 2", 6" and 12" lengths



**6982DGS
Drilling Guide System**

- Drill perfectly centered holes in broken studs.
- Anchor rail guide on any open hole within reach of broken stud - 6 inch reach.
- 4 bushings for common stud sizes - 6mm, 8mm, 10mm, and 12mm.
- 4 drilling guides for progressive drilling - 1/16", 3/32", 1/8" and 5/32".
- Conveniently stores in vinyl pouch - includes instructions.
- Made in USA with a Lifetime Warranty.

- 6982DGS-1** 4-Pc Bushing Set
- 6982DGS-2** 4-Pc Guide Set
- 6982DGS-3** Replacement Rail



**6982DEX
3 Pc Double Edge Screw Extractors**

- For unscrewing broken bolts and screws without damaging threads.
- Can be turned in clockwise or counter clockwise direction for right and left handed threads.
- Drive extractor into drill hole for secure fit.
- Hex shank design works with standard hex sockets eliminating rounded corners.
- Industrial Quality - Made from High Strength Steel - Tapered Flute design.

- 6982DEX-1**
No. 1 Dual Edge Screw Extractor (#10 - 1/4")
- 6982DEX-2**
No. 2 Dual Edge Screw Extractor (5/16" - 3/8")
- 6982DEX-3**
No. 3 Dual Edge Screw Extractor (7/16" - 1/2")



**6982ACP
Automatic Center Punch**

- Accurately marks your drill point every time.
- Creates deep center mark to prevent drill bit from wandering.
- Flared top fits comfortably in palm of hand.
- Allows free hand to place marking tip exactly where you want it.
- Press tool until spring releases causing tip to mark your drilling point.



FASTENER SERVICE AUTOMOTIVE SPECIALTY TOOLS



Impact Drivers

- Loosens hard-to-turn screws, bolts or nuts.
- Handle design prevents possibility of hitting hand with hammer when striking impact driver.
- Bit holder has 3/8" drive (No. 4608), 1/2" (No. 4607) drive, and 5/16" hex for Phillips and flat screwdriver bits.
- Includes eight screwdriver bits:
 - No. 2 Phillips bit, 1-3/8" long with 5/16" hex
 - No. 2 Phillips bit, 3-1/8" long with 5/16" hex
 - No. 3 Phillips bit, 1-3/8" long with 5/16" hex
 - No. 3 Phillips bit, 3-1/8" long with 5/16" hex
 - 5/16" wide x 1-3/8" long with 5/16" hex slotted bit
 - 5/16" wide x 3-1/8" long with 5/16" hex slotted bit
 - 3/8" wide x 1-3/8" long with 5/16" hex slotted bit
 - 3/8" wide x 3-1/8" long with 5/16" hex slotted bit

- 4607** 1/2" Impact Driver
4608 3/8" Impact Driver



4576 Universal C-Frame Nut Splitter

- Forged and heat-treated frame with offset handle works where ordinary nut splitters may fail. Smooth action cracks nuts without damaging bolt threads.
- Chisel rotates to line up parallel to bolt. Splits non-heat-treated nuts of 7/16" (11 mm) through 3/4" (19 mm) diameter. Tool is 6-3/4" in length.



7402 Universal Outside Thread Chaser

- Quickly restore threads to near new condition without expensive thread cutting equipment.
- Replaceable V-Pads and dies. Use for 1-1/4" to 5" O.D.
 - Includes Standard Die Set 216884.
 - Metric size dies available 202817, must be purchased separately.

- 216884** **Standard die set.** Includes 6 dies, threads per inch - 4, 5, 6, 7, 7-1/2, 8, 9, 10, 11, 11-1/2, 12, 14, 16, 18, 20, and 24.
- 202817** **Metric die set.** Includes three dies: 1 mm- 1.25 mm-1.5 mm-1.75 mm, 2 mm-2.5 mm-3.0 mm-3.5 mm; 4 mm pitch dies.
- 206803** **V-pad.**



4614 Side Terminal Battery Wrench

- Designed for use on GM side-terminal batteries, or any 5/16" hex head battery bolt.
- 5/16", 6 point, box end, 5-1/2" long, ratcheting wrench; insulated handle.



4615 Long-Side Terminal Battery Wrench

- Designed for use on GM side-terminal batteries, or any 5/16" hex head battery bolt.
- Long handle allows access to hard-to-reach battery terminal bolts.
- 5/16", 6 point, box end, 10" long, ratcheting wrench; insulated handle.



4616 Battery Terminal Wrench - 10mm

- Designed for use on 10 mm battery terminal bolts found on many import and domestic vehicles.
- 10 mm, 12 pt., box-end ratcheting wrench; 5-1/2" long with insulated handle.



4791 Spanner Wrench, 3/4" - 2"

This chrome vanadium hardened steel wrench features a 5" handle and slim strong hook to access slotted retaining rings in hard to reach areas.



4792 Spanner Wrench, 2" - 4 3/4"

This chrome vanadium hardened steel wrench features a 9" handle and slim strong hook to access slotted retaining rings in hard to reach areas.



885 Adjustable Hook Spanner Wrench

- Here's a tool that's needed wherever turret adjusting nuts or packing gland nuts are used.
- Capacity is 1-1/2" to 4".
 - Handle is 24" long, 11/16" diameter.



7307

Fed. Spec.: GGG-W-665b



7308

Adjustable Hook Spanner Wrenches

These pieces will replace many fixed-size wrenches needed to service industrial tractors and other equipment. Their drop-forged jaws adjust to 11 positions for a capacity of 4-3/4" to 12-3/4" O.D.

- Handle is 24" long and 1" in diameter.

7307 Spanner wrench with one 3/8" thick jaw.

7308 Spanner wrench with two interchangeable jaws: one 3/8" thick, one 3/4" thick.



Fed. Spec.: GGG-W-665b

7309

Heavy-Duty Adjustable Hook Spanner Wrench

Some jobs require beefier tools. Here's a wrench to fill that need. It's drop-forged and features extra heavy construction and a 3/4" thick, 11-position hook jaw that's capable of gripping fasteners from 4-3/4" to 12-3/4" O.D.

- Handle is 25-3/4" long and 15/16" in diameter.



6719-1 Locking Pliers

10" straight locking pliers



Accutorq™ Klikker Torque Wrenches

These precision torque wrenches make a loud click when you've reached the torque setting. They feature ratcheting heads, all-metal construction, permanently roll-marked scales, and soft-grip rubber handles that enable you to firmly grasp the wrench for right- or left-hand torquing.

- Includes molded plastic case.
- One-year warranty.

Tool No.	Torque Range	Graduations	Square Drive	Length
7375	100-1000 in.-lb (11-113 N•m)	10 in.-lb	3/8"	15-1/8"
7377	10-150 ft.-lb (14-203 N•m)	2 ft.-lb	1/2"	17-3/4"
7378	25-250 ft.-lb (34-339 N•m)	2 ft.-lb	1/2"	19-3/8"
7379	100-600 ft.-lb (136-813 N•m)	10 ft.-lb	3/4"	42-1/4"



7367 Torque Multiplier, 1100 ft-lb

- Drive Input; 1/2", 365 lb-ft Max
- Drive Output; 3/4", 1100 lb-ft Max
- Head Width; 2.9", 3.3:1 Ratio
- Reaction Bar; 13-3/4"
- Includes reaction foot.
- Note; frictional gear loss = 6%



7368 Torque Multiplier, 2200 lb-ft

- Drive Input; 3/4", 730 lb-ft Max
- Drive Output; 1", 2200 lb-ft Max
- Head Width; 3.6", 3.3:1 Ratio
- Reaction Bar; 15-5/8"
- Includes reaction foot.
- Note; frictional gear loss = 6%

4554 Torque Angle Gauge

• Required when servicing many late model engines that use torque-to-yield fasteners. Measures angle of rotation after pre-torque in torque-angle applications.

- The 360° scale is marked in 2° increments and intervals of 10° and 30°; easily zeroed for next application by turning the tool housing.
- Has 1/2" male and female square drives.



5776 Preset Torque Wrench Set

These color coded click torque wrenches are pre-set to the most common lug nut torque settings, making them perfect for tire shops. Highly durable design can hold up to the toughest tire shop demands.

- No need for adjustments
 - Durable satin finish
 - 1/2" Drive, 36 tooth
 - Quick release ratchet head
 - Perfect for Wheel / Tire shop
 - Accuracy better than ±3% CW
- Sold Individually:

5776-1 Preset Torque Wrench, 1/2" 65 lb-ft

5776-2 Preset Torque Wrench, 1/2" 80 lb-ft

5776-3 Preset Torque Wrench, 1/2" 100 lb-ft

5776-4 Preset Torque Wrench, 1/2" 120 lb-ft

5776-5 Preset Torque Wrench, 1/2" 140 lb-ft



7380-E150 Digital Torque Wrench

- Displays torque in real time and at peak when torque is released.
- Torque value accuracy is ±1% clockwise (CW) and counterclockwise (CCW) from 10%-100% of full scale.
- Can be used to measure bearing preload torque values.
- Display starts at 1% to 250% of full scale; has a 5-digit, alpha-numeric LCD, and indicator icons for functions, units and battery.
- Indicators include green, yellow and red LED light, an audible buzzer, and vibration.
- 1/4" Drive, 36 tooth ratchet head.
- Range 1.5 - 150 In Lb.

FASTENER SERVICE AUTOMOTIVE SPECIALTY TOOLS

Giant Adjustable Wrenches

The really big jobs call for really big tools. These wrenches will handle 42 bolt sizes from 1-3/8" to 4-3/4". Together, both wrenches weigh just 41 lbs., but can replace over 1,000 lbs. of fixed-size wrenches.

7640 Giant adjustable wrench. Rated to withstand 2,000 ft. lbs. of torque.

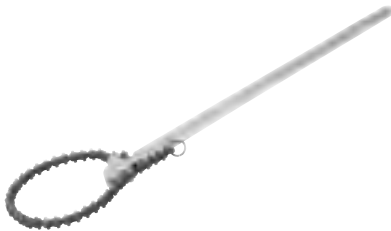
7641 Giant adjustable wrench. Rated to withstand 5,000 ft. lbs. of torque.



7640

7641

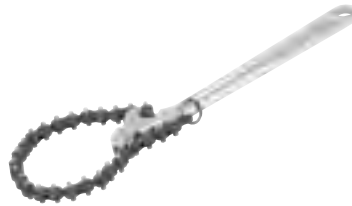
Tool No.	Nut / Bolt Size	Increments of Jaw Adjustment	Lgth..	Head Thickness	Wt. (lbs.)
7640	1-3/8" to 2-7/8"	1/8"	24"	7/8"	10.6
7641	2-3/4" to 4-3/4"	1/8"	36"	1-1/8"	30.3



6969 Ratcheting Chain Wrench – 24"

- Ratcheting action makes it possible to re-grip without removing wrench.
- Handles parts of most any shape... round, square, hexagon, or octagon.
- Handle is 24" long; chain grips objects ranging from 3" to 6-1/2" O.D.

516942 Replacement chain



6968 Ratcheting Chain Wrench – 12"

- Works on many different-shaped objects, such as square, round, hexagon, oval, etc.
- Handle is 12" long; chain grips objects ranging from 1/2" to 4-1/2" O.D.

516941 Replacement chain



SmartTech™ Technician Gloves

- Works with touchscreen technology.
- Washable synthetic leather palm with padding ensures comfort and a secure grip.
- Polyester and Lycra material around fingers offer a durable lightweight cover that stretches for a great fit.
- PVC cushions help protect knuckles from injury due to slippage.
- Comfortable polyester back panels include webbing for improved ventilation.

5801SGLV-L Large

5801SGLV-XL Extra large



7400 Ratcheting Chain Wrench

This multi-purpose tool will grip parts of nearly any shape. It features a ratcheting head design that lets you turn in either direction without removing wrench from the work.

- 13" handle with capacity from 1/2" to 4-3/4" O.D.

209199 Replacement chain



7206 Multipurpose Strap Wrench

You'll find many uses for this heavy-duty strap wrench. The 53" long nylon strap won't mar precision surfaces of shafts, pulleys, or other components. Useful on engine, transmission, and drive pulleys up to 16 inches. Special head design self-tightens the strap as force is applied to the lightweight, 12" long handle.

305085 Replacement chain



4804 Heavy Duty Pulley Holder

This strap style universal wrench features a 9" drop forged handle and 23" leather strap for excellent grip on diameters up to 7". The milled foot increases grip on the strap and pulley as handle force is increased.



7401 Ratcheting Chain Wrench

This multi-purpose tool will grip parts of nearly any shape. It features a ratcheting head design that lets you turn in either direction without removing wrench from the work.

- 19" handle with capacity from 3" to 6-3/4" O.D.

209200 Replacement chain



**4780
Personal Tool Pack**

Includes 1/4" drive ratchet, 2" extension, 16 drive bits, and Universal Spline sockets fit both SAE 3/16" - 9/16" and metric 5mm - 14mm nuts and bolts in a variety of styles; 6 pt., 12 pt., torx, square, spline, etc. All tools included in a travel pouch.



**4781
Super Stubby Screwdriver Set**

These screwdrivers are perfect for those limited access fasteners typically found on carburetors or in electrical compartments and many other areas.

- 2 Phillips and 2 straight screwdrivers included in set.



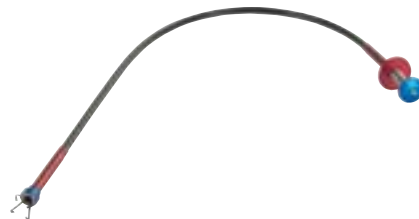
**4794
Safety Wire Drill Guide Set, SAE & Metric Set**

Here is the perfect way to drill those nuts and bolts for use with safety wire without breaking the drill bit. These guide, align, and support the hex head or the bolt threads. The hex fixture fits nuts and bolt heads up to 15/16" (24mm). The SAE fixture bar is threaded for 1/4"-20, 5/16"-18, 5/16"-24, 3/8"-18, 3/8"-24, 7/16"-14 bolts, and the Metric fixture bar covers M6x1.0mm, M8x1.0, M8x1.25mm, M10x1.25mm, M10x1.5mm, M12x1.5mm sizes.



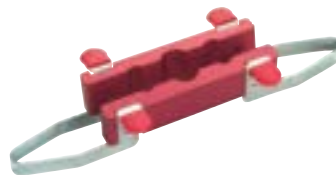
**4490
Magnetic Parts Tray**

- Rectangular, stainless steel tray is 9-1/2" x 5-1/2" and 1-1/4" deep. Holds tools and small metal parts, so they don't get lost or misplaced during repair work.
- Two heavy-duty magnets on bottom of tray, with non-marring contact pads, securely hold tray to metal objects such as a tool box, air cleaner cover, frame rail, fender, etc.



**4783
Flexible Magnetic/Claw Pick Up Tool**

The 25" flexible spring shaft allows the tool to reach difficult areas and pick up objects either magnetically or with the use of the retractable claw.



**4786
Aluminum Vice Inserts**

Essential for every workbench vice. Aluminum jaws have reliefs for 5/16, 3/8, & 9/16 (7mm, 10mm, & 15mm) diameter shafts. Excellent for holding steel shafts without scratching or damage such as shocks, crankshafts, or any threaded bolts and shafts.



**4650
Mirror and Magnet Set**

- Handles telescope from 6-1/2" to 25". Swivel heads allow access to tight areas.
- Large, rectangular swivel mirror is 2" x 3-1/2", and is attached to one telescoping handle; small mirror is 1-1/4" in diameter, and is interchangeable with magnets on the other handle.
- Magnets can lift up to 8 lbs.



**4779
Front Fork & Shock Vice**

This vice is designed to hold up to 4" diameter round or oddly shaped components such as forks, shocks, pistons, rods, etc. The V shaped jaws are covered with thick rubber pads to ensure a firm grip without leaving a mark. Comes complete with a table/vice mounting bracket that allows adjustment to any position.



**4801
Universal Clutch Holder**

Holder arms designed to fit into the external teeth of a clutch hub, but can also be used on gears and sprockets. Opens to handle a 5" OD hub.



**4795
Safety Wire Twist Pliers**

These versatile 8" pliers will reliably twist safety wire rapidly and consistently. The right hand twist mechanism features an automatic spring return. The forged alloy steel construction features tapered jaws for confined areas and mated cutters to cut safety wire. For use on safety wire applications found on vehicles, machinery, and aircraft.

PLIERS & CUTTERS AUTOMOTIVE SPECIALTY TOOLS

RETAINING RING PLIERS

Here are a variety of retaining ring pliers, available individually or in sets, to handle many applications.

7053K

Internal/external retaining ring pliers kit. Includes four 90° tips (.038" diameter), four 45° tips (.047" diameter), and eight straight tips (.047" and .070" diameter).

15702

Replacement tip kit. Contains 4 sets, 4 tips per set.

15702



7123K

Convertible retaining ring pliers kit. For internal or external rings. Contains one No. 1120 (.038" diameter) and one No. 1340 (.070" diameter) straight tip pliers.



7125K

Convertible retaining ring pliers kit. For internal or external rings. Contains one No. 1125 (.038" diameter) and one No. 1345 (.070" diameter) 45° pliers.



7300

Internal, straight tip retaining ring pliers. 16" long.

7301

External, straight tip retaining ring pliers. 16" long.



7300 Internal tip



7301 External tip

Replacement tips (pairs):

209201 For pliers Nos. 7300 and 7301.

222029 45° for pliers Nos. 7300 and 7301.

222030 90° for pliers Nos. 7300 and 7301.



209201

222029

222030

INTERNAL		CONVERTIBLE		EXTERNAL	
No. 0100	No. 0300	No. 1120	No. 1340	No. 0200	No. 0400
No. 0500		No. 1125	No. 1345	No. 0600	

How to select the correct pliers:

1. If ring number is known, locate ring number in chart —pliers are listed in right-hand column.
2. Or, measure diameter of shaft bore and locate size in chart—pliers are in right-hand column.

Ring Series No.	Size Range (Ring Size No.)	Bore of Shaft Dia. Range ("Inch" equiv.)	Pliers No.	
	12 to 87	1/8" to 7/8"	0200	
	12,15,25 to 66	1/8" to 21/32"	1120, 1125	
	25 to 143	1/4" to 1-7/16"	7053K, 7123K, or 7125K	
	93 to 143	15/16" to 1-7/16"	1340, 1345, or 0400	
	5101	31 to 75	5/16" to 3/4"	
5102	150 to 350	1-1/2" to 3-1/2"		
	555	75	0600	
	354 to 650	3-35/64" to 6-1/2"	7301	
	50 to 100	1/2" to 1"	0200	
	50 to 78	1/2" to 25/32"	1120	
	50 to 200	1/2" to 2"	7053K, 7123K, or 7125K	
	106 to 200	1-1/16" to 2"	1340, 1345, or 0400	
5108	215 to 334	2-1/8" to 3-11/32"	0600	
	350 to 400	3-1/2" to 4"	7301	
	37 to 102	3/8" to 1-1/32"	0100	
	37 to 56	3/8" to 9/16"	1120, 1125	
	37 to 200	3/8" to 1-3/4"	7053K, 7123K, or 7125K	
	N5000	106 to 175	1-1/16" to 1-3/4"	1340, 0300
	N5001	181 to 300	1-13/16" to 3-1/2"	0500
N5002	306 to 625	3-1/16" to 6-1/4"	7300	
	75 to 137	3/4" to 1-3/8"	0100	
	75 to 100	3/4" to 1"	1120, 1125	
	75 to 200	3/4" to 2"	7053K, 7123K, or 7125K	
	143 to 200	1-7/16" to 2"	1340, 1345, or 0300	
	206 to 300	2-1/16" to 3"	0500	
5008	315 to 400	3-5/32" to 4"	7300	

0100

.038" tip diameter straight for removing internal rings.



0200

.038" tip diameter straight for removing external rings.



0300

.070" tip diameter straight for removing internal rings.



0400

.070" tip diameter straight for removing external rings.



0500

.115" tip diameter straight for removing internal rings.



0600

.090" tip diameter straight for removing external rings.



7295

Retaining Ring Pliers

The "squeeze-lock" ratchet action of this tool locks retaining rings in position, making removal and installation easy. It features cushioned handles to ensure a secure grip.

- Will handle rings 3/16" thick and up to 4" in diameter.
- Pliers is 12" long.



211051

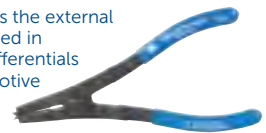
Two replacement tips.

7313

Retaining Ring Pliers

This tool removes the external retaining rings used in transmissions, differentials and other automotive components.

- Maximum spread is 1-1/16" and 7-3/4" long.



714

Horseshoe Lock Ring Pliers

This ruggedly built pliers is designed to spread and remove horseshoe lock rings used on hydraulic brakes, differentials, transmissions, and CV joints.

- Handles are 8" long.



7412K

Retaining Ring Pliers Set

This set includes 12 of our most popular retaining ring pliers, in sizes for automotive applications. Tips include straight, 45°, and 90° angles in four different sizes (.038, .047, .070, and .090" diameter).

- Includes a sturdy plastic organizer box.



4512

Snap Ring Pliers Set – Internal/External

- For internal or external snap rings; thumbscrew permits quick conversion.
- Made of heavy-gauge tempered steel.
- Includes two stainless steel handled picks.
- Contained in a blow-molded plastic storage case.

4513

Heavy-Duty Snap Ring Pliers Set (2 piece)

- Heat treated steel "circlip" pliers for large equipment repair.
- Replaceable tips and spring ratchet locking mechanism to securely hold against snap ring tension.
- Internal pliers' capacity 3-1/16" to 6-1/4" (78 mm to 159 mm) snap rings.
- External pliers' capacity 3-1/2" to 6-1/2" (89 mm to 165 mm) snap rings.
- Blow-molded storage case includes extra sets of replaceable tips.
- Overall length 16"; handle length 12-1/2".

No. 7412K Includes:

Tool No.	Description
1120	.038" dia., straight
1125	.038" dia., 45°
1131	.038" dia., 90°
1320	.047" dia., straight
1325	.047" dia., 45°
1329	.047" dia., 90°
1340	.070" dia., straight
1345	.070" dia., 45°
1349	.070" dia., 90°
1560	.090" dia., straight
1565	.090" dia., 45°
1569	.090" dia., 90°

All items can be purchased separately.

No. 4512 includes:

Tool No.	Description
4512-1	.090" tip, straight pliers
4512-2	.090" tip, 90° pliers
4512-3	.070" tip, straight pliers
4512-4	.070" tip, 90° pliers
4512-5	.047" tip, straight pliers
4512-6	.047" tip, 90° pliers
4512-7	.038" tip, straight pliers
4512-8	.038" tip, 90° pliers
4512-9	straight tip pick
4512-10	90° tip pick

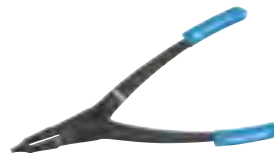
All items can be purchased separately.



No. 4513 includes:

Tool No.	Description
4513-1	Internal snap ring pliers
4513-2	External snap ring pliers
4513-3	(2) .12" (3 mm) straight tip

Tool No.	Description
4513-4	(2) .12" (3 mm) 45° tips
4513-5	(2) .12" (3 mm) 90° tips
4513-6	4 tip retaining screws



7410

Retaining Ring Pliers with replaceable tips

An ideal tool for any transmission shop, this 13" long pliers with a maximum spread of 2.5" features replaceable tips and a spring-return handle.

214903

Set of replacement tips.

4514

Mini Snap Ring Pliers Set, 4-piece

Service S-ring and R-ring clips, internal or external, straight or angled. Ruggedly built of heat-treated chrome molybdenum steel.

- Set includes two internal snap ring pliers (one straight, one 45°) and two external snap ring pliers (one straight, one 45°).
- All pliers have .038" (1.0mm) diameter tips.
- Overall length 3"; handle length 2".



PLIERS & CUTTERS

AUTOMOTIVE SPECIALTY TOOLS



4509 Straight-Blade Hose Cutter

- Cuts rubber hoses ranging from 1/4" to 1-1/2".
- Simply place hose in tool and squeeze handle to cut.

4509-1 Replacement hose cutter blade.



4411 Ratcheting Hose & PVC Cutter (Standard)

- Cuts hose and PVC up to 1-3/8" dia.
- Features metal frame and ergonomic handles for high leverage.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



4412 Ratcheting Hose & PVC Cutter (Heavy Duty)

- Cuts hose and PVC up to 1-3/4" dia.
- Features metal frame and rubber padded ergonomic handles for high leverage and comfort.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



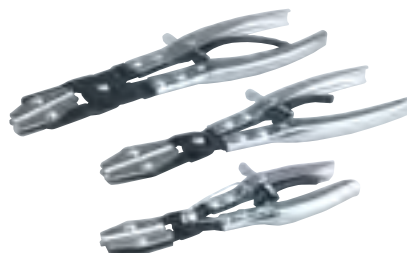
4818 Multi-purpose Scissors

Will cut hose, wire and cables, wood dowel, PVC, and thin sheet metals in addition to general cutting. The hardened stainless steel blades have an angle ground into one that eliminates slipping when cutting round materials.



5912 Crimpwell™ Angled Crimping Pliers

- Universal crimping design accommodates soft wire – solid or stranded – 10-22 AWG.
- Cutting feature included for quicker preparation.
- 9" (228mm) in length, with protective grips to increase leverage and secure crimp.
- Angled design keeps the connector, the wire, and the crimper "in-line" –improving visibility and access in hard to reach places.
- Designed to not pierce connector insulation and also works on un-insulated connectors.
- Service tech can use as much force as desired to ensure connection and it will not damage connector insulation.
- Easy-to-use: Simply insert the connector into the crimping feature, slip over the connector and squeeze.



4510 Hose Pinch Off Pliers Set, 3 Piece

- Shuts off flow through vacuum lines, fuel lines, coolant lines, etc.
- Cocking ratchet mechanism holds pivoting jaws tightly in place. Heavy-duty swivel jaws pivot to assure parallel pinching.



4802 Universal Pulley Holder Locking Pliers

This adjustable locking pliers can be used to hold pulleys, clutch hubs, flywheels, gears, and sprockets with internal or external teeth up to a 4" diameter. Can also be used on applications with slots or holes with the 5/16" pins.



4613 Battery Pliers

- Serrated jaws firmly grip the battery terminal nut or bolt.
- Offset handles allow access in hard-to-reach areas.
- Works on top-post and side-post battery terminals.



4493 Angle-Tip Relay Pliers

- Designed to remove and install relays, which are usually located in confined, hard-to-reach areas.
- Specially coated tips offer a solid grip on the relay.

4477 3/8" Cable Cutters,

Perfect choice for cutting heavier copper and aluminum cables.

- This tool is especially valuable for battery service where replacing a terminal is required.
- Clean cut with minimal mashing of wire strands.



Handled Pry Bars

Heavy-duty pry bar made of tempered square steel that you can hit without damaging the handle.

- Black chrome striking cap allows hitting the bar without damage to the handle.
- Ergonomic handle – dual durometer composite handle for user comfort; reduces hand fatigue.
- Polished tip with black oxide finish.
- Long-life finish resists rust and wear during use.
- OTC Lifetime Warranty.



8203L
3-piece Long Handled Pry Bar Set

- 8224** 24" handled pry bar
- 8236** 36" handled pry bar
- 8248** 48" handled pry bar

8203S
3-Piece Short Handled Pry Bar Set

- 8208** 8" handled pry bar
- 8212** 12" handled pry bar
- 8218** 18" handled pry bar



Jimmy Bars

We've forged these bars from chrome alloy steel, then heat-treated them to resist bending and breaking.

- 7166** 5/8" diameter, 18" long
- 7167** 3/4" diameter, 24" long
- 7168** 7/8" diameter, 30" long
- 7420** 7/8" diameter, 46" long

7177
Heavy Duty Extendable Indexing Pry Bar

- The prying head is 13/16" wide and can be extended from 34" to 53" using 31 preset positions set in 5/8" increments.
- Extension and indexing adjustments are done with separate oversized pins allowing length and angle adjustments to be made quickly.
- Optimal loading of 1500 lbs. to 2200 lbs. is made possible by the bar's heavy duty 13/16" steel bar and 1-3/8" tubular extension. Knurling has been added at the base of the handle for a strong, secure grip.
- OTC Lifetime Warranty.



7176
4 PC Rolling Head Pry Bar Kit

- Set includes 4 OTC Rolling Head Pry Bars (6", 12", 16" and 21" lengths)
- Upset head design provides optimal leverage
- Tapered end designed for hole alignment
- Proprietary thermal treatment provides superior strength and durability
- Chrome finish resists corrosion
- Comes with free pair of OTC SmartTech Gloves (Large)



Rolling Head Pry Bars

You'll have a lot of leverage using one of these rolling head pry bars. The long, tapered body will also serve as an aligning drift.

- 7162** 6" Rolling Head Pry Bar
- 7163** 12" Rolling Head Pry Bar
- 7164** 16" Rolling Head Pry Bar
- 7165** 18" Rolling Head Pry Bar (not shown)
- 7179** 21" Rolling Head Pry Bar



7175
Indexing Pry Bar Set, 3-piece

- Sizes 10", 12" and 15".
- Indexible to 180° for better access.
- 14 locking positions for leverage in multiple applications.
- Knurled handle assures a sure grip.
- Meets or exceeds ANSI specifications for pry bars

- 7172** 10" Indexing Pry Bar
- 7173** 12" Indexing Pry Bar
- 7174** 15" Indexing Pry Bar

7171
Pry Pac

Three pry bars in one economical pack. You get 12" and 18" rolling head pry bars and a 24" jimmy bar.

- Heat-treated chrome alloy steel.



7687A
Pry Bar Head

- Turns any 3/8" drive ratchet or breaker bar into a rolling head pry bar.
- Gives you the versatility of a pry bar without the storage problems.



9900A
Persuader Pry Bar Merchandiser

- Includes 10 Chisel and Alignment Jimmy Bars:
- 30" in length; 7/8" diameter.
 - Forged and chromed alloy steel.
 - Designed and heat-treated to resist bending and breaking.
 - Made in USA.
 - Lifetime warranty.

The sturdy cardboard merchandiser is 52" high, 18" wide and 12" deep, specifically designed for the Jimmy Bars, is free with purchase.



9901A
MAJOR Persuaders Pry Bar Merchandiser

- Includes two 30" 7168 Jimmy Bars.
 - Includes two 46" 7420 Jimmy Bars.
 - Includes one 54" 7421 Jimmy Bar, covering almost any medium and heavy-duty application.
- The sturdy cardboard merchandiser is 64" high, 16" wide and 18" deep.



PRY & PICK AUTOMOTIVE SPECIALTY TOOLS



EASILY REMOVE HOSES, CLIPS, WASHERS AND GASKETS

8260M

Short Pick, Long Pick and Hook Set, 14-piece

- Combines 8260, 8262 and 8263 sets.
- Packaged in molded trays which can be placed in tool drawer.



8262

Short Pick and Hook Set, 4-piece

- Consisting of four (4), 6.5", soft-handled picks.
- They are sturdy, with both stainless steel shafts and tips, with assorted tip shapes designed for marking, removing o-rings, accessing snap rings and other assorted applications.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Multi-use tools to scribe, align pierce, clean or remove o-rings, shaft seals, cv boot and motorcycle fork seals and dust hoods.
- Packaged in a molded tray which can be placed in tool drawer.



4508

Professional Style Seal Puller

- Designed to remove oil and grease seals when servicing cars, SUVs, and light trucks without damaging the housing or bearing.
- Hook tips in two sizes and professional handle design allows removal of hard-to-get-at seals by getting under them.
- The tool is 12" long and the hook tip is double-secured (versus competitors' designs), for durability.
- An extra blade is included, and additional replacements (No. 4508-1) may be ordered.

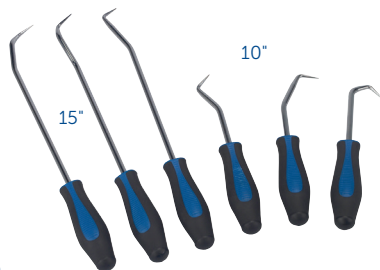
4508-1 Replacement blade for 4508



8263

Long Pick and Hook Set, 4-piece

- Consisting of four (4), 6.5", soft-handled picks.
- They are sturdy, with both stainless steel shafts and tips, with assorted tip shapes designed for marking, removing o-rings, accessing snap ring sand other assorted applications.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Multi-use tools to scribe, align pierce, clean or remove o-rings, shaft seals, cv boot and motorcycle fork seals and dust hoods.
- Packaged in a molded tray which can be placed in tool drawer.



8260

Hose Removal Set, 6-piece

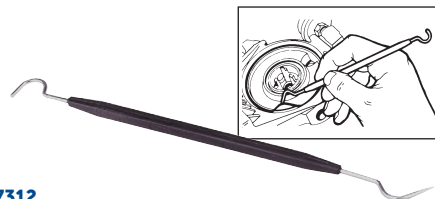
- Consisting of six (6) hose removal tools which consists of three (3) 10", soft-handled tools and three (3) 15", soft-handled tools, each with a hard end-cap.
- They are made of heat-treated, chrome steel with assorted tip shapes.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Hose removal tools can also be used on upper and lower radiator hoses, clips, washers, gaskets and other items.
- Packaged in a molded tray which can be placed in tool drawer.



7103

O-Ring / Oil Seal Pick Set

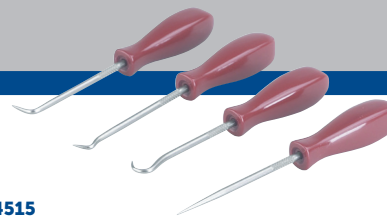
Fishing a stubborn o-ring or oil seal out of its seat is easy if you have this pair of picks in your toolbox.



7312

O-Ring / Oil Seal Pick

Here's an extremely handy tool that makes quick work of oil seal and o-ring removal and installation.



4515

Mini Pick and Hook Set, 4-piece

- Sturdy stainless steel points and shafts designed for marking, removing o-rings, accessing snap rings, and performing other tasks. Assorted angle tips allow you to reach awkward locations.
- Knurled shaft design enhances finger control for delicate jobs.



4658

Windshield Spray Nozzle Needle

- Makes quick work of clearing obstructions from the windshield washer spray nozzle.
- Easily pierces corrosion or remove blockage.
- The barrel is knurled for grip and control.
- Threaded end caps keep the needle points covered when not in use. The pocket clip keeps the tool handy.



4600

Punch and Chisel Set, 16 piece

- Durable set of heat-treated chrome vanadium steel punches & chisels. Storage tray included. Contents of set, Also Available separately.

No.	Part No.	Description
1	4600-15	Taper Punch, 1/4" x 6-3/4"
2	4600-14	Taper Punch, 3/16" x 6-1/4"
3	4600-13	Taper Punch, 5/32" x 6"
4	4600-3	Cold Chisel, 3/8" x 5-1/2"
5	4600-2	Cold Chisel, 1/2" x 6"
6	4600-1	Cold Chisel, 5/8" x 6-1/2"
7	4600-4	Center Punch, 3/16" x 8"
8	4600-5	Center Punch, 1/8" x 5"
9	4600-12	Taper Punch, 1/8" x 5-3/4"
10	4600-11	Taper Punch, 3/32" x 5-1/4"
11	4600-10	Pin Punch, 3/32" x 4-1/4"
12	4600-9	Pin Punch, 1/8" x 4-3/4"
13	4600-8	Pin Punch, 5/32" x 5"
14	4600-7	Pin Punch, 3/16" x 5-1/4"
15	4600-6	Pin Punch, 1/4" x 5-3/4"
16	4600-16	Chisel Gauge

OTC BFH HAMMER LINE

OTC No.	Head Weight	Handle Length	Total Weight
Double Face Sledge Hammer, Indestructible Handle			
5790ID-616	6 lbs.	16"	7.6 lbs.
5790ID-624	6 lbs.	24"	9.4 lbs.
5790ID-630	6 lbs.	30"	10.4 lbs.
5790ID-812	8 lbs.	12"	8.9 lbs.
5790ID-816	8 lbs.	16"	9.7 lbs.
5790ID-824	8 lbs.	24"	11.2 lbs.
5790ID-830	8 lbs.	30"	12.4 lbs.
5790ID-1030	10 lbs.	30"	14.0 lbs.
5790ID-1230	12 lbs.	30"	16.6 lbs.
5790ID-1430	14 lbs.	30"	18.5 lbs.
Club/Hand Drill Hammer, Indestructible Handle			
5791ID-312	2.5 lbs.	12"	4.0 lbs.
5791ID-412	4 lbs.	12"	5.1 lbs.
5791ID-416	4 lbs.	16"	5.5 lbs.
Cross Peen Hammer, Indestructible Handle			
5792ID-216	2 lbs.	16"	4.5 lbs.
5792ID-316	3 lbs.	16"	5.4 lbs.
Ball Peen Hammer, Indestructible Handle			
5793ID-2414	24 oz.	14"	2.6 lbs.
5793ID-3214	32 oz.	14"	3.0 lbs.
Tire Service Hammer, Indestructible Handle			
5789ID-1032	10 lbs.	32"	14.4 lbs.
5789ID-520	5 lbs.	20"	7.3 lbs.

5790-PACK Hammer Display
Includes 23 popular hammers for everyday use:



Part Number	Qty
5790ID-624	2
5790ID-630	1
5790ID-824	2
5790ID-830	1
5790ID-1030	1
5790ID-1230	1
5790ID-1430	1
5791ID-312	2
5791ID-412	2
5791ID-416	2
5792ID-216	2
5792ID-316	2
5793ID-2414	2
5793ID-3214	2
5700-DISPLAY	1

5700-DISPLAY Hammer & Tire Service Display Rack

- Designed to display various products in the framed rack, complete with removable rear sign holder.
- Sturdy display framed with heavy 5/16" rod with heavy steel base eliminates tipping.
- Black powder coat finish for a rust free, durable finish.
- Contains 2" x 2" = 52 slots and 2" x 4" = 6 slots.
- Includes 4 side hooks (not pictured).
- Assembled dimensions; W 18.5", D 19", H 44".
- Weighs approx. 35 lbs.



BFH Hammer

- Indestructible handle - never needs replacement
- Ergonomic rubber grip handle reinforced with steel bars resists breaking while absorbing impact and vibration.
- Drop-forged head is induction-hardened for long life, and contains steel locking plates that are specially bonded to ensure the head never becomes loose.
- Tire Service Features for 5789ID-1032 and 5789ID-520.
 - Use top hook as a wheel tipper; sledge end hook to drag tire into position.
 - Bead breaking wedge has grooves and a convex shape to help drive tire lube into the bead.



6939 Broken Bolt Extractor Tool

- Remove frozen, broken or cut off bolts within steering or suspension bushings.
- Can also be used to remove and install wheel studs and other general pressing needs.



6939-1 Broken Bolt Extractor Adapter Set

Available for use with the 7248 C-Frame.



7248 C-Frame Press

- Used for removing/installing; universal joints with needle bearings, pressed in wheel studs, and brake anchor pins on heavy-duty vehicles. Suitable for general pressing operations.



STRIKE-STRUCK SERVICE / GENERAL SERVICE AUTOMOTIVE SPECIALTY TOOLS



4605 Interchangeable Punch and Chisel Set

- Safety protective handle allows easy grip and protects hand from being hit by hammer.
- 12 punches and chisels included: 5 flat chisels: 1/2", 5/8", 3/4", 7/8", and 1" wide blades 1 cape chisel: 1/4" wide blade 2 taper punches: 1/8" and 1/4" diameter 2 pin punches: 3/16" and 1/4" diameter 2 center punches: 1/8" and 3/16" diameter
- Double locking ball detent holds punch or chisel securely in the driver handle.

Replacement parts available:

- 4605-1 Drive handle
- 4605-2 1/2" wide flat chisel
- 4605-3 5/8" wide flat chisel
- 4605-4 3/4" wide flat chisel
- 4605-5 7/8" wide flat chisel
- 4605-6 1" wide flat chisel
- 4605-7 1/4" cape chisel
- 4605-8 1/8" taper punch
- 4605-9 1/4" taper punch
- 4605-10 3/16" pin punch
- 4605-11 1/4" pin punch
- 4605-12 1/8" center punch
- 4605-13 3/16" center punch



Impact Drivers

- Loosens hard-to-turn screws, bolts or nuts.
- Handle design prevents possibility of hitting hand with hammer when striking impact driver.
- Bit holder has 3/8" drive (No. 4608), 1/2" (No. 4607) drive, and 5/16" hex for Phillips and flat screwdriver bits.

- Includes eight screwdriver bits:

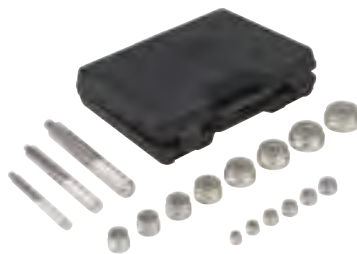
- No. 2 Phillips bit, 1-3/8" long with 5/16" hex
- No. 2 Phillips bit, 3-1/8" long with 5/16" hex
- No. 3 Phillips bit, 1-3/8" long with 5/16" hex
- No. 3 Phillips bit, 3-1/8" long with 5/16" hex
- No. 2 Phillips bit, 1-3/8" long with 5/16" hex
- No. 2 Phillips bit, 3-1/8" long with 5/16" hex
- No. 3 Phillips bit, 1-3/8" long with 5/16" hex
- No. 3 Phillips bit, 3-1/8" long with 5/16" hex
- 5/16" wide x 1-3/8" long with 5/16" hex slotted bit
- 5/16" wide x 3-1/8" long with 5/16" hex slotted bit
- 3/8" wide x 1-3/8" long with 5/16" hex slotted bit
- 3/8" wide x 3-1/8" long with 5/16" hex slotted bit

- 4607 1/2" Impact Driver.
- 4608 3/8" Impact Driver.



4406 Adjustable Bearing Race and Seal Driver

- Universal and fully adjustable.
- Twist head to adjustable from 3/4" to 3.5" (19mm to 89mm).
- Lock bolt holds jaws to preferred diameter.
- Steel striking cap mounted on aluminum handle and head provides a weight under 2 lbs.



4407 Metric Bushing Driver Set

- 14-piece tool kit for motorcycles, Asian and European vehicles contains adapters: 10-12 mm, 14-16 mm, 15-17 mm, 16-18 mm, 18-20 mm, 20-22 mm, 22-24 mm, 25-27 mm, 28-30 mm, 30-34 mm, 32-36 mm, 35-40 mm, 38-42 mm; one small driver handle; one medium driver handle; one large driver handle.
- Aluminum construction won't mar the bushing or affect bushing tolerance, which is critical for efficient operation of the engine, transmission, and hubs.



4408 Bearing Race and Seal Driver Kit

- The Bearing Race and Seal Driver Kit provides a convenient way to smoothly and quickly position a bearing in the inner hole of an axle.
- The kit includes a handle grip and six heavy-duty bearing drivers. The drivers have different diameters in order to match different-sized bearings, and three of the drivers are formed with two different diameters.
- Bearing Driver Sizes:
1.555" (39.5 mm) 1.752" (44.5 mm)
1.968" (50.0 mm) 2.322" (59.0 mm)
2.48" (63.0 mm) 2.559" (65.0 mm)
2.834" (72.0 mm) 2.992" (76.0 mm)
3.189" (81.0 mm)



4410 Master Bushing Drive Set (33 piece Metric & Standard)

- Enables you to remove and install bushings ranging from 10mm to 42mm in diameter, and 3/8" to 1-3/8" in diameter, as used import cars, trucks, tractors, construction equipment, electric motors, and many other components having bushings.
- Includes large, medium, and small driver handles and adapters all made of steel.
- Housed in a blow-molded storage case.



4505 Bushing Driver Set, 19 piece

- Enables you to remove and install bushings ranging from 3/8" to 1-3/8" in diameter, as used in cars, trucks, tractors, construction equipment, electric motors, & many other components having bushings.
- Includes: Large, medium, and small driver handles with nuts; sixteen bushing adapters ranging from 3/8" to 1-3/8".
- Housed in a blow-molded storage case.



4507 Bearing Race and Seal Driver Set, 10 piece

- This aluminum constructed set permits installation of tapered bearing races and seals without damage to the component or housing.
- Tapered side of driver is used to install races. Invert the driver to the flat side to install seals.
- Set is housed in a blow-molded plastic storage case.
- Includes driver handle with bolt, plus these tool sizes: 1.565", 1.750", 1.965", 2.325", 2.470", 2.555", 2.830", 2.995", and 3.180".

SEAL & BEARING DRIVER SET

Now you can have the proper-size driver for nearly any automotive seal, bearing, or bushing installation job. These sets include discs and handles, spacers and drivers.

- Discs range from 1/2" to 4-1/2" in diameter, in 1/16" increments.

- 27793** Starter set. Includes a handle and discs (5/8" to 2" diameter) specially selected to provide the driver sizes usually needed in automotive service. Includes plastic storage box.
- 27794** Basic set. Includes two handle sizes and 41 discs, ranging from 1/2" to 3" diameter along with plastic storage box and insert.
- 27795** Big-job set for servicing large components. Includes a handle and 24 discs, ranging from 3-1/16" to 4-1/2" diameter.
- 27796** Intermediate set. Includes a handle and 25 discs, ranging from 2" to 3-1/2" diameter.
- 27797** Master set. Includes three handle sizes and 65 discs, ranging from 1/2" to 4-1/2" diameter.
- 27810** Tool organizer board for holding all components in No. 27797 master set.



27810

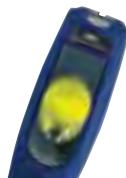


Starter Set 27793

Tool No.	Description	Tool No.	Description	Tool No.	Description
10012*	Cap Screw	27508	Disc, 1-9/16" dia.	27534	Disc, 3-3/16" dia.
10020*	Cap Screw	27509*	Disc, 1-5/8" dia.	27535	Disc, 3-1/4" dia.
10854*	Cap Screw	27510	Disc, 1-11/16" dia.	27536	Disc, 3-5/16" dia.
10855*	Cap Screw	27511*	Disc, 1-3/4" dia.	27537	Disc, 3-3/8" dia.
12001*	Cap Screw	27512	Disc, 1-13/16" dia.	27538	Disc, 3-7/16" dia.
27487*	Small Handle	27513*	Disc, 1-7/8" dia.	27539	Disc, 3-1/2" dia.
27488	Medium Handle	27514	Disc, 1-15/16" dia.	27540	Disc, 3-9/16" dia.
27489	Large Handle	27515*	Disc, 2" dia.	27541	Disc, 3-5/8" dia.
27490	Extension Tube	27516	Disc, 2-1/16" dia.	27542	Disc, 3-11/16" dia.
27491	Disc, 1/2" dia.	27517	Disc, 2-1/8" dia.	27543	Disc, 3-3/4" dia.
27492	Disc, 9/16" dia.	27518	Disc, 2-3/16" dia.	27544	Disc, 3-13/16" dia.
27493*	Disc, 5/8" dia.	27519	Disc, 2-1/4" dia.	27545	Disc, 3-7/8" dia.
27494	Disc, 11/16" dia.	27520	Disc, 2-5/16" dia.	27546	Disc, 3-15/16" dia.
27495*	Disc, 3/4" dia.	27521	Disc, 2-3/8" dia.	27547	Disc, 4" dia.
27496	Disc, 13/16" dia.	27522	Disc, 2-7/16" dia.	27548	Disc, 4-1/16" dia.
27497*	Disc, 7/8" dia.	27523	Disc, 2-1/2" dia.	27549	Disc, 4-1/8" dia.
27498	Disc, 15/16" dia.	27524	Disc, 2-9/16" dia.	27550	Disc, 4-3/16" dia.
27499*	Disc, 1" dia.	27525	Disc, 2-5/8" dia.	27551	Disc, 4-1/4" dia.
27500	Disc, 1-1/16" dia.	27526	Disc, 2-11/16" dia.	27552	Disc, 4-5/16" dia.
27501*	Disc, 1-1/8" dia.	27527	Disc, 2-3/4" dia.	27553	Disc, 4-3/8" dia.
27502	Disc, 1-3/16" dia.	27528	Disc, 2-13/16" dia.	27554	Disc, 4-7/16" dia.
27503*	Disc, 1-1/4" dia.	27529	Disc, 2-7/8" dia.	27555	Disc, 4-1/2" dia.
27504	Disc, 1-5/16" dia.	27530	Disc, 2-15/16" dia.	7350*	Allen Wrench
27505*	Disc, 1-3/8" dia.	27531	Disc, 3" dia.		
27506	Disc, 1-7/16" dia.	27532	Disc, 3-1/16" dia.		
27507*	Disc, 1-1/2" dia.	27533	Disc, 3-1/8" dia.		

NOTE: All discs are 1/2" thick. *Included in set No. 27793.

5550
Spectrum Solar 10W
LED Work Light with
UV Top Light



5550 Specifications

10W LED Work light with UV Top Light
LI-ION Rechargeable Battery – 3.6V 2250 mA, AC/DC
Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V
Power Output: 5.0V 1000 mA
Charger Time: 3.5 ~ 4.0 hours
Active Time: 2.5 hours
Storage Temperature: -4°F to 158°F; -20°C to 70°C
Operating Temperature: 23°F to 122°F; -5° to 50°C
PS: LED Sector: 170°
At 50 cm: 350 LUX (750 LM)
Waterproof Grade IP65

5551
Spectrum Trio 9W LED
Work Light with 3W
LED Top Light



5551 Specifications

9W LED Work light with 3W LED Top Light
LI-ION Rechargeable Battery – 3.6V 2250 mA, AC/DC
Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V
Power Output: 5.0V 1000 mA
Charger Time: 3.5 ~ 4.0 hours
Active Time: 3.0 hours
Storage Temperature: -4°F to 158°F; -20°C to 70°C
Operating Temperature: 23°F to 122°F; -5° to 50°C
PS: LED Sector: 25°
At 50 cm: 4000 LUX
Waterproof Grade IP65

5552
Spectrum 30+4
30 Pc. LED Work Light
with 4 Pc. LED Top
Light



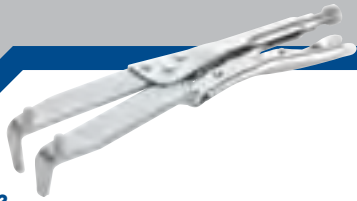
5552 Specifications

30 Piece LED Work light with 4 Piece LED Top Light
LI-ION Rechargeable Battery – 3.6V 2250 mA, AC/DC
Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V
Power Output: 5.0V 1000 mA
Charger Time: 3.5 ~ 4.0 hours
Active Time: 4.0 to 5.0 hours
Storage Temperature: -4°F to 158°F; -20°C to 70°C
Operating Temperature: 23°F to 122°F; -5° to 50°C
PS: LED Sector: 15°
At 50 cm: 2250 LUX
Waterproof Grade IP65

- AC/DC Rechargeable
- Li-Ion battery
- Magnetic base
- Bright LEDs - 50,000 hour life
- Adjustable 60° angle
- Slip resistant textured body
- Impact & Waterproof Grade IP65
- Limited Lifetime Warranty



GENERAL SERVICE AUTOMOTIVE SPECIALTY TOOLS



4802 Universal Pulley Holder Locking Pliers

This adjustable locking pliers can be used to hold pulleys, clutch hubs, flywheels, gears, and sprockets with internal or external teeth up to a 4" diameter. Can also be used on applications with slots or holes with the 5/16" pins.



4804 Heavy Duty Pulley Holder

This strap style universal wrench features a 9" drop forged handle and 23" leather strap for excellent grip on diameters up to 7". The milled foot increases grip on the strap and pulley as handle force is increased.



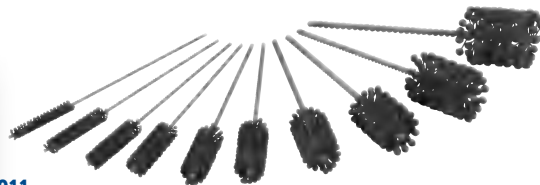
6043 Cooling System Power Flush Gun

Perfectly suited for quick and efficient cooling system flushing. Simply attach it to radiator or heater hoses and you're in business. Also usable in washing engines and even shop floors. Two simple connections: one to shop air and one to a typical water faucet. No. 6043 creates a unique vortex air/water blast for powerful cleaning applications.

Note: While normal water pressure will handle the majority of a cooling system flush, short blasts are sometimes needed to loosen some contaminants from within the system.

4803 Universal Pulley Holder Locking Pliers Set

This adjustable locking pliers can be used to hold pulleys, clutch hubs, flywheels, gears, and sprockets with internal or external teeth up to a 4" diameter. Can also be used on applications with slots or holes with the addition of the interchangeable 5, 6, 7, 10, and 16mm pin sets. Complete with metal carry case.



7011 Ball Hone Set (10 piece)

- Ball Hones can be used for refinishing and resizing bores such as found in brake calipers, engine lifters, and u-joint yokes. Also useful for any bearing or bushing application.
- All hones are 180 grit Silicone Carbide for excellent cutting and finish.



4491 Mechanic's Stethoscope

- Quick and accurate way to locate vehicle noise.
- Spring diaphragm on end of hose amplifies noise.
- Includes two hose ends: long rod helps pinpoint noises in hard-to-access areas; short adapter helps locate noise in a broader area of the vehicle.



1630 OTC 2-Drawer Service Cart

The cart features 5" oversized casters (2-locking; 2-non-locking), an ergonomic grip handle, screw driver storage, locking top and gas shocks to support the lid. The cart has a 500-pound load capacity and stands 39.5" tall, 33.25" wide and 20" deep. The bottom tray is perfect for bulkier storage items, like rags, cleaners and solvents. The top bin is 5" tall and houses the drawer locking mechanism. The first drawer is 3.25" tall and the second drawer is 4.25" tall, both with a generous 20" depth. Safely store diagnostic hardware, cameras and expensive tools securely and within arms reach. OTC Lifetime Warranty.

Tool No.	Size
7011-1	.375" 10 mm
7011-2	.500" 13 mm
7011-3	.625" 16 mm
7011-4	.750" 19 mm
7011-5	.875" 22 mm
7011-6	1.00" 25 mm
7011-8	1.25" 32 mm
7011-10	1.50" 38 mm
7011-12	1.75" 44 mm
7011-14	2.00" 51 mm

2423 Stainless Steel Tip Blow Gun

- Designed for operating pressure of 50 PSI to 235 PSI and temperature range of 14° to 158°F.
- When inlet pressure is 90 PSI, venting design prevents pressure exceeding 30 PSI if tip becomes blocked - conforming to OSHA Std. 1-13.1
- When inlet pressure is 100 PSI, the noise level is held below 80 db conforming to OSHA Std. 1910-95 (b), quieter than an electric drill
- 4-1/2" Stainless Steel Nozzle and Variable Speed Trigger for full control of amount of air dispensed
- Impact & Weather resistant materials and drop resistant construction
- Brass threaded air inlet



2424 PRO Series Safety Blow Gun (Standard Tip)

- Die Cast Aluminum body is non corroding and made to last in the harshest environments
- Ergonomic body design and dip coated operating lever reduce fatigue
- Exclusive venturi mechanism uses side ports to create higher volume of usable output
- Tamper-Proof design reduces output to safe levels if ports are blocked
- Meets OSHA standards for Safety and Noise

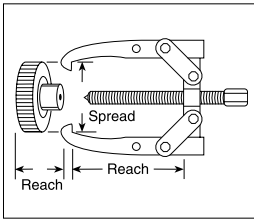
SELECTING THE RIGHT PULLER PULLERS

YOU CAN SOLVE THE 3 BASIC PULLING PROBLEMS...

The first thing you have to do is identify exactly what your particular pulling problem is. Once you recognize the problem, you can go on to select the right tool to solve it.

HOW TO SELECT THE RIGHT PULLER

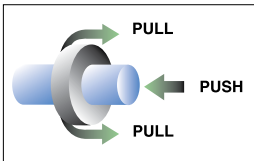
- 1: Determine the type of puller or puller combination. Which puller type is best for "getting a grip" on the part? Is a combination of puller types required?
- 2: Determine the "REACH" needed. The puller you select must have a "reach" equal to or larger than the corresponding sizes of the part.
- 3: Determine the "SPREAD" needed. The width of the part to be pulled will determine the "spread" required.
- 4: Estimate the force required. A puller with the correct "reach" and "spread" will usually have enough power. When in doubt, always use the next larger size. More power may be needed for rusted parts, or when the "area of resistance" is large.



GENERAL RULE OF THUMB:

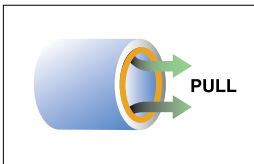
Manual pullers require that the puller screw be at least half as large (in diameter) as the shaft of the pulling job.

Hydraulic pullers need the maximum force exerted in tons to be 7–10 times the diameter of the shaft in inches.



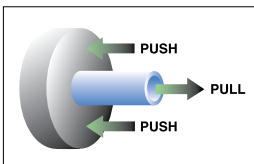
1 PULLING SOMETHING OFF A SHAFT.

Removing a gear, bearing, wheel, pulley, etc., to replace it or get at another part.



2 PULLING SOMETHING OUT OF A HOLE.

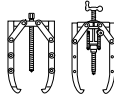
Internal bearing cups, retainers, or oil seals are usually press-fitted and are difficult to remove.



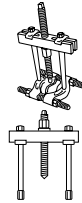
3 PULLING A SHAFT OUT OF SOMETHING.

A transmission shaft or pinion shaft is often hard to remove from a bore or housing. Use a Push-Puller with adapters if you can "get a hold of" the threaded end of the shaft. Sometimes it's possible to push a shaft through a housing, rather than pull it out. In applications of this type, the puller legs must be securely fastened to the housing and the screw may simply bear against the shaft.

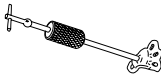
The tools to use when pulling something off a shaft:



Jaw-type puller, either manual or hydraulic. (For extra force and convenience use a hydraulic puller.) Both are available in 2- or 3-jaw versions and are used to grip the outer circumference of an attachment.



Bearing pulling attachment. Provides "knife-like" edges to get behind the component, or when there isn't a good gripping area on the part to be pulled. The splitter gets behind the component to prevent damage to the part.



Push-Puller® with attachments. External-internal adapters can thread directly into tapped holes on a component.



Slide hammer puller with selected attachments for multiple light-duty pulling tasks.

A variety of OTC adapters can be used to protect a shaft, bridge a hole, thread into tapped holes, or assist installation.

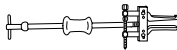
The tools to use when pulling something out of a hole:



Internal pulling attachments have narrow jaws which extend through the center of the part to be pulled. They provide a straight pull and avoid damage to housings. Designed for use with Push-Pullers or slide hammer pullers.



Push-Puller in combination with internal pulling attachment. Both mechanical and hydraulically powered versions are available.



Here a slide hammer puller is combined with an internal pulling attachment. Ideal for removing parts from blind holes, especially when there is no housing to brace puller legs against.



When there is a shaft to bear against, a forcing screw of the correct size may be used in combination with an internal pulling attachment.

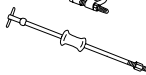
The tools to use when pulling a shaft out of something:



Push-Puller® with threaded adapter. Use a mechanical or hydraulic puller, depending on the size of the shaft to be pulled.



When the housing lacks sufficient surface for the puller legs to bear against, a pulling attachment may be used to provide support.



Slide hammer puller with threaded adapter – either external-internal or internal can be used.



Internal adapters are fastened to the external threaded end of the shaft to pull while pushing against the housing.

External-internal adapters are threaded into the shaft to pull it while pushing against the housing.

SAFETY PRECAUTIONS

⚠️ WARNING: TO PREVENT PERSONAL INJURY WHEN USING PULLERS,

- Wear approved eye protection, such as safety glasses, goggles, or a face shield.
- Inspect puller for dents, cracks, or excessive wear before use. Inspect forcing screw for signs of galling or seizing. Replace worn or damaged components.
- Do not exceed puller's rated capacity, spread, or reach. Use correct size of puller for application.
- Ensure puller is correctly aligned with application and seated on component to be removed. Jaws must be parallel to forcing screw.
- Do not use wrench extensions when applying a load.
- Cover application with a shield or protective blanket before force is applied to contain flying debris should breakage occur.
- Apply force gradually. Do not use an impact wrench to apply force unless instructions specify use with an impact wrench.
- Do not strike or "sledge" puller or component.
- Do not modify puller by grinding, heating, or other means that could weaken puller strength.



ABOUT MECHANICAL PULLERS

A pulling system can exert tons of force and it is difficult to predict the exact force required for a pulling application. It is important to observe safety precautions when using a puller.

The OTC pulling system is versatile. For that reason, it is possible that various components in a pulling setup will have different tonnage ratings. The lowest capacity component determines the capacity of the entire setup. For example, when an accessory having a capacity of one ton is used with a 10-ton capacity puller, the puller setup can be used at a force of only one ton.

If you are unsure which puller or attachment to select for an application, contact your OTC tool representative or Service Solutions, LLC.

PULLER OPERATION

1. Mount the puller so its grip is tight. When using a jaw-type puller, tighten the adjusting strap bolts. For a better grip and more even pulling power, use a 3-jaw puller when possible.
2. Align puller legs and jaws. Verify the setup is rigid and the puller is square with the application.
3. Use the correct size of puller for the application. If you have applied maximum force and the component has not moved, switch to a larger capacity puller.

4. Apply force gradually. The component should give a little at a time. Do not try to speed up the application by using an impact wrench on the forcing screw.
5. Do not couple puller legs. The tonnage capacity of the puller is reduced when longer-than-standard legs are used or when legs are compressed, increasing the chance of breakage.
6. Keep reach to a minimum. Use the shortest legs possible to reach the component to be removed.
7. Install threaded puller legs evenly into the component, attachment, or adapter. Uneven legs result in greater force applied to one side of the puller, which can result in breakage.
8. Sliding plates must be on the opposite side of the cross block from the forcing screw nut or hydraulic cylinder.
9. Bearing pulling attachments may not withstand the full tonnage of the pullers with which they are used. The shape and condition of the component being pulled affects the tonnage at which puller blocks and / or studs may bend or break. Select the largest attachments that fit the component being pulled.

PULLER MAINTENANCE

Keep the puller clean, and frequently lubricate the forcing screw from threads to tip.

Protective Blankets

Think of them as "security blankets." They wrap around pulling, pressing, and other high-force jobs to protect you and your employees from work-related injuries as much as possible. They're made of high tensile, tear resistant ballistic nylon – similar to military flak jackets – that, when tested, withstood the shattering of a neck-down grade 8 bolt without any visible damage.

NOTE: Always reduce the force from the work piece prior to removing the blanket. Protective blankets may afford protection from injuries to users and others should part breakage occur. Because of the variety of situations that require guarding, it is the user's responsibility to determine the best method of protection.

1230PB

Protective blanket. 12" x 30"

2036PB

Protective blanket. 20" x 36"

2860PB

Protective blanket. 28" x 60"



1230PB

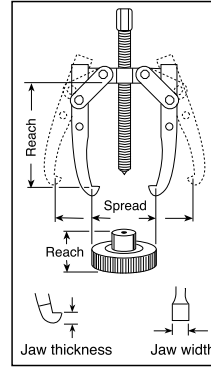
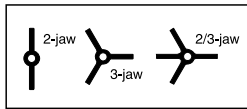
GRIP-O-MATIC® PULLERS

PROVIDING AUTOMOTIVE SERVICE SOLUTIONS FOR OVER 80 YEARS

Mechanical Grip-O-Matic® Pullers

OTC has developed the most complete line of gear and bearing pullers, enabling you to remove and install parts for fast, effective repairs. The pullers are forged from quality steel, heat treated, and subjected to rigorous tests which exceed their rated capacity.

No. 1020–1050



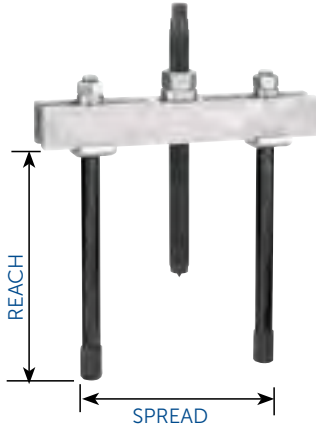
WARNING

Wear approved eye protection when using pullers. See page 121 for protective blankets for your pulling jobs.

	Tool No.	Capacity Style and Weight	Max Reach	Spread	Screw Size	Jaw Thickness	Width
	1020	1-Ton, 2-Jaw; 5 oz.	2-1/8"	3-1/4"	5/16"–24 x 3-7/8"	9/64"	1/4"
	1021	1-Ton, 3-Jaw; 8 oz.	2-1/8"	3-1/4"	5/16"–24 x 3-7/8"	9/64"	1/4"
	1022	2-ton, 2-Jaw; 14 oz. (Reversible Jaws)	3-1/4"	4"	3/8"–24 x 4-7/8"	Upper 3/16" Lower 1/8"	Upper 1/4" Lower 1/2"
	1023	2-ton, 2/3-Jaw; 1 lb., 5 oz. (Reversible Jaws)	3-1/4"	4-3/4"	3/8"–24 x 4-7/8"	Upper 3/16" Lower 1/8"	Upper 1/4" Lower 1/2"
	1024	5-Ton, 2-Jaw; 1 lb., 12 oz. (Reversible Jaws)	3-1/4"	6"	9/16"–20 x 6-15/16"	Upper 5/16" Lower 1/4"	Upper 3/8" Lower 3/4"
	1026	5-Ton, 2/3-Jaw; 2 lbs., 12 oz. (Reversible Jaws)	3-1/4"	7"	9/16"–20 x 6-15/16"	Upper 5/16" Lower 1/4"	Upper 3/8" Lower 3/4"
	1025	5-Ton, Long 2-Jaw; 2 lbs. (Reversible Jaws)	5-1/2"	6"	9/16"–20 x 6-15/16"	Upper 5/16" Lower 1/4"	Upper 3/8" Lower 3/4"
	1027	5-Ton, Long 2/3-Jaw; 3 lbs., 10 oz. (Rev. Jaws)	5-1/2"	7"	9/16"–20 x 6-15/16"	Upper 5/16" Lower 1/4"	Upper 3/8" Lower 3/4"
	1035	7-Ton, 2-Jaw; 4 lbs., 8 oz. (Reversible Jaws)	5"	9"	11/16"–18 x 9"	Upper 5/16" Lower 11/32"	Upper 1" Lower 1"
	1037	7-Ton, 2/3-Jaw; 6 lbs., 2 oz. (Rev. Jaws)	5"	10-1/2"	11/16"–18 x 9"	Upper 5/16" Lower 11/32"	Upper 1" Lower 1"

	Tool No.	Capacity Style and Weight	Max Reach Spread		Screw Size	Jaw Thickness	Width
	1036	7-Ton, Long 2-Jaw; 5 lbs., 6 oz.	8-3/4"	9-1/2"	11/16"-18 x 9"	11/32"	1"
	1038	7-Ton, Long 2/3-Jaw; 8 lbs., 2 oz.	8-3/4"	11"	11/16"-18 x 9"	11/32"	1"
	1039	13-Ton, 2-Jaw; 10 lbs., 13 oz.	11"	12"	13/16"-16 x 12"	9/16"	1"
	1041	13-Ton, 2/3-Jaw; 16 lbs., 4 oz.	11"	12"	13/16"-16 x 12"	9/16"	1"
	1040	13-Ton, Long 2-Jaw; 13 lbs.	15-1/4"	15-1/2"	13/16"-16 x 12"	9/16"	1"
	1042	13-Ton, Long 2/3-Jaw; 18 lbs., 12 oz.	15-1/4"	17"	13/16"-16 x 12"	9/16"	1"
	1043	17-1/2-Ton, 2-Jaw; 23 lbs.	14-1/2"	14"	1"-14 x 131/2"	13/16"	1-9/32"
	1045	17-1/2-Ton, 3-Jaw; 33 lbs.	14-1/2"	14"	1"-14 x 13-1/2"	13/16"	1-9/32"
	1044	17-1/2-Ton, Long 2-Jaw; 26 lbs.	18-3/4"	16"	1"-14 x 13-1/2"	13/16"	1-9/32"
	1046	17-1/2-Ton, Long 3-Jaw; 37 lbs.	18-3/4"	16"	1"-14 x 13-1/2"	13/16"	1-9/32"
	1047	25-Ton, 2-Jaw; 37 lbs., 8 oz.	15-1/2"	18"	1-1/4"-12 x 15-15/16"	1-1/16"	1-1/2"
	1049	25-Ton, 3-Jaw; 54 lbs.	15-1/2"	18"	1-1/4"-12 x 15-15/16"	1-1/16"	1-1/2"
	1048	25-Ton, Long 2-Jaw; 42 lbs., 12 oz.	22-1/4"	20"	1-1/4"-12 x 15-15/16"	1-1/16"	1-1/2"
	1050	25-Ton, Long 3-Jaw; 60 lbs.	22-1/4"	20"	1-1/4"-12 x 15-15/16"	1-1/16"	1-1/2"

PUSH PULLERS & THREADED ADAPTERS PULLERS



Push-Pullers®

927 10-Ton Capacity Can be used with No. 1123 bearing pulling attachment or No. 679 pulley pulling attachment. May also be used with Nos. 1150, 1151, 1152, or 1153 internal pulling attachments.

938 17-1/2 Ton Capacity Can be used with Nos. 1124 and 1130 bearing pulling attachments or Nos. 679 and 680 pulley pulling attachments. May also be used with Nos. 1150, 1151, 1153, 1165, or 1166 internal pulling attachments.

939 30-Ton Capacity Can be used with Nos. 1126 and 1127 bearing pulling attachments or No. 680 pulley pulling attachment (two 8012 adapters are required to connect 680 to puller). Can be used with No. 1165 internal pulling attachment.

Push-Pullers® Leg Extensions

Tool No.	Max. Reach	Max. Spread	Screw Size	Notes / Weight
927	8-1/4"	2-1/8" – 7-1/4"	3/4"–16 x 12"	1/2" of forcing screw tip end is threaded 5/8"–18. No. 1100 legs and No. 24827 leg ends included. Wt., 7 lbs.

Extra Legs (pair) for No. 927 Push-Puller (Reach equals leg length plus 1-1/2" with leg end caps.)

Tool No.	Leg Length & Wt.	Tool No.	Leg Length & Wt.
1103	4-3/4" 1 lb.	1102	11-3/4" 2 lbs., 4 oz.
1100	6-3/4" 1 lb., 8 oz.	1101	15-3/4" 3 lbs., 4 oz.

Tool No.	Max. Reach	Max. Spread	Screw Size	Notes / Weight
938	11-1/2"	3-1/8" – 11-3/4"	1"-14 x 13-1/4"	Leg ends threaded 5/8"–18. No. 1106 legs and No. 24827 leg ends included. Wt., 20 lbs., 12 oz.

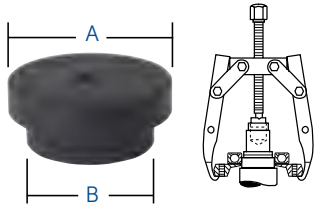
Extra Legs (pair) for No. 938 Push-Puller (Reach equals leg length plus 2" with leg end caps.)

Tool No.	Leg Length & Wt.	Tool No.	Leg Length & Wt.
1107	4-1/2" 2 lbs., 8 oz.	1105	22-1/2" 9 lbs.
1106	9-1/2" 4 lbs., 8 oz.	1108	30" 11.5 lbs.
1104	16-1/2" 6 lbs., 8 oz.		

Tool No.	Max. Reach	Max. Spread	Screw Size	Notes / Weight
939	10-1/2"	7"–16-1/4"	1-1/2"–12 x 17-1/4"	Leg ends threaded 1"–14. No. 1109 legs and No. 28390 leg ends included. Wt., 44 lbs.

Extra Legs (pair) for No. 939 Push-Puller (Reach equals leg length plus 2" with leg end caps.)

Tool No.	Leg Length & Wt.	Tool No.	Leg Length & Wt.
1109	8" 8 lbs.	1111	28" 22 lbs.
1110	18" 15 lbs.		

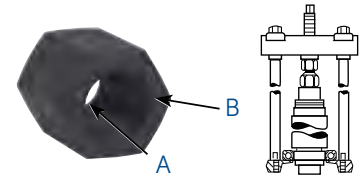


8074, 8076 & 8075 Step Plate Adapter Sets

Necessary for pulling and installing bearings, gears, or other parts found on hollow shafts or housings. They may be used with Grip-O-Matic® pullers and Push-Pullers®, as well as shop presses. All adapters are available separately.

Tool No.	Set No.	Dia. "A"	Dia. "B"
8057	•	1"	3/4"
8058	•	1-1/8"	7/8"
8059	•	1-1/4"	1"
8060	•	1-3/8"	1-1/8"
8061	•	1-5/8"	1-1/4"
8062	•	1-3/4"	1-3/8"
8063	•	1-7/8"	1-1/2"
8064	•	2"	1-5/8"
8065	•	2-1/8"	1-3/4"

Tool No.	Set No.	Dia. "A"	Dia. "B"
8066	•	2-3/8"	1-7/8"
8067	•	2-1/2"	2"
8068	•	2-5/8"	2-1/8"
8069	•	2-3/4"	2-1/4"
8070	•	2-7/8"	2-3/8"
8071	•	3"	2-1/2"
8072	•	3-1/4"	2-3/4"
8073	•	3-1/2"	3"



8044 Internal Threaded Adapter Set

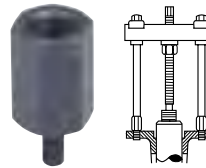
For use on the ends of Push-Puller legs or forcing screws to aid in the removal and installation of shafts, axles, and housings.

Tool No.	Internal End "A"	Internal End "B"
8035*	1/2"-20	5/8"-18
8036*	1"-14	1"-14
8037	5/8"-18	5/8"-18
8038	5/8"-18	3/4"-16
8039	5/8"-18	7/8"-14
8040	5/8"-18	1"-14
8041	5/8"-18	1-1/8"-12
8042	5/8"-18	1-1/4"-12
8043*	5/8"-18	1-1/2"-12

* Not included in set No. 8044.
Order separately. All adapters are available separately.

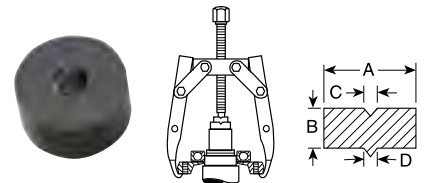
Metric and standard External-Internal Threaded Adapters

For use on the ends of Push-Puller legs or forcing screws when pulling shafts, bearing caps, pinions, etc.



Tool No.	Internal End	External End	Length
Metric Threaded Adapters			
8111	5/8"-18	M6 x 1.0	2-1/4"
8112	5/8"-18	M8 x 1.0	2-1/4"
8113	5/8"-18	M8 x 1.25	2-1/4"
8114	5/8"-18	M10 x 1.25	2-1/4"
8115	5/8"-18	M10 x 1.5	2-1/4"
8116	5/8"-18	M12 x 1.25	2-1/4"
8117	5/8"-18	M12 x 1.75	2-1/4"
8121	5/8"-18	M14 x 1.5	2-1/4"
8122	5/8"-18	M14 x 2.0	2-1/4"
8123	5/8"-18	M16 x 1.5	2-3/4"
8124	5/8"-18	M16 x 2.0	2-3/4"
8125	5/8"-18	M20 x 1.5	2-3/4"
8126	5/8"-18	M20 x 2.5	2-3/4"
8131	5/8"-18	M6 x 1.0	1-5/8"
8132	5/8"-18	M8 x 1.25	1-5/8"
8133	5/8"-18	M10 x 1.5	1-5/8"
8134	5/8"-18	M12 x 1.75	1-5/8"
8135	5/8"-18	M14 x 2.0	1-5/8"
8136	5/8"-18	M16 x 2.0	1-5/8"
8137	5/8"-18	M20 x 2.5	1-5/8"
8141	1"-14	M16 x 1.5	3"
8142	1"-14	M16 x 2.0	3"
8143	1"-14	M18 x 1.5	3"
8144	1"-14	M20 x 1.5	3"
8145	1"-14	M20 x 2.5	3"
8146	1"-14	M22 x 1.5	3"
8147	1"-14	M24 x 2.0	3"
8148	1"-14	M24 x 3.0	3"

Tool No.	Internal End	External End	Length
Standard Threaded Adapters			
206437	1/2"-20	5/8"-18	2-1/4"
8000	5/8"-18	1/4"-20	2-1/4"
8001	5/8"-18	5/16"-18	2-1/4"
8002	5/8"-18	7/16"-14	2-1/4"
8003	5/8"-18	7/16"-20	2-1/4"
8004	5/8"-18	3/8"-24	2-1/4"
8005	5/8"-18	3/8"-16	2-1/4"
8006	5/8"-18	1/2"-20	2-1/4"
8007	5/8"-18	1/2"-13	2-1/4"
8008	5/8"-18	9/16"-18	2-1/4"
8009	5/8"-18	9/16"-12	2-1/4"
8010	5/8"-18	5/8"-11	2-1/4"
8013	5/8"-18	3/4"-16	2-1/4"
8015	5/8"-18	3/4"-10	2-1/4"
8017	5/8"-18	7/8"-14	2-1/4"
8018	5/8"-18	7/8"-9	2-1/4"
8019	5/8"-18	1"-14	2-1/4"
8022	5/8"-18	1/8" pipe	2-1/4"
8012	1"-14	5/8"-18	3-3/16"
8011	1"-14	5/8"-11	2-1/2"
8014	1"-14	3/4"-16	2-1/2"
8016	1"-14	3/4"-10	2-1/2"
8020	1"-8	5/8"-18	3"
8021	1"-8	1"-14	3"
8023	1-1/4"-12	1"-14	4-1/2"
8024	1-1/4"-12	1-3/4"-12	4-3/4"
8025	1-1/4"-7	5/8"-18	4"
8027	1-1/4"-7	1"-14	4"
8029	1-5/8"-51/2	1"-14	4"
8028	1-5/8"-51/2	1"-8	4"
8030	3/4"-16	5/8"-18	2-1/4"



8056 Shaft Protector Set

Designed to protect shaft centers from distortion when extreme pressures are applied with either Grip-O-Matic® pullers or Push-Pullers. Shaft protectors are available separately.

Tool No.	"A"	"B"	"C" (60°)	"D" (60°)
8050	1-1/2"	3/4"	3/8"	7/16"
8051	1-1/4"	3/4"	3/8"	3/8"
8052	1"	3/4"	3/8"	5/16"
8053	3/4"	3/4"	1/4"	1/4"
8054	5/8"	5/8"	1/4"	1/4"
8055	5/8"	5/8"	3/16"	3/16"

HYDRAULIC PULLERS PULLERS



No. 1062 & 1063

Usable reach equals leg length minus 4-7/8" when using leg ends.

No. 1070 & 1071

Usable reach equals leg length minus 5-7/8" when using leg ends.

No. 1076

Usable reach equals leg length minus 10-5/8".

No. 1076 – 50-Ton Capacity Can be used with Nos. 1128 bearing pulling attachments. Ends of legs are threaded 1-1/4"-12. Usable reach: 13-3/8". See page 125 to order threaded adapters for use with these pullers.

Hydraulic Push-Puller®

No. 1062, 1063 – 17-1/2" Ton Capacity Can be used with Nos. 1124 and 1130 bearing pulling attachments or No. 680 pulley pulling attachment. May also be used with No. 1154 internal pulling attachment. Ends of legs are threaded 5/8"-18. Usable reach: 11-5/8".

Tool No.	Max. Reach	Max. Spread	Screw Size	Notes / Weight
1063	18-1/2"	5-3/4"-11-3/4"	1"-8 x 20"	Puller with No. 1104 legs, No. 24827 leg ends, No. 4120 hyd. ram, No. 32118 adjusting screw, and No. 24814 adjusting crank. 38 lbs.
1062	18-1/2"	5-3/4"-11-3/4"	1"-8 x 20"	Puller only. 22 lbs.

Extra Legs (pair) for No. 1062, 1063 (Reach equals leg length plus 2" with leg end caps.)

Tool No.	Leg Length & Wt.	Tool No.	Leg Length & Wt.
1107	4-1/2" 2 lbs., 8 oz.	1105	22-1/2" 9 lbs.
1106	9-1/2" 4 lbs., 8 oz.	1108	30" 11.5 lbs.
1104	16-1/2" 6 lbs., 8 oz.		

Note: 3/4"-14 thread on leg upper end.

LEG LENGTH

No. 1070, 1071 – 30-Ton Capacity Can be used with Nos. 1126 and 1127 bearing pulling attachments or No. 680 pulley pulling attachment (two No. 8012 adapters are required to connect No. 680 to puller). Also may be used with No. 1166 internal pulling attachment. Ends of legs are threaded 1"-14. Usable reach: 12-1/8".

Tool No.	Max. Reach	Max. Spread	Screw Size	Notes / Weight
1071	20-1/2"	7"-16-1/4"	1-1/4"-7 x 24"	Puller with No. 1110 legs, No. 28390 leg ends, No. 4121 hyd. ram, No. 34758 adjusting screw, and No. 27198 adjusting crank. 90 lbs.
1070	20-1/2"	7"-16-1/4"	1-1/4"-7 x 24"	Puller only. 56 lbs.

Extra Legs (pair) for No. 1070, 1071 (Reach equals leg length plus 2-5/8" with leg end caps.)

Tool No.	Leg Length & Wt.	Tool No.	Leg Length & Wt.
1109	8" 8 lbs.	1111	28" 22 lbs.
1110	18" 15 lbs.		

Note: 1"-14 thread on leg upper end.

Tool No.	Max. Reach	Max. Spread	Screw Size	Notes / Weight
1076	24"	8-1/2"- 20-1/2"	1-5/8"- 5-1/2" x 30-3/8"	Puller only. 106 lbs.

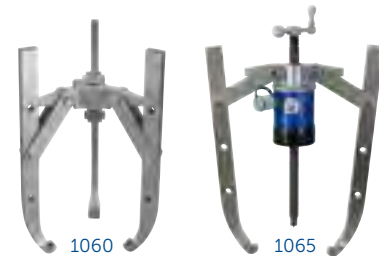
Extra Legs (pair) for No. 1076 (Reach equals leg length plus 1-1/4"-12 thd. on both leg ends.)

Tool No.	Leg Length & Wt.	Tool No.	Leg Length & Wt.
1112	24" 34 lbs.	1113	34" 47 lbs.

Hydraulic Grip-O-Matic® Puller

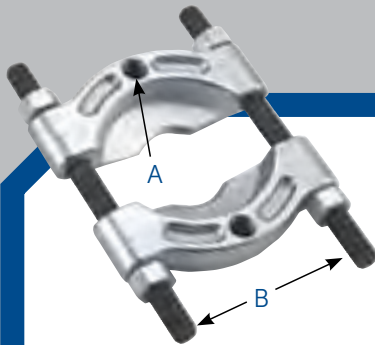
No. 1060-1080 Available in 10 to 50-ton capacities. Reliable single-acting Power Twin ram is matched with a versatile 2-jaw or 3-jaw puller. Lightweight ram can be used in other applications. You also get an adjusting screw, speed crank, and coupler where applicable. Hydraulic pump is not included; see index for pump listings.

Tool No.	MAX		Ram Capacity & Number	JAW		Screw Size & Crank No.	Style and Weight
	Reach	Spread		Thickness	Width		
1060	10"	17"	N/A	9/16"	1"	N/A	10-Ton, 2/3-Jaw; Puller Only; 17 lbs.
1065	11-1/2"	16"	17-1/2 Ton, No. 4120	13/16"	1-9/32"	1"-8 x 20" No. 24814	17-1/2 Ton, 2-Jaw; 40 lbs.
1064	11-1/2"	16"	N/A	13/16"	1-9/32"	N/A	17-1/2 Ton, 2-Jaw Puller Only; 24 lbs.
1067	11-1/2"	20"	17-1/2 Ton, No. 4120	13/16"	1-9/32"	1"-8 x 20" No. 24814	17-1/2 Ton, 3-Jaw; 53 lbs.
1066	11-1/2"	20"	N/A	13/16"	1-9/32"	N/A	17-1/2 Ton, 3-Jaw Puller Only; 37 lbs.
1073	19-7/16"	26"	30-Ton, No. 4121	1-1/8"	1-5/8"	1-1/4"-7 x 24" No. 27198	30-Ton, 2-Jaw; 91 lbs.
1072	19-7/16"	26"	N/A	1-1/8"	1-5/8"	N/A	30-Ton, 2-Jaw Puller Only; 59 lbs.
1075	19-7/16"	34"	30-Ton, No. 4121	1-1/8"	1-5/8"	1-1/4"-7 x 24" No. 27198	30-Ton, 3-Jaw; 122 lbs.
1074	19-7/16"	34"	N/A	1-1/8"	1-5/8"	N/A	30-Ton, 3-Jaw Puller Only; 90 lbs.
1080	19-7/16"	44"	N/A	1-1/8"	1-5/8"	N/A	50-Ton, 3-Jaw Puller Only; 187 lbs.



Puller components

No.	Description	Capacity
24814	Speed Crank	17-1/2 Ton
27198	Speed Crank	30 Ton
29595	Speed Crank	50 Ton
32118	Adjusting Screw	17-1/2 Ton
34758	Adjusting Screw	30 Ton
32698	Adjusting Screw	50 Ton
39448	Lube for pullers	



Bearing Splitters

No. 1121-1130 These versatile accessories feature "knife-like" edges which are easily placed behind the part to secure a gripping surface, even when clearances are extremely limited. When used with an OTC Grip-O-Matic® puller, puller jaws grip attachment's outer edge; when used with a Push-Puller, puller legs are threaded into the attachment's two tapped holes.

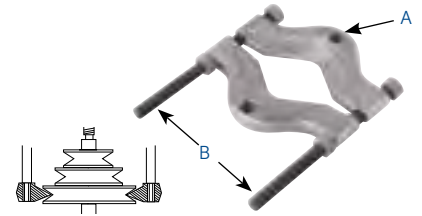
Tool No.	MAX. Spread	MIN. Spread	A	B	Weight	Application
1121	15/16"	1/4"	15/16"-18	1-11/16"	12 oz.	Use with puller Nos. 1020, 1022, & 1023.
1122	2"	1/8"	3/8"-16	2-7/16"	1 lb., 4 oz.	Use with puller Nos. 1024, 1025, 1026, 1027, 7392, & 7393.
1123	4-5/8"	1/2"	5/8"-18	4-3/8"	5 lbs.	Use with puller Nos. 1035, 1036, 1037, 1038, & 927.
1124	5-3/4"	1/2"	5/8"-18	6"	12 lbs.	Use with puller Nos. 1035, 1040, 1041, 1042, 1065, 1063, & 938.
1130	9"	1/2"	5/8"-18	6"	12 lbs., 9 oz.	Use with puller Nos. 1035, 1040, 1041, 1042, 1065, 1063, & 938.
1126	8"	5/8"	1"-14	7-1/8"	19 lbs., 12 oz.	Use with puller Nos. 1047, 1043, & 939.
1127	13-3/8"	3/4"	1"-14	10-1/4"	41 lbs., 12 oz.	Use with puller Nos. 1047, 1073, & 939.
1128	12-7/8"	5"	1-3/4"-12	13"	100 lbs.	Use with puller Nos. 1073, 1079.

A = Thread of tapped hole in adapter.
B = Distance between adjusting screws.

Pulley Pulling Attachments

Attachment clamps down into V-groove to distribute load. Use with Grip-O-Matic® pullers or Push-Pullers.

Tool No.	MAX. Spread	MIN. Spread	A	B	Weight	Application
679	5-7/8"	1-3/4"	5/8"-18	6"	4 lbs., 4 oz.	Use with puller Nos. 1035, 1036, 1037, 1038, and 927.
680	10"	1-5/8"	5/8"-18	10-1/16"	22 lbs., 4 oz.	Use with puller Nos. 1039, 1040, 1041, 1063, 1065, and 938.



A = Thread of tapped hole in adapter.
B = Distance between adjusting screws.

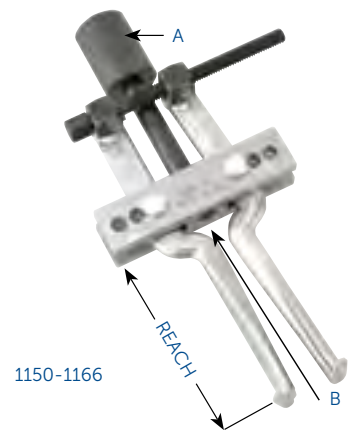
Internal Pulling Attachments

Approved by leading bearing manufacturers, OTC's internal pulling attachments remove bearing cups, oil seals, bushings, and other parts from blind holes quickly and easily. Each attachment is designed for use with a corresponding Push-Puller or slide hammer assembly.

Tool	JAW Spread	JAW Reach	A	B	Weight	Application
1153	1-1/2"-5"	2-1/8"	1"-14	5/8"-18	4 lbs., 4 oz.	Use with Nos. 927 and 938 Push-Pullers, 1155 and 1156 slide hammer pullers, or 24832 and 24833 puller screw.
1150	1-1/2"-6"	4"	1"-14	5/8"-18	4 lbs., 4 oz.	
1152	1-1/2"-6"	4"	-	5/8"-18	3 lbs., 8 oz.	
1151	1-1/2"-7"	5-1/4"	1"-14	5/8"-18	4 lbs., 8 oz.	Use with Nos. 927 and 938 Push-Pullers, 1155 and 1156 slide hammer pullers, or 24832 puller screw.
1165	3"-9"	5-7/8"	1-1/2"-12	1"-14	13 lbs., 8 oz.	Use with No. 939 Push-Puller.
1154	1-1/2"-9"	4"	1"-8	5/8"-18	4 lbs., 8 oz.	Use with No. 1063 hyd. Push-Puller.
1166	3"-9"	5-7/8"	1-1/4"-7	1"-14	13 lbs., 8 oz.	Use with No. 1071 hyd. Push-Puller.

Puller Screws

24832	13-3/4" long		5/8"-18	1 lb.	Use with Nos. 1150, 1151, 1152, and 1153. Acts as a regular forcing screw when threaded directly into the block of pulling attachment.
24833	5-1/2" long		5/8"-18	6 oz.	Use with Nos. 1150, 1152, and 1153. Acts as a regular forcing screw when threaded directly into the block of pulling attachment.



A = Thread of tapped hole in adapter.
B = Distance between adjusting screws.

4420

Pilot Bearing Pulling Attachment

- Use to pull a pilot bearing from the end of the crankshaft.
- Interchangeable jaws. One set of jaws covers a spread of 1/2" to 1-1/2". Other set of jaws covers a spread of 3/8" to 1-3/8". Both sets of jaws have a reach of 1".
- Reach has a min/max range of 3/16" to 1".
- Puller attaches to OTC and other slide hammers with 5/8"-18 thread.



4421

Pilot Bearing Pulling Attachment

- Removes pilot bearings, thrust washers, and smaller bearings hidden in a shaft or housing.
- Jaws require a minimum of 5/8" opening and can range up to a max of 1-1/2" diameter.
- Min/Max reach is 1/8" to 1".
- Works with both 5/8 - 18 as well as M18-1.5 threaded hammer shanks.



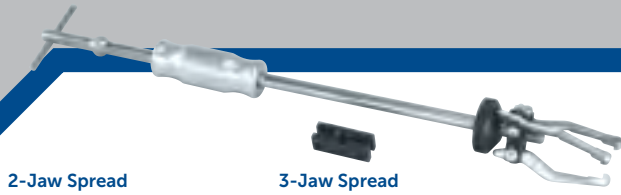
4422

Pilot Bearing Puller

- Use to pull a pilot bearing from the end of the crankshaft.
- A restriction plate catches the bridge and prevents the jaws from spinning when force is engaged.
- The "Tee Handle" design is easy-to-use and eliminates need for other tools.
- Spread covers ranges of 1/2" to 1-1/2" and 3/8" to 1-3/8".
- Reach has a min/max range of 3/16" to 1-1/4".



REVERSIBLE-JAW SLIDE HAMMER PULLERS



2-Jaw Spread				3-Jaw Spread				Overall Length
Inside		Outside		Inside		Outside		
Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
1-1/4"	3-1/2"	1"	4-1/2"	1-1/2"	4-1/4"	1-1/2"	4-1/2"	27"

Reversible-Jaw Slide Hammer Pullers

Here are two extremely versatile pullers, which will accomplish many pulling jobs involving gears, bearings, outer races, grease retainers, oil seals, etc. Either two or three puller jaws may be used to handle "inside" pulling jobs such as bearing cups and outer races, as well as regular "outside" pulling jobs. The basic slide hammer unit can be removed and used independently. The No. 1177 slide hammer puller has a 5 lb. hammer, and the No. 1176 has a 2-1/2 lb. hammer.

- 1176** Puller with 2-1/2 lb. hammer, 2-way and 3-way head, 27" long.
- 1177** Same as 1176, except has a 5 lb. hammer.

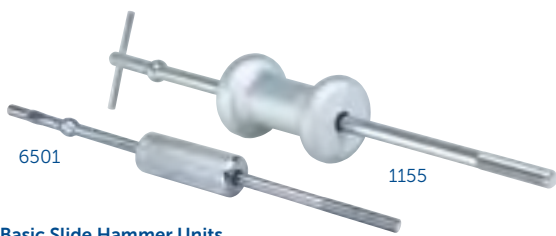


Spread		Reach	Overall Length
Min.	Max.		
1-5/8"	6"	4"	28"

Slide Hammer Pullers with Cup Pulling Attachments

These pullers combine a basic slide hammer unit with a No. 1152 internal pulling attachment (described on page 127). Ideal for removing bearing cups, outer races, and oil seals from blind holes. Upon removal of the internal pulling attachment, the basic slide hammer unit, which has a 5/8"-18 threaded end, may be used with various adapters for a multitude of pulling jobs.

- 1157** Slide hammer puller, consisting of an 1152 internal pulling attachment and an 1156 basic slide hammer unit with a 2-1/2 lb. hammer.
- 1158** Slide hammer puller (not shown), consisting of an 1152 internal pulling attachment and an 1155 basic slide hammer unit with a 5 lb. hammer.



Basic Slide Hammer Units

May be used with an OTC internal pulling attachment (page 127), or with internal or external-internal threaded adapters (page 125).

- 1155** Slide hammer unit is 24" long with a 5 lb. hammer, 5/8"-18 threaded end.
- 1156** Slide hammer unit is 24" long with a 2-1/2 lb. hammer, 5/8"-18 threaded end.
- 6501** Slide hammer unit is 17" long with a 1-3/4 lb. hammer, 1/2-20 threaded end.

6541 Pulling Hook

- This slide hammer puller attachment is used to remove seals, bearings, and other press-fit parts.
- Designed to be used with OTC No. 1155 (5 lb.) or No. 1156 (2-1/2 lb.) slide hammer, or other slide hammers having 5/8-18 threads.



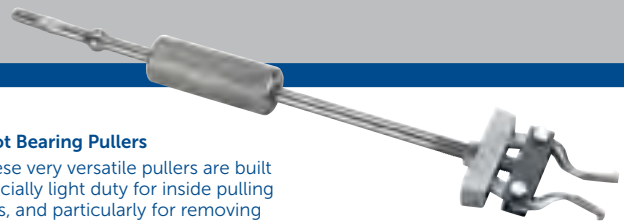
27315 Pulling Hook

- This slide hammer puller attachment is used oil seals and bearing in situations where conventional methods won't work.
- Designed to be used with OTC No. 1155 (5 lb.) or No. 1156 (2-1/2 lb.) slide hammer, or other slide hammers having 5/8-18 threads.



Sliding Hammers

- 22185** 2-1/2 lb. sliding hammer.
- 34331** 5 lb. sliding hammer.



Pilot Bearing Pullers

These very versatile pullers are built specially light duty for inside pulling jobs, and particularly for removing flywheel pilot bearings on automobiles, trucks, and tractors. Also very practical for pulling motor, generator, and magneto bearings.

Slide hammer unit is 17" long with a 1-3/4 lb. hammer, 1/2-20 threaded end.

Tool No.	Reach	I.D. Spread		Wt. (lbs./oz.)
		Min.	Max.	
1170	3/4"	1/2"	1-1/2"	4 / 14
1171	1"	7/8"	2-1/8"	4 / 14
1172	1-3/4"	1/2"	2"	4 / 14



Special Slide Hammer Puller

Ideal for pulling jobs in very close quarters, as in removal of small-bore bushings, bearings, oil seals, etc. Internal pulling attachment has a jaw spread of 1/2" to 1-3/8", adjusted by turning the slide hammer handle. Handle end has a 1/2"-20 thread.

- 1173** Slide hammer unit is 17" long with a 1-3/4 lb. hammer, 1/2-20 threaded end. with 1174 head assembly.
- 1174** Head assembly only.

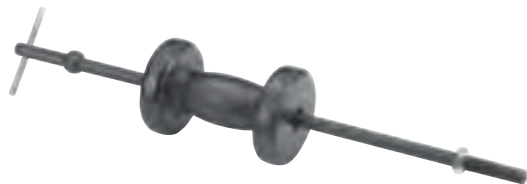
5028 Slide Hammer Puller

Just 8-1/2" long to fit into tight spots, but its 1-1/2 pound hammer gives you a little extra muscle for stubborn jobs. It's perfect for pulling injector nozzles. The shank is threaded 1/2"-20 and has a 5/8"-18 threaded adapter included. Works with many OTC pulling attachments.

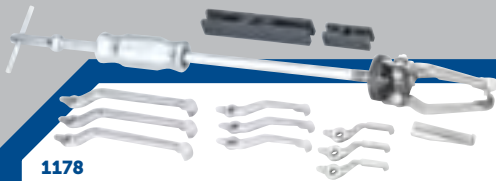


7703 Ten-Pound Slide Hammer Puller

This heavy-duty slide hammer puller gets tough with those really stuck parts. It has all the features of our smaller versions - heat treated, 24" long, and a 5/8"-18 threaded end to adapt to any of OTC's pulling attachments. The difference is the ten-pound hammer that gives you the extra muscle for really stubborn pulling jobs.



- 22185** 2-1/2 lb. sliding hammer.
- 34331** 5 lb. sliding hammer.



1176 Slide Hammer Puller Set

This useful set contains OTC's popular No. 1176 reversible-jaw slide hammer puller, plus an assortment of special jaws and adapters. You get all the versatility of the No. 1176 (described fully on page 128), plus attachments for pulling various size pilot bearings, oil seals, bushings, timing gears, harmonic balancers, and other tightly fitted parts!

Set No. 1178 consists of:

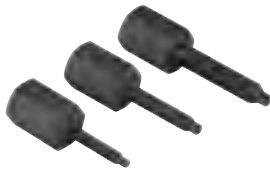
No.	Description
1176	Reversible-jaw slide hammer puller with 2-1/2 lb. hammer
44195	Medium jaw (3 include)
32054	Pilot bearing jaw (3 include)
34698	Short jaw (3 include)
44148	Long jaw (3 include)
27315	Puller hook. Removes oil seals, bearings, etc.
27241	2-way cross head
36578	Uses cap screws up to 3/8" diameter. Spread with 3/8" dia. cap screws: 1-7/8" - 5-5/8".

2-Jaw Spread

Tool No.	Inside		Outside	
	Min.	Max.	Min.	Max.
44195	1-1/2"	4-1/2"	3/4"	5"
32054	3/4"	2-3/8"	-	-
44148	2-3/4"	5-1/2"	3/4"	7-1/2"
34698	1-1/4"	3-1/2"	1"	4-1/2"

3-Jaw Spread

Tool No.	Inside		Outside	
	Min.	Max.	Min.	Max.
44195	1-1/2"	4-3/4"	1"	4-1/2"
32054	1"	2-3/4"	-	-
44148	3-1/4"	6-1/4"	1"	6-1/4"
34698	1-1/2"	4-1/2"	1-1/2"	4-1/2"



6627

Grip Wrench Adapters

- For grip wrenches using single-lead thread adjusting screw.
- Adapter threads onto a slide hammer with a 5/8"-18 thread.

205378 Grip wrench threads onto a 7/16"-14 end of adapter for pulling use.

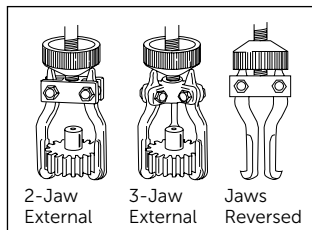
557479 Grip wrench threads onto a 5/16"-18 end of adapter for pulling use.

557480 Grip wrench threads onto a 1/4"-20 end of adapter for pulling use.



1179 "Silver Slapper" 8-Way Slide Hammer Puller Set

You can pull flange-type rear axles, stubborn oil seals and bearings, and other press-fit parts. Jaws can be set up for 2/3-way internal or external pulling jobs.



Application Examples

Set No. 1179 consists of:

No.	Description
1155	Slide hammer with 5 lb. hammer
7372	Rear axle pulling attachment
24544	3-way cross-head
24545	Cone
27241	2-way cross-block
27315	Puller hook attachment
34698	Pulling jaws (3) for internal or external pulling jobs
205378	Grip wrench adapter w/single lead (wrench not included)
205377	Dent puller attachment

5 lb. Hammer in Polished Chrome Finish.



4579

9-Way Slide Hammer Puller Set

- Pulls flange-type rear axles and most front-wheel drive hubs.
- Internal and external jaws provide a variety of combinations to pull bearings, gears and seals.
- Two- and three-way cross blocks and cone provide the perfect jaw configuration for most jobs.
- Set also includes a grip wrench adapter and a dent puller attachment for sheet metal or other unique pulling requirements.
- Designed for use with other OTC 5/8"-18 thread slide hammer attachments.
- Packaged in blow-molded case.



7792 Rear Axle Puller Set

The tools you need for flange-type rear axle and bearing removal on most late model passenger cars and light trucks. Set includes the No. 7374 rear axle pulling plate and a 5 lb. slide hammer. The axle bearing pullers, used with the slide hammer, make short work of removing semi-floating rear axle bearings.

Set No. 7792 consists of:

No.	Description
7374	Rear axle pulling plate with a 5 lb. slide hammer.
7495A	Rear axle bearing puller. Fits a min. bearing tube I.D. of 1" and a max. axle tube I.D. of 1-7/8".
7496A	Rear axle bearing puller. Fits min. bearing tube I.D. of 5/16" and max. axle tube I.D. of 2-3/8".
7497A	Rear axle bearing puller. Fits min. bearing tube I.D. of 1-3/8" and max. axle tube I.D. of 2-7/8".
27315	Puller hook for use with 5 lb. slide hammer in set. Removes oil seals, bearings, etc.



8-Way and 10-Way Slide Hammer Puller Sets

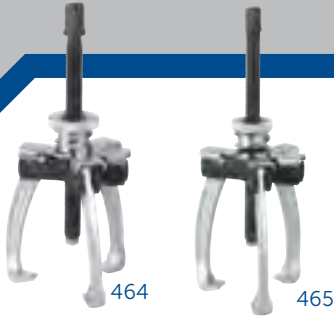
Our two most popular slide hammer puller sets—the Silver Slapper and the Silver Slapper Plus—now come packaged in a convenient plastic, blow-molded carrying/storage case. They're the same great sets with the same versatile pullers and attachments, now made even better with the addition of an organizer case. Or, if you already own either our No. 1179 or No. 1189 puller sets, we offer the plastic case separately. The case will hold either set.

7947 Eight-way slide hammer puller set. Same contents as No. 1179 Silver Slapper set, but includes plastic carrying/storage case.

7948 Ten-way slide hammer puller set.

63106 Puller storage case. Blow-molded plastic.

DIFFERENTIAL BEARING PULLERS PULLERS



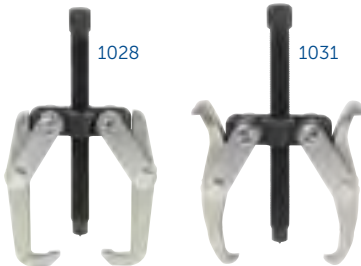
OTC "GripLock" Pullers

Manufactured to our rigorous specifications to ensure the quality professionals expect from OTC.

- Pressure bearing yoke cap holds jaws in place for ease of set up - in any orientation.
- 2 or 3 jaw application.
- Both external and internal pulling action.
- "Live Center" action forcing screw.
- Professional finished for long lasting durability...

464 Puller with a 4" maximum reach, 3" to 4" spread.

465 Puller with a 7" maximum reach, 3" to 7" spread.



Differential Bearing Pullers

For removing differential side carrier bearings on a wide variety of passenger cars and light trucks. Use with step plate adapter Nos. 8060, 8061, 8063, and 8064. (Step plate adapters are not included with 1028 or 1031. See page 125.)

1028 Puller with a 3-1/2" maximum reach, 1-1/4" to 4-1/2" spread. Primarily for servicing Ford products.

1031 Puller with a 3-1/4" maximum reach, 6" maximum spread. For servicing most General Motors, American Motors, and Chrysler products.

Bearing Cup Remover

Ideal for servicing hubs on today's popular front-wheel-drive small cars. The cone holds the jaws in place during pulling. Perfect for pulling internal bearing cups, seals, bushings, etc. Jaw spread: 15/16" to 3-1/4", reach to 3-1/2". Use with any slide hammer having a 5/8"-18 thread (OTC No. 1155 or No. 1156 or the No. 927 Push-Puller).

6542 Bearing Cup Remover.

7136 Bearing Cup Remover. Similar to Ford 308-047.



4520 Differential Side Bearing Pullers

- Use to remove differential side carrier bearing. Works on a wide variety of cars and light-duty trucks.
- Includes four step plate adapters to fit carrier bearings.
- Reach: 1-5/8". Spread: 2-5/8" to 3-3/8". Forcing screw is 3/4"-16 x 6-11/16" lg.

Set includes:

- 4520-1** Forcing Screw / Cross Block Assembly
- 4520-2** Puller Jaws / Pins (set of two each)
- 4520-3** Puller Jaws Retaining Yoke
- 4520-4** Step Plate Adapters (set of four)
 - 15/16" - 1-11/32" diameter
 - 1-1/8" - 1-1/2" diameter
 - 1-1/4" - 1-5/8" diameter
 - 1-1/8" - 1-3/4" diameter



Specifications

Reach: 1-5/8"

Spread: 2-5/8" on inside holes in crossbar
3-3/8" on outside holes in crossbar

Forcing screw: 3/4"-16 mm x 6-11/16" lg.

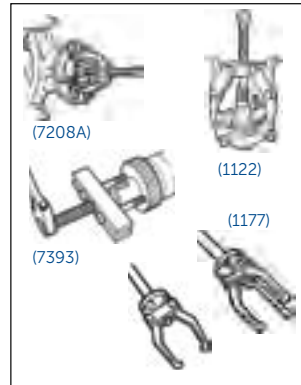
Adapter sizes: 15/16" to 1-3/4" diameter

1181 Multipurpose Puller Set

This assortment of puller tools gives you a wide range of job versatility. You get a 5 lb. slide hammer puller, hub puller, two sizes of OTC Grip-O-Matic® jaw-type pullers, a bearing pulling attachment, plus a cross-bar gear and pulley puller, all contained in a handy plastic storage case.

Set No. 1181 consists of:

No.	Description
1177	Slide hammer puller with a 5 lb. hammer, 2-way and 3-way heads. Reversible: either two or three jaws may be used to handle both "inside" and "outside" pulling jobs.
7208A	Front hub puller for servicing front-wheel-drive cars. Includes a spare locknut, which permits use with a No. 1177 slide hammer for rear axle flanges.
1023	2-ton combination 2- or 3-jaw Grip-O-Matic puller. Has 3-3/8" max. reach, 4-3/4" max. spread.
1027	5-ton combination 2- or 3-jaw Grip-O-Matic puller. Has 5-1/2" max. reach, 7" max. spread.
7393	Bar-type gear and pulley puller with a 5-1/2" long screw. Includes two hex head cap screws, 3/8"-16 x 3" long. Spread range: 1-1/2" to 4-1/4".
1122	Bearing pulling attachment for use with No. 1027 and No. 7393 pullers. Has 2" max spread, 1/8" min. spread.



1184 Cone-type Puller

Reversible jaws permit handling of both internal and external pulling jobs. The 2-way/3-way head permits assembly of puller to suit the job at hand. Turning the cone on the puller head securely locks its jaws on the part to be removed. Puller reach: 2-7/8"

2-jaw spread:
Inside: 1-1/2" to 4-1/2"
Outside: 3/4" to 5"

3-jaw spread:
Inside: 1-1/2" to 4-3/4"
Outside: 1" to 4-1/2"

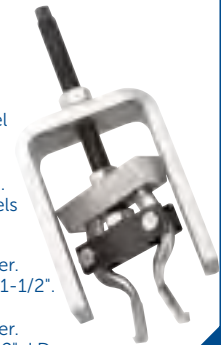


Pilot Bearing Pullers

Designed to pull flywheel pilot bearings in close quarters where a slide hammer cannot be used. Operates on many models with engine in chassis.

7318 Pilot bearing puller. Capacity: 1/2" to 1-1/2". I.D. reach: 3/4".

7319 Pilot bearing puller. Capacity: 7/8" to 2". I.D. reach: 1".





**6981
Blind Hole Puller Set**

Pilot bearings and pilot bushings are one of the most critical components in a transmission clutch system. Damage, wear, or contamination can result in binding on the input gear and may be revealed as the clutch drag symptoms or even a growling sound when clutch pedal is fully released. Address these problems with the 6981 blind hole puller set from OTC.

- 5 - collet actuator combinations cover 5/16" to 1-1/4" I.D.
- Use collets with Pulling Bridge or as Slide Hammer Attachment.
- Easy to read component application chart and instructions.
- Conveniently laid out in rugged blow mold storage case.
- Forged and machined in Owatonna Minnesota, U.S.A

Set No. 6981 consists of:

- 577564** Pin .140"
- 577565** Pin .200"
- 577566** Pin .280"
- 577567** Pin .400"
- 577568** Pin .500"
- 577569** Collet .300 to .350 (1.5" reach)
- 577570** Collet .350" to .438" (1.5" reach)
- 577571** Collet .438" - .563" (1.75" reach)
- 577572** Collet .563" - .865" (2.5" reach)
- 577573** Collet .865" - 1.25" (3" reach)
- 577574** Pin Adapter



**4581
Blind Hole Bearing Puller Set**

- For pulling jobs requiring an internal pull.
- Set includes four collets, which fit a wide range of applications. Select the appropriate sized collet by comparing it with the application. Insert the collet, expand it to fit the hole, then attach the slide hammer.
- Four collet sizes: 7/16" to 1/2", 9/16" to 11/16", 5/8" to 1", and 1" to 1-1/4".
- Set includes a 2-1/2 lb. slide hammer with a T-handle.
- Housed in a blow-molded plastic storage case.



**4536
A/C Clutch Pulley Puller Set**

- For removal of stubborn air conditioning clutch pulleys. Also can be used on many alternator, generator, power steering, and crankshaft pulleys, harmonic balancers, and fiber timing gears.
- Set includes drop-forged components: one 3/4"-16 x 5" live center forcing screw, 5-1/2" crossbar with 3 spread settings, two pairs of jaws, and a clamp bolt.
- Spread: 3" to 5"; Reach: 1" to 5".
- Includes a blow-molded plastic case.



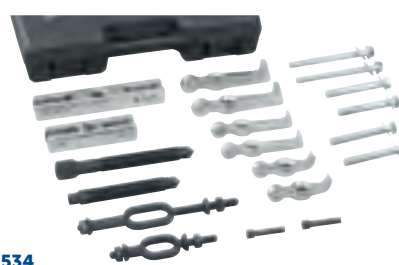
**4517
7-Ton Bar-Type Puller/Bearing Separator Set**

- Includes a Bearing Splitter with 4" capacity, two sets of hex push puller legs, a 8" bar type puller head mated with a custom thread forcing screw.
- Now service and maintenance professionals have a Puller/Bearing set for tough jobs, up to 7-tons, larger applications, and greater reach 8" to 16".
- As a stand alone puller/bearing splitter set or as a compliment to the 4518 version, the 4517 7-Ton Puller/Bearing Separator Set gives your maintenance/service shop the expanded capability to keep more business in house.



**4532
7-Ton Multi Purpose Bearing and Puller Set**

- Offers a bearing/pulley tool solution featuring a classic "H" Bar style puller block accommodating 7" to 11" application spread.
- Comes with 2 sets of forged jaws for a pulling each range of 5" to 9" - tempered for heavy-duty applications. (Jaws from OTC's 4534 are interchangeable) Two forcing screws are included for short and long pulls.
- Where a Push Puller is the best pulling choice and threaded holes are not available, the 4532 provides technicians and shops with a solution for many applications like heavy-duty pinion bearings, side bearings, alternators, generators, power steering and crankshaft pulleys, timing gears and harmonic balancers.
- Deep set transmission gears and A/C clutches. Roller gears on tracked vehicles, locking collars on pivot shafts.



**4534
Multipurpose Bearing and Pulley Puller Set**

- For a wide range of pulling jobs, including: bearings, alternators, generators, power steering and crankshaft pulleys, timing gears, and harmonic balancers.
- Set includes drop-forged components, which can be used in a variety of combinations. Contents of Set: 2 - Forcing Screws (Live Center): 3/4"-16 x 6-11/16" and 3/4"-16 x 5" 2 - Cross-bar Yokes: 3 pin-hole @ 3-1/4" to 5-1/2", 2 pin-hole @ 2-3/8" to 3-3/8" 2 - Clamp Bolts 3 - Pairs of Puller Jaws: 1-3/8" Max, 1-5/8" Max, 1-3/4" Max 1 - Pair of Jaw Pins with Ball Spring 3 - Pairs of Capped Bolts
- Spread: 3" to 5", Reach: 1" to 2-1/4"
- Housed in a blow-molded plastic storage case.



**4518
5-Ton Bar-Type Puller/Bearing Separator Set**

- This combination set includes our two most popular bearing "splitters" (2" and 3"), four sets of hex push-puller legs and a bar-type puller head with a 9/16" forcing screw. Separator tools are used with bar puller and legs for a wide variety of pulling jobs.
- The 5" puller cross-bar with a 6-1/4" forcing screw or each of the bearing separators may also be used separately or in combination with other pullers or tools.
- A blow-molded plastic storage case keeps set contents organized and protected from loss.

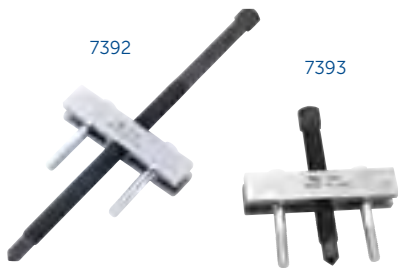
Tool No.	Min. Spread	Max. Spread	Tapped Holes	Distance Between Adj. Screws
4518-2	3/16"	2-3/8"	3/8-16	2-3/8"
4518-3	1/2"	2-3/8"	3/8-16	3-9/16"

PULLER/BEARING SETS PULLERS



1182 Lock-on, Jaw-type Puller Set

Components can be assembled to create several versatile puller versions for both internal and external pulling tasks. The puller head is turned to securely lock the jaws onto the part being removed. Both a 2-way and 3-way puller head are included, plus three long-reach and three short-reach puller jaws. Plastic storage box included. Easily removes gears, bearings, timing gears, harmonic balancers, and other press-fitted parts.



Gear and Pulley Pullers

These tools are perfect for removing timing gears, fan pulleys, harmonic balancers, and many other parts having tapped holes.

- Each puller will spread from 1-1/2" to 4-1/4". The puller blocks are 4-7/8" wide, tapped 5/8" - 18 UNF.
- Two hex head cap screws, 3/8"-16 x 3" long.

- 7392** Puller with 13" long screw
- 7393** Puller with 5-1/2" long screw



Similar to Ford
D80L-522-A, 303-D025

522 Large Gear and Pulley Puller

Using this tool, you can easily remove a wide range of gears, pulleys, or other parts that have tapped holes.

- The spread is 2" to 7-3/4". Its block is 8-1/4" wide, and its forcing screw is 3/4"-16 x 11-5/8" long.
- Accommodates any cap screws up to 1/2" diameter.



1183 Bearing Splitter Combo Set

This combo pack contains four of OTC's most popular bearing splitters, plus a pulley pulling attachment. A rugged organizer case is included, enabling you to keep the tools together for instant use.

Set No. 1183 consists of:

No.	Description
1121	Bearing splitter. Has 15/16" max. spread and 1/4" min. spread.
1122	Bearing splitter. Has 2" max. spread and 1/8" min. spread.
1123	Bearing splitter. Has 4-5/8" max. spread and 1/2" min. spread.
1130	Bearing splitter. Has 9" max. spread and 1/2" min. spread.
679	Pulley pulling attachment with a 5-7/8" max. and 1-3/4" min. spread.



4526 Heavy-Duty Single Pressure Beam Bearing Splitter Set

- Single point of adjustment allows quick attachment of splitter to the application.
- Pressure beam provides the ultimate in secure gripping surface.
- Push Puller is thread matched to the splitter.
- Interchangeable legs shorten or lengthen the range of pull.
- Designed of high quality tool grade materials for a lifetime of use.
- For use on most bushing or bearing jobs up to 4" in diameter.

6614 Heavy-Duty Gear Puller

The OTC 6614 Heavy Duty Gear Puller will remove gears up to 7-1/4" in diameter, including most cam gears. Rated at 8 tons, this puller is stout enough for almost any heavy-duty application and includes a pair of metric bolts for most applications. The slimmer design of the cross block gives more room to set up in tight quarters.

The tempered steel, rust inhibitor-coated bolts are graded 10.9 and are sized M12x1.75" and are 90mm in length. Cam gears giving you fits? Covered by OTC's Lifetime Warranty.



1180 10-Ton Capacity Push-Puller Set

Contains three popular OTC bar-type pullers in one versatile set, packed in a handy plastic storage case. Tools included permit damage-free pulling of gears, bearings, harmonic balancers, and other parts having tapped holes. Ideal for servicing heavy-duty trucks, off-road construction equipment, and machinery.

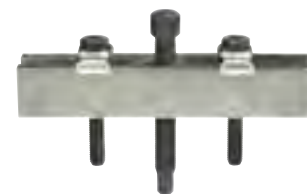
Set No. 1180 consists of:

No.	Description
927	10-ton Push-Puller, 8-3/8" reach, 2-1/8" to 7-1/4" spread. 6-3/4" puller legs. Other leg sizes are available separately. (See pages 124, 126.)
522	Gear and pulley puller; spread range when used with 1/2" cap screws: 2" to 7-3/4". Cap screws not included.
7393	Gear and pulley puller with standard 5-1/2" forcing screw, plus special 13" forcing screw. Includes two hex head cap screws, 3/8"-16 x 3" long. Special range: 1-1/2" to 4-1/4".



4527 5-Ton Single Pressure Beam Bearing Splitter Set

- Single point of adjustment allows quick attachment of splitter to the application.
- Pressure beam provides the ultimate in secure gripping surface.
- Push Puller is thread matched to the splitter.
- Interchangeable legs shorten or lengthen the range of pull.
- Designed of high quality tool grade materials for a lifetime of use.
- For use on most bushing or bearing jobs up to 3" in diameter.





7790

Flange-Type Puller Set (Grade 5)

- Versatile puller capable of removing a wide variety of components having tapped pulling holes, including harmonic balancers, gears, crankshaft pulleys, etc.
- Capable of handling 2- or 3-way bolt pulling applications.
- Works on many cars, pickups, SUVs, and small engines.
- Carries the OTC Lifetime Marathon Warranty® against defects in workmanship and material.

Contents of set:

- Puller flange: adapts to bolt circle dia. of 1-1/2" to 4-5/8".
- Forcing screw: 5-5/8" lg., 5/8-18 thread.
- Shaft protector: 1-3/16" dia. x 3/4" thick.
- Three each of the following flat washers: 1/4"; 5/16"; 3/8".
- Three each of the following bolt sizes:

- 1/4"-28 x 3" lg.	- M8 x 1.25 x 45 mm lg.
- 5/16"-24 x 3" lg.	- M8 x 1.25 x 65 mm lg.
- 5/16"-18 x 3-1/2" lg.	- M8 x 1.25 x 90 mm lg.
- 5/16"-18 x 6" lg.	- M8 x 1.25 x 30 mm lg.
- 3/8"-24 x 1-1/2" lg.	- M10 x 1.5 x 35 mm lg.
- 3/8"-16 x 2" lg.	
- 3/8"-16 x 3" lg.	
- 3/8"-16 x 4-1/2" lg.	



525

Flange-Type Puller Combination

Two specialty pullers in one box. You get a flange-type puller for removal of harmonic balancers, timing gears, and other parts with two or three tapped holes. You also get a steering wheel, pulley, and flywheel puller.

525 includes: flange-type puller and steering wheel puller with four sets of cap screws. 3/8"-16 UNF x 3.5". 3/8"-24 UNF x 3.0". 5/16"-18 UNF x 3.5". 5/16"-24 UNF x 3.5".



7793

Master Bolt Grip Set (Grade 8)

- Multi-Purpose applications such as steering wheels, flywheels, harmonic balancers, pulleys and gears with tapped holes.
- Includes special stepped bolts for 1990-2005 GM 3300-3800 V6 crankshaft pulleys.

Contents of set:

- 4-way slotted puller yoke and 2 lengths of hardened "live-center" forcing screws - a set of 3 interchangeable forcing screw tips is included to optimize pressure and prevent "walking".
- Blow molded case to prevent spilling and each bolt size is molded into the storage compartment.
- Three each of the following bolt sizes:

- M8 x 1.25 x 90mm	- 3/8"-24 UNF x 1.5"
- M8 x 1.25 x 45mm	- 3/8"-16 UNC x 2"
- 1/4"-28 UNF x 3"	- 3/8"-16 UNC x 3"
- M8 x 1.25 x 65mm	- 3/8"-16 UNC x 4.5"
- 5/16"-24 UNF x 3"	- M10 x 1.5 x 35mm
- 5/16"-18 UNC x 3.5"	
- Special Stepped Bolts - 1990 & Newer



7403

Steering Wheel, Pulley, and Flywheel Puller

Here's a puller that works in a variety of applications. It pulls steering wheels on most late model cars. It also works as a regular 2/3-way puller to remove pulleys and small engine flywheels. Cap screws included (pairs): 3/8"-16 x 3-1/2 in.; 5/16"-18 x 3-1/2 in.; 5/16"-24 x 3-1/2 in.; M8-1.25 x 90 mm; and 5/16"-18 x 4 in. (SIR).

- Works on domestic cars with or without collapsible steering columns.



6930

Flange-Type Puller Combination

Heavy-duty flange puller features a live center forcing screw. Includes two live center forcing screw tips and two sets of commonly used automotive bolts. Puller will work on bolt circles from 1-1/2" to 4-1/4". Three cap screws, 3/8"-24 x 3" long, and three cap screws, 3/8"-16 x 3" long.



PA7

7-Ton Capacity Four-In-One™ Puller Set

With the parts included in the PA7, you can quickly assemble a 2/3-jaw puller with standard or long reach. 7-ton capacity, the max. reach of 8-3/4", and max. spread of 11" make it ideal for hundreds of pulling jobs. PA7 includes: 7-ton cap. Standard jaw max. reach: 5". Max. spread: 10-1/2". Long jaw max. reach: 8-3/4". Max. spread: 11".



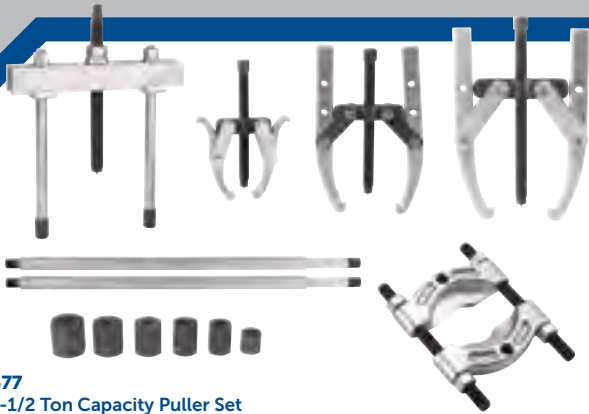
518

Flange-type Puller

- Pulls harmonic balancers, timing gears, and other parts having two or three tapped holes.
- Slotted holes in puller body permit cap screws to be positioned to handle bolt circle diameters from 1-1/2" to 4-5/8"
- Three each of two cap screw sizes included: 3/8"-24 x 3" long and 3/8"-16 x 3" long.



PULLER SETS PULLERS



1677 17-1/2 Ton Capacity Puller Set

This puller set gives you the versatility you want and the tonnage capacity you need to tackle parts removal and installation on many models of cars, trucks, tractors, power shovels, road building machinery, etc. Maintenance operations involving the removal and replacement of gears, bearings, wheels, and other press-fit parts can be done with ease.

Set No. 1677 consists of:

No.	Description	No.	Description
938	Push-Puller with 9-1/2" legs		Internal threaded adapters
1104	16-1/2" legs for 938 (pair)	8037	5/8"-18 x 5/8"-18
1024	2-jaw puller	8038	5/8"-18 x 3/4"-16 (2)
1036	2-jaw puller	8039	5/8"-18 x 7/8"-14
1039	2-jaw puller	8040	5/8"-18 x 1"-14
1130	Bearing splitter	8041	5/8"-18 x 1-1/8"-12
		8043	5/8"-18 x 1-1/2"-12



1676 Strong Box Puller Set

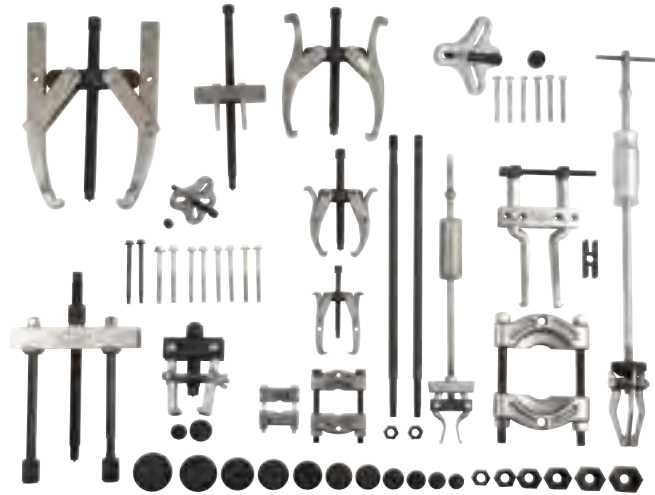
Here's a set of pullers that gives you almost unheard of versatility. You get eight pullers, five attachments, and extra puller jaws. They enable you to pull gears, bearings, pulleys, wheels, and more on cars and light trucks. All these tools are contained in a rugged, lockable metal storage cabinet you can either mount on a wall or stand on a work bench, so they are handy when you need them. Just imagine the jobs you can do with this set!

18886

Storage box only. 29-1/2" wide x 25-3/4" high x 10" deep.

Set No. 1676 consists of:

No.	Description	No.	Description
1026	2/3-jaw puller	7311A	Pitman arm puller
1037	2/3-jaw puller	1122	Bearing splitter
7392	Gear and pulley puller	1123	Bearing splitter
518	Flange-type puller	7372	Rear axle pulling adapter
7403	Steering wheel puller	43888	Long jaws for No. 1026 (3)
1170	Pilot bearing puller		
1177	Slide hammer puller	43892	Long jaws for No. 1037 (3)
		18886	Metal storage box



1675 13-Ton Capacity Puller Set

This versatile 13-ton capacity puller set removes gears, bearings, shafts, pinions, bearing outer races, and other tightly fitted parts. The set includes a Push-Puller, Grip-O-Matic® pullers, bearing pulling attachments, specialized pullers, and many accessories. You can work on all makes and models of cars and light trucks with this set.

1620

Board (3' x 4') for storing No. 1675 set (not included with set).

Set No. 1675 consists of:

No.	Description	No.	Description
927	Push-Puller with 6-3/4" legs	7310A	Pitman arm puller
1101	15-3/4" legs for 927 (pair)	8075	Step plate adapter set
1022	2-jaw puller	8035	Internal threaded adapter: 1/2" -20 x 5/8" -18 (2)
1024	2-jaw puller	8044	Internal threaded adapter set
1035	2-jaw puller	1152	Bearing cup pulling attachment
1039	2-jaw puller	1121	Bearing splitter
7392	Gear and pulley puller	1122	Bearing splitter
518	Flange-type puller	1123	Bearing splitter
7403	Steering wheel puller		
1170	Pilot bearing puller		
1176	Slide hammer puller		

Hydraulic Puller Sets

17-1/2, 30-, and 50-Ton Capacity – Individual items in the sets are fully described elsewhere in this catalog. . . consult index.

1688 17-1/2 ton capacity hydraulic puller set

1689 30-ton capacity hydraulic puller set

1690 50-ton capacity hydraulic puller set

No.	Description	1688	1689	1690
HYDRAULICS				
4012A	Single stage hydraulic hand pump assy.	x	x	x
4120A	17-1/2 ton ram with threaded insert	x		
4121A	30-ton ram with threaded insert		x	
4122A	50-ton ram with threaded insert			x
24815	Tee adapter	x	x	x
9650	Pressure gauge	x	x	x
9767	Hydraulic hose – 6 foot	x	x	x
9798	Hose half coupler with dust cap	x	x	x
PULLERS				
1062	17-1/2 ton Push-Puller with 16-1/2" legs	x		
1066	17-1/2 ton 3-jaw hydraulic puller	x		
1070	30-ton hydraulic Push-Puller with 18" legs		x	
1074	30-ton 3-jaw hydraulic puller		x	
1076	50-ton hydraulic Push-Puller with 24" legs			x
1080	50-ton 3-jaw hydraulic puller			x
ACCESSORIES				
1105	Puller leg – 22-1/2"	x		
1111	28" legs for No. 1070		x	
1113	34" legs for No. 1076			x
1127	Bearing pulling attachment		x	x
1130	Bearing pulling attachment	x		
1154	Bearing cup pulling attachment	x		
1166	Bearing cup pulling attachment		x	
201454	Pushing adapter	x		
24814	Speed crank	x		
27198	Speed crank		x	
28228	Pushing adapter	x		
28229	Ram cap		x	
28230	Ram cap for No. 1076			x
29595	Speed crank			x
32118	Ram adjusting screw	x		
32698	Adjusting screw			x
34510	Pushing adapter		x	
34755	Pushing adapter			x
34758	Adjusting screw		x	
41226	2-way head for No. 1074		x	
41224	2-way head for No. 1066	x		
50449	2-way head for No. 1080			x
8020	1"–8 F. x 5/8"–18 M. threaded adapter	x		
8023	1-1/4"–12 F. x 1"–14 M. threaded adapter (2)			x
8028	1-5/8"–5-1/2 F. x 1"–8 M. threaded adapter			x
8029	1-5/8"–5-1/2 F. x 1"–14 M. threaded adapter			x
8036	Female threaded adapter 1"–14 x 1"–14 (2)		x	
8038	Female threaded adapter 5/8"–18 x 3/4"–16 (2)	x		



1688 17-1/2 ton capacity hydraulic puller set



1689 30-ton capacity hydraulic puller set



1690 50-ton capacity hydraulic puller set

HYDRAULIC PULLER SETS PULLERS



Photo for illustrative purposes only. For complete set contents, see chart below. Individual items in the sets are fully described elsewhere in this catalog, consult index.

Hydraulic Puller Sets

- 1679** 17-1/2 ton hydraulic puller set
- 1680** 17-1/2 ton hyd. farm implement service set
- 1681** 17-1/2 ton and 30-ton hydraulic puller set.
- 1682** 17-1/2 ton, 30-ton, & 50-ton master puller set
- 1683** 17-1/2 ton & 50-ton hydraulic construction equipment service set

No.	Description	1679	1680	1681	1682	1683
HYDRAULICS						
4012A	Single-stage hydraulic hand pump assembly	x	x	x	x	x
4008	2-stage hyd. hand pump w/3-way control valve				x	
9650	2-stage hyd. hand pump w/3-way control valve	x	x	x	(2)	x
9798	Hose half coupler with dust cap	x	x	x	(2)	x
9767	Hydraulic hose – 6 ft.	x	x	x	(2)	x
RAMS						
4120A	17-1/2 ton ram with threaded insert	x	x	x	x	x
4121A	30-ton ram with threaded insert			x	x	
4122A	50-ton ram with threaded insert				x	x
PULLERS						
1025	2-jaw puller		x			
1027	5-ton capacity 2/3-jaw puller	x		x	x	x
1035	2-jaw puller		x			
1039	2-jaw puller		x			
1062	17-1/2 ton cap. hyd. Push-Puller w/16-1/2" legs	x	x	x	x	x
1105	22-1/2" legs for No. 1062 (pair)	x	x	x	x	x
1106	9-1/2" legs for No. 1062 (pair)				x	
1107	4-1/2" legs for No. 1062 (pair)				x	
1070	30-ton cap. hyd. Push-Puller with 18" legs			x	x	
1109	8" legs for No. 1070 (pair)				x	
1111	28" legs for No. 1070 (pair)			x	x	
1076	50-ton cap. hyd. Push-Puller with 24" legs				x	x
1113	34" legs for No. 1076 (pair)				x	x
1066	17-1/2 ton 3-jaw Grip-O-Matic® puller	x	x	x	x	x
41224	17-1/2 ton 2-jaw puller head	x	x	x	x	x
1074	30-ton 3-jaw hyd. puller			x	x	
1080	50-ton 3-jaw hyd. puller				x	x
50449	50-ton 2-jaw puller head				x	x
1037	Combination 2/3-jaw puller	x		x	x	x
41226	30-ton 2-jaw puller head			x	x	
43892	Long jaws for No. 1037 (3)			x	x	x
1041	Combination 2/3-jaw puller	x		x	x	x
30902	Long jaws for No. 1041 (3)			x	x	x
1170	Pilot bearing puller		x			
1176	Slide hammer puller		x			
7392	Gear and pulley puller		x			x
24833	Short forcing screw for No. 7392		x			x
Accessories						
8005	5/8"–18 F x 3/8"–16 M threaded adapter (2)	x	x	x	x	x
8006	5/8"–18 F x 1/2"–20 M threaded adapter (2)	x	x	x	x	x
8007	5/8"–18 F x 1/2"–13 M threaded adapter (2)	x	x	x	x	x
8010	5/8"–18 F x 5/8"–11 M threaded adapter (2)	x	x	x	x	x
8013	5/8"–18 F x 3/4"–16 M threaded adapter (2)	x	x	x	x	x
8015	5/8"–18 F x 3/4"–10 M threaded adapter (2)	x	x	x	x	x

No.	Description	1679	1680	1681	1682	1683
8017	5/8"–18 F x 7/8"–14 M threaded adapter (2)	x		x	x	
8018	5/8"–18 F x 7/8"–9 M threaded adapter (2)	x		x	x	
8019	5/8"–18 F x 1"–14 M threaded adapter (2)	x	x	x	x	x
8020	1"–8 F x 5/8"–18 M threaded adapter (1)	x	x	x	x	x
8021	1"–8 F x 1"–14 M threaded adapter (1)	x	x	x	x	x
8012	1"–14 F x 5/8"–18 M threaded adapter (2)			x	x	
8025	1-1/4"–7 F x 5/8"–18 M threaded adapter (2)			x	x	
8027	1-1/4"–7 F x 1"–14 M threaded adapter (2)			x	x	
8023	1-1/4"–12 F x 1"–14 M threaded adapter (2)				x	x
8024	1-1/4"–12 F x 1-3/4"–12 M threaded adapter (2)				x	
8028	1-5/8"–5-1/2 F x 1"–8 M threaded adapter (1)				x	x
8029	1-5/8"–5-1/2 F x 1"–14 M threaded adapter (1)				x	x
8036	1"–14 F x 1"–14 F threaded adapter (2)			x	x	
8038	5/8"–18 F x 3/4"–16 F threaded adapter (2)	(2)	x	(2)	(2)	x
8056	Shaft protector set	x	x	x	x	x
8075	Step plate adapter set	x	x	x	x	x
8076	Step plate adapter set	x	x			
679	Pulley pulling attachment	x		x	x	
680	Pulley pulling attachment			x	x	
8044	Internal threaded adapter set	x	x	x	x	x
10215	Hex nut: 3/4"–16 (2)					x
1154	Bearing cup pulling attachment	x	x	x	x	x
32136	Long jaws for No. 1154 (2)				x	x
1166	Bearing cup pulling attachment			x	x	x
34479	Reducing adapter for use with No. 1166	x	x	x	x	x
1122	Bearing splitter	x	x	x	x	x
1123	Bearing splitter	x	x	x	x	x
1126	Bearing splitter			x	x	x
1127	Bearing splitter				x	x
1128	Bearing splitter				x	
1130	Bearing splitter	x	x	x	x	x
24814	Speed crank	x	x	x	x	x
24815	Tee adapter	x	x	x	x	x
24829	Short bolt (2)					x
24832	Special puller forcing screw	x		x	x	
27198	Speed crank			x	x	
29595	Speed crank					x
28228	Ram cap	x	x	x	x	x
28229	Ram cap			x	x	
28230	Ram cap				x	x
32118	Ram adjusting screw	x	x	x	x	x
32698	Ram adjusting screw	x	x	x	x	x
34758	Ram adjusting screw				x	x
34510	Pushing adapter			x	x	
34755	Pushing adapter				x	x
201923	Pushing adapter	x	x	x	x	x



4565

Swivel Handle Oil Filter Wrench

- Fits filters ranging from 2-1/2" to 3-1/8" (64 mm to 80 mm) in diameter.
- Features a 1" wide stainless steel band for positive grip on the filter; swivel handle makes it easy to turn filters in hard-to-reach areas.



4568

Oil Filter Wrench, 2 way, 3 leg

- Fits filters ranging from 2-1/2" to 5-1/4" (65 mm to 135 mm) in diameter.
- To turn the tool, use a 1/2" ratchet in the ratchet drive or a 13/16" wrench on the nut.
- Knurled legs provide extra gripping power.



4896

Oil Filter Ring

- Slim wrench provides clearance around oil coolers and crank position sensor. Use on 14 flute HD filters. 3/8" square drive.

6901

Oil Filter Socket

- Fits Wix oil filters on S&S Engine applications, as well as other filters with 74mm x 15 flutes.



6905

Oil Filter Socket

- Fits Polaris oil filters, as well as other filters with 66.5mm x 14 flutes.



4898

Oil Filter Socket

- Fits Polaris oil filters, as well as other filters with 64mm x 14 flutes. Similar to Polaris No. PU-50105.



6906

Oil Filter Wrench

- For HD Street models as well as other filters with 65mm x 14 flutes. Similar to HD-51453.



Strong magnetic end.

5911A

Drain Plug PRO

- The OTC 5911A magnetically attaches to pre-loosened oil pan drain plugs so you can remove them without dropping and avoid getting burned with hot oil.
- The patented design provides universal application to hex heads. A flexible shaft can be used in virtually any location and still turn the plug as desired.
- Removable magnetic end with 1/4" square drive. When removed, the drain plug pro becomes a flexible-shaft 1/4" bit driver.
- Use for sockets and bit holders to get into hard-to-reach places including under dashboards and in engine bays to remove bolts once loosened. Designed for repetitive daily use with a Lifetime warranty.



4848

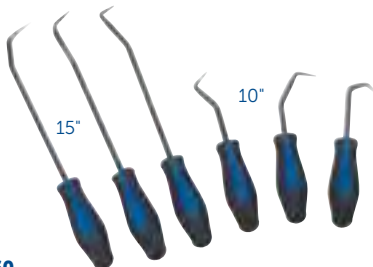
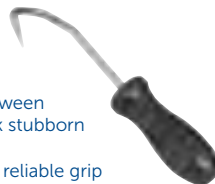
Flexible Spout Funnel

Many oil, transmission, and coolant fluid fill caps are located in hard to access areas. This aluminum 5 1/2" funnel features a removable debris screen in the base flowing to a 25" flexible spout designed to reach these difficult fill locations.

4521

Hose Removal Tool

- Unique tip easily fits between hose and fitting to break stubborn hoses loose.
- Large handle provides a reliable grip on tool during hose removal.
- Works on fuel and oil lines – any place a rubber hose is clamped to a fitting.



8260

Hose Removal Set (6-piece)

- Consisting of six (6) hose removal tools which consists of three (3) 10", soft-handled tools and three (3) 15", soft-handled tools, each with a hard end-cap.
- They are made of heat-treated, chrome steel with assorted tip shapes.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Hose removal tools can also be used on upper and lower radiator hoses, clips, washers, gaskets and other items.
- Packaged in a molded tray.



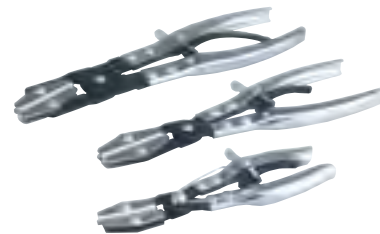
4496

Hose Clamp Pliers Set

Contains five different styles of hose clamp pliers, which will service most flat-band and ring-style hose clamps. Also contains a hose removal tool.

Set Contains:

- Straight hose clamp pliers set
- Hose removal tool
- Flat-type hose clamp pliers
- Offset hose clamp pliers
- 45° hose clamp pliers



4510

Hose Pinch Off Pliers Set, 3 Piece

- Shuts off flow through vacuum lines, fuel lines, coolant lines, etc.
- Cocking ratchet mechanism holds pivoting jaws tightly in place. Heavy-duty swivel jaws pivot to assure parallel pinching.
- Available separately:



4522

Vacuum Hose & Fuel Line Removal Tool

Designed to remove vacuum hose or fuel lines (3/16" to 1/2") from fittings or tubing.



4839

Adjustable Piston Ring Expander Pliers

These simple pliers include tips designed to capture the ends of piston rings to hold and expand them securely while installing onto pistons.



4437
8-Piece Sensor Socket Set

Includes:

- 4673-1** 29 mm Vacuum Switch and O2 Socket, 1/2" drive
- 4673-2** 7/8" Vacuum Switch and O2 Socket (wide slot), 3/8" drive
- 4673-3** 27 mm Thermal Sensor Switch, 1/2" drive
- 4673-4** 7/8" Vacuum Switch and O2 Socket (narrow slot), 3/8" drive
- 4673-5** 1-1/16" & 1" Oil Pressure Sending Unit Socket, 3/8" drive
- 4673-6** 7/8" O2 Sensor Socket, offset 1/2" drive
- 4673-7** 7/8" O2 Sensor Socket (low profile), offset 3/8" drive.
- 4437-8** 1-1/16" and 1" Oil Pressure Socket (short access), 3/8" drive



4480
Basic Fuel Injection Service Kit

Performs running, residual, rail and flow rate pressure tests on fuel injected engines. Kit includes adapters, hoses, fittings, and a professional dual scale gauge that reads 0-100 PSI and 0-700 kPa with relief valve. All packaged in a professional, heavy-duty, blow molded carrying case.



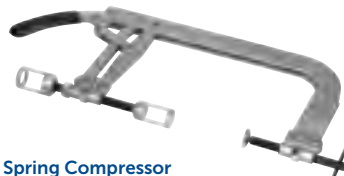
7991
Cooling System Pressure Tester

Now you can pressure test the cooling system on motorcycles, ATVs, and even snowmobile applications. The tester's universal fit eliminates the need for multiple adapters.



4842
Heavy Duty Valve Spring Compressor

Used to compress valve springs for removal or installation. The heavy duty C-frame has a 9" opening and a 5" throat. Kit includes 16mm, 19mm, 23mm, 25mm, and 30mm valve spring retainer adapters.



4572
Valve Spring Compressor

- Designed to compress valve springs on overhead valve engines.
- Includes two valve spring adapters, which fit valve spring retainers up to 1" (25 mm) and 1-3/16" (30 mm).
- Unique, direct action compressor lever gives better visibility of valve spring retainers located in difficult access areas.
- Jaw opening of 1-3/8" to 5-5/8" (35 mm to 142 mm); throat clearance of 5-7/8" (150 mm).



Similar to PU-43506-A

7211
Fuel Pressure Gauge Kit

For fuel system diagnosis. It features a sturdy 3-1/2" dial that reads 0-100 psi. It also has a built-in (100-150 psi) retard to prevent excess pressure damage. Check valve to lessen chance of fuel spray.

- Includes 6-ft. bleed hose and 30" pressure hose.
- Bleed valve eliminates air from injection system and can be used to reduce pressure when disconnecting hoses
- Bleed valve also allows gauge assembly to be used to check fuel pump volume.

306905 Optional pressure hose, 70" long.



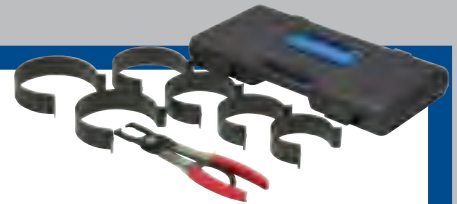
7602
Noid Light
 For HD Port Fuel Injection models.



518542
 Similar to PS-48762

518542
Fuel Injection Shradler Fitting
 Used for connecting to fuel system for diagnosis.

7361
Fuel Line Disconnects
 Disconnect tool designed to fit quick-connect fuel line fasteners. Use to separate fuel lines without damaging the connectors. Tools fit 5/16" and 3/8" lines.



4838
Piston Ring Compressor Set, 6 Piece

This 6 ring set covers 2-7/8" thru 4-3/8" piston diameters. The ring compressor pliers feature a ratcheting lock to hold the handles in position for easy piston installation.



4840
Piston Ring Compressor Set with Ring Expander

This complete set includes 12 chrome plated compressor sleeves covering 1-3/8" thru 4-3/8 diameter piston applications. Both the ring compressor and ring expander pliers feature a ratcheting lock to hold the handles in position for easy piston and ring installation. Complete with a metal carry case.



4875
 Similar to HD-47941



4876
 Similar to HD-42314

Cam/Crank Locking Tool

- Designed to lock the cam and crank sprockets together for removal, replacement and proper torquing of the sprocket bolts.

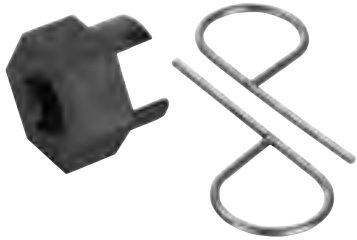
4875 Application; Dyna 2006 & Later

4876 Application; Twin Cam 88/B 1999 & Later



4844
Cam/Crank Locking Tool, Twin Cam & Dyna

- Designed to lock the cam and crank sprockets together for removal, replacement and proper torquing of the sprocket bolts.
- Double end design covers;
- Twin Cam 88/B 1999 & Later
- Dyna 2006 & Later



**4849
Cam Chain Tensioner Unloader Tool**

- These tools are used to unload the pressure of the primary and secondary chain tensioners when servicing HD Twin Cam 88 engines.
- Tools can also be used to check spring loads on chain tensioners.
- Applications include 99-06 FL, 99-05 FXD, 00-06 FXST.
- Similar to HD-42313.



**7419
Timing Tensioner Locking Pin Set**

- This pin set is used to lock timing belt or chain tensioners once they have been compressed, required during the service procedure.
- Once the belt or chain service is complete, the pin is simply pulled out to return the tensioner to functional.
- 6 pin set with clip to cover most all applications.



**4723
Ear Type Clamp Pliers**

- Used to crimp the type of clamps used on fuel and cooling system hoses.
- Ensures even, precise crimping, and eliminates possibility of damage to the clamp, boot, or hose.



**6589
Electronic Ignition Spark Tester**

Use to quickly check spark on 2 and 4 stroke gasoline engines with electronic ignition systems.



**4845
Wrist Pin Installer & Remove Tool**

- Removes and installs piston wrist pins without having to hold the piston in position and use a drift.
- Applications include HD stock and aftermarket engines, including Twin Cam, and other engine makes with similar piston pin diameter sizes.



**4846
Tappet Block Alignment Set**

- These adapter screws provide perfect alignment of the oil hole from the crank case to the tappet block on Shovel and Evo style engines.
- Align rocker boxes on Evo heads.
- Also align twin cam oil pump.
- Applications include all HD Big Twin single cam engines, stock and aftermarket, 76 – Present.
- Similar to HD-33443.



**4851
Tappet Oil Filter Screen Plug Tool**

- A simple tool to remove the tappet oil filter screen plug without removing the exhaust pipes on HD applications. Can also be used on any slot type plug.



**4847A
Twin Cam Inner Cam Bearing Remover/Installer Kit**

- This kit contains the tools to remove and install inner cam bearings without damage to the crankcase.
- The bearing puller is designed to trap the needle bearings and keep them from falling into the crankcase.
- The installation tools are designed to press on the outer most diameter of the bearing, eliminating damage to the bearing, cam, or case. The press adapter will also set the bearing to its proper depth.
- Removes and installs both 7/8" and 1" ID bearings.
- Similar to HD-42325-B.



**4866
Timing Plug**

- This threaded clear acrylic timing plug used in conjunction with a timing light allows for viewing the crankshaft timing marks without oil spraying out of the crankcase, typical during full advance RPM.
- Fits all HD models.
- Similar to HD-96295-65D.



**4948
Water Pump Drive & Rotor Puller**

- Installs the water pump drive gear on the rotor and removes the rotor from the crankshaft. This tool also works on RZR XP.
- Similar to Polaris No. PA-49316.



5604
Motorcycle Compression Tester Kit

Designed specifically for testing motorcycle and small engines, this kit features a specially designed compression gauge and hose assembly, plus three different size hose adapters. Compression Tester and hose lengths are designed for optimal viewing along side engine. Covers most popular motorcycle and small engine plug sizes.

Features and benefits:

- Corrosion resistant nickel plated finish
- 10" flex hose gauge assembly with quick coupler.
- 2-1/2" gauge features chrome bezel and rugged protective outer boot
- Dual scale gauge reads 0-300 psi and 0-2100 kPa
- 12" flex hose -14 mm standard/plus reach (extra length supports V-Twin applications)
- 12" flex hose -12 mm standard reach
- 12" flex hose -10 mm standard reach
- Rugged blow molded hard case with removable lid
- Repair parts kit



5613
Vacuum/Pressure Gauge Kit

Ideal for testing vacuum lines and components. Accurately tests low-pressure fuel systems. Quickly diagnose internal engine problems such as bad rings, valves and leaking head gaskets. Kit comes complete with adapter for most applications. Pin point hard to find problems such as cracked lines.

Features and benefits:

- Large 3-1/2" gauge features a chrome bezel and rugged protective outer boot.
- Dual purpose gauge reads vacuum and pressure.
- Dual scale gauge reads 0-30 in. Hg vac and 0-70 cm Hg, also reads 0-15 psi and 0-100 kPa.
- Built in rear hook allows gauge to be hung at eye level.
- Adapters for most applications.
- Blow molded hard case with removable lid.
- Detailed instruction chart.



5609
Cylinder Leakage Tester Kit

Quickly diagnose internal engine problems such as bad rings, valves and leaking head gaskets. Kit come complete with adapters for most applications.

Features and benefits:

- Dual 2-1/2" gauges feature chrome bezel and rugged protective outer boot.
- Scales read 0-100 psi and 0-700 kPa.
- Pressure regulated manifold includes quick couplers.
- Long flex 24" 14 mm hose.
- 10 mm, 12 mm and 18 mm thread adapters.
- Blow molded hard case with removable lid.
- Detailed instruction chart.



6978
Vacuum Test Kit

OTC 6978 Test-Vac Vacuum Test Kit allows fast, efficient testing and monitoring of many vacuum operated components and also allows one man brake bleeding. The new kit can help find vacuum leaks, test fuel, engine and exhaust valves, door locks, and heating/cooling system performance. Included in the kit are the vacuum pump, fluid container, transfer cap, hoses and fittings, packaged in a convenient blow molded storage case and covered by OTC's Lifetime Warranty.

Includes:

- Vacuum pump with integrated vacuum gauge
- Fluid container with transfer cap
- 2 lengths of vacuum hose
- 12 assorted vacuum hose fittings
- 3 brake bleed fittings
- Instruction Manual
- Blow Molded Storage Case



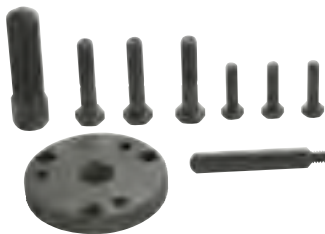
**4742
Flywheel Puller Kit**

- Developed for many small engines in the ATV, and Motorcycle service markets, these tools are machined from high quality tool grade steel and are packaged in a convenient blow-molded case.
- Each part is marked with size for reference and has a corresponding location in the storage case.
- Works on many makes like Honda, Suzuki, Kawasaki, Yamaha, Ducati and others. For street, performance or off-road.



**4800
Clutch Hub and Alternator Puller**

Removes clutch on Big Twins with 3, 5, and 10 fingers. Also works on Sportster transmission sprocket and clutch. Pulls motor sprockets, alternator covers, and many general pulling applications.



**4850
Flywheel Puller**

Designed to pull magneto flywheel, clutch hubs, or starter gears. Works on wet or dry clutches. 6x25mm and 8x40mm bolts included.



**4860
Transmission & Steering Bearing Puller/Installer Kit**

- This combination kit works on transmission main-shaft and steering stem bearings on HD motorcycles.
- Removes; Fork stem bearings on most applications. Flywheel bearing 00-03 XL. Removes/Installs; Inner bearing race on trans main-shaft Big twin 84 & later.
- Aftermarket trans main-shaft bearings & bushings on 5 & 6 spd. LSD and RSD trans.



**4864-1
Flywheel Puller**

- M33x1.5 RH Internal threads.

Applications

- KTM 625 SMC 2006, 640 LC4 Adventure 04-07, 640 LC4E 2001, 690 RFR 2008
- Suzuki GSXR 1000 01-08, GSXR 600 01-09, GSXR 750 00-08
- Yamaha WR 450F 04-08, YFZ 450 04-09.



**4864-6
Flywheel Puller**

- M38x1.5 RH Internal threads.

- Includes crankshaft protector.

Applications

- Arctic Cat DVX 400 04-07
- Kawasaki KLX & KSF 400 03-06
- Suzuki AN & LT-Z 400 03-07, DR-Z 250 01-07, LTZ 90 2007, LT-Z 250 04-07, LT-F 300F 99-01, DR-Z 400 01-06, DR-Z 400E 00-07, DR-Z 400S 00-06, DR-Z 400SM 05-07, LT-R 450 06-08.



**4864-2
Flywheel Puller**

- M50x1.5 RH Internal threads

- Includes crankshaft protector.
- Fits Suzuki.



**4864-3
Flywheel Puller**

- M24x1.5 RH Internal threads.

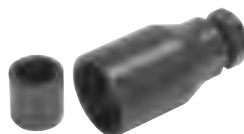
- Includes 12mm shaft protector cap.
- Fits Honda, Kawasaki, and Suzuki motorcycle applications.



**4864-4
Flywheel Puller**

- M26x1.0 RH Internal threads.

- Includes 12mm shaft protector cap.
- Fits KTM 4 stroke motorcycles.



**4864-5
Flywheel Puller**

- M30x1.0RH Internal threads.

- Fits Yamaha WR 250F.



**4888
Flywheel Socket Set**

- The best flywheel sockets available. These offer a low profile design that provides full nut to socket contact to eliminate rounding off the nut and slippage. Made from heat-treated chrome moly steel.

Set includes:

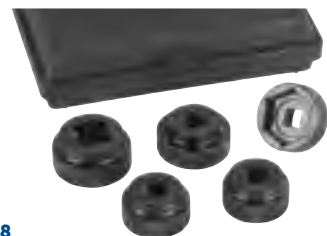
Socket fits pinion shaft nut on big twin 81-89. Size 1-1/4" with 1/2" square drive.

Socket fits crank pin nut on big twins 54 - early 81. Size 1-5/16" with 1/2" square drive.

Socket fits crank pin nut on Sportster 81-99 and Buell 87-99. Can also be used on top fork nut on glide forks. Size 1-3/8" with 1/2" square drive.

Socket fits crank pin nut on big twin 83-99 single cam. Size 1-1/2" with 1/2" square drive.

Socket fits sprocket shaft nuts on big twins 72-99 single cam. Size 1-5/8" with 3/4" square drive.





**4970
Heavy Duty Flywheel Puller**

- Extremely heavy duty puller to pull the most stubborn flywheels. Includes 2 drive screws and bolts; 8mm x 1.25 x 60mm (3X), 6mm x 1.0 x 55mm (6X), 6mm x 1.0 x 50mm (6X).
- The 6 bolt capable design fits Polaris ATV, Snowmobile, Watercraft and many other makes and models.
- Similar to Polaris No. 2871043-A.

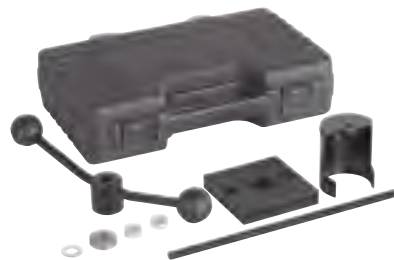
**4858
Clutch Spring Compressor Tool**

This tool will release the clutch spring pressure for easy removal and installation of the retainer ring. Applications include HD big twin 90-97, and includes spring compressor nut for use on XL 91-05 and Buell.



**4992
Clutch Spring Compressor Tool**

- This is a required tool for efficient servicing of HD 1340 cc (80 ci) clutches. The compressor relieves spring pressure for disassembly during servicing. Applications include 1340 cc (80 ci) Models 90-97, Buell 95-Later, XL 91-Later.
- Similar to HD-38515-A.



**4991
Clutch Compressor Tool**

- This universal compressor is used to compress the drive or driven clutch during assembly of disassembly. Innovative design makes use quick and effective without binding. Works on all Polaris and TEAM clutches found on full-sized model ATV, Side x Side, and Snowmobile.
- Similar to Polaris No. PU-50518.



**4971
Clutch Holding Wrench**

- Designed to hold the drive clutch for retainer bolt removal and torquing. For both P-85 and P-90 drive clutches on Polaris ATV & Side x Side.
- Similar to Polaris 9314177-A.



**4972
Drive Clutch Holding Fixture**

For solid holding of drive clutch for spider removal when shimming for belt-to-sheave clearance or servicing spider.

- Bolt to bench or clamp in a vise.
- Contacts all webs for maximum support to eliminate clutch web damage.
- Center hold down for much greater holding stability while applying off center torque.
- Single person operation, even on the most difficult spiders.
- ATV and Ranger applications.
- Similar to Polaris No. 2871358-B.



**4990
Clutch Holding Tool**

- Designed to hold the clutch basket while removing or servicing clutch.
- Fits 00-02 Polaris Xpedition models.
- Similar to Polaris PA-44688.



**4801
Universal Clutch Holder**

Holder arms designed to fit into the external teeth of a clutch hub, but can also be used on gears and sprockets. Opens to handle a 5" OD hub.



**4986
Primary Drive Clutch Puller**

- Removes primary drive clutches on Polaris ATV & Snowmobile 1985-up (except 400, 500, 600, 700, 800 domestic twins, '99 700 & 800 XCR, '99 Trail RMK, & Supersport 550 Fuji). 3/4" - 16 thread, 10-1/2" long.
- Similar to Polaris 2870506.

**4985
Primary Drive Clutch Puller**

- Removes primary drive clutches on Polaris ATV Sportsman 600/700 twin EFI X2 02-08.



**4984
Secondary Drive Clutch Puller**

- Removes secondary drive clutches on Polaris ATV & Side x Side 1985-up. 1" - 12 rolled thread, 5-1/2" total length.
- Similar to Polaris No. 2870913.



**4974
Clutch Puller**

- Removes drive clutches on Polaris Side x Side and Snowmobile.
- Snow Applications: 700/800 XCR Fuji 3 cylinder engines 1999-2001, all Domestic twin 2 -strokes model year 2000 and newer, FS/FST models 2006 and newer.
- Side x Side Applications: Ranger RZR XP 2011 and newer.
- 3/4-16 thread.
- Similar to Polaris 2872085.



**4975
Clutch Puller**

- Short puller for removal of the drive clutch from the crankshaft taper on Polaris 550 Sportsman XP 4x4 09-12, 550 Sportsman (all models) 10-12, 570 RZR 4x4 12, 800 RZR 4x4 (all models) 08-12, and Ranger Diesel.
- Similar to Polaris PA-48595.



**4978
Clutch Alignment Tool**

- Establishes correct clutch offset and alignment on Polaris EBS Clutches.
- Similar to Polaris 2872292.



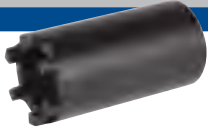
**4979
Clutch Alignment Tool**

- Establishes correct 1/2" clutch offset and alignment on Polaris ATV & Side x Side.
- Similar to Polaris 28870654.



**4980
Clutch Alignment Tool**

- Establishes correct clutch offset and alignment on Polaris P85 Clutches.
- Similar to Polaris 2870426.



**4987
Clutch Spider Nut Socket**

- Used to remove and install the drive clutch spider jam nut on 2011 & newer Ranger RZR XP. Similar to OE P/N PU-50578.
- Similar to Polaris No. PU-50578.



**4988
Clutch Spider Nut Driver**

- Essential when servicing or re-building Polaris clutch. Fit's P85 and P90 clutches found on Polaris ATVs and snowmobiles 1972 to Present. (except 900 RZR XP 4x4 11-12, 900 RZR XP 4 4x4 12).
- Similar to Polaris No. 2870338.



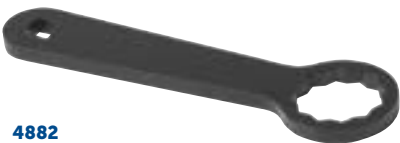
**4989
Clutch Spider Tool**

- Essential when servicing or re-building Polaris clutch. Fit's P85 and P90 clutches found on Polaris ATV, Side x Side, and snowmobiles 1972 to Present.
- Similar to Polaris No. 2870341.



**4880
4-in-1 Hex Axle Tool**

- Fits internal hex on many late model sport bike axles and some dirt bikes.
- Heavy duty CrMo steel construction for shop use.
- Four metric hex sizes: 17 mm, 19 mm, 22 mm and 24 mm.
- 3/8" square drive on both ends.



**4882
Rear Axle Wrench**

- This wrench allows for simple adjustment of drive belt tension or rear wheel alignment.
- Eliminates the need to remove any exhaust components.
- 36mm wrench includes a 1/2" square drive allowing for use with a torque wrench for proper axle torque.
- Similar to HD-47925.

**6673
Belt Tension Gauge**

Belt tension gauges are used to properly check drive belt tension on drive belts to ensure maximum belt and bearing life. This belt tension gauge simply connects to the belt to provide the tension reading. Dual scale reads 30–180 lbs. (2.5-15 ft. lbs.) and 130-800 Newtons, covering the 10 ft. lb. spec. typically found on rear drive motorcycle belts.



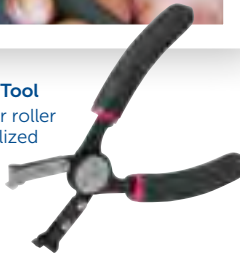
**4748
Belt Tension Gauge**

This easy to use and read tool allows for accurate belt tension to be set after belt replacement, adjustment, or wheel service. Use on secondary drive belts with a 10 lb. spec. Instructions; 1. Position the small O-ring over the 10 lb. mark. 2. Position the U-shaped belt cradle against the bottom of the belt at a 90 degree angle and locate the large O-ring to a reference point, record reading. 3. Push upward on the rubber bumper until the small O-ring touches the bottom of the tool body. Re-align the large O-ring to the reference point, difference in the reading is the belt deflection (refer to service manual for spec.)



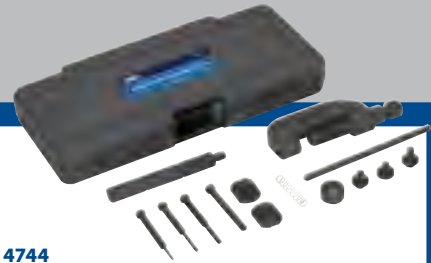
**4745
Chain Master Link Clip Tool**

Designed specifically for roller style chains with specialized tips to easily remove and install master link clips. Includes comfort grip handles.



**4746
Chain Master Link Plate Tool**

Tool will remove press-fit master link plates found on many standard and O-ring style roller chains. Will also break 40-60 series chains to add a master link or remove links.



**4744
Chain Breaker and Riveting Tool Kit**

This kit will break, press, and rivet most #25 - #35 and # 428 - #630 standard and O-ring roller chains. Includes HSS rivet tip for riveting hollow nose master links. The hardened steel body has a removable handle for compact storage.



**4738
Chain Breaker & Riveting Tool Kit**

This heavy duty kit makes easy work out of breaking, pressing, and riveting # 415 - # 632 size standard and O-ring chains. The handle can be mounted in 3 different positions on the forged and hardened alloy c-frame, providing access while the chain is on the vehicle. The kit can rivet hollow nose master links as well as hardened pins. Storage case included.



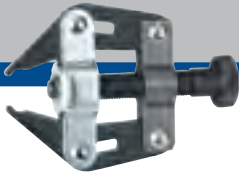
**4739
Chain Brush**

Use to clean and oil various sized roller chains found on motorcycles, ATVs, machinery, etc. Brushes adjust to chain widths ranging from 1/4" to 9/16".



**4749
Chain Alignment Tool**

Designed to simplify the alignment of the countershaft and rear sprocket during chain adjustment or wheel service. Tool clamps to rear sprocket and held with the thumb screw. The rod indicates alignment.



4758
Motorcycle/ATV Chain Tensioner

- Tool is designed to work on drive chains found on motorcycles and all-terrain vehicles (ATVs). Fits the following size chains: 428, 520, 525, 528, and 530.
- Tool jaws fit in chain link ends. Tightening the forcing screw pulls the jaws together to hold the chain for easy removal or installation of the chain connector or master link.



714
Horseshoe Lock Ring Pliers

These pliers feature 8" handles and are designed to spread and remove horseshoe style lock rings found on engines, transmissions, and chassis.



7313
Retaining Ring Pliers

These pliers are 7-3/4" long and are designed to spread and remove retaining rings found on engines, transmissions, and chassis. Maximum spread is 1- 1/16".



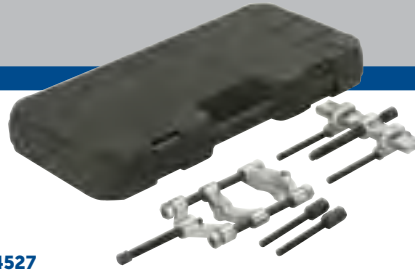
4623
CV Joint Banding Tool and Cutter

Use to install and tighten the "band-it" or strap style clamps found on CV joint boots, steering gear boots, or hoses. Tighten the band by turning the handle on the tool; use a socket or wrench on the handle to torque the band to OE specifications. When the boot clamp has been tightened to specs, cut the band to the correct length by flipping the lever (at the front of the tool) forward.



4721
CV Boot Clamp Cutter

Designed to easily cut the CV boot clamp without damaging the boot. Will cut boot clamps up to 10 mm wide and .7 mm thick. Handles are spring loaded to the open position to allow easy access to the clamp.



4527
5-Ton Pressure Beam Bearing Splitter Kit

Single point of adjustment allows quick attachment of 3" splitter to the bushing or bearing. Pressure beam is used in conjunction with interchangeable legs. Includes carry case.



7790
Flange Puller Set (48 piece)

Versatile puller capable of removing a wide variety of components having tapped pulling holes such as gears, pulleys, etc.

- Capable of handling 2- or 3-way bolt pulling applications.
- Puller flange: adapts to bolt circle dia. of 1-1/2" to 4-5/8".
- Forcing screw: 5-5/8" lg., 5/8-18 thread.
- Shaft protector: 1-3/16" dia. x 3/4" thick.



525
Flange-Type Puller Combination

Two specialty pullers in one box. You get a flange-type puller for removal of parts with two or three tapped holes. You also get a pulley and flywheel puller. 525 includes: flange-type puller along with a puller with four sets of cap screws.



5049
Pilot Bearing Puller

Make quick work of pulling stubborn, rusted pilot bearings. Fits 1" I.D. bearings. The puller's forcing screw expands the jaws inside the bearing and simultaneously pushes against the bottom of the blind hole.



6981
Blind Hole Puller Set

Pilot bearings and pilot bushings are one of the most critical components in a transmission clutch system. Damage, wear, or contamination can result in binding on the input gear and may be revealed as the clutch drag symptoms or even a growling sound when clutch pedal is fully released.

- 5 - collet-actuator combinations cover 5/16" to 1-1/4" I.D.
- Use collets with Pulling Bridge or as Slide Hammer Attachment.
- Easy to read component application chart and instructions.
- Conveniently laid out in rugged blow mold storage case.
- Forged and machined in Owatonna Minnesota, U.S.A

1037
7-Ton Grip-O-Matic Puller

Mechanical Grip-O-Matic® Puller Remove and install parts for fast, effective repairs.

- The puller is forged from quality steel, heat treated, and subjected to rigorous tests which exceed their rated capacity.
- 7-Ton, 2/3-Jaw
- Max. Reach 5" Max. Spread 10-1/2"
- Screw Size 11/16"-18 x 9"
- Jaw Thickness Upper 5/16" Lower 11/32"
- Jaw Width Upper 1" Lower 1"



4532
7-Ton Multi Purpose Bearing and Puller Set

- Offers a bearing/pulley tool solution featuring a classic "H" Bar style puller block accommodating 7" to 11" application spread.
- Comes with 2 sets of forged jaws for a pulling reach range of 5" to 9" – tempered for heavy-duty applications. Two forcing screws are included for short and long pulls.
- Where a Push Puller is the best pulling choice and threaded holes are not available, the 4532 provides technicians and shops with a solution for many applications like side bearings, alternators, generators, power steering and crankshaft pulleys.
- Deep set works excellent for pulling the primary plate from the transmission



**7403
Pulley and Flywheel Puller**

Here's a puller that works in a variety of applications. Works as a regular 2/3-way puller to remove pulleys and small engine flywheels. Cap screws included (pairs): 3/8-16 x 3-1/2 in.; 5/16-18 x 3-1/2 in.; 5/16-24 x 3-1/2 in.; M8-1.25 x 90 mm; and 5/16-18 x 4 in. (SIR).



4518-3



4518-2

**4518
5-Ton Bar-Type Puller/Bearing Separator Set**

- This combination set includes our two most popular bearing 'splitters' (2" and 3"), four sets of hex push-puller legs and a bar-type puller head with a 9/16" forcing screw. Separator tools are used with bar puller and legs for a wide variety of pulling jobs.
- The 5" puller cross-bar with a 6-1/4" forcing screw or each of the bearing separators may also be used separately or in combination with other pullers or tools.
- A blow-molded plastic storage case keeps set contents organized and protected from loss.

Tool No.	Min. Spread	Max. Spread	Tapped Holes	Distance Between Adj. Screws
4518-2	3/16"	2-3/8"	3/8-16	2-3/8"
4518-3	1/2"	2-3/8"	3/8-16	3-9/16"



**4852
Adjustable Primary Locking Bar**

- Used to lock primary for service work.
- Will work on Chain or Belt Drive style primary drives.
- Adjustable length from 4" to 7-1/4" to cover virtually any application.

**6930
Flange-Type Puller Combination**

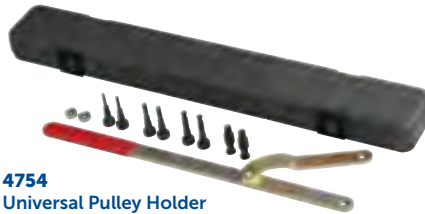
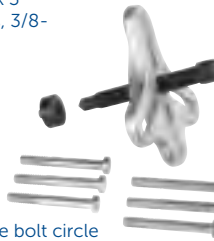
Heavy-duty flange puller features a live center forcing screw. Includes two live center forcing screw tips and two sets of commonly used automotive bolts. Puller will work on bolt circles from 1-1/2" to 4-1/4". Three cap screws, 3/8-24 x 3" long, and three cap screws, 3/8-16 x 3" long.



**518
Flange Puller**

Pull larger diameter parts having two or three tapped holes.

- Slotted holes in puller body permit cap screws to be positioned to handle bolt circle diameters from 1-1/2" to 4-5/8".
- Three each of two cap screw sizes included: 3/8"-24 x 3" long and 3/8"-16 x 3" long.



**4754
Universal Pulley Holder**

- Universal design fits many different size pulleys having slots or holes, such as crankshaft / transmission pulleys or gears.
- Wrench is adjustable from 1-1/2" to 8-5/8"; four different size step pins are interchangeable.
- Long handle enables technician to easily hold the pulley when tightening or loosening retaining bolts.

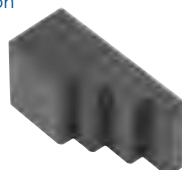


**4802
Universal Pulley Holder Locking Pliers**

This adjustable locking pliers can be used to hold pulleys, clutch hubs, flywheels, gears, and sprockets with internal or external teeth up to a 4" diameter. Can also be used on applications with slots or holes with the 5/16" pins.

**4856
Primary Drive Locking Tool**

- This wedge is placed between the primary chain and motor sprocket to lock them together during removal and installation of the engine sprocket nut without damage.
- Made of POM material to not damage the sprocket or chain.
- Fits all chain primaries.
- Similar to HD-41214.



**464
Griplock 2 Ton, 3 Jaw Puller**

Three-in-One "Griplock" Puller is used for general purpose pulling such as hubs, gears, bearings and anywhere this versatile puller can be attached.

- Pressure bearing yoke cap holds jaws in place for ease of set up - in any orientation.
- Yoke arms have two jaw positions and do not require tools to change.
- 2 or 3 jaw applications, with a 3" to 4" spread.
- Both external and internal pulling action.



**465
Griplock 5 Ton, 3 Jaw Puller**

Three-in-One "Griplock" Puller is used for general purpose pulling such as hubs, gears, bearings and anywhere this versatile puller can be attached.

- Pressure bearing yoke cap holds jaws in place for ease of set up - in any orientation.
- Yoke arms have two jaw positions and do not require tools to change.
- 2 or 3 jaw applications, with a 3" to 7" spread.
- Both external and internal pulling action.



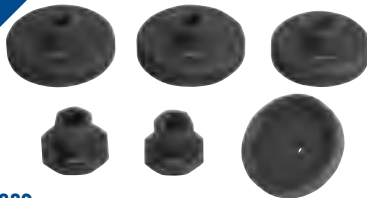
**4803
Universal Pulley Holder Locking Pliers Set**

This adjustable locking pliers can be used to hold pulleys, clutch hubs, flywheels, gears, and sprockets with internal or external teeth up to a 4" diameter. Can also be used on applications with slots or holes with the addition of the interchangeable 5, 6, 7, 10, and 16mm pin sets. Complete with metal carry case.



**4804
Heavy Duty Pulley Holder**

This strap style universal wrench features a 9" drop forged handle and 23" leather strap for excellent grip on diameters up to 7". The milled foot increases grip on the strap and pulley as handle force is increased.



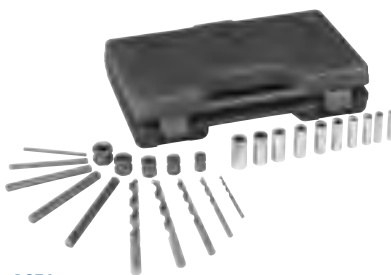
4889
Fork Cap & Compression Valve Socket Set

- This set is designed to fit fork cap sockets or the compression body with an octagonal shape. These offer a low profile design that provides full nut to socket contact to eliminate rounding off the nut and slippage. Made from high quality aluminum and can be driven with the 3/8" square drive or 19mm wrench.



4891
Fork Spring Compressor Kit

- Designed to install fork caps on forks with a large amount of spring pre-load. Kit includes 39mm and 41mm adapter sets, and one jackscrew.
- Application: 39mm and 41mm HD forks.



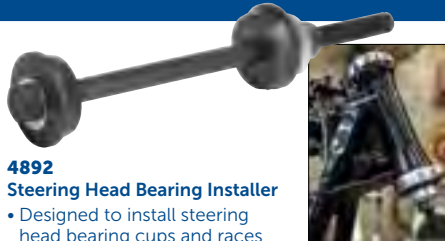
4651
Screw Extractor Set

- Removes broken studs and bolts.
- Includes ten guide bushings, five drill bits and five screw extractors with extractor nuts.
- Drill bits are left handed to help removal.



6939
ATV U-Joint Press

Use to remove and install ATV driveshaft U-Joints.



4892
Steering Head Bearing Installer

- Designed to install steering head bearing cups and races completely straight without any damage.
- Will work on stock and custom applications.
- Similar to HD-39302.



4886
Swing Arm Bearing Tool

- Designed to install new needle style bearings into a swing arm. Includes 3 drivers to fit different size bearings. Driver 1 (22.0mm/26.8mm), Driver 2 (21.0mm/26.0mm), Driver 3 (20.0mm/26.0mm).
- Application: For use on late model off-road motorcycles such as Honda, Suzuki, Kawasaki, Yamaha models.



4884
Swing Arm Pivot Bearing Puller

- An essential tool for removing and installing pivot bearings in swing arms and front fenders.
- Applications include HD Softail swingarms 86-Present, HD Springer front fender mounts 97-11.



4968
Swing Arm Tool

- This 2-in-1 tool is designed with one end for removing and installing the pivot bolt lock nut, while the other end will remove the pivot bolt.
- Applications include Honda 4-stroke 4 wheelers.



4964
Ball Joint Service Kit

- Use to remove and install ball joints in vehicle on Sportsman XP, RZR and Ranger models.
- Similar to Polaris No. PU-50506.



4965
ATV Steering Knuckle/Ball Joint Separator

- Eliminates damaging the A-Arm, ball joint stud, or rubber boot while separating the ball joint from the knuckle body. Includes 2 drive bolts for Applications include ATV models Honda TRX and Yamaha YZF, YFZ, and YFM.



4966
ATV Steering Knuckle/Ball Joint Separator

- For removal and installation of lower ball joints on models with pressed-in ball joints on the front strut casting found on Polaris and other Makes.
- Similar to Polaris No. 2870871



4995
Coil Spring Compressor Locking Pliers

- Locking pliers with special jaws that clamp on the external side of the coil spring. Use 2 pliers to evenly compress each side of the spring found on struts and coil over shocks.
- Similar to Polaris No's 2871573 & 2871574.



**4517
7-Ton Bar Type Puller/Bearing Separator**

- Includes a Bearing Splitter with 4" capacity, two sets of hex push puller legs, a 8" bar type puller head mated with a custom thread forcing screw.
- Puller/Bearing set for tough jobs, up to 7-tons, larger applications, and greater reach 8" to 16".
- Capacity to remove steering stem bearings.



**4581
Blind Hole Bearing Puller**

- For pulling jobs requiring an internal pull, such as pilot bearings and pinion bushing from cam cover.
 - Four collets which fit a wide range of applications. Select the appropriate sized collet by comparing it with the application. Insert the collet, expand it to fit the hole, then attach the slide hammer assembly.
- Set includes:
- Four collet sizes: 7/16" to 1/2", 9/16" to 11/16", 5/8" to 1", 1" to 1-1/4" and 2-1/2 pound slide hammer with T-handle and blow-molded plastic storage case.



**4797
Steering Stem Bearing Installation Tool**

- Provides a quick and easy method to install lower steering stem bearings. The 14" drive tube accepts the 1.0", 1.4", and 1.75" I.D. bearing adapters.



**6642
Trim Tool Kit (11 Piece)**

- Tools designed to remove specialty body fasteners, trim strips, panels, bezels, liners, shrouds, fascia.
- Tools are constructed of durable, impact-resistant nylon that will not damage metal and non-metal surfaces.



**4507
Bearing Driver Set, Stinger**

- Permits installation of tapered bearing races and seals without damage to the component or housing. Includes a driver handle plus popular bearing and seal drivers, ranging from 1.565" to 3.180".
- Tapered side of driver is used to install races. Invert the driver to the flat side to install seals. Set is housed in a blow-molded plastic storage case.
- Bearing applications include steering stem, swing arm, and wheel bearings races.



**4784
10" Profile Gauge**

- This 10" gauge provides an exact copy of a contour or profile needed during bodywork or fabrication. The plastic fingers will not scratch original finish and non-metal surfaces.

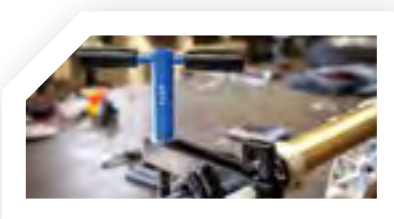


**4790
Wheel Bearing Removal/Installation Kit**

- This tool assembly will remove and install 3/4", 1", and 25mm I.D. sealed wheel bearings.
- Standard wrenches used in combination with tool. Instructions included along with blow molded case.

Includes

- 4790-1** Wheel bearing tool bridge
- 4790-2** Wheel bearing tool screw Ass'tly
- 4790-3** Wheel bearing remover, 3/4"
- 4790-4** Wheel bearing remover, 25mm
- 4790-5** Wheel bearing remover, 1"
- 4790-6** Wheel bearing tool nut/washer
- 4790-7** Wheel bearing forcing screw
- 4790-8** Wheel bearing tool set, 3 piece



**4779
Front Fork & Shock Vice**

This vice is designed to hold up to 4" diameter round or oddly shaped components such as forks, shocks, pistons, rods, etc. The V shaped jaws are covered with thick rubber pads to ensure a firm grip without leaving a mark. Comes complete with a table/vice mounting bracket that allows adjustment to any position.



**4791
Spanner Wrench, 3/4" - 2"**

This chrome vanadium hardened steel wrench features a 5" handle and slim strong hook to access slotted retaining rings in hard to reach areas.



**4792
Spanner Wrench, 2" - 4 3/4"**

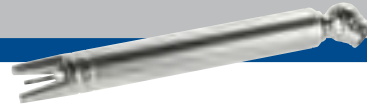
This chrome vanadium hardened steel wrench features a 9" handle and slim strong hook to access slotted retaining rings in hard to reach areas.



**7206
Multi-purpose Strap Wrench**

You'll find many uses for this heavy-duty strap wrench. The 53" long nylon strap won't mar precision surfaces of shafts, pulleys, or other components. Useful on engine, transmission, and drive pulleys up to 16 inches. Special head design self-tightens the strap as force is applied to the lightweight, 12" long handle.

305085 Replacement Strap.



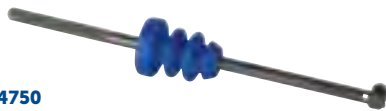
**4751
Tire Pressure/Tread Depth Gauge**

This 3-in-1 gauge will measure tire pressure, lower tire pressure, and measure tread depth all in one gauge. Rugged cast housing for strength and long life.



**4741
Spoke Tool Set (9 Piece)**

- Use to tighten or loosen spoke nuts found on most motorcycle and scooter wheel applications.
- Nine interchangeable wrench ends; 5.2 mm, 5.4 mm, 5.6 mm, 5.8 mm, 6.0 mm, 6.2 mm, 6.4 mm, 6.6 mm, 6.8 mm.



**4750
Tire Valve Installer/Remover Tool**

This 14" steel tire valve tool includes a stepped rubber sleeve that can be positioned on the handle for optimum pulling angle of the valve, while protecting the wheel finish. Removes and installs snap-in style tire valves.



**4769
Wheel Rim Protector Set, (3 piece)**

Fits over the wheel rim to protect the wheel from being scratched or damaged while using tire spoons. Set of 3.



**4770
Tire Spoon with Grip**

This 13" curved tip tire spoon is strong yet comfortable to use with the form fit hand grip. The rounded head prevents puncturing the tube.

**4771
Tire Bead Alignment Tool**

This aluminum tool will hold a tire bead into the drop center of the wheel when changing the tire or installing an inner tube. The nylon thumbscrew will not damage the wheel finish.



**4747
Spoke Torque Wrench Set (22 Piece)**

Take the guesswork out of spoke wheel assembly and maintenance. This dual head spoke wrench offers install and removal in one wrench. The click-type torque end applies accurate and equal tension to each spoke, while the fixed end easily removes damaged or rusted spokes. This set includes 11 torque heads and 11 fixed heads for use with the sealed body wrench, all complete in an organizer case. Head sizes included for both ends; 5.0mm, 5.6mm, 5.8mm, 6.0mm, 6.2mm, 6.3mm, 6.5mm, 6.7mm, 6.8mm, 7.1mm, and Spline.



**5734-18
Tire Machine Spoon, Double End, 18"** Has a curved end and a bent tip end for starting the bead on a tire changing machine.

**5734-18G
Tire Machine Spoon, Double End with Grip Grooves, 18"** Has a curved end and a bent tip end for starting the bead on a tire changing machine.

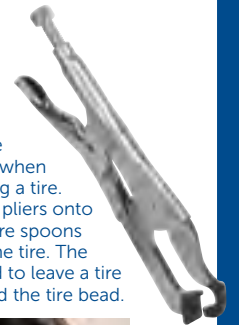
**5726
Bead Breaking Tool**

Designed to break down motorcycle, ATV and small garden tractor tires. The two-tool set includes a locking pliers and pry tool to quickly and easily break the bead. The locking pliers clamps to the wheel rim by forcing the wedged jaw into the tire bead. The pry tool incorporates a second wedge and a loop that quickly hooks to the locking pliers wedge jaw. The pry tool is then pushed down, breaking the tire bead.



**5730
Motorcycle Bead Holding Pliers**

Specialty locking pliers designed to hold the tire bead either up or down when mounting or demounting a tire. Clamp the non-marring pliers onto the wheel rim and use tire spoons to mount or demount the tire. The pliers eliminate the need to leave a tire spoon in position to hold the tire bead.



Motorcycle Tire Bead Holding Tool

This tool allows the tire bead to be held in the drop center of the wheel when changing the tire or installing an inner tube. The slot slides over the spoke and the opposite end is depressed to push the tire into position.

4777
For use on wheels with 1 5/8" maximum side profile height.

4775
For use on wheels with 3/4" maximum side profile height.



WHEEL / BRAKE MOTORCYCLE/POWERSPORTS



Brake Fluid Tester

- Tester determines quality of brake fluid.
 - One battery included: 1.5V AAA.
1. Remove cap from brake fluid reservoir.
 2. Remove probe cap from brake fluid tester.
 3. Press power button on top of tester. Green LED lights up.
 4. Dip entire length of metal probes into brake fluid.
 5. After one second, match color of LEDs with color chart to determine brake fluid quality.
- Tester automatically powers off after twelve seconds of inactivity.

4598-DOT3 Tester calibrated with DOT 3 fluid.

4598-DOT4 Tester calibrated with DOT 4 fluid.



6703 Line Fluid Stopper Kit

Stop messy fluid leaks and prevent contamination during service.

- Kit seals all types of rubber and steel line found on fuel, brakes, and oil lines.
- Includes two banjo style fitting stoppers, two steel line stoppers, six line plugs, a line disconnect tool, and a long reach line pinch-off tool for hard-to-reach hoses.

6703-1 Banjo Line Fluid Stoppers, 2 pk

6703-2 Steel Line Fluid Stoppers, 2 pk

6703-3 Line Plug Fluid Stoppers, 6 pk



4740 Spring Hook (6" reach)

- Made from heat treated alloy steel.
- Designed for removing and installing hard-to-reach headlight adjusting springs, exhaust, brake and kickstand springs.



4599 One Man Brake Bleeder Hose

- Removes air from brake system—one wheel at a time— and eliminates the need for an assistant to help do the job.
- Hose easily attaches to bleeder screw, which holds hose in place and prevents leaking.
- Check-valve on end of hose prevents air from entering brake system when pumping brake pedal.

4743 Brake Caliper Spreader

- Compresses the brake pistons on most style calipers for easy pad replacement.
- Fits calipers with 1/4" thick rotor applications, popular on motorcycles.
- Range: .25" (5 mm) to 2.25" (58 mm). Works on all automotive applications in this range.



4799 Brake Piston Removal Locking Pliers

This specially designed locking pliers allows the removal of brake caliper pistons during service or rebuild. The pliers is simply clamped into the I.D. of the caliper piston allowing it to be pulled out of the caliper. Range: 5/8" to 2-1/4" diameter pistons.



4795 Safety Wire Twist Pliers

These versatile 8" pliers will reliably twist safety wire rapidly and consistently. The right hand twist mechanism features an automatic spring return. The forged alloy steel construction features tapered jaws for confined areas and mated cutters to cut safety wire. For use on safety wire applications found on vehicles, machinery, and aircraft.

4796 Steering Neck Bearing Race Remover

Simple way to remove bearing race in the steering neck. Remover is inserted into neck and bolt is adjusted to tighten the remover against I.D. of steering neck. The remover is then driven from other end of neck to remove race. Fits 1-1/8" to 2-5/8" I.D. bearing race.



4794 Safety Wire Drill Guide Set, SAE & Metric Set

Here is the perfect way to drill those nuts and bolts for use with safety wire without breaking the drill bit. These guide, align, and support the hex head or the bolt threads. The hex fixture fits nuts and bolt heads up to 15/16" (24mm). The SAE fixture bar is threaded for 1/4"-20, 5/16"-18, 5/16"-24, 3/8"-18, 3/8"-24, 7/16"-14 bolts, and the Metric fixture bar covers M6x1.0mm, M8x1.0, M8x1.25mm, M10x1.25mm, M10x1.5mm, M12x1.5mm sizes.



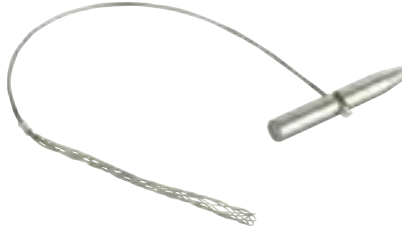
8104A Vacuum Brake Bleeder

This one man brake bleeding system allows for fast and efficient vacuum brake bleeding. Universal rubber fitting holds securely on brake bleeder screw. Attach shop air and use the quick release trigger for on-demand vacuum and hands free operation. Compact size and 17 oz. (500ml) capacity.



4870
Master Cylinder Snap-Ring Pliers

Allows for removal of the internal snap rings found in hydraulic master cylinder. Remove and install small to medium snap rings up to a 2 1/8" depth. Other snap ring applications include transmission gear locators, bearing and oil seal retention, and fork seal retaining rings.



4782
Wire Pulling Tool

This tool contains an 18" cable with a "T" handle at one end and wire mesh at the other. By threading the cable through a difficult to reach area such as a bike frame, wires or connector can be hooked to the end allowing the wiring to be pulled through.



4878
Ignition Switch Housing Alignment Tool

- This tool aligns the ignition switch housing properly as the retaining screws are being torqued. Proper switch alignment extends the life of the ignition switch. Applications include HD FL Touring models 03 – Present, V-Rods 02 – Present.
- Similar to HD-45962.



4617
Terminal Battery Brush

- Designed to clean corrosion from side post batteries.
- One brush used to clean battery terminals; other brush used to clean battery cable ends.
- Plastic handle resists battery acid.



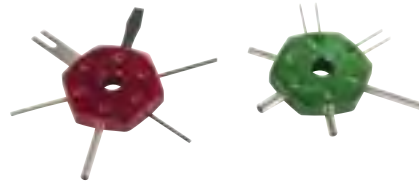
4813
Heat Shrink Tubing Set (171 Piece)

Protection and insulation for solder connections and components. 2 to 1 shrink ratio with flame or heat gun.



4614
Battery Terminal Wrench, 5/16, 6 pt.

- Designed for use on side-terminal batteries, or any 5/16" hex head battery bolt.
- 5/16", 6 point, box end, 5-1/2" long, ratcheting wrench; insulated handle.



4822
Wire Connector Tool Set (2 Piece)

Designed to remove terminals from connector housing without damage to the terminal or connector. Set provides 12 different tool styles fit most common connectors.



4814
Waterproof Heat Shrink Tubing Set (106 Piece)

Waterproof protection and insulation on solder connections and components. Adhesive lined inner wall to seal out moisture. 3 to 1 shrink ratio with flame or heat gun.



4616
Battery Terminal Wrench, 10mm, 12 pt.

- Designed for use on 10 mm battery terminal bolts found on many batteries.
- 10 mm, 12 pt., box-end ratcheting wrench; 5-1/2" long with insulated handle.



4461 Terminal Release Tool Set

- Save time and money. Repair or rebuild a wiring harness without having to order the entire OE replacement.
- Services most OE terminal connectors. Insert the appropriate release tool to depress the locking tab and the individual wire slides out for service or replacement.

Kit includes:

- 7737 Computer edge board and header release tool.** Each end of the tool works on different terminal connector configurations. Works on various domestic and import models.
- 7738 Weather Pack sensor terminal release tool.** Works on various domestic and import models.
- 7740 Micro-style terminal release tool.** Works on various domestic and import models.
- 7741** Specifically designed to release ID computer terminals on various domestic and import models.
- 7742 Universal harness release tool** designed to work on various domestic and import models.
- 7743** Releases terminals on most harness connectors on various domestic and import models, including water, O₂, vacuum, and air temperature sensors.



4467 Automatic Wire Stripper

- Quick removal of insulation on wire AWG 12-20.
- Comes with adjustable depth gauge (8mm to 12mm).
- Sharp v-shaped tooth easily removes insulation without any damage to soft wire strands.
- Cutting tool stored below the stripper.
- Features a space saving locking mechanism for pockets or tool drawer storage.



5912 Crimpwell™ Angled Crimping Pliers

- Universal crimping design accommodates soft wire – solid or stranded – 10-22 AWG.
- Cutting feature included for quicker preparation.
- 9" (228mm) in length, with protective grips to increase leverage and secure crimp.
- Angled design keeps the connector, the wire, and the crimper "in-line" – improving visibility and access in hard to reach places.
- Designed to not pierce connector insulation and also works on un-insulated connectors.
- Service tech can use as much force as desired to ensure connection and it will not damage connector insulation.
- Easy-to-use: Simply insert the connector into the crimping feature, slip over the connector and squeeze.



5953 Dual End Wire Holder

- Holds wire and connectors solidly during soldering or other wire service.
- Unique design allows connection to be held firmly on both sides with infinite adjustability.
- Insulated clips act as heat sinks to protect shrink tubing or other sensitive parts from heat.



5955 Magnetic Clamp Wire Holder

- Holds wire and connectors solidly during soldering or other wire service.
- Unique design allows connection to be held firmly on both sides with infinite adjustability.
- Insulated clips act as heat sinks to protect shrink tubing or other sensitive parts from heat.
- Clamp with magnet allows for attachment to a work bench, vehicle, or any other object for a firm base.



5950K CrimPro™ 4-in-1 Wire Service Set

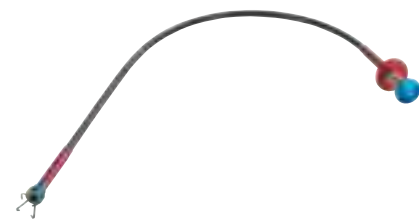
CrimPro™ 4-in-1 Wire Service Set includes both the OTC 5950S CrimPro™ 4-in-1 Wire Tool and OTC 5950A CrimPro™ 4-in-1 Angled Wire Tool.

5950S

- Compact 7-inch design used 4 ways.
- Gripping nose - to pull, twist, bend, and shape.
- Crimper - crimps 12-20 AWG insulated and non-insulated wire.
- Stripper - strips 12-20 AWG wire.
- Cutter - ability to make cuts below pivot.

5950A

- The angled feature allows access to close quarters and facilitates superior crimps.
- Compact 7-inch design used 4 ways.
- Gripping nose - to pull, twist, bend, and shape.
- Crimper - crimps 12-20 AWG insulated and non-insulated wire.
- Stripper - strips 12-20 AWG wire.
- Cutter - ability to make cuts below pivot.



4783 Flexible Magnetic/Claw Pick Up Tool

The 25" flexible spring shaft allows the tool to reach difficult areas and pick up objects either magnetically or with the use of the retractable claw.



4818 Multi-Purpose Scissors

Will cut hose, wire and cables, wood dowel, PVC, and thin sheet metals in addition to general cutting. The hardened stainless steel blades have an angle ground into one that eliminates slipping when cutting round materials.



5900A-PLUS Master Torx Bit Socket Set, 53-piece

Updated 53-piece Master Torx Bit Socket Set plus special 24mm External Torx PLUS Socket (p/n 5932-24) required for Ford Super Duty pick-up beds starting model year 2017. Socket kit includes various sizes of Torx, Torx PLUS, Tamper Resistant Torx, Bit Sockets and External Torx Sockets in 1/4", 3/8" and 1/2" square drive. Stored in a convenient hard plastic clamshell case for protection and organization. Not rated for use with impact tools.

6100 Standard TORX® Socket Set T10 to T60 (12 piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6101	T10	1/4"
6102	T15	1/4"
6103	T20	1/4"
6104	T25	1/4"
6105	T27	1/4"
6106	T30	1/4"
6107	T40	3/8"
6108	T45	3/8"
6109	T47	3/8"
6110	T50	3/8"
6111	T55	3/8"
6112	T60	1/2"



6150 External TORX® Socket Set (7 piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6151	E6 x 25	1/4"
6152	E7 x 25	1/4"
6153	E8 x 25	1/4"
6154	E10 x 32	3/8"
6155	E12 x 32	3/8"
6156	E14 x 32	3/8"
6157	E16 x 32	3/8"



6170 Metric Hex Socket Set (7 piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6171	3 mm	3/8"
6172	4 mm	3/8"
6173	5 mm	3/8"
6174	6 mm	3/8"
6175	7 mm	3/8"
6176	8 mm	3/8"
6177	10 mm	3/8"



6180 TORX® PlusSocket Set (9 piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6181	TP10	1/4"
6182	TP15	1/4"
6183	TP20	1/4"
6184	TP25	1/4"
6185	TP27	1/4"
6186	TP30	1/4"
6187	TP40	3/8"
6188	TP45	3/8"
6191	TP50	3/8"



5933 MortorQ® Super Bit Set (5-piece)

Set includes one each of the following:

No.	Size	Sq. Drive
5933-0	MTS 0	3/8"
5933-1	MTS 1	3/8"
5933-2	MTS 2	3/8"
5933-3	MTS 3	3/8"
5933-4	MTS 4	3/8"



4780 Personal Tool Pack

Includes 1/4" drive ratchet, 2" extension, 16 drive bits, and Universal Spline sockets fit both SAE 3/16" - 9/16" and metric 5mm - 14mm nuts and bolts in a variety of styles; 6 pt., 12 pt., torx, square, spline, etc. All tools included in a travel pouch.



5943 9-Piece Power Driver Socket Extensions

The 5943, 9 piece Power Driver Socket Extension set from OTC adds versatility to your existing power tools and socket sets. Each extension uses a 1/4" hex shank for adjustable chuck drills with 1/4", 3/8" or 1/2" square drive on the other end for sockets. 3 square drive sizes - 2" 6" and 12". Now use your sockets with your cordless power tools for short, medium and long reach applications. The 5943 is a great choice for running up multiple bolts like oil and transmission pans or rear ends instead of ratcheting each one by hand. Save your time for proper torquing instead of hand turning your bolts. Limited lifetime warranty.

- 5943-1** Three 1/2" square drive socket extensions in 2", 6" and 12" lengths
- 5943-2** Three 3/8" square drive socket extensions in 2", 6" and 12" lengths
- 5943-3** Three 1/4" square drive socket extensions in 2", 6" and 12" lengths



5180 Portable Multi Purpose C-Frame Press

- Lightweight (less than 28 lbs.) and durable, the 5180 portable press is perfect for bench top pressing applications.
- Use for all clamping, pressing, and bending needs. Ideal for welding and metal fabrication.
- Press can be positioned vertically or horizontally.
- Versatile 9" - 4-1/4" Open-Throat® design.
- Couples to any 4- or 10-ton Porta Power pump.
- Base allows the operator to mount the press to a bench.

Set includes: C-Frame press with base, adapters: V-pushing and ram pushing (9/16" and 3/4" dia. shanks), receiving inserts, flat insert, storage case.

GENERAL SERVICE MOTORCYCLE/POWERSPORTS



4781 Super Stubby Screwdriver Set

These screwdrivers are perfect for those limited access fasteners typically found on carburetors or in electrical compartments and many other areas.

- 2 Phillips and 2 straight screwdrivers included in set.



8262 Short Pick & Hook Set (4 Piece)

Consisting of four (4), 6.5", soft-handled picks.

- They are sturdy, with both stainless steel shafts and tips, with assorted tip shapes designed for marking, removing O-rings, accessing snap rings and other assorted applications.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Multi-use tools to scribe, align pierce, clean or remove O-rings, shaft seals, CV boot and motorcycle fork seals and dust hoods.
- Packaged in a molded tray which can be placed in tool drawer.

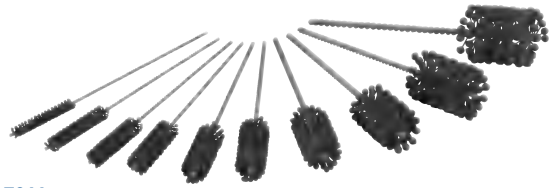


8263 Long Pick & Hook Set (4 Piece)

Consisting of four (4), 9.25", soft-handled picks.

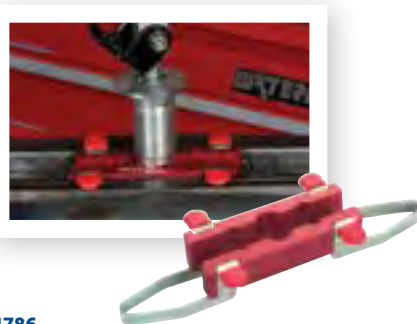
- They are sturdy, with both stainless steel shafts and tips, with assorted tip shapes designed for marking, removing O-rings, accessing snap rings and other assorted applications.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Multi-use tools to scribe, align pierce, clean or remove O-rings, shaft seals, CV boot and motorcycle fork seals and dust hoods.
- Includes a knurled shaft which allows good grip with grease or oil on hands.
- Packaged in a molded tray which can be placed in tool drawer.

Tool No.	Size
7011-1	.375" 10 mm
7011-2	.500" 13 mm
7011-3	.625" 16 mm
7011-4	.750" 19 mm
7011-5	.875" 22 mm
7011-6	1.00" 25 mm
7011-8	1.25" 32 mm
7011-10	1.50" 38 mm
7011-12	1.75" 44 mm
7011-14	2.00" 51 mm



7011 Ball Hone Set (10 piece)

- Ball Hones can be used for refinishing and resizing bores such as found in brake calipers, engine lifters, and u-joint yokes. Also useful for any bearing or bushing application.
- All hones are 180 grit Silicone Carbide for excellent cutting and finish.



4786 Aluminum Vice Inserts

Essential for every workbench vice. Aluminum jaws have reliefs for 5/16, 3/8, & 9/16 (7mm, 10mm, & 15mm) diameter shafts. Excellent for holding steel shafts without scratching or damage such as shocks, crankshafts, or any threaded bolts and shafts.



4410 Master Bushing Driver Set

- Enables you to remove and install bushings ranging from 10mm to 42mm in diameter, and 3/8" to 1-3/8" in diameter.
- Includes large, medium, and small driver shafts handles and adapters all made of steel.
- Housed in a blow-molded storage case.

8203S 3-Piece Short Handled Pry Bar Set

A 3-piece Handled Pry Bar Set that includes 8", 12" and 18" lengths for moving or separating components with maximum leverage. Each bar is made from tempered square steel for durability and strength. The dual durometer handle provides a comfortable and secure grip, reducing hand fatigue. A black chrome striking cap will take hammer blows without handle damage, and a polished tip and black oxide finish resists rust and wear during use. Covered by OTC's Lifetime Warranty.



- 8208 8" handled pry bar
- 8212 12" handled pry bar
- 8218 18" handled pry bar

8203L 3-piece Long Handled Pry Bar Set

A set of 3 made-in-the-USA pry bars with comfortable, sturdy rubberized grips. Each bar is drop-forged in Minnesota with a hand-ground chisel end for wedging into tight spaces. Special tempered steel provides extra strength, durability and leverage for tough jobs. A dedicated striking cap provides a big target to drive the pry bar in to help separate components faster. Includes lifetime warranty.

- 8224 24" handled pry bar
- 8236 36" handled pry bar
- 8248 48" handled pry bar





4484
Weatherpack Crimper Set

Manage environmentally-sealed connection systems with the OTC 4484 Weather Pack Crimper Kit. Weather pack connection systems are designed to protect against exposure to heat, moisture and contaminants. Includes:

- Two interchangeable crimping dies coverage wire range AWG 22 / 20-18 (DIN: 0.35 / 0.5-0.8mm) and AWG 16-14 / 12 (DIN: 1.0-2.0 / 3.0mm).
- Dies are magnetically secure and easily changed.
- Instructions clearly illustrate how to create a weather-proof seal.
- Connections found on motorcycles, Class 7 - 8 tractors, automobiles and more.

- 4484-1** Ratcheting Crimper Chassis
- 4484-2** Weather Pack Crimp Die Set
- 4484-3** Weather Pack Crimp Die Set



4497A
Ratcheting Terminal Crimper

- Heavy-gauge steel crimping tool designed for insulated wire terminals.
- Ratcheting action crimps terminal to correct tightness on the wire, making crimping fast and easy.
- Insulated handles with compound mechanical leverage for power.
- For wire sizes: AWG 22-18 (0.6mm—1.0mm) red terminal; AWG 16-14 (1.3mm—1.6mm) blue terminal; AWG 12-10 (2.0mm—2.6mm) yellow terminal.



4512
Snap Ring Pliers Set – Internal/External

- For internal or external snap rings; thumbscrew permits quick conversion.
- Made of heavy-gauge tempered steel.
- Includes two stainless steel handled picks.
- Contained in a blow-molded plastic storage case.



4411
Ratcheting Hose & PVC Cutter (Standard)

- Cuts hose and PVC up to 1-3/8" dia.
- Features metal frame and ergonomic handles for high leverage.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



4412
Ratcheting Hose & PVC Cutter (Heavy Duty)

- Cuts hose and PVC up to 1-3/4" dia.
- Features metal frame and rubber padded ergonomic handles for high leverage and comfort.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



4509
Straight-Blade Hose Cutter

- Cuts rubber hoses ranging from 1/4" to 1-1/2".
- Simply place hose in tool and squeeze handle to cut.
- Replacement steel cutter blade No. 4509-1 is available.

4509-1
 Replacement hose cutter blade

No. 4512 includes:

Tool No.	Description
4512-1	.090" tip, straight pliers
4512-2	.090" tip, 90° pliers
4512-3	.070" tip, straight pliers
4512-4	.070" tip, 90° pliers
4512-5	.047" tip, straight pliers
4512-6	.047" tip, 90° pliers
4512-7	.038" tip, straight pliers
4512-8	.038" tip, 90° pliers
4512-9	straight tip pick
4512-10	90° tip pick

All items can be purchased separately.



1545
Motorcycle/ATV Lift

- 1,500 lb. capacity and 17" long skids that will lift the largest, widest cruisers.
- Lowest clearance available, 3-1/2" at lowest level, with a wide lift range of 3-1/2" to 16-3/4".
- Removable handle provides 360° access to load.
- Features also include foot pedal release, locking rear casters, automatic safety lock, and two ratcheting tie down straps for safety.



4490
Magnetic Tray

- Rectangular, stainless steel tray is 9-1/2" x 5-1/2" and 1-1/4" deep. Holds tools and small metal parts so they don't get lost or misplaced during repair work.
- Two heavy-duty magnets on bottom of tray have non-marring contact pads; will securely hold tray to metal objects such as a tool box, frame rail, fender, etc.



4515
Mini Pick and Hook Set – 4-Piece

- Sturdy stainless steel points and shafts designed for marking, removing o-rings, accessing snap rings, and performing other tasks. Assorted angle tips allow you to reach awkward locations.
- Knurled shaft design enhances finger control for delicate jobs.

GENERAL SERVICE MOTORCYCLE/POWERSPORTS

Accutorq™ Klikker Torque Wrenches

These precision torque wrenches make a loud click when you've reached the torque setting. They feature ratcheting heads, all-metal construction, permanently roll-marked scales, and soft-grip rubber handles that enable you to firmly grasp the wrench for right- or left-hand torquing.

- Includes molded plastic case.
- One-year warranty.



7375



7380-E150 Digital Torque Wrench

- Displays torque in real time and at peak when torque is released.
- Torque value accuracy is $\pm 1\%$ clockwise (CW) and counterclockwise (CCW) from 10%–100% of full scale.
- Can be used to measure bearing preload torque values.
- Display starts at 1% to 250% of full scale; has a 5-digit, alpha-numeric LCD, and indicator icons for functions, units and battery.
- Indicators include green, yellow and red LED light, an audible buzzer, and vibration.
- 1/4" Drive, 36 tooth ratchet head. Range 1.5 – 150 In Lb.



7377

Tool No.	Torque Range	Graduations	Square Drive	Length
7375	100-1000 in.-lb (11-113 N•m)	10 in.-lb	3/8"	15-1/8"
7377	10-150 ft.-lb (14-203 N•m)	2 ft.-lb	1/2"	17-3/4"



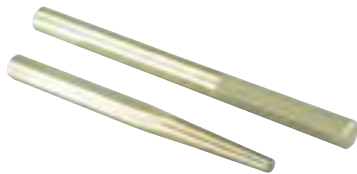
4629 Brass Hammer and Punch Set

- Brass-head hammer and punches are ideal to use where sparks from ferrous metals would be hazardous, or where precision metal parts could be damaged by steel tools.
- Two hammer head weighing 24 and 12 oz.
- Two tapered punches 14" x 5/8", 10" x 5/8".
- One hex tapered punch 8" x 5/8".
- Two drift punches 10" x 3/4", 8" x 1/2".
- Two pin punches 6" x 3/8", 4" x 1/4".



4606 Brass Hammer and Punch Set

- Brass-head hammer and punches are ideal to use where sparks from ferrous metals would be hazardous, or where precision metal parts could be damaged by steel tools.
- Hammer head weighs 24 oz.; brass drift punch is 10" x 3/4" diameter; brass tapered punch is 8" x 5/8" hex tapered to 3/8" diameter point.



4602 Brass Punch Set (2 piece)

- Two large, brass non-sparking punches. Ideal for use near precision parts or in locations where sparks from ferrous metal could be hazardous.
- Includes an 8" punch (5/8" hex, tapered to 3/8") and 10" straight punch (3/4" dia., chamfered at both ends).



Rolling Head Pry Bars

You'll have a lot of leverage using one of these rolling head pry bars. The long, tapered body will also serve as an aligning drift.

7163 Pry bar; 12" long.

7165 Pry bar; 18" long.



4550 Scraper Set

Scrapers feature polished, heat-treated, stiff, stainless steel blades. Handles are ergonomic two-component plastic and feature a non-slip grip and steel bolstered end. Packaged in a storage tray. Includes: 1-1/4" straight blade, 1-1/4" bent blade, and 2" straight blade tips.



4605
Interchangeable Punch and Chisel Set

- Safety protective handle allows easy grip and protects hand from being hit by hammer.
 - 12 punches and chisels included: 5 flat chisels: 1/2", 5/8", 3/4", 7/8", and 1" wide blades 1 cape chisel: 1/4" wide blade 2 taper punches: 1/8" and 1/4" diameter 2 pin punches: 3/16" and 1/4" diameter 2 center punches: 1/8" and 3/16" diameter
 - Double locking ball detent holds punch or chisel securely in the driver handle.
- Replacement parts available:

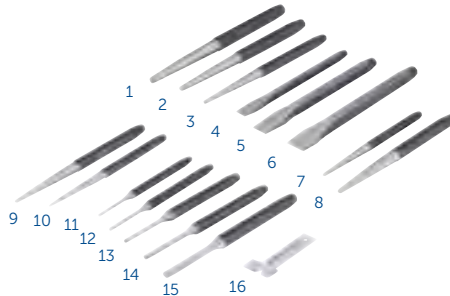
- 4605-1** Drive handle
- 4605-2** 1/2" wide flat chisel
- 4605-3** 5/8" wide flat chisel
- 4605-4** 3/4" wide flat chisel
- 4605-5** 7/8" wide flat chisel
- 4605-6** 1" wide flat chisel
- 4605-7** 1/4" cape chisel
- 4605-8** 1/8" taper punch
- 4605-9** 1/4" taper punch
- 4605-10** 3/16" pin punch
- 4605-11** 1/4" pin punch
- 4605-12** 1/8" center punch
- 4605-13** 3/16" center punch



Impact Drivers

- Loosens hard-to-turn screws, bolts or nuts.
- Handle design prevents possibility of hitting hand with hammer when striking impact driver.
- Bit holder has 3/8" drive (No. 4608), 1/2" (No. 4607) drive, and 5/16" hex for Phillips and flat screwdriver bits.
- Includes eight screwdriver bits:
 - No. 2 Phillips bit, 1-3/8" long with 5/16" hex
 - No. 2 Phillips bit, 3-1/8" long with 5/16" hex
 - No. 3 Phillips bit, 1-3/8" long with 5/16" hex
 - No. 3 Phillips bit, 3-1/8" long with 5/16" hex
 - 5/16" wide x 1-3/8" long with 5/16" hex slotted bit
 - 5/16" wide x 3-1/8" long with 5/16" hex slotted bit
 - 3/8" wide x 1-3/8" long with 5/16" hex slotted bit
 - 3/8" wide x 3-1/8" long with 5/16" hex slotted bit

- 4607** 1/2" impact driver.
- 4608** 3/8" impact driver.



4600
Punch and Chisel Set (16 piece)

- Durable set of heat-treated chrome vanadium steel punches and chisels. Storage tray included.
- Contents of set:
- 3 – Cold chisels (with gauge): 3/8" x 5-1/2"; 1/2" x 6"; 5/8" x 6-1/2"
 - 2 – Center punches: 1/8" x 5"; 3/16" x 6"
 - 5 – Pin punches: 3/32" x 4-1/4"; 1/8" x 4-3/4"; 5/32" x 5"; 3/16" x 5-1/4"; 1/4" x 5-3/4"
 - 5 – Taper punches: 3/32" x 5-1/4"; 1/8" x 5-3/4"; 5/32" x 6"; 3/16" x 6-1/4"; 1/4" x 6-3/4"
 - 1 – Chisel gauge



4576
Universal C-Frame Nut Splitter

- Forged and heat-treated frame with offset handle works where ordinary nut splitters may fail. Smooth action cracks nuts without damaging bolt threads.
- Chisel rotates to line up parallel to bolt. Splits non-heat-treated nuts of 7/16" (11mm) through 3/4" (19mm) diameter. Tool is 6-3/4" in length.



4514
Mini Snap Ring Pliers Set (4 Piece)

- Small-size pliers for work in tight areas. Service S-ring and R-ring clips, internal or external, straight or angled. Ruggedly built of heat-treated chrome molybdenum steel.
- Set includes two internal snap ring pliers (one straight, one 45°) and two external snap right pliers (one straight, one 45°).
- All pliers have .038" (1.0mm) diameter tips.

No.	Part No.	Description
1	4600-15	Taper Punch, 1/4" x 6-3/4"
2	4600-14	Taper Punch, 3/16" x 6-1/4"
3	4600-13	Taper Punch, 5/32" x 6"
4	4600-3	Cold Chisel, 3/8" x 5-1/2"
5	4600-2	Cold Chisel, 1/2" x 6"
6	4600-1	Cold Chisel, 5/8" x 6-1/2"
7	4600-4	Center Punch, 3/16" x 8"
8	4600-5	Center Punch, 1/8" x 5"
9	4600-12	Taper Punch, 1/8" x 5-3/4"
10	4600-11	Taper Punch, 3/32" x 5-1/4"
11	4600-10	Pin Punch, 3/32" x 4-1/4"
12	4600-9	Pin Punch, 1/8" x 4-3/4"
13	4600-8	Pin Punch, 5/32" x 5"
14	4600-7	Pin Punch, 3/16" x 5-1/4"
15	4600-6	Pin Punch, 1/4" x 5-3/4"
16	4600-16	Chisel Gauge



6613
Variable Pin Spanner Wrench

- Universal design fits many different types of pulleys having slots or holes, including camshaft pulleys and crankshaft pulleys.
- Wrench is adjustable from 1-1/4 inch to 5 inches; works with a 1/2 inch ratchet or breaker bar.

Set Includes:

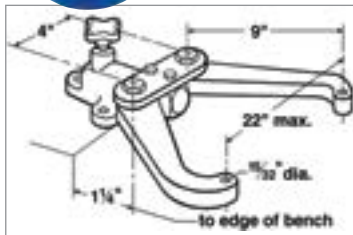
- 526908-1** 3.5 mm pin
- 526908-2** 4 mm pin
- 526908-3** 4.5 mm pin
- 526908-4** 5 mm pin
- 526908-5** 6 mm pin
- 526908-6** 7 mm pin
- 526908-7** 10 mm pin
- 526908-8** Handle

GENERAL SERVICE MOTORCYCLE/POWERSPORTS



4650 Mirror and Magnet Set

- Handles telescope from 6-1/2" to 25". Swivel heads allow access to tight areas.
- Large, rectangular swivel mirror is 2" x 3-1/2", and is attached to one telescoping handle; small mirror is 1-1/4" in diameter, and is interchangeable with magnets on the other handle.
- Magnets can lift up to 8 lbs.



7020 Bench-Mounted Holding Fixture

Securely hold and rotate small engines, transmissions, and other components while you're working on them.

- This holding fixture will handle pieces weighing up to 250 lbs., and it offers 360° of rotation with positive stops at 90° increments.
- Three sides of the mounted unit remain fully exposed.



34607 Base assembly only.



Universal Outside Thread Chaser

This thread chaser will quickly restore threads on fork tubes, steering stems, axles, etc. to near original condition without the use of expensive thread-cutting equipment.

- Replaceable V-pads and dies.
- 1-1/4" to 5" O.D.

7402
Thread chaser with 6 dies: threads per inch - 4, 5, 6, 7, 7-1/2, 8, 9, 10, 11, 11-1/2, 12, 14, 16, 18, 20, and 24.

216884
Standard die set. Includes 6 dies, in the sizes listed above.

202817
Metric die set. Includes three dies: 1 mm- 1.25 mm-1.5 mm-1.75 mm, 2 mm-2.5 mm-3.0 mm-3.5 mm; 4 mm pitch dies.

206803
V-pad

5550 Spectrum Solar10W LED Work Light with UV Top Light



5551 Spectrum Trio9W LED Work Light with 3W LED Top Light



5552 Spectrum 30+430 Pc. LED Work Light with 4 Pc. LED Top Light



- AC/DC Rechargeable
- Li-Ion battery
- Magnetic base
- Bright LEDs - 50,000 hour life
- Adjustable 60° angle
- Slip resistant textured body
- Impact and water resistant
- Limited Lifetime Warranty

5550 Specifications

10W LED Work light with UV Top Light
LI-ION Rechargeable Battery – 3.6V 2250 mAh, AC/DC
Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V
Power Output: 5.0V 1000 mAh
Charger Time: 3.5 ~ 4.0 hours
Active Time: 2.5 hours
Storage Temperature: -4°F to 158°F; -20°C to 70°C
Operating Temperature: 23°F to 122°F; -5° to 50°C
PS: LED Sector: 170°
At 50 cm: 350 LUX (750 LM)
Waterproof Grade IP65

5551 Specifications

9W LED Work light with 3W LED Top Light
LI-ION Rechargeable Battery – 3.6V 2250 mAh, AC/DC
Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V
Power Output: 5.0V 1000 mAh
Charger Time: 3.5 ~ 4.0 hours
Active Time: 3.0 hours
Storage Temperature: -4°F to 158°F; -20°C to 70°C
Operating Temperature: 23°F to 122°F; -5° to 50°C
PS: LED Sector: 25°
At 50 cm: 4000 LUX
Waterproof Grade IP65

5552 Specifications

30 Piece LED Work light with 4 Piece LED Top Light
LI-ION Rechargeable Battery – 3.6V 2250 mAh, AC/DC
Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V
Power Output: 5.0V 1000 mAh
Charger Time: 3.5 ~ 4.0 hours
Active Time: 4.0 to 5.0 hours
Storage Temperature: -4°F to 158°F; -20°C to 70°C
Operating Temperature: 23°F to 122°F; -5° to 50°C
PS: LED Sector: 15°
At 50 cm: 2250 LUX
Waterproof Grade IP65



DIESEL COMPRESSION TESTERS HEAVY DUTY TOOLS & EQUIPMENT



7222 Injector Tube Remover/Installer

- Removes injector tubes for service and re-installs.
- Fits GM 6.6L Duramax Diesel, 2001 to present.
- Similar to J-45910.



7223 Glow Plug Bore Reamer

- Reams glow plug bores for proper replacement of glow plugs.
- Fits GM 6.6L Duramax Diesel, 2001 to present.
- Similar to EN-51249.



6005A Glow Plug Remover

Set includes 10 mm and 12 mm split nuts, three spacers (3/16", 1/4", and 5/16"), plastic storage/organizer case and instructions. The 10 mm split nut will work on Ford 6.9L and 7.3L diesels; GM 6.2L, and 6.5L diesels; and various diesels in import vehicles. The 12 mm split nut works on various diesels in import vehicles, plus many agricultural and construction diesel applications.

Diesel Compression Tester with Adapters

This easy-to-use compression tester is designed for light- and medium-duty diesel engines equipped with glow plugs. A dual-reading gauge, featuring a push-button release valve, measures compression to 1000 PSI and 7000 kPa. The hose end has quick disconnect fittings. The tester comes with glow plug and nozzle adapters in a handy storage case.

Tester services these engines:

- Cummins B and C
- Navistar DT466/DT360
- Ford/Navistar 6.9L & 7.3L
- Detroit 6.2L & 6.5L
- Hino diesel and Mitsubishi Fuso truck engines

5020 Diesel compression tester with adapters
5021 Universal diesel engine compression gauge
Replacement Adapters (available separately)

47484 Hino diesel truck engines with 12 mm x 1.25 thread
217791 Cummins B 3.9L 4 cyl. & 5.9L 6 cyl. '89-'98
308472 Mitsubishi Fuso truck 4D & 6D engines with 10 mm x 1.25 thread

310810 Cummins C 8.3L 6 cyl. '88-'96
310832 Ford/Navistar 6.9L & 7.3L, Detroit 6.2L & 6.5L with 10 mm x 1.0 thread
310840 Navistar DT466/DT360



5020

Similar to Ford 303-D091
(D93T-6000-A)



5021

Similar to Ford 303-D092
(D93T-6000-B)

Similar to Ford 303-D103



6076 Ford Diesel Compression Test Adapter

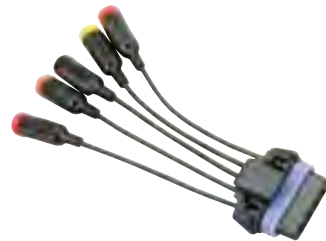
- Use with OTC No. 5021 diesel engine compression gauge.
- Remove glow plug; this adapter is used to connect the No. 5021 gauge to perform a compression test.
- Application: 1994–2003 Ford vans and pickups with 7.3L direct-injected turbocharged (DIT) diesel engine.

Similar to Ford 303-757



6660 Ford Diesel Compression Test Adapter

- Use with OTC No. 5021 diesel engine compression gauge.
- Works on 2003–2006 Ford vans and trucks—with 6.0L diesel engines.



6088 Ford 5-pin Connector Harness for Glow Plug Testing

- Provides an easy way to check glow plug resistance without having to remove the valve cover of 1994–98 Ford trucks and vans with 7.3L DIT (direct-injected turbocharged) diesel engines.
- Used with any standard digital volt ohmmeter to check glow plug resistance.



7835 Ford Rear Main Oil Seal Kit

- Works on 1994–2003 7.3L diesel engine in Ford 3/4- and 1-ton trucks.
- A complete kit with the tools you need to correctly remove and install the rear main oil seal and wear ring on the crankshaft.
- Eliminates makeshift methods of seal removal and installation that could damage the new seal or crankshaft.



GM Duramax Injector Pullers

- Designed to pull injectors on a GM Duramax 6.6L engines.

6778

From 2001 - 2004, Similar to J-44639.

6779

From 2005 - 2011, Similar to J-46594.

Similar to Ford
303-625



6595

Ford High Pressure Oil Line Disconnect Tool

- Use to disconnect the high pressure oil line from the cylinder head.
- Works on 1998–2003 Ford vans and trucks with 7.3L direct-injected, turbo-charged (DIT) diesel engines.



Similar to Miller 8318

6069

Cummins Diesel Fuel Injector Remover Kit

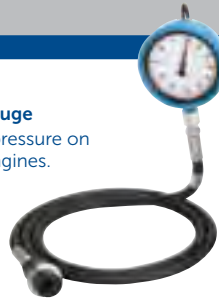
Kit contains a fuel injector connector tube remover and fuel injector puller. The fuel injector connector tube must be removed before removal of the injector, or both will be damaged.

Application: 1998-1/2–2002 Dodge pickups and vans with 5.9L 24-valve Cummins diesel turbo engine.

6754

Diesel Fuel Pressure Gauge

- Designed to test fuel pressure on GM Duramax diesel engines.
- Similar to J-44638.



5060

Detroit Diesel Injector Socket

Used on GM 6.2L and 6.5L engines. This 30 mm socket ensures proper fit during nozzle removal and installation. The 3/8" square drive and 7/8" hex permit easy access in tight quarters, and prevent damage to nozzle and related components.



Similar to Ford
No. 303-491
No. 303-492

6067

Ford Injector Remover / Installer Kit

- Removes and installs injectors without damaging the injector or cylinder head.

Application: 1994–2003 Ford 3/4- and 1-ton trucks, Super Duty trucks, and vans with 7.3L direct-injected turbocharged (DIT) diesel engine.

7471A

Cummins Engine Barring Tool

Insert the tool into the flywheel housing until it engages the ring gear, then attach a 1/2" square drive ratchet or breaker bar and turn. The tool's load-bearing collar provides friction-free operation while rotating the tool in the housing.

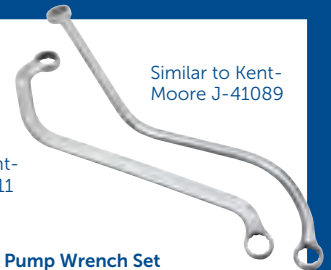
- Works on Cummins B and C series diesel engines and 5.9L liter diesels used in Dodge pickups.



6749

Diesel Engine Barring Socket

- Designed to rotate engine on a Mack E7 and Cat 3208.
- Similar to J-38587-A.



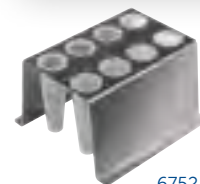
Similar to Kent-Moore J-41089

Similar to Kent-Moore J-41711

6087

GM Injection Pump Wrench Set

- Use to loosen or tighten injection pump retaining bolts whenever pump timing adjustment or pump service is required. Services 1996–1999 GM full-size 2- and 4-wheel drive trucks, vans, and Suburbans with 6.5L diesel engine.
- Two specially bent wrenches are needed, due to the location of the throttle, cruise control, T.V. cable bracket, cooling system crossover pipe and bracket, and the thermostat housing on vans and pickups.
- Wrenches are 15 mm, 12-point, double box-end type.



6752



6753

Designed for the diesel truck market, this tool will work for just about any injector you need to remove for service or replacement.

6752

Fuel Injector Storage Rack with Protective Cups

Compartment are marked to help keep the injectors organized by the cylinder they came from in order to keep the injector calibration in sync with the vehicles ECM. Similar to Ford No. 303-D113.

6753

Protector Cups

A set of eight replacement cups for 6752 Fuel injector storage rack. Similar to Ford No. 303-D115.

OIL FILTER WRENCHES

HEAVY DUTY TOOLS & EQUIPMENT



7248 C-Frame Press

- The C-Frame used in conjunction with OTC Ball Joint Adapters. Can also be used for removing/installing universal joints with needle bearings, pressed in wheel studs, and brake anchor pins on heavy-duty vehicles. Suitable for general pressing operations.

6935 U-Joint Service Adapter

For use with the 7248 C-Frame to service the u-joints found on Dana 60 4WD front drive axles.



Application:

- 1977-1991 Chevrolet and GMC 1 Ton
- 1975-2010 Dodge 3/4 & 1 Ton
- 2000-2002 Ford Excursion
- 1999-2010 F250
- 1985-2010 F350
- 1999-2008 F450
- 1999-2004 F550

Heavy-Duty Oil Filter Wrenches

- Features a 1/2" wide steel band that can stand up to the high torque needed to remove filters from trucks, tractors, and other heavy equipment.
- Use with a 1/2" drive ratchet or breaker bar.



4555 Heavy-Duty Oil Filter Wrench

Fits filters ranging from 4-1/8" to 4-3/4" (104 mm to 120 mm) in diameter.

4556 Heavy-Duty Oil Filter Wrench

Fits filters ranging from 4-1/2" to 5-1/4" (115 mm to 135 mm) in diameter.

4557 Heavy-Duty Oil Filter Wrench

Fits filters ranging from 5" to 5-3/4" (125 mm to 145 mm) in diameter.



Adjustable Oil Filter Pliers

- Forged jaws with sure-grip teeth grab the filter for easy removal.
- Slip-joint ratchet and lock mechanism allows a secure grip on filters.

4560

Small Adjustable Oil Filter Pliers. Pliers is 13-1/2" long and fits filters ranging from 2-1/4" to 5" (57 mm to 127 mm) in diameter.

4561

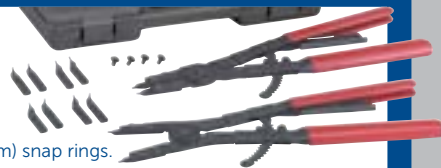
Large Adjustable Oil Filter Pliers. Pliers is 18" long and fits filters ranging from 3-3/4" to 7" (95 mm to 178 mm) in diameter.

4562

Adjustable Oil Filter Pliers Set. Includes both the No. 4560 and No. 4561 listed above.

4513 Heavy-Duty Snap Ring Pliers Set (2 piece)

- Heat treated steel "circlip" pliers for large equipment repair.
- Replaceable tips and spring ratchet locking mechanism to securely hold against snap ring tension.
- Internal pliers' capacity 3-1/16" to 6-1/4" (78 mm to 159 mm) snap rings.
- External pliers' capacity 3-1/2" to 6-1/2" (89 mm to 165 mm) snap rings.
- Blow-molded storage case includes extra sets of replaceable tips.
- Overall length 16"; handle length 12-1/2".



4513 includes:

Tool No.	Description	Tool No.	Description
4513-1	Internal snap ring pliers	4513-4	(2) .12" (3 mm) 45° tips
4513-2	External snap ring pliers	4513-5	(2) .12" (3 mm) 90° tips
4513-3	(2) .12" (3 mm) straight tip	4513-6	4 tip retaining screws

Retaining Ring Pliers

7300 Internal, straight tip retaining ring pliers. 16" long.

7301 External, straight tip retaining ring pliers. 16" long.



7300 Internal tip



7301 External tip

See page 110 for replacement tips.

Giant Adjustable Wrenches

The really big jobs call for really big tools. These wrenches will handle 42 bolt sizes from 1-3/8" to 4-3/4". Together, both wrenches weigh just 41 lbs., but can replace over 1,000 lbs. of fixed-size wrenches.

7640 Giant adjustable wrench. Rated to withstand 2,000 ft. lbs. of torque. Nut/bolt size 1-3/8" to 2-7/8". Increments of Jaw adjustment 1/8", length 24". Head thickness 7/8".

7641 Giant adjustable wrench. Rated to withstand 5,000 ft. lbs. of torque. Nut/bolt size 2-3/4" to 4-3/4". Increments of Jaw adjustment 1/8", length 36". Head thickness 1-1/8".



7463 Gland Nut Wrench

This wrench is fully adjustable to fit hydraulic cylinders on vehicles having gland nuts from 1" to 3-3/4" in diameter. It also reverses to work on either 1/4" or 7/32" pinholes.

- Accommodates a 1/2" drive ratchet.



215128 Replacement pin.

1266 Adjustable Gland Nut Wrench

Here's a wrench designed to fit hydraulic cylinders on most farm and construction equipment. It fits gland nuts from 2" to 6" diameter pin to pin. Includes reversible pins, sizes 1/4" and 5/16" diameter.

- Accommodates a 3/4" drive ratchet or breaker bar.



204928 Replacement pin.

5961HD Heavy-Duty Drain Plug Pro™

- For Agricultural, Commercial, and Heavy-Duty Vehicle Applications
- Remove fluid drain plugs without touching the plug or hot fluids!
- NO touching HOT plugs.
- NO HOT fluids on hands.
- Removable attachment permits use with common 3/8" square drive sockets. Great for starting bolts in hard-to-reach places.

- Just magnetically attach heavy-duty drain plug pro™ to pre-loosened drain plugs and rotate to remove.
- Magnetic attachment for internal 1/2" square drive drain plugs.
- Magnetic attachment for large drain plugs.



Similar to Ford D79L-6731-A

7062A Universal Filter Wrench

This filter wrench will stand up to the job of removing nearly any spin-on filter (up to 6"). Universal design permits use on most vehicles. The tough 2" wide nylon strap holds firmly. The more leverage applied, the tighter it grips.

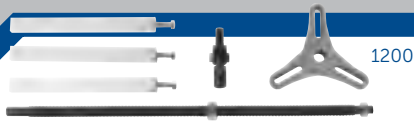
- Accommodates a 3/8" drive ratchet.



5028 Slide Hammer Puller

Just 8-1/2" long to fit into tight spots, but its 1-1/2 pound hammer gives you a little extra muscle for stubborn jobs. It's perfect for pulling injector nozzles. The shank is threaded 1/2" -20 and has a 5/8" -18 threaded adapter included. Works with many OTC pulling attachments.





Sleeve Puller / Installer Sets

These sets work on a wide array of truck, bus, and tractor engines, as well as those in other vehicles. They'll handle wet and dry sleeves – and you won't need to remove head studs. Save time, effort, and money.

- Choice of two sets: manual or 17-1/2 ton hydraulic powered.
- Wide range of adapter plates available to fit most engines.

1200 Manual Sleeve Puller Set

This manually operated, screw-powered device removes cylinder sleeves from most truck, bus, and tractor engines. Adapter plates (not included in the set) accommodate a wide range of bore sizes. See application chart below. The puller enables one technician to handle sleeve-pulling tasks. Not recommended for Mack engines (use No. 1202 set).

1201 Installing Conversion Kit for 1200 Set

Permits the No. 1200 sleeve puller to handle both removing and installing operations. Use plate Nos. 1253–1256 for installing, and plate Nos. 1219–1250 for removing. Plates are not included with kit.



Sleeve puller plate application chart

The puller plates listed here work with manual and 17-1/2 ton hydraulic sleeve pullers	Bore Dia.	Plate No.
J.I. CASE – 207 Diesel	4"	1227
CATERPILLAR – 1673C; 1674; 3304; 3306; D330C; D333C; D334, D326, D337	4-3/4" 5-1/8"	1240 1246
CUMMINS – V Series 903 NT855	5-1/2"	1250
H & NH	4-7/8"	1242
GENERAL MOTORS – 53 Series	3-7/8"	1225
71 Series	4-1/4"	1232
INT'L HARVESTER – C-221, C-263	3-9/16"	1221
D-166, D-188, D-236, D-282, C-248, D-248, D-310, D-358, D-155	3-11/16"	1222
D-179, D-206, D-239	3-7/8"	1225
C-281, D-281, D-361	4-1/8"	1230
D-691, D-461	4-3/4"	1240
D-407	4-5/16"	1233
JOHN DEERE – 4-270, 6-404	4-1/4"	1232
6-531	4-3/4"	1240
6-619	5.12"	1246
8-955	5.512"	1250
MACK – END(T) 673, 675, 676	4-7/8"	1243
672	4-7/8"	1242
END (T) 711, 707	5"	1245
PERKINS – AD3.152, AG3.152, AD4.203	3.6"	1219
AG4.212, A4.236, AG4.236, A6.354, A6.3541, ATC6.3541, AT6.354, AT6.3541	3-7/8"	1223

Universal puller for wet-type sleeves, see 1205.



1202 shown



- 24824** Thrust washer
- 37592** Three-way head
- 27908** 13" risers (3 required)
- 22205-PK5** Forcing nuts
- 208675** Swivel assembly
- 10088** Cap screws, hex hd. (3)
- 10586** Flat washers (3)
- 11466** Thrust bearing
- 32976** Pulling screw

No. 1201	Description
33769	Screw extension
41291	Installing bar
302340	Yoke assembly



4180

17-1/2 Ton Hydraulic Sleeve Puller Set

Removes and installs sleeves of many makes and models of trucks, buses, and tractors.

- 1202** 17-1/2 ton hydraulic sleeve puller set.
- 1203** Sleeve puller without hydraulic assembly.

No. 1202	Description (includes 1203 and 4180)
37592	Three-way head
33769	Screw extension
302482	Speed nut
302340	Yoke assembly
10088	Cap screws, hex hd (3)
32976	Pulling screw
4180	Hyd. ram/pump assy.
27908	13" risers (3 req'd)
41291	Installing bar
10221	Hex safety nut
208675	Swivel assembly
10586	Flat washers (3)
21714	Insert

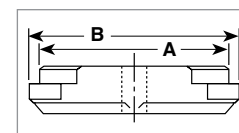
1205 Universal Puller for Wet-Type Sleeves

This tool will remove cylinder sleeves faster than ordinary pullers because it requires very little setup time. Cone adjustment positions the puller jaws quickly, locking bar is tightened. To aid in breaking "frozen" sleeves loose, adjustable bridge is positioned on the cylinder block and the bearing-mounted forcing nut is tightened. Next, bridge is removed and slide hammer assembly is attached. With a few sharp hammer blows, sleeve is pulled. In most cases, job time will average less than two minutes per cylinder. The puller features a 5 lb. slide hammer to help bust loose even the most stubborn sleeves.

- Special adapters are unnecessary.
- Adjustable jaws fit sleeves 3" to 6-1/2" in diameter.

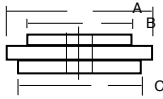
Sleeve Removal Plates

Designed to work with set Nos. 1200, 1202, and 1203, these removal plates fit the full spectrum of cylinder sleeve sizes. Determine engine bore size ("A" dimension) and O.D. of sleeve to be pulled ("B" dimension). Then consult chart to the right.



Bore Inches	A I.D. +.010 -.000	B I.D. +.010 -.000	OTC Plate Number
3.600"	3.585	3.657	1219
3-9/16"	3.547	3.663	1221
3-11/16"	3.671	3.792	1222
3-7/8"	3.840	4.047	1223
3-7/8"	3.859	4.093	1225
4"	3.984	4.218	1227
4-1/8"	4.109	4.229	1230
4-1/4"	4.235	4.470	1232
4-5/16"	4.302	4.450	1233
4-3/4"	4.734	5.171	1240
4-7/8"	4.860	4.980	1242
4-7/8"	4.860	5.045	1243
5"	4.977	5.120	1245
5-1/8"	5.093	5.593	1246
5-1/2"	5.484	5.718	1250

HEAVY DUTY TOOLS HEAVY DUTY TOOLS & EQUIPMENT



Sleeve Installation Plates

Each of these dry-sleeve installation plates covers a range of bore sizes. Their reversible design makes both sides usable. The plates work with our manual or 17-1/2 ton hydraulic puller/ installers.

(Nos. 1200, 1202, and 1203). Check chart at below to ensure correct sleeve selection.

Fits Sleeves From	A	B	C	No.
3-3/16" to 3-7/16"	3-7/8"	3.171"	3.421"	1252
3-9/16" to 3-7/8"	4-1/4"	3.546"	3.859"	1253
4-1/8" to 4-3/8"	4-3/4"	4.109"	4.359"	1254
4-3/8" to 4-3/4"	5-1/4"	4.390"	4.734"	1255
4-13/16" to 5-3/4"	6-3/8"	4.797"	5.734"	1256



5022 Oil Seal and Wear Ring Installer

This two-piece tool makes the difficult job of correctly installing the rear crankshaft seal and wear ring on most Navistar DT-360 and DT-466 engines thru 1996 an easy task. Bolt the adapter to the crankshaft and wrench the component home.

- Eliminates damage to seals or wear ring that can occur when driving them into place.



7106 Cylinder Liner Height Gauge with Hold-Down Bar

This set lets you meet those exacting specifications necessary for optimum diesel engine performance. It accurately measures cylinder bore flatness and depth. The hold-down bar correctly seats the liner for accurate measurement of liner protrusion. The easy-to-read dial is in .001 inch graduations, 1.000" range.

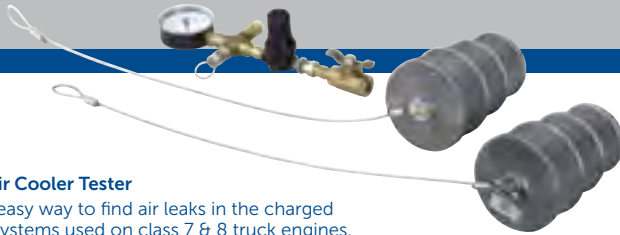


7161 Cummins Engine Turning Tool

This tool makes easy work of manually rotating a Cummins 855 cubic inch engine. It's essential hardware when you're bringing pistons to top dead center to adjust injector timing.

5039 Charged Air Cooler Tester

This is the easy way to find air leaks in the charged air cooler systems used on class 7 & 8 truck engines. The tester features a large 2-1/2", 0-60 PSI pressure gauge, regulator and relief valve, and two safety cables. It also has quick disconnect air fittings that attach to a 3", 3-1/2", or 4" cooler hose.



5071 Cummins Water Pump Pulley Tool

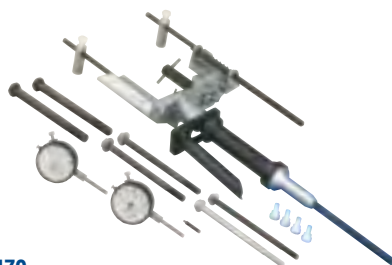
This heavy-duty tool is designed to remove or install water pump pulleys on Cummins L10 and M11 engines, 1991 and newer. The installer has a rugged thrust bearing that allows for friction-free pulley installation without damaging pump components.



7119 Compressor Drive-Gear Coupling Puller

Here's the solution for removing the coupling from the Cummins Compact and Bendix air compressors found on many Cummins 855 cubic inch engines. The split collet design fits over the coupling, and mechanical force does the work.

- Works on compressors with 1-3/4" O.D. shaft.



7470 Cummins Diesel Injector Timing Kit

Measures static timing on Cummins J, K, N, NH, V-12, N-14, and L-10 series diesel engines. With this tool you can determine the injector push tube travel in relation to piston travel. Tool is installed with one dial indicator in the injector bore and the other on the injector push tube. Turn the engine over manually to find top dead center. By checking the gauges, you can determine if timing is within factory specifications, then make adjustments to the cam followers.



7120 Cummins Drive-Pulley Tool Set

This two-piece set is designed to remove and install the drive pulley on Cummins NH and NTC 855 cubic inch engines. The 7120B remover simply bolts into the tapped holes for pulling. The 7120A installer threads onto the pulley accessory drive shaft for easy installation.

- 7120A** Drive-pulley installer.
- 7120B** Drive-pulley remover.



5044 Self-Adjusting Clutch Rotating Tool

This handy tool replaces the self-adjuster mechanism on Spicer self-adjusting clutches, allowing you to manually adjust them with a wrench or socket.

- 3/4" hex drive.



Pilot Bearing Pullers

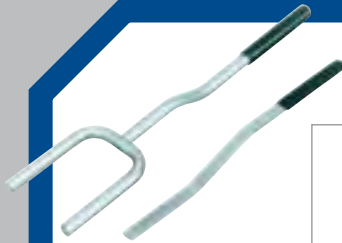
These tools make quick work of pulling stubborn, rusted pilot bearings. No. 5048 fits 1-1/4" I.D. bearings, and No. 5049 fits 1" I.D. bearings. The puller's forcing screw expands the jaws inside the bearing and simultaneously pushes against the crankshaft.

- 5048** Pilot bearing puller for 1-1/4" I.D.
- 5049** Pilot bearing puller for 1" I.D.



7028 Clutch-Adjusting Wrench

This clutch-adjusting wrench will solve the difficult, time-consuming job of internally adjusting heavy-duty Spicer clutches. Using this wrench is much quicker and easier than makeshift methods such as pry bars, which often result in component damage, poor job performance, or extra downtime.

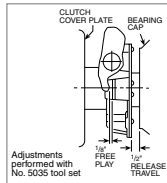


Similar to Ford 308-D008 (D93L-4201-A)

5035 Truck Clutch Adjustment Set

The gauges in this set enable you to check the adjustment of pull-type, heavy-duty clutches, ensuring their correct operation. One gauge checks the amount of free play between the yoke and the bearing's wear pad. The other gauge lets you determine the amount of travel between the release bearing and transmission bearing cap.

- Release bearing travel gauge.
- Clutch pedal free play gauge.



Adjustments performed with No. 5035 tool set



5190A Heavy-Duty U-Joint Puller

The ideal tool for disassembling drivelines.

- May be used with up to a one-inch impact wrench.
- Quickly and easily removes sealed U-joint cups without the need for hammering or heat.
- Will not damage the driveshaft, yoke, bearing cups, or joints.
- Fits practically all Class 7 and 8 trucks, including: Spicer driveline 1610, 1710, 1760, 1810, 1880 Spicer SPL 140, 170, 250 and 350 "Life Series" Meritor (Rockwell) 16N, 17N, 18N, 1710 Meritor RPL 20 and 25 "Permalube" Series.



5192 Heavy-Duty Bearing Cup Installer

Quickly and easily installs bearing cups on bolt-retained universal joints. Fits series 1610 to 1880 and nearly all other heavy-duty truck and machine type u-joints with bolt-retained bearing cups.

- Automatically aligns bearing cups during installation.
- Eliminates the possibility of damage to the needle bearing.

Similar to Ford 308-D009 (D93L7025-A)

Truck Clutch Alignment Shafts

These 10-spline clutch alignment shafts are available in the three most popular sizes: 1-1/2", 1-3/4", 2" O.D., and are designed for use on heavy-duty single, two-plate, push/pull, manual, and self-adjust clutches. The shafts are constructed of lightweight fiberglass-reinforced nylon that won't hang up in clutch disc splines. Yet, they're rugged and will easily support the weight of heavy pressure plates.



- 5070** Truck clutch alignment shaft. 1-1/2" O.D., 30 mm pilot.
- 7072A** Truck clutch alignment shaft. 1-1/2" O.D., 1" pilot, 10 splines, 3.25" long. Similar to Ford 308-D001 (D79T-7550-A).
- 7073A** Truck clutch alignment shaft. 1-3/4" O.D., 1-1/4" pilot, spline 3.75" long. Similar to Ford 308-D002 (D79T-7550-B).
- 7074A** Truck clutch alignment shaft. 2" O.D., 1-1/4" pilot, 10 splines, 3.6" long. Similar to Ford 308-D003 (D79T-7550-C).
- 7480** Truck clutch alignment shaft. 1-3/4" O.D., 1" pilot. Similar to Ford 308-D010 (D93T-7550-A).
- 5029** Clutch alignment shaft. 2" O.D., 1-1/4" pilot, 10 splines, 7.3" long. Similar to Ford 308-D011 (D93T-7550-B).
- 5030** Clutch alignment shaft. 1-3/4" O.D., 1-1/4" pilot, spline 7.375" long. Similar to Ford 308-D012 (D93T-7550-C).



5191 Heavy-Duty Bearing Cup Installer

Quickly and easily installs bearing cups on Dana/Spicer SPL "Life Series" quick-disconnect universal joints.

- Three individual adapters press bearings to the manufacturer's recommended depths.
- Adapters fit Spicer SPL 140, 170, and 250 series drivelines.



7490 U-Joint Tool

Designed for a 1/2" impact wrench, this U-joint tool removes even the most stubborn U-joints with ease. It's compact and easily set up, making it ideal for service calls. And it can be used at different angles and in tight places, eliminating those damaging makeshift methods. The puller's legs have holes for bolt storage.

- Bolts included: 5/16"-24 x 1-1/2", 3/8"-24 x 1-1/2", 7/16"-20 x 1-1/2", M8-1.25 mm x 35 mm.
- Works on most Dana Spicer and Meritor U-joints – except Spicer's Life series model SPL250X.



5043 Clutch Service Set

Here's an ideal companion set to the clutch handler. Designed for Spicer heavy-duty clutches, the nine tools in this set help with a variety of jobs, from clutch installation and removal to flywheel drive-pin installation to clutch adjustment.

- Includes handy plastic carrying case.

OTC No.	Description
5044*	Self-adjust clutch rotating tool. Rotates adjusting ring.
5045*	Flywheel drive pin installing tool. Aligns and installs drive pins in 14" heavy-duty truck pot-type flywheels.
5046*	Clutch release tool. Removes shipping blocks from between clutch housing and release bearing.
7028*	Adjusting wrench. For internal adjustment of multiple lever and angle-spring clutches.
7073A*	Clutch alignment tool. 1-3/4" O.D. Provides perfect fit to spline of clutch disc.
7074A*	Clutch alignment tool. 2" O.D. Provides perfect fit to spline of clutch disc.
213013	Pair of 3/8" flywheel to clutch guide pins.
213014	Pair of 7/16" flywheel to clutch guide pins.
213015	Hex key Wrench. Removes/installs flywheel drive pin set screws.

* Tool is available separately.



7057 U-Joint Puller

This service tool easily removes stubborn, corroded bearings without damaging U-joint components, even in limited space. The tool applies up to 7 tons of force to separate yoke assemblies and remove bearings. Far superior to sledgehammer methods.

- Works on Meritor 16N, 17N, 18N, and 1710 series U-joints and Spicer 1600/1610 to 1880 series U-joints.
- Includes plastic storage box, No. 1036 2-jaw puller, and instructions.

HEAVY DUTY LOCKNUT SOCKETS HEAVY DUTY TOOLS & EQUIPMENT

Wheel bearing locknuts are easy to remove or install with these specially designed sockets. They're made of high-strength steel and resist rounding out.

NOTE: Sockets are designed for use with 3/4" square-drive manual tools only. Impact tool use voids sockets' warranty.

1902 – Similar to Ford No. 205-039 (T70T-4252-B)

1904 – Similar to Ford No. 205-040 (T70T-4252-D)

1905 – Similar to Ford No. 205-041 (T70T-4252-E)

1910 – Similar to Ford No. 205-042 (T70T-4252-K)

1928 – Similar to Ford No. 205-043 (T70T-4252-W)

Measure from flat to flat to determine size of locknut, then consult chart to find the correct socket.



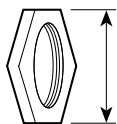
9850 Truck Wheel Bearing Locknut Sockets (6-pt.)

21 wheel bearing locknut sockets with tool board.

62908 Display board only.

No.	Qty.	Description
1901	1	Locknut socket (2-3/32")
1902	1	Locknut socket (2-3/8")
1904	1	Locknut socket (2-9/16")
1906	1	Locknut socket (3")
1908	1	Locknut socket (3-1/4")
1910	1	Locknut socket (3-1/2")
1912	1	Locknut socket (3-7/8")
1914	1	Locknut socket (4")
1915	1	Locknut socket (4-1/8")
1916	1	Locknut socket (4-3/8")
1918	1	Locknut socket (4-7/8")
1920	1	Locknut socket (2-1/4")
1921	1	Locknut socket (2-1/2")
1922	1	Locknut socket (2-5/8")
1923	1	Locknut socket (2-3/4")
1926	1	Locknut socket (3-3/4")
1928	1	Locknut socket (2-9/16" rounded)
1932	1	Locknut socket (2-7/8")
1934	1	Locknut socket (3-1/8")
1936	1	Locknut socket (2-3/8" rounded)
1939	1	Locknut socket (5-1/4")

Socket No.	Opening Size	Socket No.	Opening Size	Socket No.	Opening Size	Socket No.	Opening Size
1901	2-3/32" (6 pt.)	1923	2-3/4" (6 pt.)	1924	3-3/8" (8 pt.)	1940	4-1/8" (8 pt.)
1920	2-1/4" (6 pt.)	1937	2-3/4" (8 pt.)	1910	3-1/2" (6 pt.)	1916	4-3/8" (6 pt.)
1902	2-3/8" (6 pt.)	1932	2-7/8" (6 pt.)	1911	3-1/2" (8 pt.)	1917	4-3/8" (8 pt.)
1936*	2-3/8" (6 pt.)	1933	2-7/8" (8 pt.)	1925	3-3/4" (8 pt.)	1938	4-1/2" (8 pt.)
1903	2-3/8" (8 pt.)	1906	3" (6 pt.)	1926	3-3/4" (6 pt.)	1941	4-13/16" (8 pt.)
1921	2-1/2" (6 pt.)	1907	3" (8 pt.)	1927	3-13/16" (8 pt.)	1918	4-7/8" (6 pt.)
1904	2-9/16" (6 pt.)	1934	3-1/8" (6 pt.)	1912	3-7/8" (6 pt.)	1919	4-7/8" (8 pt.)
1905	2-9/16" (8 pt.)	1935	3-1/8" (8 pt.)	1913	3-7/8" (8 pt.)	1939	5-1/4" (6 pt.)
1928*	2-9/16" (6 pt.)	1908	3-1/4" (6 pt.)	1914	4" (6 pt.)	7795	2-1/2" (6 pt.)
1922	2-5/8" (6 pt.)	1909	3-1/4" (8 pt.)	1915	4-1/8" (6 pt.)	7796	2-3/4" (6 pt.)



Measure from flat to flat to determine size of locknut, then consult chart to select a socket. Warranty is void if tool is subjected to impact wrench use.



* Fits special "rounded" hex nut found on Dana axles of some Ford trucks.

* Depth of locknut sockets is 5".

Metric Truck Wheel Bearing Locknut Sockets

Socket No.	Opening Size	Socket No.	Opening Size	Socket No.	Opening Size
1950M	54 mm (6 pt.)	1955M	80 mm (6 pt.)	1962M	100 mm (8 pt.)
1951M	55 mm (6 pt.)	1956M	82 mm (8 pt.)	1959M	106 mm (8 pt.)
1952M	60 mm (6 pt.)	1957M	90 mm (8 pt.)	1960M	110 mm (8 pt.)
1953M	70 mm (6 pt.)	1958M	94 mm (8 pt.)	1961M	120 mm (6 pt.)
1954M	71 mm (6 pt.)				

5059 Hubcap Installer

Truckers like chrome, and many of them accent their truck's drive axle with chrome hubcaps designed to snugly fit around the axle-shaft bolts. Unfortunately for service shops, these hubcaps are often tricky to install without causing damage. That's where our hubcap installer comes in handy. Constructed of high-density polyethylene, this tool guides the cap into place over the axle nuts, protecting it from unwanted and costly dents.



5047 Lug Nut Cap Remover

Chrome-plated lug nut caps found on many heavy-duty trucks and trailers can be tough to remove, and they're easily damaged if you pry them off or use an ordinary cap remover. This tool avoids those problems. It is ruggedly built and features specially coated jaws that won't slip off the caps, no matter how much squeezing force you apply.

- Features cushioned handles.



5047LP Lug Nut Cap Remover Locking Pliers

- Designed to remove lug nut caps found on heavy duty truck and trailers quickly and easily without damage. Caps can be easily damage by prying or using standard cap removers.
- Locking pliers design with specially coated jaws apply maximum grip on the lug nut caps without damage.



9851

Wheel Bearing Locknut Sockets (8 pt.)

18 wheel bearing locknut sockets with tool board.

62909 Display board only

No.	Qty.	Description
1903	1	Locknut socket (2-3/8")
1905	1	Locknut socket (2-9/16")
1907	1	Locknut socket (3")
1909	1	Locknut socket (3-1/4")
1911	1	Locknut socket (3-1/2")
1913	1	Locknut socket (3-7/8")
1917	1	Locknut socket (4-3/8")
1919	1	Locknut socket (4-7/8")
1924	1	Locknut socket (3-3/8")
1925	1	Locknut socket (3-3/4")
1927	1	Locknut socket (3-13/16")
1929	1	Locknut socket (2-5/8")



No.	Qty.	Description
1930	1	Locknut socket (2-7/8")
1931	1	Locknut socket (3-5/8")
1933	1	Locknut socket (2-7/8")
1935	1	Locknut socket (3-1/8")
1937	1	Locknut socket (2-3/4")
1938	1	Locknut socket (4-1/2")

9852

Wheel Bearing Locknut Sockets

A selection of popular sizes in 6- or 8-point.

62910 Display board only.

No.	Qty.	Description
1904	1	Locknut socket (2-9/16" hex)
1908	1	Locknut socket (3-1/4" hex)
1909	1	Locknut socket (3-1/4" 8 pt.)
1910	1	Locknut socket (3-1/2" hex)
1913	1	Locknut socket (3-7/8" 8 pt.)
1914	1	Locknut socket (4" hex)
1915	1	Locknut socket (4-1/8" hex)
1921	1	Locknut socket (2-1/2" hex)
1922	1	Locknut socket (2-5/8" hex)



No.	Qty.	Description
1923	1	Locknut socket (2-3/4" hex)
1928	1	Locknut socket (2-9/16" hex rounded)
1932	1	Locknut socket (2-7/8" hex)

9814

Truck Pinion Sockets

We've designed and built these sockets to have the correct clearance for yoke and locknut assemblies on a variety of truck transmissions and differentials. The sockets have 3" of usable depth and are 4" long. Using the right tools saves time and effort, eliminating the need to destroy standard sockets by grinding them down to fit tight pinion clearances.

No. 1981* – Socket only, not included in set.

62911 – Tool Board only

Socket No.	Opening Size	Socket No.	Opening Size
1975	2" (6 pt.)	1980	2-3/4" (6 pt.)
1976	2-1/8" (6 pt.)	1981*	2-1/2" (6 pt.)
1977	2-1/4" (6 pt.)	NOTE: Use sockets with 3/4" square-drive, manually powered handles only. Warranty void if tool is subjected to impact wrench use.	
1978	2-3/8" (6 pt.)		
1979	2-5/8" (6 pt.)		



1944 Budd Wheel Sockets

- Metric sizes for Isuzu, Hino, Mitsubishi Fuso, and import trucks; fit front and rear axle wheels.

- 1-1/2" hex Budd wheel socket for American-made trucks with dual rear wheels.

These sockets work on the import truck Budd wheels. Their extra deep design lets you remove both nut and stud with just the one socket. Usable with a 1" square drive impact wrench.

1944 – Consists of 1945A, 1946A, 1947A, 1948A, and 1949A, in a blow molded organizer case.

1945A 35 mm hex socket with 17 mm sq.

1946A 38 mm hex socket with 20 mm sq.

1947A 41 mm hex socket with 21 mm sq.

1948A 33 mm hex Budd wheel socket. For Mack Midliners, White Volvo, and other import trucks with dual rear wheels.

1949A 1-1/2" hex Budd with 13/16" square wheel socket. For American-made trucks with dual rear wheels.

Tubular Spanner Wrenches

- Six-lug, spanner-type wrenches remove and install rear wheel bearing locknuts. They're built for use with a 3/4" square-drive ratchet or breaker bar.



1929 Wrench for servicing Chevrolet and GMC 5,200 and 7,200 lb. axles. Socket O.D. is 2-5/8".

1930 Wrench for servicing Chevrolet and GMC 11,000 to 13,500 lb. axles. Socket O.D. is 2-7/8".

1931 Wrench for servicing Chevrolet and GMC 15,000 lb. axles; 17,000 lb. 2-spd. axles; 15,000 lb. trailing axles. Socket O.D. is 3-5/8".

7217 Locknut Socket

- Designed to fit the axle nut on Chevy Topkick/Kodiak, 2003 - Newer.
- Similar to J-44275.



Jimmy Bars

We've forged these bars from chrome alloy steel, then heat-treated them to resist bending and breaking.

7166 5/8" diameter, 18" long

7167 3/4" diameter, 24" long

7168 7/8" diameter, 30" long

7420 7/8" diameter, 46" long



STEERING / SUSPENSION TOOLS HEAVY DUTY TOOLS & EQUIPMENT



4240A

Kingpin & Brake Anchor Pin Pusher

With this pin remover, hydraulic force and precision tooling replace torch-and-hammer methods for getting the job done quickly and easily. Five special collars and two pins allow this unit to work on both straight and tapered kingpins and accommodates sizes from 7/8" to 2" in diameter and up to 11-1/4" long. The tool delivers 30 tons of hydraulic force to push out even the most corroded kingpins. A job that could consume the better part of a day is done in minutes. The anchor pin can be removed quickly by using the special adapter installed in the pusher's base block and the unit positioned over the brake's spider.

- Works on many models of trucks and buses.
- 27-1/2" high x 8-1/2" wide.
- 30-ton capacity.
- Set includes No. 4002 hydraulic hand pump, No. 9767 hose, No. 9798 hose-half coupler, No. 4121 Power Twin 30-ton ram, and No. 29424 anchor pin adapter.

4240A Complete kingpin and anchor pin pusher set with hydraulics

4241 King- and anchor-pin pusher with anchor pin adapter without hydraulics

29424 Anchor pin adapter only



4241



29424

5053 Mack Kingpin Socket

Here is a socket that makes life a little easier for anyone who works on Mack trucks. Designed for 1/2" square drive ratchet or breaker bar, the socket fits the slotted adjusting screw in tapered kingpins used on most Mack front axles (12,000 to 20,000 lbs.).

- Socket O.D. 1.8"



6065 Tie Rod Socket for Medium-Duty Trucks

Services GM-, Ford-, and Chrysler-built 1-ton 2WD and 4WD trucks. Also works on medium-duty Class 2 through Class 6 trucks. Use with a 1/2" drive impact wrench to easily remove the tie rod ends from the tie rod.

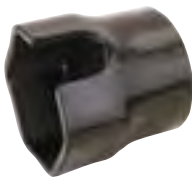
- Socket I.D. 2-1/8"



5068 Truck Tie Rod Socket

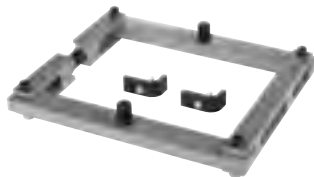
Designed to withstand the force of a 3/4" drive impact wrench, this rugged socket makes truck tie-rod end removal quick and simple.

- Works on inner and outer tie rod ends on 12,000 to 16,000 lb. truck axles.
- Socket I.D. 2-3/4"



7503HD Heavy Duty Tie Rod and Ball Joint Remover

A universal heavy-duty puller that removes a wide range of tie rods and ball joints from a variety of cars, trucks, SUVs and heavy-duty vehicles. The 7503HD has a 10-ton pulling capacity, twice the force applied by the original 7503. Jaw spread and reach are increased to 3 and 4 inches for a wider variety of applications and larger vehicles. A heavier duty forcing screw is used, measuring 3/4" - 10, 6 1/2" long with interchangeable tips including cone, flat and cup for multiple applications. The tool will also remove pitman arms and can be used in many pulling situations that require a 2 jaw puller on other vehicles types and machinery.



7071 Differential Housing Spreader

Removing and installing differential ring gear assemblies is typically a difficult, time-consuming chore – that is, unless you're using this differential housing spreader. This device uses mechanical screw power to spread the housing. Allowing easy removal of the differential assembly while eliminating damage often caused by makeshift methods.

- Works on Dana axle models 30 through 70.



5079 Heavy-Duty Power Steering Pump Analyzer

- There is only one way to troubleshoot problem components in a heavy-duty power steering system: a flow and pressure reading meter. OTC's new No. 5079 measures both: 1 to 10 gallons oil flow and up to 3,000 psi of pressure.
- When connected in line, this universal analyzer will isolate the failed components in just minutes. There is no wasted time as in trial and error methods.
- The set is complete with high pressure hoses, 9/16"-18 standard fittings, and quick disconnect couplers to handle Eaton/Vickers, TRW, Ross, and Shepard power steering systems.

223018 Accessory fitting kit.



4295 Wheel Stud Service Kit

- Works on most hubs for installation and removal.
 - All sizes of studs.
- Installation done by pushing on the head, eliminating the need for threaded adapters.
 - Reduces number of adapters required
 - Reduces damage to studs
 - Increases ease of use
- Remove and install 10 studs in only 10-15 minutes (compare to 20-30 minutes for more expensive competitive products).
- Can be powered with an impact wrench, no hydraulic power source required.
- No need to remove hub from vehicle.
- Reduces risk of damage to hubs, studs, and bearings when using tool.
- Weighs only 12 lbs., assembled to remove studs and 14 lbs., assembled to install studs.

**SEE PAGE 43
FOR GREASE GUNS**





7180 Universal Bearing Cup Installer

This handy, adjustable tool is designed to install wheel-bearing cups in a wide range of heavy-duty axles. Simply adjust and lock the jaws to the cup I.D., slip on the new cup, set it in the bore, and drive it in with a hammer. The tool helps eliminate the damage caused by makeshift methods.

- Works on axles from 11,000 to 50,000 lb. capacity.
- Adjusts to fit 3-5/8" to 6-1/2" O.D. bearing cups, which adds up to as many as 30 individual drivers.

52038 Replacement jaw.

207561 Replacement retaining spring.



5038 Brake Anchor Pin and Bushing Service Set

With the No. 5038, there's no need to remove the bearing hub assembly just to replace the pins and bushings on 16-1/2" S-cam trailer and tractor "Q" brake systems. Much less complicated and time consuming!

- Special tooling and our C-frame press get you past the hub assembly, so you can do the job quickly and professionally without damaging other parts.
- Includes everything needed for removal and replacement.



5081 S-Cam Air Brake Spring Tool

- Eliminate makeshift, unsafe methods of unhooking and reconnecting retaining springs when replacing brake shoes on heavy-duty tractors and trailers.
- Simply hook the retaining spring loop and press down. Lever action against the axle makes the job a snap!

314548 Replacement hook kit.



5080A Truck Front Leaf Spring, Pin, and Bushing Service Set

- Delivers 10 tons of hydraulic force to remove and install truck front spring eye bushing assemblies quickly and easily.
- Services bushings with diameters from 1-1/4" through 1-7/8", and pin diameters from 7/8" through 1-1/8". Handles all popular OE and aftermarket components, including Horton pin and bushing assemblies.
- Service bushing assemblies, in many cases, without removing leaf spring hangers and spring assemblies from the vehicle.
- All accessories are included except the hydraulic hand pump and hydraulic hose which must be purchased separately.



5085 Hub Oil Seal Puller

- Eliminates bearing and hub damage that can occur when a punch and hammer is used to remove the seal.
- Extra long 28" handle provides leverage, unique pulling head design quickly and easily removes the seal in one piece.
- Built from the highest quality heat-treated steel.
- Removes hub seals on trailer and truck axles, including truck steering axles.



7077 Axle-Stud Cone Pliers

Now you can easily remove the tapered cone from studs used on the rear axles of medium and heavy-duty trucks. This specially designed tool gives you the leverage needed to expand the cone and remove it from the stud for axle removal.

5052 Slack Check

This tool enables you to quickly check the brake adjustment on class 7 and 8 trucks and trailers having S-cam brakes. It features a sturdy, four-position handle to provide the leverage you need at the proper angle.

- Works on manual or automatic slack adjusters.



Slack Adjuster Pullers

These pullers will yank even the most corroded slack adjuster off the S-cam— and do so in just a fraction of the time needed with "heat and beat" methods. Plus, they won't damage components. Both pullers have a rugged forcing screw and cast steel body. Puller No. 5055 fits many manual types, and the No. 5056 works on Rockwell, Haldex, Gunite, and Bendix automatic adjusters.

5055 Manual slack adjuster puller.

5056 Automatic slack adjuster puller.



5054 Air Brake Service Kit

This kit has the tools needed to remove slack adjusters and push-rod clevis pins used in the S-cam brake systems of class 7 and 8 vehicles.

- Works on manual or automatic slack adjusters.
- Includes Nos. 5055 and 5056 slack adjuster pullers, 5057 brake clevis pin press, and a plastic storage case.



5057 Clevis Pin Press

Removing corroded clevis pins from a brake air-chamber push rod can be a maddening and time-consuming task— unless you're using our clevis pin press. This handy screw-operated tool applies the force just where it's needed. The pin is easily removed from its hole without damaging nearby components.



5089 Air Brake Line Release Tools

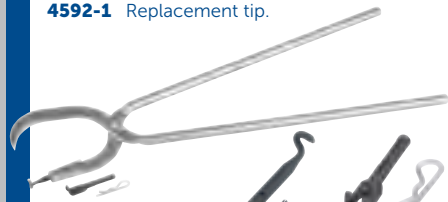
Tools used to separate connectors on the P/S system and EGR coolers without damage. Also works on connectors on other liquid and air lines. Each tool has two sizes. 3/8" and 5/8"; 1/2" and 3/4". Similar to J-45666 & J-42971. Applications: 2003-later Medium Duty trucks.

BRAKE / TRANSMISSION TOOLS HEAVY DUTY TOOLS & EQUIPMENT

4592 Truck Brake Spring Pliers

• Designed to remove and install the brake shoe return springs on medium-duty and heavy-duty drum brakes.

4592-1 Replacement tip.



7069A Heavy-Duty Brake Spring Pliers

Save time and effort when removing and installing return springs on the brake shoes of heavy-duty vehicles. This specially designed pliers works for hydraulic wedge-type and "S" cam air brakes. Its 26-1/4" length gives you the leverage to do the job more easily, and the huge jaw opening accommodates even the widest brake shoes.

202621 Wedge-type replacement tip

204141 "S" cam replacement tip

202621 204141



Positioned for bearing installation.



Positioned for main shaft timing.



Transmission Timing Block Sets

These sets enable one-man installation of front and rear countershaft bearings on Fuller twin-countershaft transmissions. The set positions the upper countershaft, yet lets you slide it aside to insert the main shaft. When the main shaft is in place and timing marks line up, turn the tool vertically to engage and position the countershaft to main shaft.

7108 Timing block set for Fuller RTO 610/613 transmissions.

7109 Timing block set for Fuller RT and RTO 910, 915, 9513, 12509, 12510, 12513, and 12515 transmissions.

5063 Timing Tool

• Designed to support the main-case upper countershaft during transmission assembly and timing.
• Works on Eaton® Fuller® 2 Series Roadranger® transmissions.



Truck Transmission Bearing Service Set

The set is designed to help you remove input shaft bearings and countershaft bearings, in both the main and auxiliary boxes of heavy-duty Fuller transmissions. It will also remove end yokes from 1600/1610-1810 series transmissions. The puller delivers 10 tons of mechanical power—essential force for working on big gearboxes.

• Works on Fuller twin-countershaft transmissions: 125, 600, 660, 900, 9500, 1100, 12500, 12600, 13000, 14600, 15600, and 8600 series, 910-913, 915, and 9513.

7070A Truck transmission bearing service set

7075 Transmission output shaft end yoke remover only



7462 Hydraulic Brake Spring Tool

Here's a tool to remove and install the return springs in Lucas Girling hydraulic brake systems. The tool's machined tip cradles the return spring securely, and its sliding fulcrum gives you all the leverage needed to do the job. A knurled handle helps prevent slipping.

• Works on 1984 to current Ford F600, F700, and F800 series having Lucas Girling hydraulic brakes.



Similar to Ford 206-D005 (D90T-2588-A)

5072 Lucas Rear Brake Adjusting Tool

If you're working on a lot of medium-duty hydraulic brake systems, you need our adjusting tool. It enables you to easily adjust Lucas Girling hydraulic brake systems (popular in Ford F700, F800, and F900 series). The tool's offset design and extra handle length get the job done quickly.



205776 Bearing Puller Set

This puller set, designed for use with our No. 7070A transmission service set (sold separately), is designed to remove front countershaft and input shaft bearings on Fuller RT, RTO 610/613 twin countershaft transmissions.



5051 Bearing Puller Set

When teamed with our No. 7070A puller, this puller set will remove front and rear countershaft bearings from the main case of Eaton® Fuller® 2 Series Roadranger® transmissions.

• Includes pulling collet, sleeve, and a pair of puller legs.

5064 Countershaft Pushing Tool

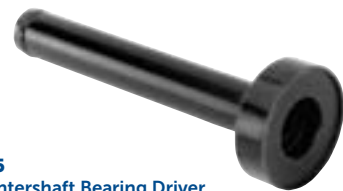
Replacing rear countershaft bearing snap rings in Eaton Fuller transmissions. With this tool, you can easily move the countershaft rearward to expose the snap ring.

• Works on Eaton® Fuller® Roadranger® transmissions (series 2, 5, 6, and 7).



5065 Countershaft Bearing Driver

• Eases the task of installing a main-case countershaft bearing.
• Works on Eaton® Fuller® 2 Series Roadranger® transmissions.

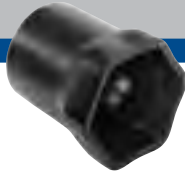


5066 Bearing Driver

This tool is designed to install the bearing on 2" diameter input shafts used in Eaton® Fuller® Roadranger® transmissions.



Made of aircraft quality steel.



1982M 70 mm Hex Socket

Attach this heavy-duty socket to your 3/4" drive ratchet or breaker bar, and you'll be able to easily remove the end-yoke locknut on Eaton® Fuller® 2 Series Roadranger® transmissions.



5040 Cummins® Injector Remover/ Installer

This is our best tool for removing or installing fuel injectors on Cummins L10 and N14 Select electronically controlled engines. The large slide hammer and pin-type pulling adapter easily—and safely—handle injector jobs.

- Includes storage case.
- Two installing adapters help prevent damage to an injector's electronic solenoid.



5042 Cummins® Injector Puller

This helpful puller will handle a variety of injectors found in Cummins engines: mechanical L-10, PDT, and PTD top-stop 855NH. Its two-jaw design firmly grips the injector while it is being removed by the slide hammer.

- Includes storage case and special adapter for pulling STC injectors.



5062 Auxiliary Countershaft Shim Tool

When you're working on Eaton® Fuller® 2 Series Roadranger® transmissions, this tool holds the auxiliary countershaft in place while you set the bearing end play.

- Includes a support strap for .100 and .125 shim settings, and metric and standard mounting bolts.



7455 Mack Fuel Injector Nozzle Tool

Here's a handy tool for removing or installing injector nozzles on Mack E-6 4 VH and E-9 4 VH four-valve engines. The puller threads directly into the nozzle holder, and mechanical screw power does the pulling while a cylindrical guide holds the injector steady.

- Includes gauge to ensure correct injector depth during installation.



Cummins® Fuel Injector Puller Adapter

When combined with our No. 5028 injector puller or a slide hammer with a 1/2"-20 threaded shaft, this adapter gives you an easy, damage-free way to remove fuel injectors from Cummins B and C series engines.

215844 Cummins fuel injector puller adapter for B and C series engines with 14 mm x 1.5 injector threads.



7117 Caterpillar Fuel Injector Nozzle Puller

We've designed this nozzle puller to remove pencil nozzles on Cat engines. The tool applies straight, even pulling power through a bridge assembly and mechanical forcing screw. The job is done quickly—and without damage.

- Works on Caterpillar 1100/3208 diesel engines.



7121 Fuel Injector Nozzle Puller

We've designed this puller to remove the pencil-type fuel injector nozzles used in many agricultural and construction engines. The slide hammer action gives a straight, even pull without damaging components.

- Works on Case, Caterpillar, GM, John Deere, Waukesha, and White diesel engines.



7458 Bosch Nozzle Socket

Removes or installs injector nozzles. You use the inner socket to hold the nozzle stationary, and the outer socket to loosen or tighten the nozzle's gland nut.

- Works on Bosch KDEL 21 mm injector nozzles used in John Deere engines.

218163 Ford Fuel Injector Puller Adapter

Designed to work with the No. 5028 slide-hammer puller, this adapter removes injectors from Ford 6.6L and 7.8L diesel engines without damage.

- Slide-hammer threads are 1/2" x 20. Threaded end for injector is 14 mm x 1.5.



5024 Injector Sleeve Set

Here are the ideal tools for removing and installing the injector sleeves of International 1995 - 2003 DT466 engines. The removing tool threads onto a slide hammer with 5/8" - 18 threads to remove sleeves quickly. The installer seats new sleeves equally fast, without damage.

Similar to Ford 303-230(T83T-9396-A)

Diesel Fuel Line Wrenches

Fuel line nuts are often hard to reach, but these unique 3/8" square-drive tools solve that problem. With them, you can loosen or tighten fuel lines at the fuel injector nozzle or fuel injection pump without damaging the nut.

7453A Fuel line wrench, 2.6" long. For International DT466 and 9L diesel engines. Fits 19 mm fuel line nuts.

7460 Fuel line wrench, 2.6" long. For International 6.9L and 7.3L diesel engines. Fits 5/8" hex nut.



6080 Cummins Diesel Fuel Injector Kit

For 1988-98 Dodge pickups and vans with 5.9L 12-valve, and 1998-1/2-newer 5.9L 24-valve Cummins diesel engines

NOZZLE TESTERS HEAVY DUTY TOOLS & EQUIPMENT

4201

Nozzle-Tester Adapter Set

This is our universal adapter set for testing injection nozzles on the most popular automotive, agricultural, and construction diesel engines. The set has 17 adapters that connect to our No. 4200 Nozlrater testing unit.

- Includes handy metal storage box.
- 23622— used on 1989–95 Cummins 5.9L, 1983–94 Ford 6.9L and 7.3L.
- 23623— used on 1996–2000 Cummins 5.9L and Navistar 6.6L and 7.8L.



Adapter No.	Description	I.H. Truck	I.H. Farm Construction	John Deere	Oliver & Allis	Waukesha	Case, Ford Tractor, Massey, & Perkins	White	Mack	Caterpillar Pencil Nozzles	Deutz	GM Autos	VW, Audi, & Mercedes Autos	Mercedes & Magaris Truck
36352	Fuel line assembly, 9/16"–18 R.H. thd. with 24° on pipe.	•	•	•	•	•	•	•	•	•	•	•	•	•
23622	Adapter nut, 12 X 1.5 mm internal R.H. thd. to 1/2"–20 internal L.H. thd.	•		•	•	•	•	•			•	•	•	
23623	Adapter nut, 14 X 1.5 mm internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•	•	•	•	•		•		•			•
23624	Adapter nut, 18 X 1.5 mm internal R.H. thd. to 1/2"–20 internal L.H. thd.		•		•	•	•							
201917	Adapter nut, 9/16"–18 internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•	•	•	•	•	•				•		
23626	Adapter nut, 5/8"–18 internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•		•	•	•							
201912	Adapter nut, 3/4"–16 internal R.H. thd. to 1/2"–20 internal					•								
201913	Adapter nut, 9/16"–24 internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•											
23693	Straight adapter, 1/2"–20 external L.H. thd. (Ermeto 24° & 90° seat) to 9/16"–18 external R.H. thd. (E201917°).	•	•	•	•	•	•	•				•		
23692	Straight adapter, 3/8"–24 external R.H. thd. to 9/16"–18 external R.H. thd. (internal Ermeto 24°).	•	•											
23617	90° adapter, 9/16"–18 external R.H. thd. (Ermeto 24°) to 9/16"–18 internal R.H. thd. (Ermeto 24°).	•	•	•	•		•		•		•	•	•	•
23621	Straight adapter, 9/16"–18 external R.H. thd. (Ermeto 24°) to 1/2"–20 external L.H. thd. (60° seat).	•	•	•			•	•	•		•	•	•	•
208370	Banjo adapter, 9/16"–18 external R.H. thd. (24° seat).		•	•										
201916	Adapter, 9/16"–18 external R.H. thd. to 9/16"–18 internal R.H. thd. ferrule.			•										
208369	90° adapter, 9/16"–18 external R.H. thd. to 9/16"–18 internal R.H. thd.	•												
38279	Straight adapter, 14 X 1.5 mm external R.H. thd. (Ermeto 60°) to 9/16"–18 external R.H. thd. (internal Ermeto 24°).			•										
43468	Straight adapter, 1/2"–20 external R.H. thd. (Ermeto 24°) to 9/16"–18 external R.H. thd. (internal Ermeto 24°).							•						
Additional Accessories Available (not included in 4201 Set)														
44026	Straight adapter, 9/16"–18" R.H. thd. (Ermeto 24°) to Caterpillar 1100 & 3200 series pencil nozzle.									•				
201920	Adapter nut, 14 X 1.5 mm external thd. to o"–18 internal R.H. thread													Connects OTC 4200 Nozlrater to other fittings used in the industry.



Nozzle Tester Manifold/Adapter Sets

These adapter sets expand our No. 4200 Nozlrater to troubleshoot a wide range of diesel engine injector nozzles.

4202 Adapters for servicing Audi, GM, Mercedes-Benz, Nissan/Datsun, Toyota, and VW Rabbit diesel engines.

4203 Manifold/adapter set. Tests Caterpillar high- and low-pressure, capsule-type nozzles, and high-pressure, pencil-type nozzles on 1100 and 3200 series engines. Complete with Nos. 39870 and 206168 adapters, low-pressure gauge (up to 1,000 PSI), cap plug and mounting brackets.

No. 4202 set includes:

Adapter No.	Description	Chevy Chevette & GM 1980 and newer C.A.V. nozzles	GM 1979 & newer pencil nozzles	GM 1978 pencil nozzles	Nissan, Toyota, and VW Rabbit Diesels	Audi & Mercedes-Benz
36352	Fuel line assy., 9/16"-18 R.H. thd. with 24° on pipe.	•	•	•	•	•
23617	90° adapter, 9/16"-18 external R.H. thd. (Ermeto 24°) to 9/16"-18 internal R.H. thd. (Ermeto 24°).	•	•	•	•	•
23621	Straight adapter, 9/16"-18 external R.H. thd. (Ermeto 24°) to 1/2"-20 external L.H. thd. (60° seat).	•	•	•	•	•
23622	Adapter nut, 12 X 1.5 mm internal R.H. thd. to 1/2"-20 internal L.H. thd.	•	•	•	•	•
201917	Adapter nut, 9/16"-18 internal R.H. thd. to 1/2"-20 internal L.H. thd.	•	•	•	•	•
23693	Straight adapter, 1/2"-20 external L.H. thd. (Ermeto 24° & 90° seat) to 9/16"-18 external R.H. thd. (Ermeto 24°).	•	•	•	•	•

4200

Nozlrater Diesel Injector Nozzle Tester

Here is the ultimate tool for diagnosing a number of problems that affect diesel fuel injector nozzles. The Nozlrater tester enables you to check for leakage, pop-off pressure, spray pattern, and chatter. This tool will accommodate a wide range of injectors. We also offer adapters so you can troubleshoot nozzles used in popular automotive, agricultural, and construction engines. Nozlrater features a rugged, lightweight reservoir that holds 7/10 of a gallon of fuel. It is equipped with a replaceable 2-micron filter. The large, dual-scale, high-pressure gauge is protected by a guard and includes an indicator needle to record maximum pressure reached. The tester is light enough to be easily carried for field use. Or you can bench-mount it, using the holes in its base.

• Not designed for Cummins or Detroit injectors.

17169 Replacement filter.

11565 Gauge.



Specifications

Overall width	5-3/4"
Overall length (includes handle)	26"
Overall height	11-1/4"
Weight (empty)	15 lbs., 10 oz.
Max. pressure	5000 PSI (350 bar)
Max. reservoir cap.	.692 gal. of diesel fuel (160 cu. in.)
Usable reservoir cap.	.628 gal. of diesel fuel (145 cu. in.)
Outlet port	For 3/8" tube
Gauge	Calibrated 0-5000 PSI (350 bar) Has 3-1/2" dial face with maximum reading indicator needle.
Gauge connection	1/4" NPT internal
Stroke of 1/2" dia. piston	3/4"
Volume per full stroke	.147 cu. in. (2.4 cc)
Intake filter	2 micron

208629

Calibration Fluid

- For use in diesel injection pump testers and injector nozzle testers.
- 1 gallon



Davco Diesel Filter Wrenches

- Found on Caterpillar, Cummins, Detroit Diesel, International, Mack, Mercedes-Benz, Volvo and other engines.
- Durable, stainless steel construction.
- Precise, laser-cut angles.
- Opens vent cap also.
- Soft, ergonomic handle.

6914 Fits Davco Diesel filter models, 232-233-234.

6915 Fits Davco Fuel filters 382 & 384.



6916

Duramax Water Sensor Wrench

- Used to remove and install the water sensor on the fuel filter.
- Works on 2001 and Newer 6.6L Duramax Diesel found in Chevrolet and GMC Trucks and Vans.
- 3/8" square drive hole.

OIL FILTER CRUSHERS / FLUID RECEIVERS HEAVY DUTY TOOLS & EQUIPMENT



1821
10-Ton Capacity, Air-operated Automotive Oil Filter Crusher

- Crushes up to four automotive filters (3-7/8" dia. x 9" high) at one time, in approximately 20 seconds. Engineered and built for dependable operation. Covered by OTC Lifetime Warranty®.
- 100% air operation eliminates electrical connections. Generous size of crushing chamber easily accommodates the largest automotive spin-on filters.
- Includes mounting stand. No wall mounting or time consuming installation required.



1877
25-Ton Capacity Heavy-Duty Oil Filter Crusher

- Handles the big filters (up to 6" dia. and 12-1/2" long) found in trucks, construction equipment, farm implements, etc. May also be used for automotive and light truck filters. It does it all!
- Crushes filters to 1/4 of original size, removing up to 95% of filter's oil capacity. Automatic cycle feature: load the filter, push a button, and walk away.
- Air/hydraulic pump works on standard shop air (requires 9 CFM at 100 psi). Special valving returns ram automatically at the end of each cycle. No electrical connections needed.
- Built-in floor stand (completely assembled). Whole unit requires just 5 square feet of floor space.
- Covered by OTC Lifetime Warranty®.



Shipped assembled

1896
25-Ton Capacity High-Speed Heavy-Duty/Automotive Oil Filter Crusher

- Automotive and heavy-duty filters up to 15-1/4" long and 6" diameter are crushed in approximately 8 to 16 seconds. Filters are reduced to 20% of original size, with 95% of residual oil removed.
- Automatic cycle feature lets you load the filter, push a button, and walk away.
- Powered by 2 hp electric/hydraulic pump, 230 volt, 20 amp, 60 cycle, single phase, 3,450 rpm. Has a 2-gallon reservoir.
- Built-in, heavy-duty floor stand with leveling pads is designed to accept a 30-gallon drum for oil drainage. Comes assembled. Covered by OTC Lifetime Warranty®.



**SEE PAGE 35
FOR OIL FILTER
WRENCHES**

Oil Filter Crusher Comparison Chart

No.	Tonnage	Pump	Crushing Time	% Oil Removed	Filter Size	Stand Dimensions
1821	10-ton	Air	20 Seconds	95%	Chamber: 8" x 8" x 9" H.	18-1/2" W x 24" D x 63-1/2" H
1877	25-ton	Air/Hyd.	80 Seconds	95%	6" Dia. - 12-1/2" Long	18-1/2" W x 30" D x 74-1/2" H
1896	25-ton	Elec./Hyd.	16 Seconds	95%	6" Dia. - 15-1/4" Long	27" W x 30" D x 78" H

Note: Crushing times are approximate; crushing times may vary depending on air pressure available, size of filter, type of filter, etc.

Transfer Tankers

- Draining oil from a large displacement engine and getting it to your bulk storage container is a snap with OTC's Transfer Tankers.
- Used oil is collected in a reservoir, and then rolls smoothly on 4" free-wheeling casters to your storage location.
- Pump moves five gallons a minute through the 8-foot transfer hose to the a 15-gallon reservoir.
- Handle is removable for easy storage.
- Screen attached to reservoir allows assembly to be stored on its side.
- Can also be used for transferring antifreeze.

5077A Low profile Transfer Tanker is only 7-1/2" from floor to top of reservoir. Comes equipped with an electric pump (No. 528093).

5097 Low profile Transfer Tanker is only 7-1/2" from floor to top of reservoir. Comes equipped with a pneumatic pump (No. 529966).



5077A



5097



1577
Low Profile Fluid Receiver

- Designed for receiving waste fluid during a wide range of repair jobs.
- Fluid capacity: 7.5 gallons.
- Constructed of polyethylene plastic for heavy-duty use—yet, only weighs 13 pounds.
- Low profile, only 5" high, it easily slides under passenger cars.
- Designed with four casters to provide efficient maneuverability.
- Suitable for cooling system repair jobs—can be used for antifreeze.
- Includes splash screen to prevent spillage and splashing.
- Two-year warranty.

HENDRICKSON SERVICE SETS

Rear Suspension

4246

Hendrickson Rear Suspension Bushing Tool Kit

- Replace rusted and frozen heavy-duty rear suspension bushings faster and easier
- Patent-pending design is suspension-mounted, eliminating the need to hold the tool during operation
- Remove/install Hendrickson PRIMAAX EX, COMFORT AIR, FCCC V Ride™ Pivot and D-Pin Bushings
- Save time and effort during suspension service to get trucks back on the road faster
- Included adapters align tool with the suspension to ensure proper bushing installation and reduce the chance of misalignment and bushing damage
- Includes an OTC 4106A 25-ton high-force cylinder



4247

- Adds an OTC 2510A air/hydraulic pump to make bushing service faster and easier
- Includes everything in the 4246 kit



4250

Hendrickson Adapter Kit for Front Suspensions

- Use with your 4246 or 4247 Rear Tool on select Hendrickson Front Suspensions
- Remove and install Hendrickson PACCAR Monoleaf, Navistar Monoleaf, Volvo Monoleaf suspension Pivot Bushings



Front Suspension

4274

Hendrickson Front Suspension Bushing Tool Kit

Replace rusted and frozen heavy-duty front suspension bushings faster and easier

- Patent-pending design is suspension-mounted, eliminating the need to hold the tool during operation
- Remove and install Hendrickson PACCAR Monoleaf, Navistar Monoleaf, Volvo Monoleaf suspension Pivot Bushings
- Save time and effort during suspension service to get trucks back on the road faster
- Included adapters align tool with the suspension to ensure proper bushing installation and reduce the chance of misalignment and bushing damage
- Includes an OTC 4106A 25-ton high-force cylinder



4275

- Adds an OTC 2510A air/hydraulic pump to make bushing service faster and easier
- Includes everything in the 4274 kit



4254

Hendrickson Adapter Kit for Rear Suspensions

- Use with your 4274 or 4275 Front Tool on select Hendrickson Rear Suspensions
- Remove and install Hendrickson PRIMAAX EX, COMFORT AIR, FCCC V Ride™ Pivot and D-Pin Bushings



BUSHING SERVICE HEAVY DUTY TOOLS & EQUIPMENT

4263 Suspension Bushing Tool

- Suspension bushing tool used to remove and replace suspension bushings. The hydraulic cylinder and press plate assembly mounts to the suspension component or leaf spring for hands free operation and eliminates the need to hold heavy equipment. Used in conjunction with the bushing adapter sets designed to fit specific bushings and suspension components.
- 15 ton capacity



4263

4261 Hendrickson Front Suspension Bushing Tool

- Suspension bushing tool kit used to remove and replace the leaf spring bushings on Hendrickson Airtek NXT front suspensions found on Freightliner Cascadia vehicles. The hydraulic cylinder and press plate assembly mounts to the leaf spring for hands free operation and eliminates the need to hold heavy equipment. Press plates and bushing adapters are specifically designed to fit the front leaf spring and bushing.
- 15 ton capacity.



4261

4255 Hendrickson Airtek NXT Bushing Adapter Kit

- This adapter kit is used in conjunction with the 4263 Suspension Bushing Tool to remove and replace the leaf spring bushings on Hendrickson Airtek NXT front suspensions found on Freightliner Cascadia vehicles. Plate, adapters and cups make bearing removal and installation faster and easier than other methods.
- Plate, cup and adapters specially designed to fit Airtek NXT front suspension
- Included adapters and cups allow bushing to be pressed out and new bushing to be pressed in
- Adapters aid with installation to help ensure a straight, clean installation of vital suspension bushings



4255



1757 Hendrickson Bar Pin Adapter Set

Adapter set is used with the beam removed from the truck, and in conjunction with OTC No. 51100 press plate and a 100-ton hydraulic shop press.

To remove bushings, use OTC's previously introduced No. 302030 removing adapter and No. 206457 press adapter, both of which may be ordered separately. Reinstall bushings following procedures recommended by the suspension manufacturer.

1767 Hendrickson Primaax Quick Alignment Socket

- Hendrickson – Approved tool.
- Used to adjust axle alignment on the Primaax air suspension.
- Works on Primaax models 230, 460, and 690 rear suspensions.



1768 Hendrickson PRIMAAX® Quick Wrench

- Used to torque cross tube end cap bolts and longitudinal torque rod top pad bolts.
- Reduces maintenance time by eliminating the need to remove the tires to gain access to the end cap bolt.
- Use with the following Hendrickson PRIMAAX suspensions:
 - Type A - PAX 230/460/690 and FMX 240/480 with 8-1/2" ride height
 - Type B - PAX 230/460/690 with 10" ride height.



Freightliner

Freightliner Rear Suspension Tool

- Removes and installs single-wrapped FAS II Airliner Freightliner Rear Suspension bushings in a fraction of the time of traditional methods.
- Saves an average 45 minutes per bushing (4 per vehicle) on flat rate of 1.5 hours per bushing.
- 15 ton Capacity cylinder

4244 Freightliner Rear Suspension Tool

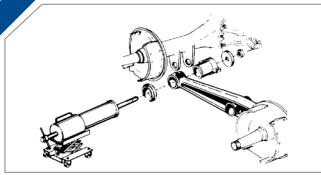
4245 Freightliner Rear Suspension Tool includes 2510A Air/Hydraulic Pump.



4244



4245



1740 tooling setup for end bushing installation.

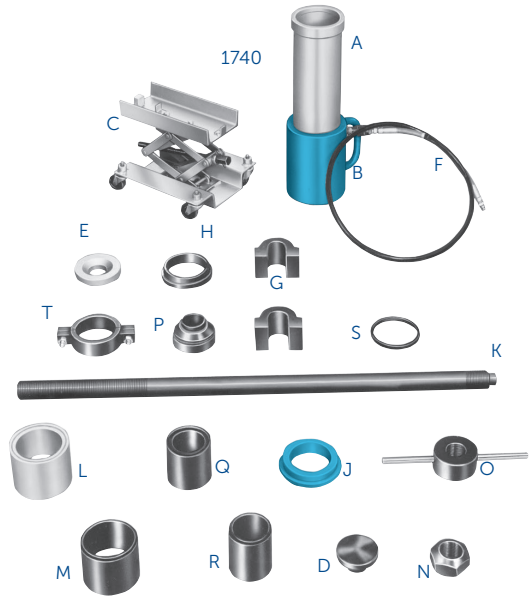
**1740
Basic Tooling Set**

This is the basic tooling set for servicing center and end beam bushings. It does not include the hydraulic pump or gauge. If you are already equipped with hydraulics, you can be replacing bushings right away! (Does not include tooling for hanger tube or end plug adapter removal.)

For 340 thru 450 Series Hendrickson Suspensions

Item	No.	Description
A	44119	Receiving tube
B	51678	80-ton cylinder
C	51695	Jack cart
D	206457	Press adapter
E	206459	Clamp plate
F	9780	Hydraulic hose
G	302018	Spacer (2)
H	302019	Receiving adapter
J	302021	Receiving adapter
K	302023	Pulling screw

Item	No.	Description
L	302026	Installing adapter
M	302027	Removing adapter
N	302028	Hex nut
O	302029	Speed nut
P	302030	Removing adapter
Q	302031	Installing adapter
R	302032	Removing adapter
S	302401	Spacer ring (3)
T	42052	Inst. adapter clamp



HENDRICKSON SERVICE SETS WITH HYDRAULICS

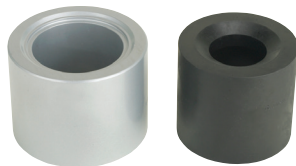
FOR 340 – 450 SERIES HENDRICKSON SUSPENSIONS

**1742
Basic Tooling Set with hydraulics (Hydraulic pump 4031)**

The preferred method for servicing center and end beam bushings. You get the complete No. 1740 basic set, plus OTC's No. 4031 two-stage electric/hydraulic pump with remote hand switch, a No. 9654 pressure gauge, hose half coupler, and 80-ton single-acting ram. (Tooling for hanger tube or end plug adapter removal not included.)

**1741
Basic Tooling Set with hydraulics (Hydraulic pump 4062)**

The method Hendrickson recommends for suspension service. You get the No. 1740 basic set, plus OTC's No. 4062 two-stage electric/hydraulic pump with remote hand switch, a No. 9653 pressure gauge, hose half coupler, and 80-ton single-acting ram. (Tooling for hanger tube or end plug adapter removal not included.)

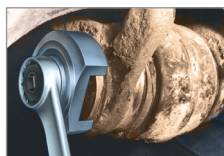
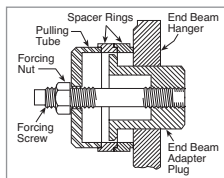


**1746
R400 Center Bushing Adapter Set**

For R400 series Hendrickson suspensions having center bushing No. 49400 or field service center bushing No. 49600.

Used with OTC's No. 1740 suspension tool set, these adapters let you remove and install the new style R400 center bushings on Hendrickson suspensions.

- 310248** Removing adapter
- 310249** Installing adapter



**1745
End Bushing Adapter Puller Set**

Set contains everything needed to remove end bushing adapter plugs in 380 thru 440 series suspensions. The plugs have to be removed prior to end bushing replacement.

The set is complete in a handy plastic case.

For use with 1740 series tooling sets (order separately).



Item	No.	Description
A	207025	Spacers (3)
B	302592	Screw (7/8"–14)
C	302593	Screw (15/16"–12)
D	207027	Screw
E	207026	Plug gauge
F	207030	Hand tap (7/8"–14)
G	207031	Hand tap (15/16"–12)
H	207039	Nut assembly
I	302595	Receiving cup

BUSHING SERVICE HEAVY DUTY TOOLS & EQUIPMENT



1749 Hendrickson Suspension Bar Pin End Bushing Adapter Set

Extend your No. 1741 and No. 1742 bushing service equipment sets. You can now remove and install worn end bushings on the Hendrickson new style bar pin end bushings without removing the equalizing beam from the vehicle. The No. 1749 works in conjunction with OTC's No. 1741 and No. 1742 80-ton portable service equipment to do the job quickly, using procedures recommended by the manufacturer.

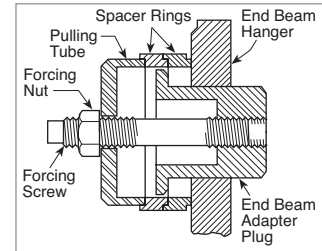
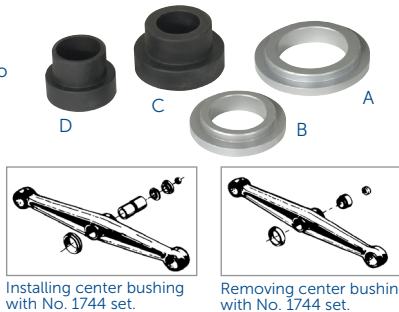


1744 Bronze Center Bushing Service Set

Designed for replacing bronze center bushings on 340, 380, 440, and 460 Hendrickson suspensions. Also installs bronze center bushing grease seals. For use with 1740 series tooling set (order separately).

For 340, 380, 440, & 460 series suspensions.

Item No.	Description
A 28536	Installing adapter
B 28538	Installing adapter
C 302024	Removing/installing adapter
D 302025	Removing/installing adapter



1748 End Bushing Adapter Puller Set for Hendrickson Truck Suspensions

This set contains everything needed to remove end bushing adapter plugs used on 400 series and the larger 460-520 series suspensions. The plugs have to be removed prior to end bushing replacement. The set is complete in a handy plastic case. For use with 1740 series tooling sets (order separately).

For servicing the 400 and larger 460-520 series suspensions.

Item No.	Description
A 207025	Spacers (3)
B 302592	Screw (7/8"-14)
C 302593	Screw (15/16"-12)
D 207027	Screw
E 207026	Plug gauge
F 207030	Hand tap (7/8"-14)
G 207031	Hand tap (15/16"-12)
H 207039	Nut assembly
I 302595	Receiving cup
J *221378	Hand tap (M30 x 2)
K *313342	Screw (M30 x 2)

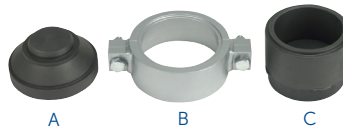
*For use on 460-520 series adapter plugs (can be purchased separately and used with set No. 1745).

1763 Center and End Bushing Service Set

This set is required for bushing service on 500 and 700 series heavy-duty suspensions. It is intended for use with a 100-ton capacity shop press. It allows replacement of center and end bushings.

For 500 & 700 series suspensions. Use with a shop press.

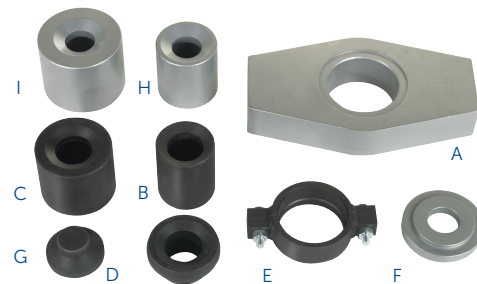
Item No.	Description	Item No.	Description
A 208350	Adapter	C 28541	Adapter
B 208349	Adapter clamp		



1764 Center and End Bushing Tool Set

This set is the answer for replacing center and end bushings on Hendrickson 340 and 380/440 series suspensions. The 1764 is for use with a 100-ton or larger hydraulic press. The press plate sits on the press bolster to provide a level, cradle-like surface for the beam to rest on during pressing.

For 340 and 380/440 series suspensions. Use with a shop press.



Item No.	Description	Item No.	Description	Item No.	Description
A 51100	Press plate	D 302030	Removing adapter	G 206457	Press adapter
B 302032	Removing adapter	E 42052	Inst. adapter clamp	H 302027	Removing adapter
C 302031	Installing adapter	F 206459	Clamp plate	I 302026	Installing adapter



5130
1,000 lb. Capacity DriveMaster™ Driveline Lift

- Low profile of 7" and a Lift range: 7" to 30".
- Pivoting pump handle +/- 15° tilt in each direction
- Includes 553516 Differential Adapter
- ANSI/PALD

Specifications:

Overall Length – 43"
Overall Width – 30-1/4"
Max. Height – 30°
Min. Height – 7°



5078
Air-Assisted 2,000 lb. Capacity High-Lift Transmission Jack... or Trucks & Buses

- Foot-operated air pump enables the operator to effortlessly raise the transmission into place.
- Rugged, heavy wall tubing and oversized base for stability.
- A dedicated adapter for Allison 500- and 600-series automatic transmissions is included.
- Covered by OTC Lifetime Warranty®.

Specifications:

Min. height is 41-1/2" Backward tilt – 38°
Max. height is 65" Side tilt (side/side) – 14°
Forward tilt – 50° Leg width – 46"

1591B
10-Ton Combination Air Lift & Support Stand

- 40" removable handle and 8' air hose.
- Covered by OTC Lifetime Warranty®.

Specifications:

Capacity – 10 tons (at 200 PSI air)
Minimum height (unpinned, no extension) – 18-3/4"
Maximum height (pinned in top hole, with extension) – 50-1/2"
Stroke – 10-7/8"



5019A
2,200 lb. Capacity Low-Lift Transmission Jack

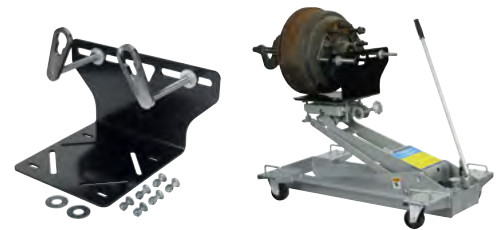
- Special mounting adapter fits popular Eaton® Fuller® RoadRanger® transmissions used on nearly all Class 7 and 8 heavy-duty trucks. Mounting plate angle is adjusted with the turn of a wrench.
- Swiveling pump handle permits ease of operation in restricted working spaces.
- Fast-acting pump quickly raises lifting arm.
- Includes No. 504231 adapter for Eaton® Fuller® RoadRanger® transmissions (also available separately).

Specifications:

Min. height is 8-1/4" Side tilt (either side) – 12°
Max. height is 36-1/2" Overall length – 52"
Forward tilt – 15° Overall width – 32-1/2"
Backward tilt – 20°

5091
HD Spindle Adapter

This low-lift transmission jack adapter holds the spindle assembly firmly in place during king pin service. It eliminates the need to completely disassemble the brakes to reduce spindle weight for handling. During service, the spindle assembly can be raised to a comfortable working height while replacing king pin bearings or bushings. Out patented design will work with standard HD truck bolt patterns and wheel stud sizes and adapts to most low-lift transmission jacks.



5091

Accessories for 5019A / 5078 / 1522A Transmission Jacks and 5130 Driveline Lift

558382 Auxiliary box adapter. Used with all.

561949 Light duty transmission adapters. Used with all.

528150 Eaton® "Lightning" adapter. Used with the No. 5019A transmission jack.

543284 Roadranger transmission Model series FRO-11210C to FRO-18210C that is equipped with an internal cooler. Used with the No. 5019A transmission jack.

49611 Eaton® Fuller® RoadRanger® auxiliary housing adapter. Bolts directly to the countershaft bearing caps to provide a stable platform for removing and installing the auxiliary housing.

553516 Differential Mounting Adapter. Mounts easily using existing bolt patterns. Fits the most common differentials currently in use on Category 7 and 8 Heavy Duty Trucks. Including: Eaton, Fuller, Rockwell, Meritor, Spicer, International, and Mack. For use on OTC (5019A – 553516 requires 565188 adapter) 5078 and Stinger 1522A Transmission Jacks.

314729 Allison 500/600 series automatic transmission adapter used with No. 5078 transmission jack.

540231 Eaton® Fuller® RoadRanger® transmission adapter

540232 Mack transmission mounting brackets. Provides a stable platform for Mack T200 series transmissions.



558382



561949



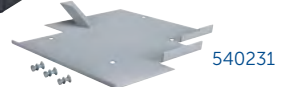
528150



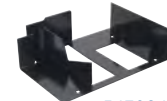
543284



49611



553516



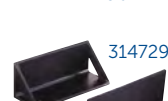
314729



540231



540232



540232

CLUTCH / AIR LIFTS / POWER TRAIN LIFTS HEAVY DUTY TOOLS & EQUIPMENT



5018A Truck Clutch & Flywheel Handler

- Replaces 14" & 15-1/2" clutch assemblies weighing up to 250 lbs.
- 13" low point enables access below side faring.
- Linkage raises load from horizontal to vertical position.
- 360 degree swivel head.
- Includes a 2" spline shaft with a 1-1/4" pilot to aid alignment.
- Covered by OTC Lifetime Warranty®.

516160 Optional flywheel handling attachment

515686 Optional splined shaft, 1-3/4" dia. with 1-1/4" pilot

516159 Optional splined shaft, 1-3/4" dia. with 1" pilot



5015A Truck Clutch & Flywheel Handler

- Handles 14" and 15-1/2" clutch assemblies weighing up to 150 lbs.
- Lifting range of 9" to 37". Swivel casters provide easy maneuverability.
- Includes a 2" spline shaft with a 1-1/4" pilot to aid in alignment.

218174 Flywheel handling attachment for use on No. 5015 and 5015A only.

48625 Optional splined shaft, 1-3/4" dia. with a 1-1/4" pilot.

440533 Optional splined shaft, 1-3/4" dia. with a 1" pilot. Needed for clutch service on some Navistar 466 series engines.

314386 Optional 1-3/4" dia. alignment shaft extension. Used for 2-plate clutch of Navistar 466 series engine.



218174

314386



1520 10-Ton Capacity Lifting System (Includes two lifts)

- Mobile, tandem system is air-operated. This will handle your class 7 and 8 tractor lifting needs. No need to waste time re-blocking and making additional lifts for the clearance you need for under-vehicle service. Roll the system to the vehicle anywhere in the shop or outside on a level surface.
- Unique design provides lift from the tires, not the frame or axle members. Ideal for situations where limited ground clearance or a lack of clear access complicates lifting.
- Single controller operates both sides of the system for a smooth, level lift up to two full feet from the bottom of the tires to the ground. Units can double as support stands when retention pin is inserted.
- Covered by OTC Lifetime Warranty®.

Specifications:

Capacity – 10-tons (20,000 lbs.) (pair)
Air pressure – 150 psi
Lifting range – 0"-24"
Saddle width – 19-1/2" –

24" dia. rim sizes
Height – 53-1/4"
Width – 41-1/2"
Length – 39-1/2"

Power Train Lifts

- These lifts will handle engine and transmission assemblies, gas tanks, drive axle assemblies, engine/transaxle assemblies, electric vehicle batteries, and more.
- Scissors-type design allows access to all four sides of a component.
- Two independent adjusting screws tilt the table $\pm 15^\circ$ side-to-side, or fore and aft. Can be operated manually or with non-impact air wrench.
- 20" x 32" table.
- 8" swivel casters provide enhanced mobility under heavy loads.
- ANSI/PALD compliant.

5285 Power train lift (1,650 lb. Capacity)

Air / hydraulic operation – Foot control pump with hose allows movement around lift.

- Min. height is 31-1/2"; Max. height is 74-1/2".
- Footprint 33" wide x 48" long.

1595 Power train lift (2,500 lb. Capacity)

Powered by a quiet, 110V electric/hydraulic pump.

- Smooth, steady lifting and lowering motion controlled by hand-held remote.
- A 30 ft. long retractable extension cord is mounted to the frame.
- Min. height is 29"; Max. height is 80"
- Footprint 31" wide x 50" long.

5295 Powertrain Lift (1,760-lb capacity)

The sliding split table top design of this powertrain lift allows for separation of the engine/transmission assembly or hybrid engine/generator module, making service easier. The unique design also helps handle removal and installation of electric vehicle batteries, fuel tanks, suspension systems and other powertrain assemblies. A generous ground clearance allows for floor crane access while a low collapsed height aids in servicing large components while still on the lift. The table tilts to help properly align components to the vehicle during installation and threaded holes in the tabletop accommodate future adapters and powertrains.

- Similar to GM lift P/N GE-52200 and Honda lift P/N HON52200.



1590 10-Ton Air Lift

- Adjustable lifting saddles and an extra-wide stance for extra stability.
- Automatic mechanical safety catch engages in five height positions.
- Two large swivel casters and pneumatic tires make it easy to maneuver, even on loose gravel.
- Covered by OTC Lifetime Warranty®.

Specifications:

Capacity – 10 tons (at 200 psi air)
Air pressure – 100–200 psi
Lifting range – 13"–52"
Saddle spread – 29" – 41-3/4"

Saddle – 4" X 5-1/4"
Height – 67-1/2"
Width – 41"
Length – 36"
Distance from lift arm to floor support – 12-1/2"

572913

Optional saddle set for 1590. Saddle – 4" X 5-5/8"



5267

Lift Pad Adapters, set of two

The adapters sit on the hoist or jack saddle and seat inside frame holes on GM vehicles to prevent saddle lip from damaging frames or subframes. Similar to J-43625.



5285
extended

Casters provide a 9-1/2" clearance on lower frame

5285
collapsed

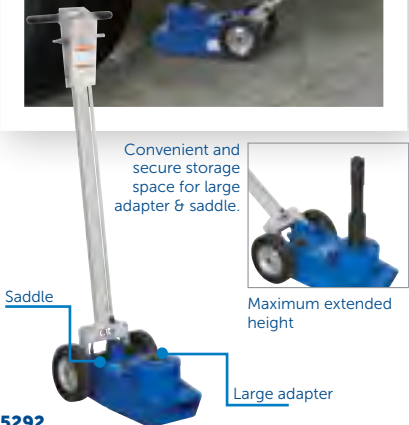


5295
extended





Convenient and secure storage space for large adapter & saddle.

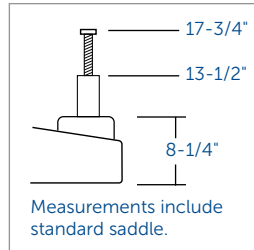
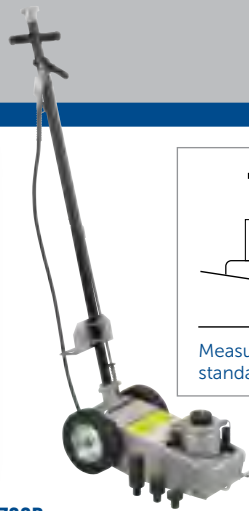


5292 27.5-Ton Under Axle Jack

- Features class-leading 27.5 ton capacity
- Robust design with completely sealed piston.
- New lever design and pneumatic release valve for more precise release control.
- Power return allows lowering with no load.
- Includes two height adapters for flexibility.
- PALD compliant.
- Minimum retracted height (with saddle only): 8-1/4".
- Maximum extended height (with screw extended and large adapter): 21-3/8".
- Stroke: 4.9375".
- PSI range: 90 to 175.

1540 4-Ton Capacity Fork Lift Jack

- 8,000 lb. capacity with a low starting height of 2-5/8".
- Two-position lift pad permits handling of all lift truck configurations with flat or edged surfaces.
- Minimum low lift: 2-1/4".
- Maximum high lift: 16-1/4".
- Features include high-quality seals and high-strength steel construction.
- Handle stop makes for easy maneuverability.
- 30" long handle.



1788B 22-Ton Capacity Under-Axle Jack

- Improvements include advanced seal ring material and one-piece air piston air pump
- Long 49-1/2" T-handle lets you easily position jack under vehicles with long overhangs.
- One pull of the handle activates the self-retracting 22-ton capacity ram without having to crawl underneath the vehicle.
- Jack has large rubber-tired wheels.
- Lifting range:

3/4" saddle	Max. height 17-3/4"
1-15/16" saddle	Max. height 18-15/16"
3-7/8" saddle	Max. height 20-5/8"
- Cylinder stroke, 4-1/2"; extended screw length, 4-1/4"; PSI range, 90-145.

5214 4-Ton Capacity Fork Lift Jack

- 8,000 lb. capacity with a low starting height of 2-5/32".
- 10,000 lb. capacity (5 tons) when lifting from cylinder saddle— ideal for agriculture and industrial applications.
- Unique shape of primary saddle allows for handling of all lift truck configurations with flat or edged surfaces.
- Features include high-quality seals, chrome-plated internal components, and high-strength steel construction.
- Secondary lifting surface feature.
- Complies with ASME-PALD.
- Lifting Height: 2-5/32 – 17-15/16".



215009*

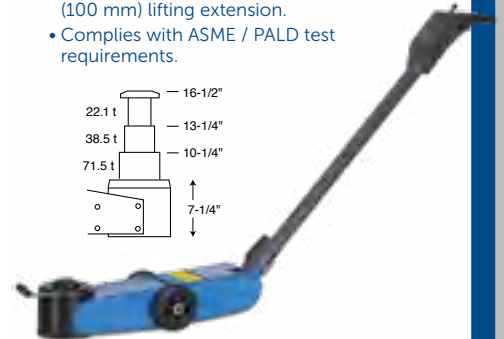
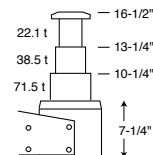
In-line oil lubricator. Add to air line to meter precise flow of lubricant to air motor. Has 1/4" NPT fitting. *Not included, order separately. Prevents harmful contamination caused by moisture in the air line!



5093B 3-Stage Under-Axle Jack

Three-stage lift capacity 22.1 T, 38.5T, and 71.5-tons. Ideal for lifting loaded trailers, buses, and other Class 7 & 8 vehicles.

- Piston and cylinders are made from chromium molybdenum vanadium steel for durability and then liquid nitrided to prevent rust and seizing.
- Features a high load-approach speed.
- Air-driven cylinder with pressure control knob for maximum user safety.
- 4-position handle: horizontal, 45 degrees, vertical, or collapsed.
- 7-inch minimum height for low clearance vehicles.
- Comes complete with a 3-15/16 in. (100 mm) lifting extension.
- Complies with ASME / PALD test requirements.



SERVICE JACKS

HEAVY DUTY TOOLS & EQUIPMENT

5-Ton and 10-Ton Service Jacks

- A built-in safety overload prevents using the jack beyond its rated capacity.
- Convenient foot pedal speeds the lifting operation. Handle lock and release control are located on top of the handle. Handle can be locked into any position from vertical to horizontal.
- Both models have a spring-loaded 40" handle.

1505B 5-ton service jack

1510B 10-ton service jack



20-Ton Capacity Service Jack

- Low-profile stance and extended height add to versatility.
- Wheels and swivel casters feature internal bearings.
- Either the foot pedal or jack handle may be used for pumping action. Counter-balanced, spring-assisted handle has a three-position lock.

1512 20-ton service jack

Specifications	1505B	1510B	1512
Capacity	5-ton	10-ton	20-ton
Lifting range	6" to 22"	6-1/4" to 22"	7-1/2" to 24"
Saddle dia.	5-1/8"	6"	7-1/2"
Overall reach	47"	51"	97"
Frame height	7-3/4"	9-3/4"	10-1/4"
Handle Length	43"	43-1/4"	42"
Floor space	14-3/4" to 56"	18" to 60"	18-1/8" to 61-3/8"

5-Ton and 10-Ton Air/Hydraulic Service Jacks

- Bring the versatility of air-assist operation to your shop's lifting tasks.
- Huge front wheels mounted in bearings provide trouble-free service life. Rugged steel frame members.
- Rear swivel casters make spotting the jack easy. Spring-loaded handle may be locked in three positions, from horizontal to vertical.

1507B 5-ton air/hydraulic service jack

1511B 10-ton air/hydraulic service jack

Specifications	5206	5210
Capacity	6-ton	10-ton
Min. Height	6-11/16"	6-11/16"
Max. Height	22-13/16"	23-13/16"
Overall length	87"	99-1/2"
Overall width	16-5/8"	16-5/8"
Handle length	39-3/8"	39-3/8"

Specifications	1507B	1511B
Capacity	5 ton	10 ton
Air pressure	80-120 PSI	80-120 PSI
Lifting range	5-7/8" to 22"	6-3/8" to 22"
Saddle dia.	6-5/8"	5-3/4"
Overall reach	87"	90"
Frame height	8"	10"
Handle length	40"	45"



SEE ADDITIONAL PRODUCTS IN THE EQUIPMENT SECTION OF THIS CATALOG. PAGES 204 – 207.





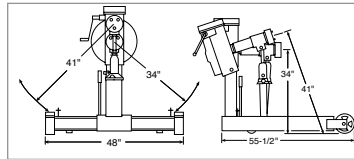
6000 lb. Revolver® Diesel Engine Stand

- 96-to-1 ratio worm and gear set rotates components 360°; handle locks in any position.
- Integral 12-ton jack raises the work to provide the swing radius needed for clearance.
- Two front wheels and two rear casters provide mobility.
- Universal adapter assembly permits use with a wide variety of mounting plates.
- Covered by OTC Lifetime Warranty®.

1750A Revolver diesel engine stand with No. 205061 universal engine adapter assembly.

1750 Engine stand without universal engine adapter assembly. Revolver® Engine Adapter Plates

You can order just the plates you need for the engines you work on. The universal adapter assembly is required for mounting all plates to the stand.



Engine Plates	
205061	Universal Adapter Plate Assembly. Included with 1750A engine stand. (Must be used with all plates below.)
J-29109-J	Adapter plate to accommodate adapters for Kent-Moore engine stand.
Detroit Diesel	
205058*	For Detroit engines: 53 series in-line 6 cyl., 6V & 8V; 71 series in-line 6 cyl., 6V, 8V, & 12V; 92 series 6V & 8V; 8.2 liter V-8.
52871*	For coach 6V and 8V series 71 Detroit Diesel.
218504*	For Detroit series 60 in-line 6-cylinder engines.
Detroit Allison	
208160*	Allison transmission mounting plate for transmission Nos. AT500, MT600, MT 6-speed, VH, VS, and V730.
61373*	Allison transmission adapter plate for transmission series HT-750, CLBT, HT-740D, CR/DR, and HT-750CT.
Cummins	
205059*	For Cummins engines: All NH, NTC, NTE, N14 855 series in-line 6 cyl; 378 series V6; 504, 555, & 903 series V8; KT 1150 series in-line 6 cyl., L10.
61405*	For Cummins L-10 and M11 series engines. Plate attaches to the left side of engine for complete tear down.
218098	For Cummins "B" series 5.9L in-line 6 cyl. engines.
218099*	For Cummins "C" series 8.3L in-line 6 cylinder engines.
Caterpillar	
205060*	For Caterpillar engines: Nos. 1673, 1674, 1693, 3306, & 3406 in-line 6 cyl.; Nos. 1100, 3208, and 3408 V8.
217687*	For Caterpillar 3114, 3116, and 3176 in-line 6 cylinder and C12 engines.
Mack	
205101*	For Mack engines: All 672, 673, 675, & 711 series in-line 6 cyl.
206629*	For Mack engines: V8 1000, E6, & E7 in-line 6 cyl.
528858*	For Mack 865, and 868.
International Harvester	
206386*	For International Harvester engines: DT-466 (2004 & Earlier), DT-360, DT408, 7 530 in-line 6 cylinder; DV-550, MV-404, MV-446, V304, V345, V392, 4-152, 4-196, 4-194; 9.0 liter 7 T444E V8; and Ford 6.9L, 7.3L DIT.
528856*	For IH300 & 400 Series.
528868*	For International VT365.
Ford	
61681*	For mounting Ford 6.6L/7.8L engines.
206386*	For Ford 7.3 engines.
Volvo	
528853*	For Volvo TD67 and TD71 engines.
John Deere	
528859*	For JD 400 and 500 engines.
528861*	For JD Powertech 4.5L & 6.8L.
528863*	For JD 8995 V6, must be used with 528859.



*NOTE: Must be used with 205061 univ. adpt. plate assembly. Each engine mounting plate includes all the necessary hardware and an engine application chart.

ENGINE / JACK STANDS HEAVY DUTY TOOLS & EQUIPMENT



1735B

1735B 2,000 lb. Capacity Heavy-Duty Motor-Rotor® Repair Stand

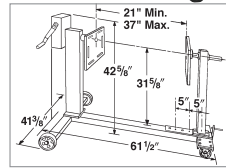
- Handles a wide variety of engines, transmissions, torque converters, and rear axles from trucks, tractors, and construction machinery.
- The 50:1 ratio gearbox allows full rotation of mounted unit with just a turn of the crank and locks in position. Easily maneuvered when loaded.
- To ensure engine stability in all positions, this repair stand is equipped with a positive-crank handle locking mechanism.
- Twin-post design, featuring laterally adjustable, 3 position outboard support; provides an extremely stable work-holding unit.
- Locking rear wheels anchor stand in position.
- Covered by OTC Lifetime Warranty®.

206391 6.0L and 6.4L Ford engine adapters.
(Works with both the OTC 1735, 1735A and 1735B.)

206392 Ford 6.7L Engine Adapter for 1735B HD Rotor Repair Stand.



1735B with engine



206391

206392

1783 Heavy-Duty 20-Ton Capacity Adjustable Support (One only)

- Designed for the really big service jobs. Rugged steel construction, and large 15-1/2" square base will satisfy support requirements up to 40,000 lbs.
 - Features include 4-point adjustment. Height range is 15-1/4" to 24". Saddle diameter is 6".
 - Covered by OTC Lifetime Marathon Warranty®.
- Note: Recommend use in pairs.



1778B 12-Ton Capacity Low Profile Jack Stand (One only)

- Spun steel base won't dig or sink into asphalt or sand.
 - Height range of 19" to 29-1/2".
 - Covered by OTC Lifetime Warranty®.
- Note: Recommend use in pairs.



1779B 12-Ton Capacity High Profile Jack Stand (One only)

- Spun steel base won't dig or sink into asphalt or sand.
 - Height range of 33-3/4" to 44-1/4".
 - Covered by OTC Lifetime Warranty®.
- Note: Recommend use in pairs.



Extension Tubes for 1778B and 1779B Jack Stands

- 543751** Extension Tube Height range of 19" to 29-1/2"
- 543752** Extension Tube Height range of 33-3/4" to 44-1/4"

543751

543752



3- and 6-Ton Capacity Ratcheting Jack Stands

- Jack stands feature a formed steel frame for strength and long life, and rolled base edges that resist sinking into soft ground or asphalt.
- Recessed column saddle for acceptance of vehicle panel rail (pinch weld).
- Dual purpose handle serves as carrying handle and column release.
- Investment cast rack bar for long life strength.
- Covered by OTC Lifetime Warranty®.

1736A Pair of 6-Ton Jack Stands. Height Range of 15-1/2" to 24-1/2".

1733A Pair of 3-Ton Jack Stands. Height Range of 12-1/2" to 18-1/2".



5373

OTC Stinger 3, 4, 6 and 12-Ton Jack Stands

- Formed and welded steel base for strength; self-locking ratchet handle cannot be released under load. Durable baked enamel finish resists corrosion.
- Stands conform to ANSI PALD load rating standard; factory tested before shipment.

5372 Pair of 3-ton jack stands. Base: 8-1/4" x 7-1/2". Height range: 12" to 17-11/16".

1796 Pair of 4-ton jack stands. Base: 11-7/16" x 10-3/8". Height range: 15-5/16" to 23-13/16".

5373 Pair of 6-ton jack stands. Base: 11-9/16" x 10-3/8". Height range: 15-5/8" to 23-11/16".

1784D Pair of 12-ton jack stands. Base: 12-1/8" x 10-7/8". Height range: 17-1/2" to 27-1/2".



1780 22-Ton Capacity Jack Stands

- Height range is 13-7/8" to 19-7/8".
- Saddle size 3" x 3-3/4".
- Pin-style (non-ratchet) three positions, 3" intervals.
- Reinforced collar to meet newest ANSI PALD test standards.
- 11" flat base prevents sinking into the surface.

1774B 10-Ton Capacity Ratcheting Jack Stands (pair)

- These ratcheting jack stands are highest quality steel and factory tested to ANSI PALD standards.
- The form-fit saddle design and 12" x 14" base ensures stability.
- Height range is 20" to 31-1/2".



OTC 9300 STINGER SERIES BOTTLE JACKS GIVE YOU LIFTING RANGE FROM 2 TO 50 TONS.

- Forged base and cylinder to ensure strength and eliminate leaks.
- Chromed pump piston and ram for additional rust resistance.
- In-line design for increased ease of use in positioning and operation.
- Includes free seal kit with each unit to extend product life.
- ANSI/PALD compliant.



OTC 9300 Stinger Series Bottle Jacks

Cap. (tons)	Stroke	OTC No.	Retracted Height min.	Length of Screw Extension	Height with Screw Extension	Pump Strokes to Extend Piston One Inch	Saddle Dia.	Base Size	Carry Handle	Weight
2	4-5/8"	9302	7"	2-3/8"	14"	8	13/16"	4-5/16" x 2-9/16"	No	5.7 lbs.
3	4-1/2"	9303	7-1/2"	2-9/16"	14-9/16"	13	15/16"	4-9/16" x 2 7/8"	No	7 lbs.
5	4-13/16"	9305	7-13/16"	3"	15-5/8"	20	1-1/8"	5-3/16" x 3"	No	9 lbs.
8	4-15/16"	9308	7-13/16"	3"	15-3/4"	21	1-3/8"	6" x 3-9/16"	No	13.2 lbs.
12	6"	9312	9-3/8"	3-1/4"	18-5/8"	21	1-3/4"	6-9/16" x 4-3/16"	Yes	18.9 lbs.
12	3-11/16"	9314	7-1/16"	2-7/8"	13-5/8"	21	1-3/4"	6-9/16" x 4-3/16"	Yes	16.1 lbs.
20	6-7/8"	9320	10-5/8"	2-15/16"	20-7/16"	28	2-1/8"	7" x 4-11/16"	Yes	28.6 lbs.
20	3-7/16"	9322	7-3/16"	1-11/16"	12-5/16"	25	2-1/8"	7" x 4-11/16"	Yes	22.5 lbs.
30	6-5/8"	9330	11"	N/A	17-5/8"	41	2-1/2"	7-11/16" x 6"	Yes	43.2 lbs.
50	7-3/16"	9350	11-3/4"	N/A	18-15/16"	74	2-1/2"	8-11/16" x 7"	Yes	76.5 lbs.



5213A



5221A



5213TA

Bottle Jacks

- Base, pressure cylinder, and oil reservoir form one internal part, which results in a stronger jack.
- Piston never contacts cylinder, so pressure will be absorbed and not damage jack if vehicle tilts.
- The No. 5213T is telescopic, allowing for very low initial height with high lifting.

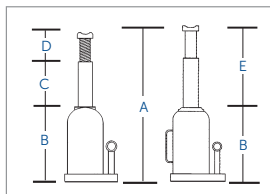
5213A – 12-Ton Bottle Jack.

5221A – 20-Ton Bottle Jack.

5213TA – 12-Ton Telescopic Bottle Jack.

Bottle Jack Dimensions

Jack	A	B	C	D	E
5213A	17-3/4"	8-7/8"	5-1/4"	3-1/2"	–
5221A	18-1/32"	9-1/4"	8-3/4"	3-5/8"	–
5213TA	22-5/16"	9-7/8"	–	–	12-7/16"



Air/Hydraulic Bottle Jacks

- Operate manually or pneumatically, 100 PSI minimum air pressure required.

4313C

12-ton air-assist bottle jack; lift range 9-1/2" to 18-3/8", stroke 6-1/8".

4321C

20-ton air-assist bottle jack; lift range 9-7/16" to 17-11/16", stroke 5-7/8".



4313C

1734A Heavy-Duty Wheel Step

- Tire-mounted wheel step provides quick, easy access to under-hood components.
- Fits heavy-duty vehicles (Class 7/8).
- Installs in seconds; adjusts to fit 22-1/2" to 24" wheel sizes and folds for easy storage.
- 300 pound capacity.
- Non-skid platform surface.



Shown folded

WHEEL SERVICE HEAVY DUTY TOOLS & EQUIPMENT

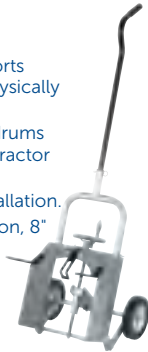
5017A Brake Drum Dolly

- Remove, install, and transport truck brake drums without physically having to lift them.
- Works on 15" and 16-1/2" drums found on most Class 7 and 8 tractor and trailer brake systems.
- Heavy-gauge steel construction, ten-inch pneumatic tires, and adjustable handle.
- Covered by OTC Lifetime Warranty®.



1543 Brake Drum Dolly

- Removes, installs, and transports truck brake drums without physically having to lift them.
- Works on all 15" and 16-1/2" drums found on most class 7 and 8 tractor and trailer brake systems.
- 6" height adjustment aids installation.
- Heavy-gauge steel construction, 8" tires, and 36" handle.



Easy Lever Wheel Dollies

- Gives technicians the leverage they need to easily remove or install truck tire-and-wheel assemblies.
- Heavy-duty construction capable of toting 300 pounds.
- Onboard rollers that make stud-hole alignment a snap.
- Spring-loaded kickstand for handy parking.
- Two models that, together, can accommodate tire diameters from 24 to 48 inches.
- Rugged tubular steel construction.

5096A Heavy-duty Easy Lever Wheel Dolly. With a width of 26", this dolly handles tire diameters of 36" to 48".

5095A Easy Lever Wheel Dolly. With a width of 22", this dolly handles tire diameters of 24" to 36".

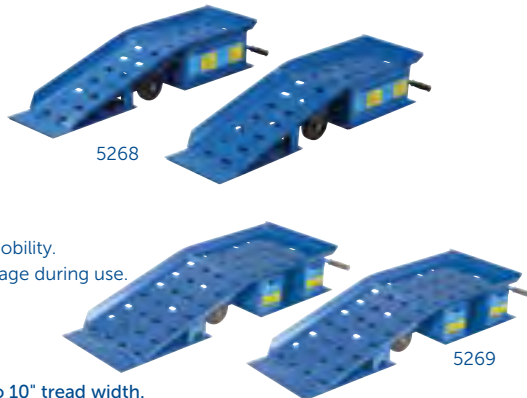


20-Ton Truck Ramps

- Long, retractable T-handle enhances mobility.
- Non-skid rubber matting prevents slippage during use.
- Durable, heavy-duty rubber wheels.
- Capacity per pair is 20 tons
- Covered by OTC Lifetime Warranty®.

5268 – 20-ton truck ramps handle up to 10" tread width.

5269 – Wide 20-ton truck ramps handle up to 16" tread width



5268

5269

Model	Frame Height	Frame Width	Frame Length	Wheel Diameter	Handle Length
5268	9-1/4" (23.5 cm)	13-1/2" (34.29 cm)	47" (119.38 cm)	5" (12.7 cm)	33" (83.82 cm)
5269	9-1/4" (23.5 cm)	18-1/4" (46.36 cm)	47" (119.38 cm)	5" (12.7 cm)	33" (83.82 cm)

5090 Back Buddy™ II

- Remove, transport, service, and install heavy truck brake drums and hub assemblies.
- Fast-motion ratcheting jack with 14" of vertical lift.
- Pneumatic rear tires.
- Tilting mechanism to achieve the exact angle necessary for precise reassembly.
- Fold-down handle for open access to the work area.
- Onboard lube tray and toolbox.
- An array of optional adapter sets capable of grabbing almost any truck hub assembly or brake drum, inboard or outboard.

Adapter Sets (sold separately)

513926 10 stud inboard hub & drum assemblies – 335 mm.

513927 10 hole outboard drums – 3/4" thick back plates

513925 5 and 6 spoke wheels

514644 8 stud inboard hub & drum assemblies

514645 8 hole outboard drums

514646 6 stud inboard hub & drum assemblies

514647 6 hole outboard drums

514648 Humvee/Hummer geared hubs



5105B 1,100 lb. Capacity High-Lift Dual Wheel Dolly

- Effortless air-powered hydraulic lift system for a variety of applications.
- 0 to 42" lifting range.
- Six-inch lateral adjustment.
- Tilt adjustment of +15° to -8° ensures easy alignment.
- Features four swivel casters, two locking, for enhanced mobility.



1770A 1,500 lb. Dual Wheel Dolly

- Hydraulic jack provides almost 5" of lift and tilts wheel assembly 4° to prevent damage to wheel seal.
- Independent lifting rack provides maximum stability; rollers won't catch on load.
- Swivel casters for easy maneuverability.
- Floor space is 45" by 41".
- 6' chain holds load in place.
- Covered by OTC Lifetime Marathon Warranty®.



1769A Truck Dual Wheel Dolly

- This 1,500 capacity dolly will remove, transport, and replace dual wheel and tire assemblies without strain or struggle.
- Swivel casters, 3-1/2" front and 3" rear, provide easy maneuverability.
- Floor space is 43" by 42".
- No. 1769A hydraulic jack provides over 6-1/2" of lift and tilts wheel assembly 7° to prevent damage to wheel seal.
- Includes a 6' support chain to hold load in place.



5702 Tire Bead Seater

The 5702 OTC Tire Bead Seater provides many of the great features of its 5713 big brother, at a more economical price!

- The trigger style discharge valve allows for optimum airflow control while allowing both hands to firmly hold the tank/valve assembly, critical for effective and safe use.
- Unique nozzle design significantly reduces "blowback recoil" and contains discharge holes strategically placed for optimum inflation of a wide range of tire sizes and wheel diameters.
- Inline design allows for a comfortable distance from the tire and wheel while seating.
- ASME approved 2-gallon tank with inlet valve, pressure gauge, and relief pressure valve for safety.

5713 Tire Bead Seater

The Tire Bead Seater is used when a tire, new or used, is mounted on a wheel and the tire bead does not touch both sides of the wheel, making inflation possible. The air trigger on this tool expels a tremendous burst of air that inflates the tire to seat it to the wheel rim. This allows the tire to be inflated to the recommended pressure through the tire valve.



- The Tire Bead Seater is equipped with unique configurations that enhance ease of use, productivity and safety for technicians looking to get the job done right every time.
- Unlike other options out there, the Tire Bead Seater's ASME certified 13-gallon tank is designed with a nozzle and valve connected via hose assembly, giving the user more control rather than requiring them to hold the weight of the tank.
- The trigger style discharge valve allows for optimum airflow control while allowing both hands to firmly hold the nozzle/valve assembly, critical for effective and safe use. Wheels and handle function in either the vertical or horizontal position for easy mobility and storage.
- Unique nozzle design significantly reduces "blowback recoil" and contains discharge holes strategically placed for optimum inflation of a wide range of the tire sizes and wheel diameters.
- Air valve included for filling tank, which also provides compressed air for filling the tire while seating the bead, optimum for on-the-road service.

All these unique features combine to provide an industry leading bead seater with multiple tire capacity (up to 5 tires) on one tank fill.



5700A Accessory Tire Bead Seater

- Provides the ability to control the blast with both hands firmly on the nozzle assembly, increasing effectiveness and safety.
- Includes all the fittings to adapt the hose to most surge tanks found on tire changers. A tank hook is also included to hang the nozzle when not in use.
- Long 6-1/2' hose will reach all positions on the tire.

5735-PACK Tire Spoon Pack with Hang Rack

An upgraded pack of popular tire spoons features the 35" Double End Tire Spoon with Grip Grooves (5735 35G), 35" Curved/Flat Tip Curved Tire Spoon (5735-35) and 30" Curved Tire Spoon (5736-30), along with a FREE rack (5715) that can be hung on a toolbox or wall for easy organization.

*Tool chest not included



5715 Tire Spoon Rack

- Designed to hold OTC Tire Spoons by the handle upset.
- Also holds tools with 3/4" or smaller diameter shafts.
- Can be hung on end of tool box or mounted to the wall via holes on 16" center.



5789-PACK Tire Service Display

Includes 23 popular tools for changing a tire:



Part Number	Qty
5716	1
5720	1
5724	1
5728	1
5729	1
5731	1
5732	1
5733	1
5735-35	2
5735-42	2
5735-42K	1
5736-24	1
5736-30	1
5737-30	1
5739-24	1
5739-30	1
5758	2
5047LP	1
5789ID-520	1
5789ID-1032	1
5700-DISPLAY	1

5700-DISPLAY

Hammer & Tire Service Display Rack

- Designed to display various products in the framed rack, complete with removable rear sign holder.
- Sturdy display framed with heavy 5/16" rod with heavy steel base eliminates tipping.
- Black powder coat finish for a rust free, durable finish.
- Contains 2" x 2" = 52 slots and 2" x 4" = 6 slots.
- Assembled dimensions; W 18.5", D 19", H 44".



5693 Dual/Single Wheel Separator

Quickly separate rusted, frozen or seized outside dual wheels or single wheels from the wheel hub. The unique outer drive hook has an offset handle to easily align the tool on the rim to break wheels loose, with a flat side to eliminate turning during use. Outer drive hook has two grooves for 16" - 17" wheels and 19.5" to 24.5" wheels. Force is applied directly to the wheel rim and not the wheel lip, preventing damage and bending of the wheel.

Includes four adapters to fit most wheel shapes and sizes: Dual wheel outer, long cupped dual wheel inner, short cupped single wheel and flat.



TIRE SERVICE HEAVY DUTY TOOLS & EQUIPMENT



Convex Slip Head - Unique "Convex Slip Head" curved design allows the spoon to slide easily into the tire bead while the spoon bump limits the depth for quick-and-easy operation.



Grip grooves - Eliminate spoon slippage on the wheel rim while mounting or demounting the tire. The grooves also limit the depth of the spoon to help eliminate pinching tire tube applications.

5716	HD Sliding Tire Spoon - 38" extends to 52", 3/4" diameter. Inner slide bar provides hammer action to easily insert and remove the spoon.	
5716G	HD Sliding Tire Spoon with Grip Grooves 38" extends to 52", 3/4" diameter. Inner slide bar provides hammer action to easily insert and remove the spoon.	
5720	Sliding Dual Tire Spoon 35" and 3/4" diameter. Unique configuration provides mount and demount heads on either end with the aid of a slide hammer mounted mid bar, allowing for hammering either end in or out of the tire bead. Twist-lock feature locks 3.5 lb. slide weight in position.	
5724	Extending Tire Spoon 22" extends to 34", 3/4" diameter. Twist-lock feature allows the spoon to be extended to any length and locked into position with a twist of the collar.	
5734-18	Tire Machine Spoon, Double End, 18" Has a curved end and a bent tip end for starting the bead on a tire changing machine.	
5734-18G	Tire Machine Spoon, Double End with Grip Grooves, 18" Has a curved end and a bent tip end for starting the bead on a tire changing machine.	
5735-18	Double End Curved & Flat Tip Curved Tire Spoon, 18" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.	
5735-18G	Double End Tire Spoon with Grip Grooves, 18" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.	
5735-35	Double End Curved & Flat Tip Curved Tire Spoon, 35" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.	
5735-35G	Double End Tire Spoon with Grip Grooves, 35" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.	
5735-42	Double End Curved & Flat Tip Curved Tire Spoon, 42" Same great design as the original double end mount/demount tire spoon, but in a 42" length for added leverage. 3/4" diameter.	
5735-42K	Double End Tire Spoon with Kick Start, 42" Includes kick loops to allow the spoon to be forced into tight bead locations with the help of foot pressure. 3/4" diameter.	
5736-18	Curved Tire Spoon, 18" Handle knob enables easier spoon pick up. 3/4" diameter.	
5736-18G	Curved Tire Spoon with Grip Grooves, 18" Handle knob enables easier spoon pick up. 3/4" diameter.	
5736-24	Curved Tire Spoon, 24" Handle knob enables easier spoon pick up. 3/4" diameter.	
5736-24G	Curved Tire Spoon with Grip Grooves, 24" Handle knob enables easier spoon pick up. 3/4" diameter.	
5736-30	Curved Tire Spoon, 30" Handle knob enables easier spoon pick up. 3/4" diameter.	
5737-30	Flat Tip Curved Tire Spoon, 30" Handle knob enables easier spoon pick up. 3/4" diameter.	
5739-24	Curved Shank Tire Spoon, 24" The curved shank allows improved access for the spoon head around the tire bead or wheel rim. Handle knob enables easier spoon pick up. 3/4" diameter.	
5739-30	Curved Shank Tire Spoon, 30" The curved shank allows improved access for the spoon head around the tire bead or wheel rim. Handle knob enables easier spoon pick up. 3/4" diameter.	



5789ID-1032

5789ID-520

Tire Service Hammers, Indestructible Handle

- Indestructible handle - never needs replacement!
- Ergonomic rubber grip handle reinforced with steel bars resists breaking while absorbing impact and vibration.
- Drop-forged head is induction-hardened for long life, and contains steel locking plates that are specially bonded to ensure the head never becomes loose.
 - Use top hook as a wheel tipper; sledge end hook to drag tire into position.
 - Bead breaking wedge has grooves and a convex shape to help drive tire lube into the bead.

5789ID-520 5 lb. head, handle length 20", total weight 7.3 lbs.

5789ID-1032 10 lb. head, handle length 32", total weight 14.4 lbs.



5728 Tire Bead Breaker

- This tool will break beads in applications where other bead breakers have failed. A tire with a very weak or damaged sidewall due to a zipper rupture, or driven too far while flat, can be near impossible to break the bead with conventional bead breakers. Other applications like extremely soft sidewall tires, such as ATV tires, is where this unique bead breaker works and other do not.
- Unique head is designed to provide a large striking area for all angles, while providing the mass needed to break the tire bead.
- This design puts the force exactly where it's required and eliminates the possibility of accidentally hitting the wheel, problems typically encountered while using larger swing hammer style bead breakers.



5047LP Lug Nut Cap Remover Locking Pliers

- Designed to remove lug nut caps found on heavy duty truck and trailers quickly and easily without damage. Caps can be easily damaged by prying or using standard cap removers.
- Locking pliers design with specially coated jaws apply maximum grip on the lug nut caps without damage.



5752 Wheel Loader & Tipper

- The new ergonomic wheel loader and tipper integrates two very helpful tools into one.
- The wheel loader feature allows a technician to lift various sizes and types of wheels and tires in and out of a truck bed.
- The wheel tipper feature allows the technician to flip a wheel over during tire service, or just tip up a wheel and tire to move.
- Both of these features allow the technician to easily and safely service and lift wheels by eliminating the need to bend over to lift, dramatically reducing the risk of back injury.
- Works on steel or aluminum wheels, inflated or deflated.

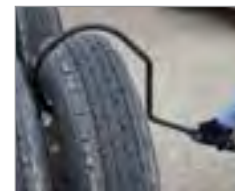


5750 Wheel Tipper

- This ergonomic wheel tipper allows the technician to flip a wheel over during tire service, or just tip up a wheel and tire to move.
- Allows the technician to easily and safely service wheels by eliminating the need to bend over to lift, dramatically reducing the risk of back injury.
- Works on steel or aluminum wheels, inflated or deflated.

5727 Sliding Bead Breaker

- The unique wedge design allows for consistent and accurate impact angle without adjusting the handle angle.
- The split head design provides wider tire force area while reducing drag on the wheel rim.
- Foot loops allows for extra foot pressure for bead breaking with fewer strikes.
- The head is also designed to tip tires from either side of the wheel. Includes wheel tipping slots to easily flip 250 lb. tires without hurting your back.
- Hammer shaft does not fall out of hammer body like competitive units.



5729 Outside Dual Wheel Bead Breaker

- Breaks the inner bead on the outside tire without removing the wheel from the truck.
- Unique design places pressure in the exact location required to quickly and easily break the inner bead.
- Simply pull up on the handle and the bead is forced off the wheel rim.



5745 Hands Free Air Chuck

- Perfect for applications where the tire valve is facing the floor while seating the tire bead, such as most dual wheel configurations.
- Hooks on the top bead seat of the wheel and the spring pressure holds the chuck on the tire valve pointing to the opposite side.
- Ball valve included to allow inflation only when needed.
- Allows for safe tire inflation when used with a 6' to 8' inflation hose.

HEAVY DUTY TOOLS HEAVY DUTY TOOLS & EQUIPMENT



5747 Tire Valve Stem Punch Kit

- Quickly and easily remove old valve stems from a wheel with a swing of a hammer.
- Simply place the punch tip on the inside of the valve stem and strike the punch to force the old valve stem out of the wheel.
- The unique punch tip is heat treated and shaped to remove all types of valve stems, including 10mm nickel plated, steel, and brass.
- Works on 412, 413, and 418 valve stems.
- Includes hand protecting grip with interchangeable 5" and 8" punch adapters for car and truck wheel applications.

5747-2 Tire valve punch tip, 5"

5747-3 Tire valve punch tip, 8"



5731 Tire Bead Locking Pliers

- Prevents the tire from slipping while mounting the top bead.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.
- Prevents tire from contacting costly TPM Sensors.



5732 Tire Spoon Holding Pliers

- Tire Spoon Holding Pliers is the 3rd hand needed to ease mounting and demounting of tires with tire spoons.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.



5733 Tire Bead Wedge Pliers

- Tire Bead Wedge Pliers keeps the tire in the bead drop area to ease mounting and demounting of larger truck and agricultural tires.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.



Accutorq™ Clikker Torque Wrenches

- These precision torque wrenches make a loud click when you've reached the torque setting. They feature ratcheting heads, all-metal construction, permanently roll-marked scales, and soft-grip rubber handles that enable you to firmly grasp the wrench for right- or left-hand torquing.
- Includes molded plastic case.
 - One-year warranty.

Tool No.	Torque Range	Graduations	Square Drive	Length
7378	50–250 in. lbs. (68–339 N•m)	2 ft. lbs.	1/2"	19-3/8"
7379	100–600 in. lbs. (136–813 N•m)	10 ft. lbs.	3/4"	42-1/4"



7367 Torque Multiplier, 1100 lb-ft

- Drive Input; 1/2", 365 lb-ft Max
- Drive Output; 3/4", 1100 lb-ft Max
- Head Width; 2.9", 3.3:1 Ratio
- Reaction Bar; 13-3/4"
- Includes reaction foot.
- Note; frictional gear loss = 6%



7368 Torque Multiplier, 2200 lb-ft

- Drive Input; 3/4", 730 lb-ft Max
- Drive Output; 1", 2200 lb-ft Max
- Head Width; 3.6", 3.3:1 Ratio
- Reaction Bar; 15-5/8"
- Includes reaction foot.
- Note; frictional gear loss = 6%

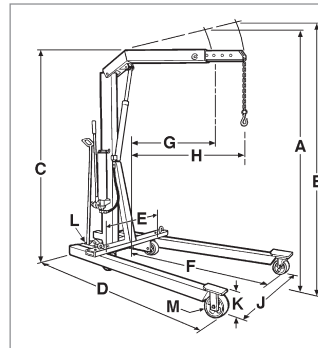


5082 Wheel Tipper

- This heavy-duty wheel tipper makes handling those hard- to-manage truck tires easy. To use the wheel tipper, simply deflate the tire and break the bead, then hook the wheel tipper to the rim of the wheel. The wheel tipper makes an otherwise tough task effortless.
- Designed for both aluminum and steel wheels won't damage wheel rim.



1819, 1820



Specifications	1819	1820
Cap., boom retracted	2,200	4,400
Cap., boom extended	1,650	3,300
A Max. boom height, boom retracted	107"	111"
B Max. boom height, boom extended	117"	122"
C Overall height, boom horizontal	80"	82"
D Overall length	83"	89"
E Minimum throat width	24"	25"
F Inside leg length	54"	57-1/2"
G Effective boom reach (retracted)	33"	35-1/2"
H Effective boom reach (extended)	48"	50-1/2"
J Inside leg width (3-position)	24", 36" 48"	26", 40" 52-1/2"
K Leg height	8"	9-1/2"
L Dolly wheel diameter	5"	5"
M Wheel diameter	6"	8"
Height, folded	79"	86"
1819 Floor space folded	27" x 38"	
1820 Floor space folded	31" x 42"	

2,200 and 4,400 lb. Capacity Heavy-Duty Floor Cranes

- To conserve valuable floor space, crane folds into a compact package for storage.
- For "close-in" work, leg spread adjusts to clear vehicle's wheels, telescoping boom extension gives additional reach. Roller bearing mounted wheels and steering dolly provide ease of mobility.
- A two-speed hydraulic hand pump provides fast boom travel; descent of boom is under precise control of operator.
- Covered by OTC Lifetime Warranty®.

1819 2,200 lb. Capacity Crane. Has hydraulic hand pump and 16-7/8" lifting chain.

39610 1/4" steel chain grade 43, 18-3/8" long, 2,200 lb. capacity. Has safety hook on end. Use with 1819.

1820 4,400 lb. Capacity Crane. Has hydraulic hand pump and 18-3/8" lifting chain.

39611 5/16" steel chain grade 70, 19-3/4" long, 4,400 lb. capacity. Has safety hook on end. Use with 1820.

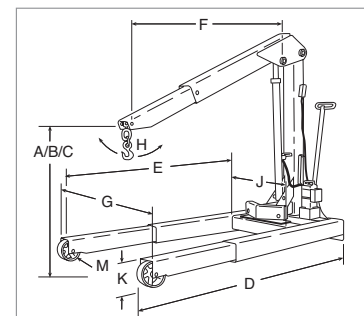


1813

Boom Capacity (lbs.) Description	Extended 4,000	Centered 5,000	Retracted 6,000
A Maximum boom height	161-7/8"	150-11/16"	139-1/2"
B Minimum boom height	6"	17-3/8"	28-3/4"
C Overall height (boom horizontal)	87"	87"	87"
D Overall length*	129-1/8"	113-7/8"	98-1/4"
E Inside leg length	91-11/16"	76-1/8"	43-1/4"
F Effective boom horizontal reach	94-1/4"	78-3/4"	63-1/4"
G Outside leg width**	59-3/4"	57-3/4"	55-3/4"
H Boom swing	36"	31"	26"
J Inside leg width	35-3/4"		
K Leg height	9-1/16"		
M Wheel diameter	8"		
Dolly wheel diameter	5"		

* Legs in storage position: 80-7/8"

** Legs in storage position: 53-1/2"



6,000 lb. Capacity Heavy-Duty Mobile Floor Cranes

- Three boom positions give capacities of 4,000, 5,000, and 6,000 lbs. to handle the biggest engines, and often the transmission right along with the engine! Usable reach is almost 92".
- Boom swivels for vertical and lateral positioning; legs extend to straddle the biggest tires.

1814 6,000 lb. capacity crane with electric/ hydraulic pump (115V) with remote motor control.

1813 6,000 lb. capacity crane with two-speed hydraulic hand pump.

FLOOR CRANES / ACCESSORIES HEAVY DUTY TOOLS & EQUIPMENT



2,000 and 4,000 lb. Capacity Folding Floor Cranes

- Both of these cranes fold up for compact storage.
- Front wheels are 5-7/8"; rear casters 3-1/2".

2002 2000 lb. capacity crane with a reach of 24" to 36"

2004 4000 lb. capacity crane with a reach of 26" to 48"

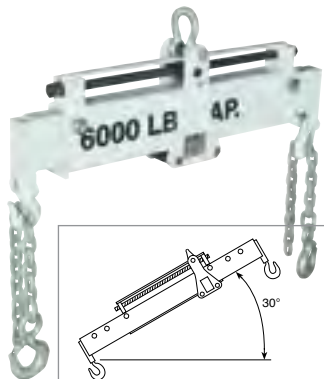
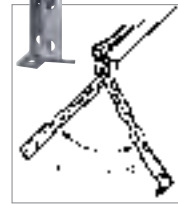
Specifications	2002	2004
Maximum capacity, boom extended	500 lbs.	1,000 lbs.
Maximum capacity, boom retracted	2,000 lbs.	4,000 lbs.
Maximum hook height, boom extended	94"	86-1/2"
Maximum hook height, boom retracted	87"	72-3/4"
Effective boom reach, boom extended	36"	48"
Effective boom reach, boom retracted	24"	26"
Leg width @ front wheels	25"	32-1/2"
Leg height	6-1/2"	7-3/4"
Floor space folded	16" x 17-1/2"	33" x 33-1/2"
Floor space unfolded	57" x 25"	70" x 33-1/2"



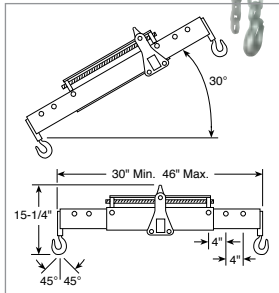
4305 1,500 lb. Capacity Engine Load Leveler

Designed to hook to a crane or hoist to handle and position large, bulky components.

- The horizontal tilt can be adjusted to compensate for off-center loads, or adjusted to a certain angle for a component being positioned.



1812



Load Leveler

- Improved design over conventional spreader bars.
- Carriage on main support beam moved by turning lead screw; this permits fine adjustment of the tilt angle of component being lifted.
- Turn lead screw manually or with air-powered tools.
- Spreader bar adjustment secured with locking bolts.
- Chain grade is 80.
- Covered by OTC Lifetime Warranty®.

1812 Load Leveler. Max. lifting capacity: 6,000 lbs.; distance between hooks: min. 30", max. 46".

1822 Load Leveler. Max. lifting capacity: 10,000 lbs.; distance between hooks: min. 36", max. 56".



1806

4,000 lb. capacity Load-Rotor® Positioning Sling

- Use with a floor crane. Engine, transmission, or other component is tilted or leveled by turning sling's 5/8" hex drive end with a common speed handle and socket.
- Has 65-3/4" long chain (5/16") and hook assembly with forged hook on each end. Pair of special lifting brackets included.
- Makes engine removal and installation a snap, even in close quarters.
- For use with floor cranes only; not to be used with overhead hoists or lifts.



302249

Alloy Chains for Overhead Lifts and Hoists

302941 5/16" alloy chain, 26-13/16" long, 4,000 lb. capacity. With safety hook on one end. Use on No. 1812.

302249 3/8" alloy chain, 28-3/8" long, 6,000 lb. capacity. With safety hook on one end.



Heavy-Duty Adjustable Slings

- For lifting and positioning engines, transmissions, etc. Each chain can be adjusted independently for length; plate design enables chain to be "short-hooked" for correct tilt.

205049 2,000 lb. capacity sling with 1/4" chain, 56" long

205050 4,000 lb. capacity sling with 5/16" chain, 65" long

38841 Plate only, use with any 1/4" or 5/16" alloy steel chain



7100

4,000 lb. Capacity Lifting Brackets (pair)

- Attach directly to component for easy lifting; will take 1/2" diameter bolts.



Universal Outside Thread Chaser

Damaged bolt or nut threads can be an annoying, costly problem—unless you have one of our thread chasers. It will quickly restore threads to near original condition without the use of expensive thread-cutting equipment.

- Replaceable V-pads and dies.
- 1-1/4" to 5" O.D.

7402 Thread chaser with 6 dies: threads per inch - 4, 5, 6, 7, 7-1/2, 8, 9, 10, 11, 11-1/2, 12, 14, 16, 18, 20, and 24.

216884 Standard die set. Includes 6 dies, in the sizes listed above.

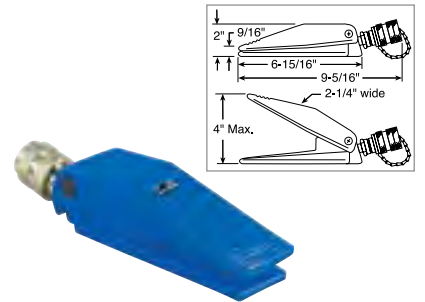
202817 Metric die set. Includes three dies: 1 mm- 1.25 mm-1.5 mm-1.75 mm, 2 mm-2.5 mm-3.0 mm-3.5 mm; 4 mm pitch dies.

206803 V-pad.



6492 Engine Preluber Kit

- Ensures oil is present to internal engine components on the first start of a new or rebuilt engine, or after major engine work is performed.
- Required to prime the oil pump and fill the oil galleries and internal engine components with clean, new oil.
- Connects to engine oil system at the oil pressure sensor on a variety of domestic and import engines.
- Oil pressure sensor adapters included.



4085 1-ton Capacity Hydraulic Spreader

This hydraulic spreader is rated at a full 1-ton capacity at 10,000 PSI and that's enough for a wide variety of jobs. Working in tight spots is no problem—it needs only a 9/16" clearance to engage the jaws. With a big 4" spread, it's ready for a variety of applications: straightening work, removing dents and creases from sheet metal, or as a clamp. The device's spring-return jaws are made of high-strength alloy steel. It can be dead-ended at 4" spread under full load. Ideally suited to work with No. 4012 hand pump (not included).



8203L

3-piece Long Handled Pry Bar Set

A set of 3 made-in-the-USA pry bars with comfortable, sturdy rubberized grips. Each bar is drop-forged in Minnesota with a hand-ground chisel end for wedging into tight spaces. Special tempered steel provides extra strength, durability and leverage for tough jobs. A dedicated striking cap provides a big target to drive the pry bar in to help separate components faster. Includes lifetime warranty.

8224 24" handled pry bar

8236 36" handled pry bar

8248 48" handled pry bar



4180

Power Twin Ram and Pump Set

- Center-hole feature permits extending adjusting screws, cables, puller screws, etc., straight through the ram.
- This spring return unit is compact and lightweight.
- Ideal for jobs having restricted working space.
- Set includes 4120 17-1/2 ton, 2" stroke single-acting hydraulic ram; 4002 pump; 9650 gauge; 24815 tee; 9767 hose; and 9798 hose half coupler.



4020

Air/Hydraulic Pump

- Ideal all-around power source develops 10,000 PSI at 100 PSI air.
- Two-stage release mechanism; internal relief valve.
- 98 cu. inches of usable oil.
- Covered by OTC Lifetime Warranty®.



8203S

3-Piece Short Handled Pry Bar Set

A 3-piece Handled Pry Bar Set that includes 8", 12" and 18" lengths for moving or separating components with maximum leverage. Each bar is made from tempered square steel for durability and strength. The dual durometer handle provides a comfortable and secure grip, reducing hand fatigue. A black chrome striking cap will take hammer blows without handle damage, and a polished tip and black oxide finish resists rust and wear during use. Covered by OTC's Lifetime Warranty.

8208 8" handled pry bar

8212 12" handled pry bar

8218 18" handled pry bar

Pumps and Rams

9110B

10-Ton Ram with 6" stroke. Use with the snap-together components of OTC Stinger's collision repair sets, or with most similar competitive products.

9107B

Single Speed Hydraulic Pump.

Ideal for single acting rams. Developing up to 10,000 psi operating pressure, the pumps operate horizontally or vertically in the "head down" position. Finger tip control provides instant release or pumping action. Has a built-in safety overload valve.



COLLISION REPAIR SETS HEAVY DUTY TOOLS & EQUIPMENT



1513B – 4-Ton



1515B – 10-Ton

Collision Repair Sets, Stinger Series 4- and 10-Ton

- Very competitively priced, yet high quality sets include single-speed hydraulic hand pump, hose, and ram.
- Components snap together for quick setups to apply pushing, spreading.
- Components include: hydraulic pump, hose, and ram; ram flat base; extension tubes (4); 1/2-ton spreader; tube coupling; ram toe; wedge head; serrated saddle; flex head; plunger toe; 90° wedge head; storage case. The case for the 10-ton set has wheels for mobility.

1513B 4-ton collision repair set. Has single speed hydraulic hand pump and ram with 4" stroke.

1515B 10-ton collision repair set. Has single speed hydraulic hand pump and ram with 6" stroke.



1517B – 4-Ton



1519B – 10-Ton

Collision Repair Sets, OTC Series 4- and 10-Ton

- We've matched our OTC hydraulics with versatile tooling.
- Components snap together, permitting you to apply pushing, spreading.
- Components include: hydraulic pump, hose, and ram; ram flat base; 1/2-ton hydraulic spreader; extension tubes (4); tube coupling; ram toe; wedge head; serrated saddle; flex head; plunger toe; 90° wedge head; storage case. The case for the 10-ton set has wheels for mobility.

1517B 4-ton collision repair set. Has single speed hydraulic hand pump (4000A) and ram (4082B) with 5" stroke.

1519B 10-ton collision repair set. Has two-speed hydraulic hand pump (4012A) and ram (4083C) with 6-1/8" stroke.

222618 6 ft. hose 1/4" NPT.

5086 Collision Repair Set, 10-Ton

- Exert hydraulic force just where it's needed to lift, spread, bend, or straighten. Handles the high-force jobs you face daily in trailer maintenance or other applications.
- Includes reliable components including 10-ton, 10-1/8" stroke hydraulic ram; air/hydraulic pumping unit; hydraulic hose; four snap-together extension tubes; extension tube coupling; serrated saddle; flat base; 90° wedge head; flex head; storage case.
- All set components are covered by OTC Lifetime Marathon Warranty®.



DIESEL EXHAUST FLUID (DEF) TRANSFER EQUIPMENT HEAVY DUTY TOOLS & EQUIPMENT



4342 DEF Electric Pump Tote Kit with Dispenser Coupler

The Electric DEF Pump Tote Kit quickly transfers fluid from DEF totes. The kit includes everything needed to pump DEF into barrels for easier transport and refilling of vehicle systems. It includes the OTC 4338 Electric Pump, a manual nozzle, hoses and brackets to mount to a standard DEF tote. Additionally, it includes the OTC 4333 Dispenser Coupler to keep moisture out of the container, maintaining high levels of DEF concentration and fluid effectiveness. (Drum and tote not included.)

4341 DEF Electric Pump Tote Kit

Same as the 4342 does not included 4333 Dispenser Coupler.



4344 DEF Electric Pump Drum Kit with Dispenser Coupler

The Electric DEF Pump Drum Kit quickly transfers fluid from DEF totes to barrels. The kit includes everything needed to pump DEF into barrels for easier transport and refilling of vehicle systems. It includes the OTC 4338 Electric Pump, a manual nozzle, hoses and brackets to mount to a standard DEF tote. Additionally, it includes the OTC 4333 Dispenser Coupler to keep moisture out of the container, maintaining high levels of DEF concentration and fluid effectiveness. (Drum and tote not included.)

4343 DEF Electric Pump Drum Kit

Same as the 4344 does not included 4333 Dispenser Coupler.



4333 DEF Dispenser Coupler

The reusable DEF Dispenser Coupler helps maintain diesel exhaust fluid concentration and purity by preventing contamination. It connects and disconnects easily from compatible containers including 55-gallon drums and DEF totes. Viton seals nearly eliminate leaks and stainless steel construction provides extra durability and reliability.



4334 Digital Turbine DEF Flow Meter

OTC's DEF Digital Turbine Flow Meter accurately measures fluid volume transferred for DEF, windshield washer fluid and other water-based fluids, even in severe weather conditions. It is designed for measurement in-line or end-of line when used with a dispensing nozzle. The digital display shows fluid transferred in quarts, pints and gallons and uses two AAA 1.5 volt batteries. Polyamide construction ensures a strong and protective housing for durability and a long work-life.



4339 Air Operated DEF Pump

OTC's Air Operated DEF Transfer Pump uses compressed air to pump and quickly move DEF and other fluids. It is designed to be mounted to drums from 15 to 55 gallons using its built-in 2" bung adapter. A versatile and industrial design enables the pump to also move engine oil and antifreeze without damage.



4337 Rechargeable Electric Pump

This Rechargeable DEF Transfer Pump makes dispensing diesel exhaust fluid easy in remote locations. A flow rate of 6 gallons per minute with a charge that lasts 15 minutes can transfer up to 90 gallons on a single charge. It is lightweight and easy to use with drums or totes with a telescoping inlet tube and flexible hose. Included with the pump is a one-hour quick charger, a lithium-ion battery and a manual nozzle.



4338 Electric DEF Transfer Pump

The 115 volt 3.0 amp electric DEF pump can pump at a rate of 9 gallons per minute for 30 minutes for more heavy usage. Generating .5 horsepower with speeds up to 2850 rpm, the pump can quickly move up to 270 gallons in 30 minutes. Lightweight construction makes it easy to transport while still being capable of withstanding rain and is engineered to pump water and antifreeze in addition to DEF.



4336 Hand Operated DEF Pump

The lever-action barrel-style hand pump pulls DEF from 15 to 55-gallon drums with a 2" opening without any electricity or compressed air. The hand-operated pump is ideal for low-volume DEF transfer in the field or the shop. A lightweight and durable design features a long telescoping inlet tube and flexible outlet hose. The multi-purpose design can also be used with engine oil, antifreeze, and windshield washer fluid.



4340 Air Operated Double Diaphragm DEF Pump

The Air Operated Double Diaphragm DEF Pump makes quick work of large-volume DEF transfer. It easily installs on most containers or free-floating in fluid. A versatile design can transfer contaminated liquids when cleaning out pits and, when properly installed, is capable of submersed operation. It can also pump antifreeze, ethanol and waste water.



4335 Auto Shut-Off DEF Nozzle

A dual-mode automatic DEF control nozzle that can be held open manually or locked to control flow of fluids. It will automatically shut off once the DEF level in the tank reaches the outlet discharge spout to avoid spilling or overfilling. It has a heavy duty stainless steel cast body with a polyamide cover for durability and protection. It can also be used with other water-based fluids and E85.

5286

Portable Diesel Particulate Filter Cleaner

The Diesel Particulate Filter (DPF) Cleaner was designed with shop service in mind. Its portability allows the unit to be placed as close to the vehicle as possible and to be stored wherever needed in the service facility. The advent of the 2010 Tier 4 cleaning requirements created the need for a lighter, more portable cleaning system which can be taken into the field to clean filters at the point of service.

Diesel Particulate Filter features

- Lightweight and Highly Portable - ideal cleaning system for use in the shop or on a service truck.
- Flexibility - clean DPF's from 6" to 15.5" in diameter using shop or compressed air of at least 100 PSI and 20 CFM sustained airflow.
- Fully Automated Operation - once started, the cleaning process can be completed with minimal operator oversight, freeing up the technician to simultaneously do other work in the shop.
- Focused Air Jet Technology™ - concentrates a precise high pressure stream of air directly into every cell.
- Easy Maintenance - contains no internal filters that require user maintenance.
- Rugged design provides maximum durability.
- Operates on 12-24 volt DC, or 110-220 Volt AC.

Efficiency by the Numbers*

- Cleans up to 20% more efficiently than traditional pulse based systems.
- Cleans up to 5% more efficiently than other more expensive "air knife" systems.

*Based on third party OE test data using Pin-gauge measurement.

Unique floating puck prevents "splash back"

- Features Focused Air Jet Technology™ with a unique floating puck that prevents splash back.
- Includes three nozzles: two straight (short and long), for standard "open face" DPFs; and one curved for the angled-flange DPFs.
- Ensures quiet operation.

Ash disposal System and Shield

- Innovative ash disposal system enables technician to quickly and easily remove and dispose of particulate matter in accordance with local environmental requirements.



5286 kit includes:

- Cleaning unit
- Three neoprene rings fit filters from 6 in. (165 mm) to 15.5 in. (400 mm) in diameter
- Wet / dry HEPA vacuum
- Short, long, and curved-flange filter nozzles
- Adjustment feet for standard and flanged filters
- Ash disposal kits
- AC and DC adapter cables

Accessories

563197

(Set of 5) – Ash disposal system enables technician to quickly and easily remove and dispose of particulate matter in accordance with local environmental requirements.



Curved neck nozzle with floating puck for angled-flange DPFs.



Long nozzle with floating puck for standard open face DPFs.



Includes innovative shield to protect cleaning area from moisture.





**5280
OTC 5280 Diesel Particulate Filter Cleaner**

The Diesel Particulate Filter (DPF) Cleaner was designed with shop service in mind. The cleaning process allows the DPF to be cleaned as part of a general maintenance schedule at the service location with minimal time away from the vehicle. It's portability allows the unit to be placed as close to the vehicle as possible and to be stored wherever needed in the service facility.

DPF Cleaner Features

- OE tested and Dealer recommended – By many major diesel engine manufacturers. Robust design – For long shop life. Can be used as part of a preventative maintenance program.
- High Pressure cleaning process for thorough cleaning of ash from DPF – produces 10 times the burst energy of competitive low pressure units.
- Initial Burst Quick check – To identify filters too plugged for proper cleaning.
- Movable with locking wheels – For placement throughout the shop.
- Computer Controlled Process Based on OE Requirements – for "Start to End" cleaning without constant technician monitoring.
- Containment of hazardous ash – For easy disposal.
- HEPA Filter Air Exhaust System – To exceed environmental air standards for shop.
- Operates on standard 115V outlet.
- Proven to clean to over 92% efficiency. (3)

(3) Third-party OEM test results using pin gauge measurement with approved OTC adapters and burst cycles. Actual results may vary.

Replacement Filters:

	558569	12" HEPA Filter
	558570	Vacumm Replacement Filter
	558571	30" Air Filter Cartridge
	558572	Replacement Desiccant
	558573	Replacement Element Filter

Includes the following items:

	535936	Small Cone
	543887	Medium Cone
	543885	Large Cone
	553913	CAT Adapters
	553915	Cummins Adapters

Seal Repair Kits

557281	Cone seal repair kit
557282	CAT adapter seal repair kit
557283	CUMMINS adapter seal repair kit
557510	VOLVO adapter seal repair kit
557511	ISUZU adapter seal repair kit
557553	UD TRUCK/HIND seal repair kit
557554	DETROIT DIESEL adapter seal repair kit

Upgrade kits for other OEM's are sold separately:

	556889	Detroit Diesel Upgrade Kit
	553990	UD TRUCK (with Hino Engine) Upgrade Kit
	553991	Isuzu Upgrade Kit
	553993	Volvo/Mack Upgrade Kit
	558181	Navistar Upgrade Kit Requires use of 5281 DPF Thermal Processing Unit.
	554654	Includes all upgrade kits shown above

DPF EQUIPMENT HEAVY DUTY TOOLS & EQUIPMENT

5281

OTC DPF Thermal Processing Unit

The 5281 DPF Thermal Processing Unit is a device which will thermally regenerate a DPF unit at a controlled, pre-programmed rate. Sometimes, the DPF cannot be regenerated on the truck due to a failure with the vehicle's own regeneration system, or in the case of retrofit applications, a lack of an on-vehicle regeneration system. Thermal regeneration of DPFs is used in conjunction with the OTC 5286 DPF Cleaner.

Designed to facilitate the cleaning of dirty filters – especially those with high amounts of wet soot, and unburned hydrocarbons.

- Pre-programmed thermal profile controls temperature 'ramp up' and 'cool down' to protect the DPF from thermal shock, reducing the risk of cracking the DPF.
- Holds temperature constant for two hours to ensure complete regeneration of filter.
- Includes both standard cycle and "pre-treat" cycle for oil-soaked filters.
- Built-in electronic safety lock prevents unauthorized opening of the door when temperatures exceed 200 degrees F.
- Large chamber accommodates various DPF sizes and shapes. Front access door allows for easy access to the thermal chamber.
- 220VAC / 60Hz / Single phase / 50 Amp.
- 1-year warranty.
- CE, UL201, UL499.
- Internal chamber dimension: 24" (L) x 24" (W) x 26" (H).

CE



Electronic safety lock.



J-47399

Horizontal DPF Handler

- The Universal mounting assembly adjusts front to back and side to side for easy DPF handling
- The height range of 6-1/2" to 29-1/2" is ideal for most of today's trucks
- Safety strap holds the load securely while moving about the shop

Specifications:

Overall Length: 34-1/2"

Overall Width: 19-3/8"

Max. Height: 29-3/4"

Min. Height: 7-1/2"

Side tilt: 30°, Front tilt: 15°, Back tilt: 15°



5025 OTC DEF Refractometer

Kit includes: Refractometer, dropper, lens wipe cloth, instructions and quick guide, screwdriver and case.

5025

DEF Refractometer

SCR and EPA 2010

EPA regulations require all diesel engines manufactured on or after January 1, 2010 to meet lowered NOx emissions standards.

- Most heavy duty engine (Class 7-8 trucks) manufacturers, have chosen to utilize SCR. This includes Detroit Diesel (DD13, DD15, and DD16 models), Cummins (ISX line), PACCAR, and Volvo/Mack.
- SCR-equipped engines require the periodic addition of Diesel Exhaust Fluid (DEF, a urea solution) to enable the process. DEF is available in a bottle from most truck stops, and some have installed bulk DEF dispensers near the Diesel Fuel pumps. However, to ensure the proper operation of the SCR system, operators must ensure the DEF in their vehicle consists of a 32.5% Urea / Water solution.
- The OTC 5025 makes this a simple and quick process for an operator or technician.

Application:

The refractometer is a portable, precision, optical instrument used for measuring the Diesel Exhaust Fluid (DEF) concentration. When a liquid sample is placed on the prism, the light passing through it is bent. The more concentrated the liquid, the more the light will bend. The refractometer contains a reticle, or scale, that is enlarged through the eyepiece to measure this light. The values on the scale have been established to evaluate the DEF condition.

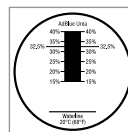
Scale:

0.5% line graduations

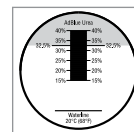
32.5% Indicated

Scale 15-40%

Waterline & 20 Deg C



The scale without any liquid on the prism.



The scale with liquid on the prism. The reading is taken at the point the shadow line crosses the scale.

CLUTCH / POWER TRAIN/AIR LIFTS SHOP EQUIPMENT



5018A 516160
Truck Clutch & Flywheel Handler

- Replaces 14" & 15-1/2" clutch assemblies weighing up to 250 lbs.
- 13" low point enables access below side faring.
- Linkage raises load from horizontal to vertical position.
- 360 degree swivel head.
- Includes a 2" spline shaft with a 1-1/4" pilot to aid alignment.
- Covered by OTC Lifetime Warranty®.

516160 Optional flywheel handling attachment

515686 Optional splined shaft, 1-3/4" dia. with 1-1/4" pilot

516159 Optional splined shaft, 1-3/4" dia. with 1" pilot



5015A
Truck Clutch & Flywheel Handler

- Handles 14" and 15-1/2" clutch assemblies weighing up to 150 lbs.
- Lifting range of 9" to 37". Swivel casters provide easy maneuverability.
- Includes a 2" spline shaft with a 1-1/4" pilot to aid in alignment.

218174 Flywheel handling attachment for use on No. 5015 and 5015A only.

48625 Optional splined shaft, 1-3/4" dia. with a 1-1/4" pilot.

440533 Optional splined shaft, 1-3/4" dia. with a 1" pilot. Needed for clutch service on some Navistar 466 series engines.

314386 Optional 1-3/4" dia. alignment shaft extension. Used for 2-plate clutch of Navistar 466 series engine.



218174

314386



1520
10-Ton Capacity
Lifting System (Includes two lifts)

- Mobile, tandem system is air-operated. This will handle your class 7 and 8 tractor lifting needs. No need to waste time re-blocking and making additional lifts for the clearance you need for under-vehicle service. Roll the system to the vehicle anywhere in the shop or outside on a level surface.
- Unique design provides lift from the tires, not the frame or axle members. Ideal for situations where limited ground clearance or a lack of clear access complicates lifting.
- Single controller operates both sides of the system for a smooth, level lift up to two full feet from the bottom of the tires to the ground. Units can double as support stands when retention pin is inserted.
- Covered by OTC Lifetime Warranty®.

Specifications:

Capacity – 10-tons (20,000 lbs.) (pair)	24" dia. rim sizes
Air pressure – 150 psi	Height – 53-1/4"
Lifting range – 0"-24"	Width – 41-1/2"
Saddle width – 19-1/2" –	Length – 39-1/2"

Power Train Lifts

- These lifts will handle engine and transmission assemblies, gas tanks, drive axle assemblies, engine/transaxle assemblies, electric vehicle batteries, and more.
- Scissors-type design allows access to all four sides of a component.
- Two independent adjusting screws tilt the table $\pm 15^\circ$ side-to-side, or fore and aft. Can be operated manually or with non-impact air wrench.
- 20" x 32" table.
- 8" swivel casters provide enhanced mobility under heavy loads.
- ANSI/PALD compliant.

5285 Power train lift (1,650 lb. Capacity)

Air / hydraulic operation – Foot control pump with hose allows movement around lift.

- Min. height is 31-1/2"; Max. height is 74-1/2".
- Footprint 33" wide x 48" long.

1595 Power train lift (2,500 lb. Capacity)

Powered by a quiet, 110V electric/hydraulic pump.

- Smooth, steady lifting and lowering motion controlled by hand-held remote.
- A 30 ft. long retractable extension cord is mounted to the frame.
- Min. height is 29"; Max. height is 80"
- Footprint 31" wide x 50" long.

5295 Powertrain Lift (1,760-lb capacity)

The sliding split table top design of this powertrain lift allows for separation of the engine/transmission assembly or hybrid engine/generator module, making service easier. The unique design also helps handle removal and installation of electric vehicle batteries, fuel tanks, suspension systems and other powertrain assemblies. A generous ground clearance allows for floor crane access while a low collapsed height aids in servicing large components while still on the lift. The table tilts to help properly align components to the vehicle during installation and threaded holes in the tabletop accommodate future adapters and powertrains.

- Similar to GM lift P/N GE-52200 and Honda lift P/N HON52200.



1590
10-Ton Air Lift

- Adjustable lifting saddles and an extra-wide stance for extra stability.
- Automatic mechanical safety catch engages in five height positions.
- Two large swivel casters and pneumatic tires make it easy to maneuver, even on loose gravel.
- Covered by OTC Lifetime Warranty®.

Specifications:

Capacity – 10 tons (at 200 psi air)	Saddle – 4" X 5-1/4"
Air pressure – 100–200 psi	Height – 67-1/2"
Lifting range – 13"–52"	Width – 41"
Saddle spread – 29" – 41-3/4"	Length – 36"
	Distance from lift arm to floor support – 12-1/2"

572913

Optional saddle set for 1590. Saddle – 4" X 5-5/8"



5267

Lift Pad Adapters, set of two

The adapters sit on the hoist or jack saddle and seat inside frame holes on GM vehicles to prevent saddle lip from damaging frames or subframes. Similar to J-43625.



5285
extended

Casters provide a 9-1/2" clearance on lower frame



5285
collapsed

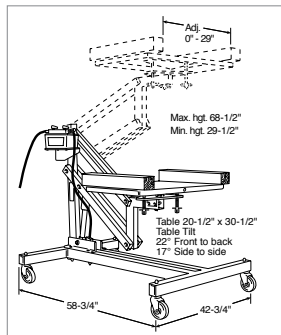


5295
extended



1585A
Power Train Lift – 1,250 lb. Capacity

- For easy removal and installation of engine/transaxle assemblies on FWD vehicles. Also handy for pulling rear ends, leaf springs, and more.
- Includes 4020 air/hydraulic pump.
- Your shop air supply is the only thing you need to get the precise control.
- Width between wooden support blocks is adjustable from 0–29". Load is secured with a tough nylon strap.
- Covered by OTC Lifetime Warranty®.



5078
Transmission Jack Air-Assisted
2,000 lb. Capacity High-Lift, for Trucks & Buses

- Foot-operated air pump enables the operator to effortlessly raise the transmission into place.
- Rugged, heavy wall tubing and oversized base for stability.
- A dedicated adapter for Allison 500- and 600-series automatic transmissions is included.
- Covered by OTC Lifetime Warranty®.

Specifications:
Min. height is 41-1/2" Backward tilt – 38°
Max. height is 65" Side tilt (side/side) – 14°
Forward tilt – 50° Leg width – 46"



Head adjustable to 19-1/2" x 18".

1728
Air-Assisted 1,000 lb. Capacity High-Lift Transmission Jack

- Unique foot pedal design gives you complete control over the air-driven first stage to rapidly raise the mounting head to the transmission; second stage is hydraulically actuated — permitting precise operator control during removal and installation.
- Transmission mounting head features four ratcheting brackets that adjust to fit a wide range of transmissions. Four-wheel base with locking swivel casters provides stability and portability.
- Safety bypass prevents damage caused by a system overload.
- Carries OTC Lifetime Warranty®.

Specifications:
Min. height is 34-1/2" Max. height is 72"
Max. forward tilt – 40° Max. backward tilt – 20°
Max. side tilt (either side) – 10°
Leg width – 41" Air pressure (psi) 90 to 160



1793A
1,000 lb. Capacity High-Lift Transmission Jack

- Universal saddle tilts front to back and side to side; features adjustable corner brackets and safety chain for optimum positioning of the load.
- Flash-chromed rams inhibit rust from entering the hydraulic system.
- Foot-operated pump and lowering pedal for ease of control when positioning or removing a transmission.
- Wide leg base with 4" polyurethane swivel wheels that provide stability and easy maneuvering. (Brakes on two of the wheels.)
- Safety overload system to prevent jack from being used beyond its rated capacity.

Specifications:
Min. height is 35" Max. height is 71-5/8"
Max. forward tilt – 24° Max. backward tilt – 19°
Max. side tilt (either side) ± 20°
Leg width – 37-1/8"



Folding foot pedal.

5237
1,000 lb. Capacity High-Lift Transmission Jack

- Universal mounting head provides wide fore and aft tilt range.
- Two-stage hydraulic cylinder design.
- Innovative folding foot pedal and release provides precise ease of control when positioning or removing a transmission. - Significantly reduces force required to lift extremely heavy transmissions.
- Upgraded ergonomic handles for adjustment.
- ANSI/PALD compliant.

Specifications:
Min. height is 34-1/2" Max. height is 75"
Max. forward tilt – 50° Max. backward tilt – 20°
Max. side tilt (either side) – 10°
Leg width – 41"



1794A
Air-Assisted 1,000 lb. Capacity High-Lift Transmission Jack

- Air-assist primary stage for rapidly raising the mounting head, activated by depressing foot pedal.
- Hydraulic secondary stage for precise operator control, activated by a hand pump to raise the load, and a release knob to lower the load.
- Big, easy-to-grip knobs that make mounting head adjustments simple, and a safety chain for securing the load.
- Wide leg base with 4" polyurethane swivel wheels that provide stability and easy maneuvering. (Brakes on two of the wheels.)
- Safety overload system to prevent jack from being used beyond its rated capacity.

Specifications:
Min. height is 37-5/8" Max. height is 76-1/2"
Max. forward tilt – 42° Max. backward tilt – 46°
Max. side tilt (either side) ± 12°
Leg width – 37-1/8"

TRANSMISSION / DRIVELINE LIFTS SHOP EQUIPMENT



- 5130**
1,000 lb. Capacity DriveMaster™ Driveline Lift
- Low profile of 7" and a Lift range: 7" to 30".
 - Pivoting pump handle +/- 15° tilt in each direction
 - Includes 553516 Differential Adapter
 - ANSI/PALD
- Specifications:
 Overall Length – 43"
 Overall Width – 30-1/4"
 Max. Height – 30"
 Min. Height – 7"



- 1521A**
1,000 lb. Capacity Low-Lift Transmission Jack
- Universal mounting head, with adjustable brackets, tilts front to back and side to side for easy transmission alignment.
 - Safety chains hold the load securely, even while moving about the shop.
 - Wide, stable wheel base with four swivel casters, and two handle grips make it easy to position under the vehicle.
 - Safety overload prevents jack from being used beyond its rated capacity.
 - Pump handle rotates a full 360° for use in any position.

- Specifications:
 Min. height is 7-1/2" Overall length – 34-1/2"
 Max. height is 29-3/4" Overall width – 19.3/8"
 Max. forward tilt – 67°
 Max. backward tilt – 17°
 Max. side tilt (either side) – 30°

1591B
**Air Lift & Support Stand
 10-Ton Combination**

- 40" removable handle and 8' air hose.
- Covered by OTC Lifetime Warranty®.

- Specifications:
 Capacity – 10 tons (at 200 PSI air)
 Minimum height (unpinned, no extension) – 18-3/4"
 Maximum height (pinned in top hole, with extension) – 50-1/2"
 Stroke – 10-7/8"



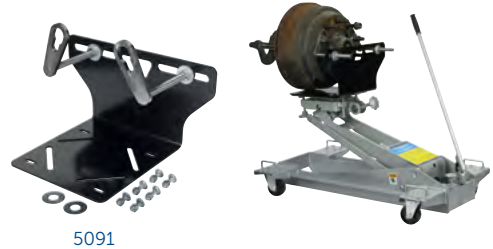
- 5019A**
2,200 lb. Capacity Low-Lift Transmission Jack
- Special mounting adapter fits popular Eaton® Fuller® RoadRanger® transmissions used on nearly all Class 7 and 8 heavy-duty trucks. Mounting plate angle is adjusted with the turn of a wrench.
 - Swiveling pump handle permits ease of operation in restricted working spaces. Fast-acting pump quickly raises lifting arm.
 - Includes No. 504231 adapter for Eaton® Fuller® RoadRanger® transmissions (also available separately).
- Specifications:
 Min. height is 8-1/4" Side tilt (either side) – 12°
 Max. height is 36-1/2" Overall length – 52"
 Forward tilt – 15° Overall width – 32-1/2"
 Backward tilt – 20°



- 1522A**
Heavy-Duty 2,000 lb. Capacity Low-Lift Transmission Jack...for Class 7 and 8 Trucks
- Includes No. 220492 adapter for Eaton® Fuller® RoadRanger® transmissions.
 - Pump handle rotates 360° for operator convenience; ball bearing 3.5" diameter swivel casters provide easy positioning of jack.
 - Safety overload system prevents use of jack beyond its rated capacity, and a safety bypass protects the hydraulic cylinder from damage.
- Specifications:
 Min. height is 6-7/8" Side tilt (either side) – 11°
 Max. height is 35-1/4" Overall length – 43-1/2"
 Forward tilt – 24° Overall width – 26"
 Backward tilt – 18°

5091
Heavy-Duty Spindle Adapter

This low-lift transmission jack adapter holds the spindle assembly firmly in place during king pin service. It eliminates the need to completely disassemble the brakes to reduce spindle weight for handling. During service, the spindle assembly can be raised to a comfortable working height while replacing king pin bearings or bushings. Out patented design will work with standard HD truck bolt patterns and wheel stud sizes and adapts to most low-lift transmission jacks.



**Transmission Jacks Accessories
 for 5019A / 5078 / 1522A and 5130 Driveline Lift**

- 558382** Auxiliary box adapter. Used with all.
- 561949** Light duty transmission adapters. Used with all.
- 528150** Eaton® "Lightning" adapter. Used with the No. 5019A transmission jack.
- 543284** Roadranger transmission Model series FRO-11210C to FRO-18210C that is equipped with an internal cooler. Used with the No. 5019A transmission jack.
- 49611** Eaton® Fuller® RoadRanger® auxiliary housing adapter. Bolts directly to the countershaft bearing caps to provide a stable platform for removing and installing the auxiliary housing.
- 553516** Differential Mounting Adapter. Mounts easily using existing bolt patterns. Fits the most common differentials currently in use on Category 7 and 8 Heavy Duty Trucks. Including: Eaton, Fuller, Rockwell, Meritor, Spicer, International, and Mack. For use on OTC (5019A – 553516 requires 565188 adapter) 5078 and Stinger 1522A Transmission Jacks.
- 314729** Allison 500/600 series automatic trans-mission adapter used with No. 5078 transmission jack.
- 540231** Eaton® Fuller® RoadRanger® transmission adapter
- 540232** Mack transmission mounting brackets. Provides a stable platform for Mack T200 series transmissions.





1870

Universal Transmission Adapter

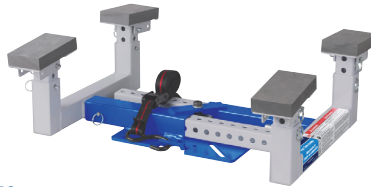
Universal transmission adapter with independently adjustable and indexing locking arms that adapt to nearly any transmission shape. The adjustable mounting arms will fit most high-lift transmission jacks. Maximum capacity of 400 lbs. Meets or exceeds current ASME PASE standards for portable automotive service equipment.



223196

Transmission Jack Mounting Adapter Set

- Used with No. 1728 transmission jack. Ideal for use on larger standard transmissions with irregularly shaped oil pans.
- Four adjustable arms help stabilize transmissions that have rounded bottom surfaces.



1758

Fuel Tank Handler

- Provides safe and efficient handling of fuel tanks. Adjustable from 24" to 38" horizontally, and 7" to 11" vertically, to service tanks up to 40 gallons.
- Universal adapter plate fits all OTC and virtually all competitive transmission jacks and power train lifts in the market.
- Gearing mechanism ensures equal extension of lift arms to ensure load is properly balanced over jack.
- Four adjustable support risers can be individually adjusted to ensure a perfect fit to any fuel tank design.
- Cross-link polyethylene foam pads protect tank from damage.

Shown mounted on an OTC high-lift jack.



7020 Similar to Ford T57L-500-B, 307-003



7020

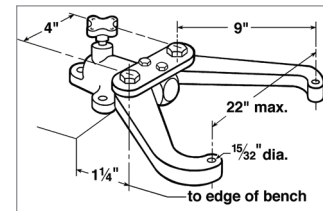
Bench-Mounted Holding Fixture

- Here's a helpful device that enables you to securely hold and rotate small engines, transmissions, and other components while you're working on them.
- This holding fixture will handle pieces weighing up to 250 lbs., and it offers 360° of rotation with positive stops at 90° increments.
 - Three sides of the mounted unit remain fully exposed.

34607

Base assembly only.

34607 Similar to Ford D83L-500-B1, 300-D041



20-Ton Truck Ramps

- Long, retractable T-handle enhances mobility.
- Non-skid rubber matting prevents slippage during use.
- Durable, heavy-duty rubber wheels.
- Capacity per pair is 20 tons
- Covered by OTC Lifetime Marathon Warranty®.

5268 – 20-ton truck ramps handle up to 10" tread width.

5269 – Wide 20-ton truck ramps handle up to 16" tread width



5268



5269



7118

Transmission Adapter Kit

- Converts your OTC engine stand into a transmission service stand.
- Kit replaces the adjustable arms of the stand to hold and position the transmission at workbench height for repair.
 - The transmission is held with three sides fully exposed for working convenience, and can be rotated a full 360° for complete access to all parts.

Model	Frame Height	Frame Width	Frame Length	Wheel Diameter	Handle Length
5268	9-1/4" (23.5 cm)	13-1/2" (34.29 cm)	47" (119.38 cm)	5" (12.7 cm)	33" (83.82 cm)
5269	9-1/4" (23.5 cm)	18-1/4" (46.36 cm)	47" (119.38 cm)	5" (12.7 cm)	33" (83.82 cm)

UNDER AXLE / SERVICE JACKS SHOP EQUIPMENT



Convenient and secure storage space for large adapter & saddle.



Maximum extended height

Saddle

Large adapter

5292 27.5-Ton Under Axle Jack

- Features class-leading 27.5 ton capacity
- Robust design with completely sealed piston.
- New lever design and pneumatic release valve for more precise release control.
- Power return allows lowering with no load.
- Includes two height adapters for flexibility.
- PALD compliant.
- Minimum retracted height (with saddle only): 8-1/4".
- Maximum extended height (with screw extended and large adapter): 21-3/8".
- Stroke: 4.9375".
- PSI range: 90 to 175.

5093B 3-Stage Under-Axle Jack

Three-stage lift capacity 22.1T, 38.5T, and 71.5-tons. Ideal for lifting loaded trailers, buses, and other Class 7 & 8 vehicles.

- Piston and cylinders are made from chromium molybdenum vanadium steel for durability and then liquid nitrided to prevent rust and seizing.
- Features a high load-approach speed.
- Air-driven cylinder with pressure control knob for maximum user safety.
- 4-position handle: horizontal, 45 degrees, vertical, or collapsed.
- 7-inch minimum height for low clearance vehicles.
- Comes complete with a 3-15/16 in. (100 mm) lifting extension.
- Complies with ASME / PALD test requirements.



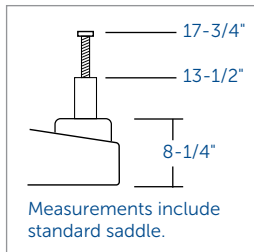
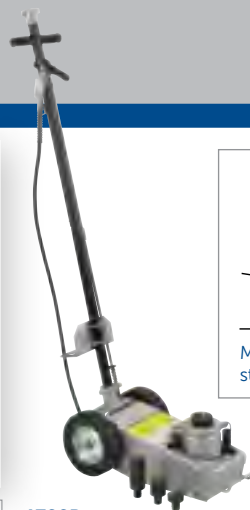
Single control switch, handy and easy to use.



4 positions: horizontal, 45 degrees, vertical, or collapsed for easier transport.



8-1/4" width for easy access to the lifting point.



1788B 22-Ton Capacity Under-Axle Jack

- Improvements include advanced seal ring material and one-piece air piston air pump
- Long 49-1/2" T-handle lets you easily position jack under vehicles with long overhangs.
- One pull of the handle activates the self-retracting 22-ton capacity ram without having to crawl underneath the vehicle.
- Jack has large rubber-tired wheels.
- Lifting range:

3/4" saddle	Max. height 17-3/4"
1-15/16" saddle	Max. height 18-15/16"
3-7/8" saddle	Max. height 20-5/8"
- Cylinder stroke, 4-1/2"; extended screw length, 4-1/4"; PSI range, 90-145.

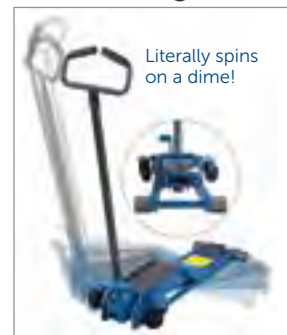
215009

* In-line oil lubricator. Add to air line to meter precise flow of lubricant to air motor. Has 1/4" NPT fitting.

*Not included, order separately. Prevents harmful contamination caused by moisture in the air line!



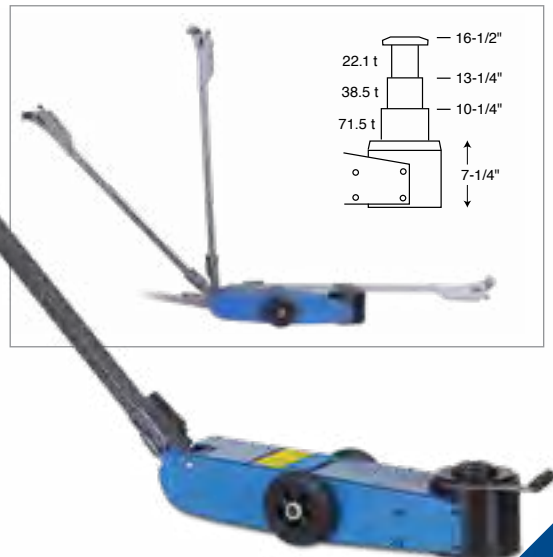
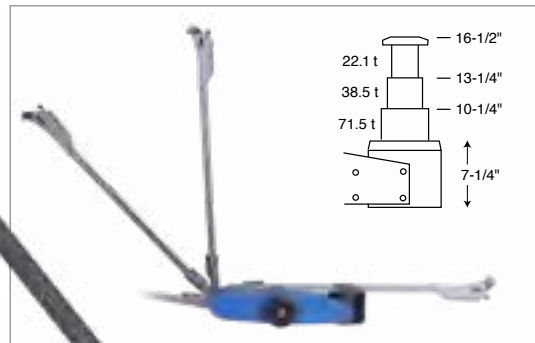
1-7/8" Low Profile



Literally spins on a dime!

5200 Ultra-Low Profile 2-Ton Service Jack

- Minimum saddle height of just 1-7/8".
- Unique, fifth-wheel design provides effortless 360° maneuverability – literally spins on a dime!
- Featuring Polyamide casters – superior to cast wheels due to their high mechanical strength and thermal properties.
- Foot pedal for quick approach of saddle to lifting point. Ergonomic handle for user comfort and enhanced mobility.
- Lifting range of 1-7/8" to 20-1/2".
- CE marked – ASME / PALD tested.





5202

2- & 3-Ton Service Jack

- Ergonomic handle for user comfort and easy mobility.
- Foot pedal for quick approach of the lifting saddle to load. Built-in tray for fasteners and tools.
- CE marked – ASME/PALD tested.
- Covered by OTC Lifetime Warranty®.

5202A

2-ton Service Jack

Min. height 3"; Max. height 18-1/4".

5203A

3-ton Service Jack

Min. height 5-1/2"; Max. height 20-1/2".

Specifications	5202A	5203A
Capacity	2-ton	3-ton
Min. height	3"	5-1/2"
Max. height	18-1/4"	20-1/2"
Overall length	34-5/8"	42-1/4"
Overall width	14-3/16"	14-3/16"
Handle length	39-1/2"	39-1/2"



1533A Includes 1532A and 1582A

1532A 2-Ton Aluminum Service Jack

- Light-weight aircraft-grade aluminum construction makes it easy to carry and roll
- Low profile allows it to be used with ground-hugging high-performance cars
- Meets ASME PASE-2014 Standard for Service Jacks
- Includes side mounted carrying handles for quick and easy carrying
- Min. height 3-1/4"; max height 18-5/8"

Product Specs:

- Handle Length 47.6 inches
- Saddle Diameter 4.5 inches
- Wheel Diameter 2.5 inches
- Caster Diameter 1.75 inches
- Strokes to Full Height 5
- Actuating Handle Effort 85 lbs

1582A 2-Ton Aluminum Jack Stands (2 included)

Flat round base doesn't dig in to soft surfaces such as asphalt

- Placement of hole locations allows for broad range from low to high heights
- Light weight material makes handling and use easy

Product Specs:

- Low Height 9.5 inches
- High Height 15.2 inches
- Number of Adjusting Positions 6
- Base Diameter 7.0 inches
- Weight of Each Stand 4.70 lbs
- Saddle Size 2.2 x 2.2 inches

1547 Includes 1532A and 1582A

1546 3-Ton Aluminum Service Jack

- Light-weight aircraft-grade aluminum construction makes it easy to carry and roll
- Low profile allows it to be used with ground-hugging high-performance cars
- Meets ASME PASE-2014 Standard for Service Jacks
- Includes side mounted carrying handles for quick and easy carrying
- Min. height 3-5/8"; max height 19-3/16"

Product Specs:

- Handle Length 47.6 inches
- Saddle Diameter 4.6 inches
- Wheel Diameter 2.6 inches
- Caster Diameter 2.0 inches
- Strokes to Full Height 7
- Actuating Handle Effort 106 lbs

1596 3-Ton Aluminum Jack Stands (2 included)

Flat round base doesn't dig in to soft surfaces such as asphalt

- Placement of hole locations allows for broad range from low to high heights
- Light weight material makes handling and use easy

Product Specs:

- Low Height 9.5 inches
- High Height 15.6 inches
- Number of Adjusting Positions 6
- Base Diameter 7.1 inches
- Weight of Each Stand 4.74 lbs
- Saddle Size 2.2 x 2.0 inches

**SEE PAGE 208 FOR
JACKS STANDS
3-TON, 6-TON AND
12-TON STANDS.**



552650

Aluminum Racing Jack wall Mount

Ideal for storing or displaying OTC Racing Jack:

- Easily mounts to shop wall or side of truck.
- Includes convenient snap-in handle clasps.
- Velcro strap for additional security.





5302



5303

2-1/4 / 3-Ton Hydraulic Service Jacks

- Flanged upper body edge increases strength to resist twisting.
- Light, compact design makes them easy and convenient to use.
- Built-in safety overload system protection prevents use beyond their rated capacity.
- Rear swivel casters, for easy maneuvering and positioning.
- These jacks have 4" saddle dia., 21" overall reach, 6-1/2" frame height,
- 39-1/2" handle length, and a floor space of 13-1/2" x 24-1/2".

5302

2-1/4-ton capacity with a lifting range of 5" to 18".

5303

3-ton capacity with a lifting range of 5-3/4" to 18-1/2".



**5300
OTC Stinger 3-Ton Jack Pack**

This jack pack includes (5303) 3-ton service jack and (5372) Pair of 3-ton jack stands.

5303 3-Ton Service Jack

- Flanged upper body edge increases strength to resist twisting.
- Light, compact design makes them easy and convenient to use.
- Built-in safety overload system protection prevents use beyond their rated capacity.
- Rear swivel casters, for easy maneuvering and positioning.
- Lifting range of 5-3/4" to 18-1/2"
- 4" saddle dia., 21" overall reach, 6-1/2" frame height.
- 39-1/2" handle length, and a floor space of 13-1/2" x 24-1/2".

5372 3-Ton Service Jack Stands

- Base: 8-1/4" x 7-1/2".
- Height range: 12" to 17-11/16".
- 11 adjustment positions.
- Welded foot pads resists sinking into soft ground or asphalt.



**1536A
OTC Stinger 3-1/2 Ton Jack Pack**

This jack pack includes (1526A) 3-1/2-ton service jack and (1796) Pair of 4-ton jack stands.

1526A Two-Speed 3-1/2 Ton Service Jack

The ideal floor jack for both a large automotive service center or a one person shop.

- Gets to the load quickly.
- One pump to load; three pumps to full height unloaded.
- Extra wide lift range – from 4" to 21".
- A long 48" spring-loaded handle provides rapid return after each pump.
- Heavy-duty construction – rolled edges add strength and resist twisting.
- With a wheel base of 23", the front wheels are 3-1/2" diameter and rear casters are 2-1/8".
- Pinned 4-3/4" saddle will not lift off during use.
- 2-year limited warranty.

1796 4-Ton Stinger Jack Stands

Meet the latest ASME PASE safety standards and feature a wide range of locking heights and adjusting positions to provide a universal stand for most vehicles. The form-fit saddle design and wide base ensures stability.

- Lifting range of 15-1/2" to 23-13/16".

Specifications	5302	5303
Capacity	2-1/4 ton	3-ton
Lifting range	5" to 18"	5-3/4" to 18-1/2"
Saddle dia.	4"	4"
Frame height	6-1/2"	6-1/2"
Handle Length	39-1/2"	39-1/2"
Floor space	13-1/2" x 24-1/2"	13-1/2" x 24-1/2"



1511B



1505B



1512

5-Ton and 10-Ton Air/Hydraulic Service Jacks

- Bring the versatility of air-assist operation to your shop's lifting tasks.
- Huge front wheels mounted in bearings provide trouble-free service life. Rugged steel frame members.
- Rear swivel casters make spotting the jack easy. Spring-loaded handle may be locked in three positions, from horizontal to vertical.

1507B

5-ton air/hydraulic service jack

1511B

10-ton air/hydraulic service jack

Specifications	1507B	1511B
Capacity	5 ton	10 ton
Air pressure	80–120 PSI	80–120 PSI
Lifting range	5-7/8" to 22"	6-3/8" to 22"
Saddle dia.	6-5/8"	5-3/4"
Overall reach	87"	90"
Frame height	8"	10"
Handle length	40"	45"

5-Ton and 10-Ton Service Jacks

- A built-in safety overload prevents using the jack beyond its rated capacity.
- Convenient foot pedal speeds the lifting operation. Handle lock and release control are located on top of the handle. Handle can be locked into any position from vertical to horizontal.
- Both models have a spring-loaded 40" handle.

1505B 5-ton service jack

1510B 10-ton service jack

20-Ton Capacity Service Jack

- Low-profile stance and extended height add to versatility.
- Wheels and swivel casters feature internal bearings.
- Either the foot pedal or jack handle may be used for pumping action. Counter-balanced, spring-assisted handle has a three-position lock.

1512 20-ton service jack



1510B

Specifications	1505B	1510B	1512
Capacity	5-ton	10-ton	20-ton
Lifting range	6" to 22"	6-1/4" to 22"	7-1/2" to 24"
Saddle dia.	5-1/8"	6"	7-1/2"
Overall reach	47"	51"	97"
Frame height	7-3/4"	9-3/4"	10-1/4"
Handle Length	43"	43-1/4"	42"
Floor space	14-3/4" to 56"	18" to 60"	18-1/8" to 61-3/8"

FORK LIFT JACKS / STANDS SHOP EQUIPMENT

5214

4-Ton Capacity Fork Lift Jack

- 8,000 lb. capacity with a low starting height of 2-5/32".
- 10,000 lb. capacity (5 tons) when lifting from cylinder saddle—ideal for agriculture and industrial applications.
- Unique shape of primary saddle allows for handling of all lift truck configurations with flat or edged surfaces.
- Features include high-quality seals, chrome-plated internal components, and high-strength steel construction.
- Secondary lifting surface feature.
- Complies with ASME-PALD.
- Lifting Height: 2-5/32 – 17-15/16".



1540

4-Ton Capacity Fork Lift Jack

- 8,000 lb. capacity with a low starting height of 2-5/8".
- Two-position lift pad permits handling of all lift truck configurations with flat or edged surfaces.
- Minimum low lift: 2-1/4".
- Maximum high lift: 16-1/4".
- Features include high-quality seals and high-strength steel construction.
- Handle top makes for easy maneuverability.
- 30" long handle.



3- and 6-Ton Capacity Ratcheting Jack Stands

- Jack stands feature a formed steel frame for strength and long life, and rolled base edges that resist sinking into soft ground or asphalt.
- Recessed column saddle for acceptance of vehicle panel rail (pinch weld).
- Dual purpose handle serves as carrying handle and column release.
- Investment cast rack bar for long life strength.
- Covered by OTC Lifetime Warranty®.

1736A Pair of 6-Ton Jack Stands.
Height Range of 15-1/2" to 24-1/2".

1733A Pair of 3-Ton Jack Stands.
Height Range of 12-1/2" to 18-1/2".

5373



OTC Stinger 3, 4, 6 and 12-Ton Jack Stands

- Formed and welded steel base for strength; self-locking ratchet handle cannot be released under load. Durable baked enamel finish resists corrosion.
- Stands conform to ANSI PALD load rating standard; factory tested before shipment.

5372 Pair of 3-ton jack stands. Base: 8-1/4" x 7-1/2". Height range: 12" to 17-11/16".

1796 Pair of 4-ton jack stands. Base: 11-7/16" x 10-3/8". Height range: 15-5/16" to 23-13/16".

5373 Pair of 6-ton jack stands. Base: 11-9/16" x 10-3/8". Height range: 15-5/8" to 23-11/16".

1784D Pair of 12-ton jack stands. Base: 12-1/8" x 10-7/8". Height range: 17-1/2" to 27-1/2".



1774B

10-Ton Capacity Ratcheting Jack Stands (pair)

- These ratcheting jack stands are highest quality steel and factory tested to ANSI PALD standards.
- The form-fit saddle design and 12" x 14" base ensures stability.
- Height range is 20" to 31-1/2".



1780

22-Ton Capacity Jack Stands

- Height range is 13-7/8" to 19-7/8".
- Saddle size 3" x 3-3/4".
- Pin-style (non-ratchet) three positions, 3" intervals.
- Reinforced collar to meet newest ANSI PALD test standards.
- 11" flat base prevents sinking into the surface.

1783

Heavy-Duty 20-Ton Capacity Adjustable Support (One only)

- Designed for the really big service jobs. Rugged steel construction, and large 15-1/2" square base will satisfy support requirements up to 40,000 lbs.
 - Features include 4-point adjustment. Height range is 15-1/4" to 24". Saddle diameter is 6".
 - Covered by OTC Lifetime Warranty®.
- Note: Recommend use in pairs.



1778B

12-Ton Capacity Low profile Jack Stand (One only)

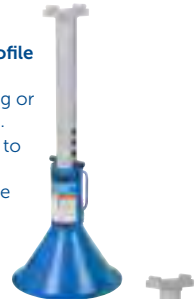
- Spun steel base won't dig or sink into asphalt or sand.
 - Height range of 19" to 29-1/2".
 - Covered by OTC Lifetime Warranty®.
- Note: Recommend use in pairs.



1779B

12-Ton Capacity High profile Jack Stand (One only)

- Spun steel base won't dig or sink into asphalt or sand.
 - Height range of 33-3/4" to 44-1/4".
 - Covered by OTC Lifetime Warranty®.
- Note: Recommend use in pairs.



Extension Tubes for 1778B and 1779B Jack Stands

543751

Extension Tube Height range of 19" to 29-1/2"

543752

Extension Tube Height range of 33-3/4" to 44-1/4"



543751

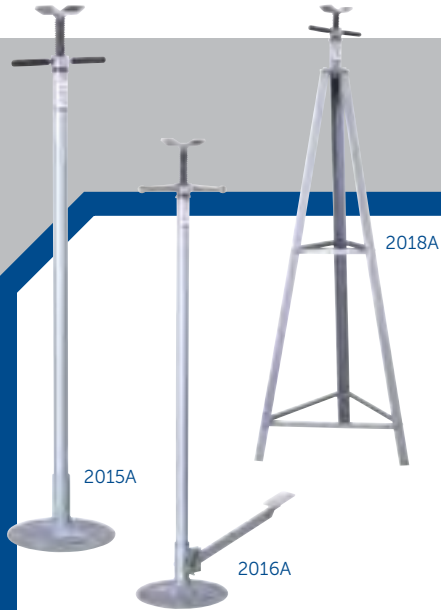
543752

1781B

4,000 lb. Capacity Underhoist Tripod Stand

- Ideal for undercar maintenance. An ACME take-up screw precisely positions and secures the support stand in place.
- Height range of 65-3/4" to 74-5/8".





Tripod and Underhoist Stands

2018A 4,000 lb. Capacity Underhoist Tripod Stand

Lifting height of 58-7/8" to 91-5/8"; saddle measures 3-1/4" x 3-1/4".

- 24" x 24" x 24" tripod base.

2015A 1,500 lb. Capacity Underhoist Stand

Lifting height of 54-1/4" to 80-3/4"; saddle measures 5-1/4" x 1-1/4".

- 11-7/8" dia. base.

2016A 1,500 lb. Capacity Underhoist Stand with Foot Pedal

Foot pedal actuated lifting mechanism.

- Lifting height of 54-1/4" to 80-3/4"; saddle measures 5-1/4" x 1-1/4".



1572

Car Dolly (3,600 lbs., capacity pair)

- Innovative patent-pending design — clamps directly to pinch welds to prevent slippage during use.
- Independent units eliminate the need to adjust dolly width for different vehicle designs.
- Each unit has an independently adjustable threaded lift saddle with rubber pads to protect the vehicle frame.
- Universal design for use on all vehicle types without additional adapters.
- Provides easy movement of FWD vehicle after removal of drive train.
- The material on the 5" casters is polypropylene.
- Each unit has 1,800 lbs. capacity (3,600 lbs., pair) with low height of 9" and high of 14".
- May be used with or without tires on vehicle.



Shown folded

1734A

300 lb. Capacity Heavy-Duty Wheel Step

- Tire-mounted wheel step provides quick, easy access to under-hood components.
- Fits heavy-duty vehicles (Class 7/8).
- Adjusts to fit 22-1/2" to 24" wheel sizes.
- Non-skid platform surface.



Shown folded

1534A

300 lb. Capacity Passenger/Light Truck Wheel Step

- Provides quick, easy access to your vehicle's roof for loading/unloading cargo.
- Fits passenger and light trucks.
- Adjusts to fit 14" to 20" wheel sizes.
- Non-skid platform surface.
- Two-year warranty.



1580 (sold individually)

1580

1,500 lb. Capacity Easy Roller™

- Provides simple and efficient method of moving a disabled vehicle around a shop environment.
- Fits tread widths up to 12".
- 4 heavy-duty phenolic casters.
- 1,500 lbs. capacity per unit.
- Hydraulic lift mechanism with locking pin.



5090

Back Buddy™ II

- Remove, transport, service, and install heavy truck brake drums and hub assemblies.
- Fast-motion ratcheting jack with 14" of vertical lift.
- Pneumatic rear tires.
- Tilting mechanism to achieve the exact angle necessary for precise reassembly.
- Fold-down handle for open access to the work area.

Adapter Sets (sold separately)

513926 10 stud inboard hub & drum assemblies — 335 mm.

513927 10 hole outboard drums — 3/4" thick back plates

513925 5 and 6 spoke wheels

514644 8 stud inboard hub & drum assemblies

514645 8 hole outboard drums

514646 6 stud inboard hub & drum assemblies

514647 6 hole outboard drums

514648 Humvee/Hummer geared hubs



1545

Motorcycle/ATV Lift

- 1,500 lb. capacity and 17" long skids that will lift the largest, widest cruisers.
- Lowest clearance available, 3-1/2" at lowest level, with a wide lift range of 3-1/2" to 16-3/4".
- Removable handle provides 360° access to load.
- Features also include foot pedal release, locking rear casters, automatic safety lock, and two ratcheting tie down straps for safety.

BRAKE DRUM / WHEEL DOLLIES SHOP EQUIPMENT

5017A Brake Drum Dolly

- Remove, install, and transport truck brake drums without physically having to lift them.
- Works on 15" and 16-1/2" drums found on most Class 7 and 8 tractor and trailer brake systems.
- Heavy-gauge steel construction, ten-inch pneumatic tires, and adjustable handle.
- Covered by OTC Lifetime Marathon Warranty®.



1543 Brake Drum Dolly

- Removes, installs, and transports truck brake drums without physically having to lift them.
- Works on all 15" and 16-1/2" drums found on most class 7 and 8 tractor and trailer brake systems.
- 6" height adjustment aids installation.
- Heavy-gauge steel construction, 8" tires, and 36" handle.



5105B 1,100 lb. Capacity High-Lift Dual Wheel Dolly

- Effortless air-powered hydraulic lift system for a variety of applications.
- 0 to 42" lifting range.
- Six-inch lateral adjustment.
- Tilt adjustment of +15° to -8° ensures easy alignment.
- Features four swivel casters, two locking, for enhanced mobility.



Easy Lever Wheel Dollies

- Gives technicians the leverage they need to easily remove or install truck tire-and-wheel assemblies.
- Heavy-duty construction capable of toting 300 pounds.
- Onboard rollers that make stud-hole alignment a snap.
- Spring-loaded kickstand for handy parking.
- Two models that, together, can accommodate tire diameters from 24 to 48 inches.
- Rugged tubular steel construction.

5096A Heavy-duty Easy Lever Wheel Dolly. With a width of 26", this dolly handles tire diameters of 36" to 48".

5095A Easy Lever Wheel Dolly. With a width of 22", this dolly handles tire diameters of 24" to 36".



5100 Wheel Mate™

- Enables truck technicians to easily remove, install, rotate, and transport single tire-wheel assemblies.
- Internal ratcheting jack with 14 inches of vertical travel—almost a foot higher than conventional dollies.
- U-shaped chassis that provides close, unhindered access to work area.
- A design that accommodates—and securely holds—almost any truck wheel, including wide-based singles, without restraining chains.
- Heavy-duty ball-bearing wheels mounted under ball-bearing swivel casters for maximum maneuverability.
- Foot-operated wheel lock.
- Rugged structural steel tubing construction that meets the demands of the toughest shop environments.



5082 Wheel Tipper

This heavy-duty wheel tipper makes handling those hard-to-manage truck tires easy. To use the wheel tipper, simply deflate the tire and break the bead, then hook the wheel tipper to the rim of the wheel. The wheel tipper makes an otherwise tough task effortless.

- Designed for both aluminum and steel wheels won't damage wheel rim.



1770A 1,500 lb. Dual Wheel Dolly

- Hydraulic jack provides almost 5' of lift and tilts wheel assembly 4° to prevent damage to wheel seal.
- Independent lifting rack provides maximum stability; rollers won't catch on load.
- Swivel casters for easy maneuverability.
- Floor space is 45" by 41".
- 6' chain holds load in place.
- Covered by OTC Lifetime Marathon Warranty®.



1769A Truck Dual Wheel Dolly

- This 1,500 capacity dolly will remove, transport, and replace dual wheel and tire assemblies without strain or struggle.
- Swivel casters, 3-1/2" front and 3" rear, provide easy maneuverability.
- Floor space is 43" by 42".
- No. 1769A hydraulic jack provides over 6-1/2" of lift and tilts wheel assembly 7° to prevent damage to wheel seal.
- Includes a 6' support chain to hold load in place.



6000 lb. Revolver® Diesel Engine Stand

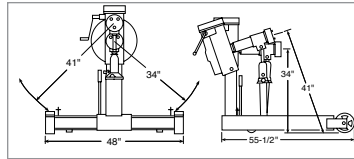
- 96-to-1 ratio worm and gear set rotates components 360°; handle locks in any position.
- Integral 12-ton jack raises the work to provide the swing radius needed for clearance.
- Two front wheels and two rear casters provide mobility.
- Universal adapter assembly permits use with a wide variety of mounting plates.
- Covered by OTC Lifetime Warranty®.



1750A Revolver diesel engine stand with No. 205061 universal engine adapter assembly.

1750 Engine stand without universal engine adapter assembly. Revolver® Engine Adapter Plates

You can order just the plates you need for the engines you work on. The universal adapter assembly is required for mounting all plates to the stand.



Engine Plates

205061	Universal Adapter Plate Assembly. Included with 1750A engine stand. (Must be used with all plates below.)
J-29109-J	Adapter plate to accommodate adapters for Kent-Moore engine stand.
Detroit Diesel	
205058*	For Detroit engines: 53 series in-line 6 cyl., 6V & 8V; 71 series in-line 6 cyl., 6V, 8V, & 12V; 92 series 6V & 8V; 8.2 liter V-8.
52871*	For coach 6V and 8V series 71 Detroit Diesel.
218504*	For Detroit series 60 in-line 6-cylinder engines.
Detroit Allison	
208160*	Allison transmission mounting plate for transmission Nos. AT500, MT600, MT 6-speed, VH, VS, and V730.
61373*	Allison transmission adapter plate for transmission series HT-750, CLBT, HT-740D, CR/DR, and HT-750CT.
Cummins	
205059*	For Cummins engines: All NH, NTC, NTE, N14 855 series in-line 6 cyl; 378 series V6; 504, 555, & 903 series V8; KT 1150 series in-line 6 cyl., L10.
61405*	For Cummins L-10 and M11 series engines. Plate attaches to the left side of engine for complete tear down.
218098	For Cummins "B" series 5.9L in-line 6 cyl. engines.
218099*	For Cummins "C" series 8.3L in-line 6 cylinder engines.
Caterpillar	
205060*	For Caterpillar engines: Nos. 1673, 1674, 1693, 3306, & 3406 in-line 6 cyl.; Nos. 1100, 3208, and 3408 V8.
217687*	For Caterpillar 3114, 3116, and 3176 in-line 6 cylinder and C12 engines.
Mack	
205101*	For Mack engines: All 672, 673, 675, & 711 series in-line 6 cyl.
206629*	For Mack engines: V8 1000, E6, & E7 in-line 6 cyl.
528858*	For Mack 865, and 868.
International Harvester	
206386*	For International Harvester engines: DT-466 (2004 & Earlier), DT-360, DT408, 7 530 in-line 6 cylinder; DV-550, MV-404, MV-446, V304, V345, V392, 4-152, 4-196, 4-194; 9.0 liter 7 T444E V8; and Ford 6.9L, 7.3L DIT.
528856*	For IH300 & 400 Series.
528868*	For International VT365.
Ford	
61681*	For mounting Ford 6.6L/7.8L engines.
206386*	For Ford 7.3 engines.
Volvo	
528853*	For Volvo TD67 and TD71 engines.
John Deere	
528859*	For JD 400 and 500 engines.
528861*	For JD Powertech 4.5L & 6.8L.
528863*	For JD 8995 V6, must be used with 528859.



*NOTE: Must be used with 205061 univ. adpt. plate assembly. Each engine mounting plate includes all the necessary hardware and an engine application chart.

ENGINE STANDS / ENGINE SUPPORT BARS SHOP EQUIPMENT

1735B

2,000 lb. Capacity Heavy-Duty Motor-Rotor® Repair Stand

- Handles a wide variety of engines, transmissions, torque converters, and rear axles from trucks, tractors, and construction machinery.
- The 50:1 ratio gearbox allows full rotation of mounted unit with just a turn of the crank and locks in position. Easily maneuvered when loaded.
- To ensure engine stability in all positions, this repair stand is equipped with a positive-crank handle locking mechanism.
- Twin-post design, featuring laterally adjustable, 3 position outboard support; provides an extremely stable work-holding unit.
- Locking rear wheels anchor stand in position.
- Covered by OTC Lifetime Warranty®.

206391 6.0L and 6.4L Ford engine adapters. (Works with both the OTC 1735, 1735A and 1735B.)

206392 Ford 6.7L Engine Adapter for 1735B HD Rotor Repair Stand.



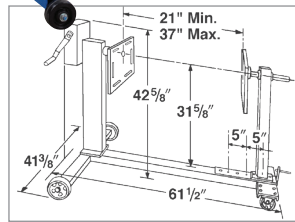
206391

206392

1735B with engine



1735B



4324

Engine Support Bar

- 1,100 pound capacity.
- Rubber padded support legs ensure stability during use.
- Tubular steel construction for long life.
- Adjustable width: 57" x 27".
- Features two hook assemblies for ease of use.
- Includes two 36" chain assemblies.

1726A

1,000 lb. Capacity Engine Stand

- A time saver for passenger car and light truck engine rebuilding or repair. Four adjustable attachment arms make engine mounting fast and easy.
- Engine can be rotated a full 360° with a turn of the handle; a locking pin secures the work in any of eight positions.
- Two rear wheels lock tightly to anchor the stand in place.
- Easy one-bolt disassembly for transport of stand.
- Covered by OTC Lifetime Warranty®.

Specifications:

Height to center line – 28"

Length – 46"

Width – 35-1/2"

Handle length – 24"



60796

60796 Drip pan (ABS material) for No. 1726A.

Engine Support Bars

Unique, innovative design featuring...

- Cutting edge, design self-centers load to prevent tipping on inclined surfaces.
- Smooth sliding legs adjust easily to different vehicle widths.
- PVC-coated support legs don't scratch vehicle surfaces.
- "Quick Connect" third-point bar (No.1725) makes setup a snap.
- Spinner handle enables lightning fast adjustment.

1723

Engine support bar (2-Point), 500 lb. capacity

1725

Engine support bar (3-Point), 700 lb. capacity

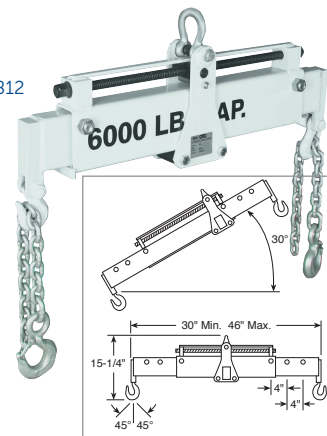


1725



1723

1812



Load Leveler

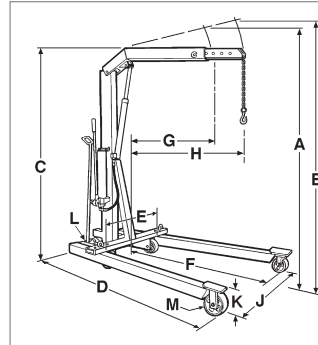
- Improved design over conventional spreader bars.
- Carriage on main support beam moved by turning lead screw; this permits fine adjustment of the tilt angle of component being lifted.
- Turn lead screw manually or with air-powered tools.
- Spreader bar adjustment secured with locking bolts.
- Chain grade is 80.
- Covered by OTC Lifetime Warranty®.

1812 Load Leveler. Max. lifting capacity: 6,000 lbs.; distance between hooks: min. 30", max. 46".

1822 Load Leveler. Max. lifting capacity: 10,000 lbs.; distance between hooks: min. 36", max. 56".



1819, 1820



2,200 and 4,400 lb. Capacity Heavy-Duty Floor Cranes

- To conserve valuable floor space, crane folds into a compact package for storage.
- For "close-in" work, leg spread adjusts to clear vehicle's wheels, telescoping boom extension gives additional reach. Roller bearing mounted wheels and steering dolly provide ease of mobility.
- A two-speed hydraulic hand pump provides fast boom travel; descent of boom is under precise control of operator.
- Covered by OTC Lifetime Warranty®.

1819 2,200 lb. Capacity Crane. Has hydraulic hand pump and 16-7/8" lifting chain.

39610 1/4" steel chain grade 43, 18-3/8" long, 2,200 lb. capacity.
Has safety hook on end. Use with 1819.

1820 4,400 lb. Capacity Crane. Has hydraulic hand pump and 18-3/8" lifting chain.

39611 5/16" steel chain grade 70, 19-3/4" long, 4,400 lb. capacity.
Has safety hook on end. Use with 1820.

Specifications	1819	1820
Cap., boom retracted	2,200	4,400
Cap., boom extended	1,650	3,300
A Max. boom height, boom retracted	107"	111"
B Max. boom height, boom extended	117"	122"
C Overall height, boom horizontal	80"	82"
D Overall length	83"	89"
E Minimum throat width	24"	25"
F Inside leg length	54"	57-1/2"
G Effective boom reach (retracted)	33"	35-1/2"
H Effective boom reach (extended)	48"	50-1/2"
J Inside leg width (3-position)	24", 36", 48"	26", 40", 52-1/2"
K Leg height	8"	9-1/2"
L Dolly wheel diameter	5"	5"
M Wheel diameter	6"	8"
Height, folded	79"	86"
1819 Floor space folded	27" x 38"	
1820 Floor space folded	31" x 42"	

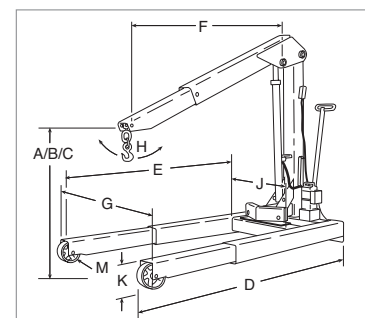


1813

Boom Capacity (lbs.)	Extended	Centered	Retracted
Description	4,000	5,000	6,000
A Maximum boom height	161-7/8"	150-11/16"	139-1/4"
B Minimum boom height	6"	17-3/8"	28-3/4"
C Overall height (boom horizontal)	87"	87"	87"
D Overall length*	129-1/8"	113-7/8"	98-1/4"
E Inside leg length	91-11/16"	76-1/8"	43-1/4"
F Effective boom horizontal reach	94-1/4"	78-3/4"	63-1/4"
G Outside leg width**	59-3/4"	57-3/4"	55-3/4"
H Boom swing	36"	31"	26"
J Inside leg width	35-3/4"		
K Leg height	9-1/16"		
M Wheel diameter	8"		
Dolly wheel diameter	5"		

* Legs in storage position: 80-7/8"

** Legs in storage position: 53-1/2"



6,000 lb. Capacity Heavy-Duty Mobile Floor Cranes

- Three boom positions give capacities of 4,000, 5,000, and 6,000 lbs. to handle the biggest engines, and often the transmission right along with the engine! Usable reach is almost 92".
- Boom swivels for vertical and lateral positioning; legs extend to straddle the biggest tires.

1814 6,000 lb. capacity crane with electric/ hydraulic pump (115V) with remote motor control.

1813 6,000 lb. capacity crane with two-speed hydraulic hand pump.

FLOOR CRANES / LIFTING CHAINS SHOP EQUIPMENT



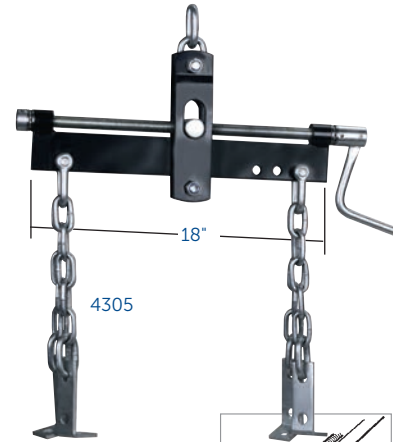
2,000 and 4,000 lb. Capacity Folding Floor Cranes

- Both of these cranes fold up for compact storage.
- Front wheels are 5-7/8"; rear casters 3-1/2".

2002 2000 lb. capacity crane with a reach of 24" to 36"

2004 4000 lb. capacity crane with a reach of 26" to 48"

Specifications	2002	2004
Maximum capacity, boom extended	500 lbs.	1,000 lbs.
Maximum capacity, boom retracted	2,000 lbs.	4,000 lbs.
Maximum hook height, boom extended	94"	86-1/2"
Maximum hook height, boom retracted	87"	72-3/4"
Effective boom reach, boom extended	36"	48"
Effective boom reach, boom retracted	24"	26"
Leg width @ front wheels	25"	32-1/2"
Leg height	6-1/2"	7-3/4"
Floor space folded	16" x 17-1/2"	33" x 33-1/2"
Floor space unfolded	57" x 25"	70" x 33-1/2"



4305 1,500 lb. Capacity Engine Load Leveler

Designed to hook to a crane or hoist to handle and position large, bulky components.

- The horizontal tilt can be adjusted to compensate for off-center loads, or adjusted to a certain angle for a component being positioned.

Lifting Chains for Floor Cranes

- For use with floor cranes only; not recommended for overhead hoists or lifts.

38839 1/4" steel chain, 56-1/2" long, 2,000 lb. capacity. Has safety hook on both ends. Use with No. 205049.

38840 5/16" steel chain, 65-3/4" long, 4,000 lb. capacity. Has safety hook on both ends. Use with No. 205050.

31609 1/4" steel chain, 56-1/2" long, 2,000 lb. capacity. With swiveling safety hooks on both ends. Use with No. 1805.

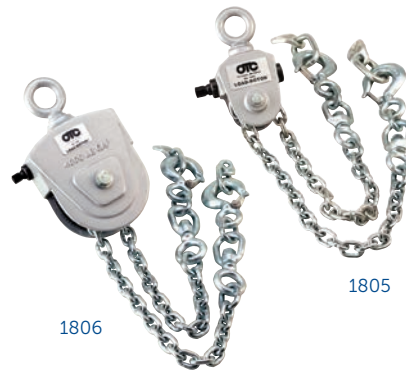
31800 5/16" steel chain, 65-3/4" long, 4,000 lb. capacity. With swiveling safety hooks on both ends. Use with No. 1806.

Alloy Chains for Overhead Lifts and Hoists

302941 5/16" alloy chain, 26-13/16" long, 4,000 lb. capacity. With safety hook on one end. Use on No. 1812.

302249 3/8" alloy chain, 28-3/8" long, 6,000 lb. capacity. With safety hook on one end.

302249



Load-Rotor® Positioning Slings

- Use with a floor crane. Engine, transmission, or other component is tilted or leveled by turning sling's 5/8" hex drive end with a common speed handle and socket.
- Makes engine removal and installation a snap, even in close quarters.
- For use with floor cranes only; not to be used with overhead hoists or lifts.

1805 2,000 lb. capacity Load-Rotor®. Has 56-1/2" long chain (1/4") and hook assembly with forged swiveling hook on each end. Pair of special lifting brackets included.

1806 4,000 lb. capacity Load-Rotor®. Has 65-3/4" long chain (5/16") and hook assembly with forged hook on each end. Pair of special lifting brackets included.



7100 4,000 lb. Capacity Lifting Brackets (pair)

- Attach directly to component for easy lifting; will take 1/2" diameter bolts.



Heavy-Duty Adjustable Slings

- For lifting and positioning engines, transmissions, etc. Each chain can be adjusted independently for length; plate design enables chain to be "short-hooked" for correct tilt.

205049 2,000 lb. capacity sling with 1/4" chain, 56" long

205050 4,000 lb. capacity sling with 5/16" chain, 65" long

38841 Plate only, use with any 1/4" or 5/16" alloy steel chain

OIL FILTER CRUSHERS / FLUID RECEIVERS SHOP EQUIPMENT



1821 10-Ton Capacity, Air-operated Automotive Oil Filter Crusher

- Crushes up to four automotive filters (3-7/8" dia. x 9" high) at one time, in approximately 20 seconds. Engineered and built for dependable operation. Covered by OTC Lifetime Warranty®.
- 100% air operation eliminates electrical connections. Generous size of crushing chamber easily accommodates the largest automotive spin-on filters.
- Includes mounting stand. No wall mounting or time consuming installation required.



1877 25-Ton Capacity Heavy-Duty Oil Filter Crusher

- Handles the big filters (up to 6" dia. and 12-1/2" long) found in trucks, construction equipment, farm implements, etc. May also be used for automotive and light truck filters. It does it all!
- Crushes filters to 1/4 of original size, removing up to 95% of filter's oil capacity. Automatic cycle feature: load the filter, push a button, and walk away.
- Air/hydraulic pump works on standard shop air (requires 9 CFM at 100 psi). Special valving returns ram automatically at the end of each cycle. No electrical connections needed.
- Built-in floor stand (completely assembled). Whole unit requires just 5 square feet of floor space.
- Covered by OTC Lifetime Warranty®.



Shipped assembled

1896 25-Ton Capacity High-Speed Heavy-Duty/Automotive Oil Filter Crusher

- Automotive and heavy-duty filters up to 15-1/4" long and 6" diameter are crushed in approximately 8 to 16 seconds. Filters are reduced to 20% of original size, with 95% of residual oil removed.
- Automatic cycle feature lets you load the filter, push a button, and walk away.
- Powered by 2 hp electric/hydraulic pump, 230 volt, 20 amp, 60 cycle, single phase, 3,450 rpm. Has a 2-gallon reservoir.
- Built-in, heavy-duty floor stand with leveling pads is designed to accept a 30-gallon drum for oil drainage. Comes assembled. Covered by OTC Lifetime Warranty®.



SEE PAGE 35
FOR OIL FILTER
WRENCHES

Oil Filter Crusher Comparison Chart

No.	Tonnage	Pump	Crushing Time	% Oil Removed	Filter Size	Stand Dimensions
1821	10-ton	Air	20 Seconds	95%	Chamber: 8" x 8" x 9" H.	18-1/2" W x 24" D x 63-1/2" H
1877	25-ton	Air/Hyd.	80 Seconds	95%	6" Dia. - 12-1/2" Long	18-1/2" W x 30" D x 74-1/2" H
1896	25-ton	Elec./Hyd.	16 Seconds	95%	6" Dia. - 15-1/4" Long	27" W x 30" D x 78" H

Note: Crushing times are approximate; crushing times may vary depending on air pressure available, size of filter type of filter, etc.

Transfer Tankers

- Draining oil from a large displacement engine and getting it to your bulk storage container is a snap with OTC's Transfer Tankers.
- Used oil is collected in a reservoir, and then rolls smoothly on 4" free-wheeling casters to your storage location.
- Pump moves five gallons a minute through the 8-foot transfer hose to the a 15-gallon reservoir.
- Handle is removable for easy storage.
- Screen attached to reservoir allows assembly to be stored on its side.
- Can also be used for transferring antifreeze.

5077A Low profile Transfer Tanker is only 7-1/2" from floor to top of reservoir. Comes equipped with an electric pump (No. 528093).

5097 Low profile Transfer Tanker is only 7-1/2" from floor to top of reservoir. Comes equipped with a pneumatic pump (No. 529966).



5077A



5097



1577 Low Profile Fluid Receiver

- Designed for receiving waste fluid during a wide range of repair jobs.
- Fluid capacity: 7.5 gallons.
- Constructed of polyethylene plastic for heavy-duty use—yet, only weighs 13 pounds.
- Low profile, only 5" high, it easily slides under passenger cars.
- Designed with four casters to provide efficient maneuverability.
- Suitable for cooling system repair jobs—can be used for antifreeze.
- Includes splash screen to prevent spillage and splashing.
- Two-year warranty.

PRESSES SHOP EQUIPMENT

5180 10-Ton Portable Hydraulic C-Frame Press

- Weighing less than 28 lbs, this durable press is portable for various applications, i.e., roadside maintenance services, industrial applications, marine, general automotive.
- For clamping, pressing and bending. Ideal for welding and metal fabrication.
- 9" Open-Throat® design.
- Couples to any 4- or 10-ton Porta Power pump.
- The base can be assembled to position the press either vertically or horizontally and can also be mounted to a bench.

Set includes: C-Frame press with base, adapters: V-pushing and ram pushing (9/16" and 3/4" dia. shanks), receiving insert, flat insert, storage case.



A	B	C	D	E	F	G	H
21-1/4"	13-3/4"	9"	8-1/2"	2-1/2"	1-1/2"	4"	4-1/4"

Hydraulic Bottle Jack Presses

- All bottle jacks have an overload valve built into them.

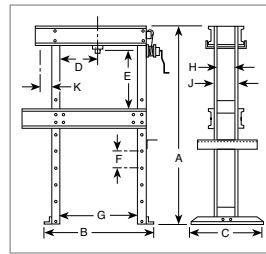
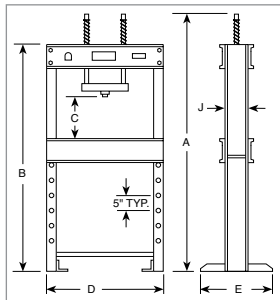
1823A 12-ton capacity press with a OTC bottle jack.

Stroke 6-1/4", 19 pump stroke to extend piston 1 inch.
Height with screw extension 19".

1824A 20-ton capacity press with a OTC bottle jack.

Stroke 7-1/2", 30 pump stroke to extend piston 1 inch.
Height with screw extension 20-1/2".

309111 20-ton capacity press (frame only).



1825 17-1/2 Ton Capacity Heavy-Duty "Open Throat" Press

- Ram head moves side to side for off-center pressing; ram-to-work distance is adjusted by a forcing screw that is extended or retracted by a speed crank.
- "Open-throat" frame extensions make handling of bulky jobs possible outside of the press frame.
- This press does not have a lifting mechanism. If a lifting mechanism is needed, order 211407.
- Covered by OTC Lifetime Warranty®.
- Has No. 201832 hydraulic ram with 2" stroke, No. 4002 hydraulic hand pump, No. 9650 gauge, No. 9767 hose, adjusting screw, speed crank, ram cap, and pump mounting bracket.



211407 17-1/2 ton winch kit.

OTC No.	A	B	C	D	E	J
1823A	84-1/2"	72"	2" - 42"	28-3/4"	28"	4-3/8"
1824A	85-7/8"	72"	2" - 37"	37-1/2"	28"	7-3/8"

A	B	C	D	E	F	G	H	J	K	Floor Space
64"	28"	28"	17-7/8"	34-7/8"	3-3/8"	20"	4-1/4"	5"	4-3/8"	28" x 28"



1826

25-Ton Capacity Heavy-Duty "Open Throat" Press

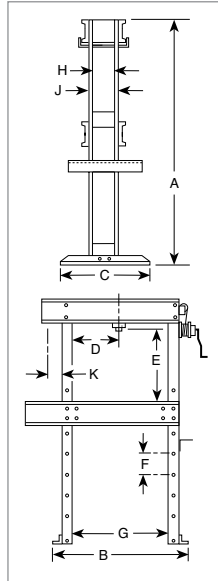
- "Open throat" feature enables ram to be positioned outside of press frame for fast axle bearing removal and installation, as well as other tasks. Rugged press is covered by OTC Lifetime Warranty®.
- Press bed is raised or lowered with a hand crank, and a spring-return hydraulic ram is laterally adjustable for off-center work at full capacity.

1826

25-ton press. Includes No. 4016 hydraulic hand pump; No. 52025 hydraulic ram with 14" stroke; No. 9652 gauge; No. 303563 hose (3/8" ID x 8'); and pump mounting bracket.

1826A

25-ton press. Includes No. 4020 air/hydraulic pump; equipped the same as 1826.



A	B	C	D	E	F	G	H	J	K	Floor Space
68"	43"	28"	3"-29"	6-7/8"-4-3/8"	4-1/2"	32"	5-1/2"	6-1/2"	7"	55-1/4" x 28"



1833

25-Ton Capacity Shop Presses

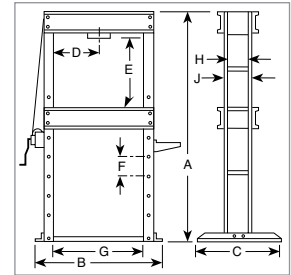
- Tough, economical press is ideal for pressing rear axle bearings, piston pins, and much more.
- Large 30" x 46" work area under ram makes positioning of even bulky work easy. Press bed is easily raised and lowered by a dependable lifting mechanism. Choice of model with hand- or air-driven hydraulic pump.

1833

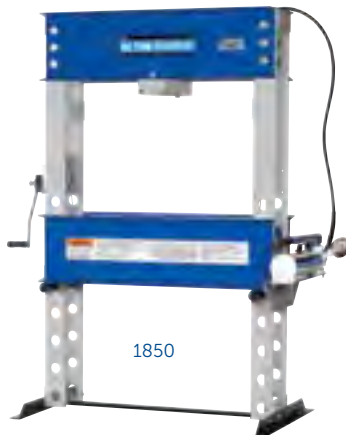
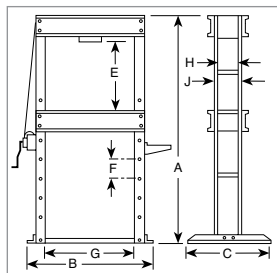
25-ton press, complete with No. 4002 hydraulic hand pump; No. 9652 gauge; No. 24815 tee; No. 9767 hose (1/4" ID x 6'); hydraulic ram No. 51426 with 6-1/4" stroke; and 42733-WH2 pump mounting bracket.

1834

25-ton press, complete with air-driven No. 4020 hydraulic pump; No. 9652 gauge; No. 24815 tee; No. 9768 hose (1/4" ID x 8') and hydraulic ram with 6-1/4" stroke.



A	B	C	D	E	F	G	H	J	Floor Space
69-1/2"	40-1/2"	28"	3"-27"	5-3/4"-46"	4"	30"	5-1/2"	6-1/2"	48-1/2" x 28"



1850

55-Ton Capacity Economy Shop Presses

- Wide 10" throat opening between lower bolsters
- Durable steel frame resists buckling and bending. Covered by OTC Lifetime Warranty®.
- Hand-operated winch and cable mechanism adjusts lower press bolster.

1850

55-ton press. Includes No. 52457 hydraulic ram with 6-1/4" stroke; No. 4016 hydraulic hand pump; No. 9651 gauge; No. 9767 hose (1/4" ID x 6'); and pump mounting bracket.

1851

55-ton press. Includes No. 52457 hydraulic ram with 6-1/4" stroke; No. 4020 air/hydraulic pump; No. 9651 gauge; No. 9767 hose (1/4" ID x 6'); and pump mounting bracket.

A	B	C	E	F	G	H	J	Floor Space
70-3/4"	47-1/2"	28"	6-1/8"-41-1/8"	5"	35"	7-1/16"	10"	55-1/2" x 28"



1845

55-Ton Capacity Heavy-Duty Presses

- Side-to-side positioning of ram allows full capacity pressing along entire bolster length without buckling or bending. Covered by OTC Lifetime Warranty®.
- Hydraulic ram features 13" of stroke. Choice of hydraulic power units.

1845

55-ton press. Includes single-acting ram No. 52380 with 13" stroke; No. 4044 electric/hydraulic pump; No. 9651 gauge; No. 303563 hose (3/8" ID x 8'); and pump mounting bracket.

1846A

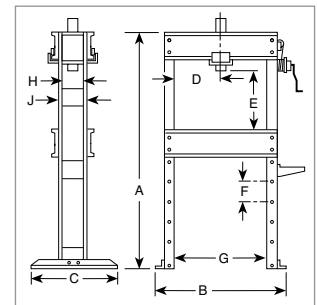
Same as No. 1845 except has No. 4016 hydraulic hand pump and single acting ram No. 65458 with 10-1/8" stroke.

1847

Same as No. 1845 except has a No. 4022 air/hydraulic pump and a No. 9781 hose (3/8" ID x 10').

1872

55-ton press. Includes double-acting ram No. 51682 with 13" stroke; No. 4046 electric/hydraulic pump; No. 9651 gauge; No. 36887 hoses; and pump mounting bracket.



A	B	C	D	E	F	G	H	J	Floor Space
72"	48-1/2"	36"	3-1/4"-32-3/4"	6"-42"	6"	36"	6-3/4"	8"	56-1/2" x 36"

*Lateral head movement.

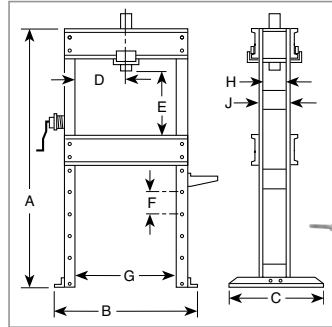
PRESSES SHOP EQUIPMENT

100-Ton Capacity Economy Shop Press

- Large 35" opening between press uprights allows easy handling of large gears, shafts, sprockets, and other components serviced in truck, construction, and agricultural equipment shops. Covered by OTC Lifetime Warranty®.
- Hand-operated winch and cable mechanism gives operator precise control in adjustment of lower press bolster to any height.

1854

100-ton press. Includes hydraulic ram No. 52434 with 10" stroke; No. 4044 electric/hydraulic pump; No. 9651 gauge; No. 9768 hose (1/4" ID x 8'); and pump mounting bracket.



1854

A	B	C	D	E	F	G	H	J	Floor Space
86-5/8"	47-1/2"	28"	17-1/2"	9-5/8"-49-5/8"	8"	35"	6-3/8"	10"	55-1/2" x 28"



1857



1858

100-Ton Capacity Heavy-Duty Shop Presses

- Wide open uprights allow easy positioning of bars and shafts for straightening or bending.
- Upper bolster can be lowered for convenient positioning during repetitive jobs.
- Ram head glides smoothly on rollers for easy horizontal adjustments; rugged press frame will withstand a full capacity load with the ram head in any position across the upper bolster.
- Covered by OTC Lifetime Warranty®.

1857

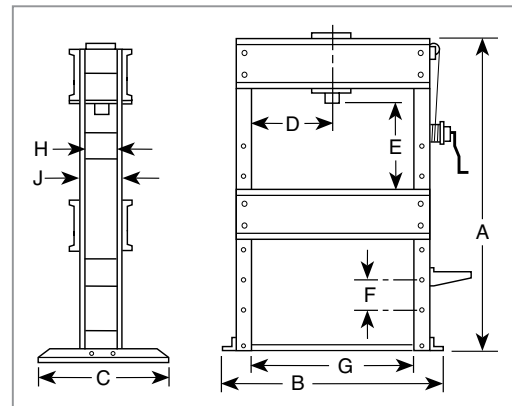
100-ton press. Includes single-acting No. 52434 ram with 10" stroke; No. 4008 hydraulic hand pump; No. 9651 gauge; No. 9781 hose (3/8" ID x 10'); and pump mounting bracket.

1858

Same as No. 1857, except has double-acting No. 51683 ram with 13" stroke; No. 61217 3-phase, 220V, 3450 rpm electric/hydraulic pump; and two No. 9769 hoses.

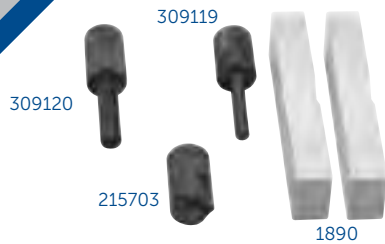
1858-1P

Same as No. 1858, except it has a No. 4064 2-stage, 1-phase hydraulic pump.



A	B	C	D	E	F	G	H	J	Floor Space
77-1/4"	64"	36"	7"-43"	2"-42"	8"	50"	8"	10"	36" x 78-1/4"

*Lateral head movement. Frame shipped assembled.



Accessory Set for Bottle Jack Presses

- 1879** Accessory set for 12-ton and 20-ton bottle jack presses. Includes;
- 1890** 9" long V-block set
- 215703** 1-1/2" dia. V-pushing adapter
- 309119** 3/4" dia. pushing adapter
- 309120** 1" dia. pushing adapter



25-Ton Press Accessory Sets

- 8075** Step plate adapter set
- 8076** Step plate adapter set
- 1889** V-throat press plate. Dimensions are 11 5/8" x 14-1/2" and 3/4" thick.

Note: See page 125 for sizes of step plate adapters in sets.



17-1/2 Ton Press Accessory Sets

- 8075** Step plate adapter set
- 8076** Step plate adapter set
- 1888** V-throat press plate. Dimensions are 9-1/4" x 10" and 3/4" thick.

Note: See page 125 for sizes of step plate adapters in sets.

Accessories for 100-Ton Capacity Presses

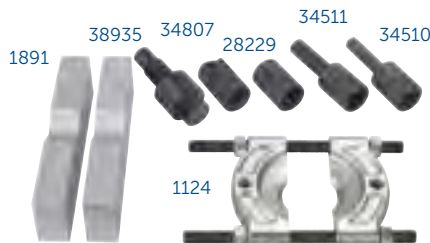
- 50392** Straightening fixtures (pr.)
- 1893** V-blocks, 14" long (pr.)
- 21332** Pushing adapter (must be used with reducing adapter).
- 36469** V-pushing adapter (must be used with reducing adapter).
- 43563** Reducing adapter (for double-acting ram).
- 43562** Reducing adapter (for single-acting ram, not pictured).



17-1/2 -Ton Press Accessory Set

- Adapters and accessories attach to ram's forcing screw or are used on press bed to support work.
- Set includes:

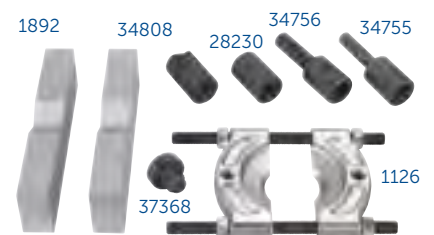
- 1123** Bearing pulling attachment
- 201923** Ram pushing adapter with a 1/2" dia. shank
- 201454** Ram pushing adapter with a 3/4" dia. shank.
- 34806** V-pushing adapter
- 1890** V-blocks (pair)



25-Ton Press Accessory Set

- Adapters and accessories attach to ram's forcing screw or are used on press bed to support work.
- Set includes:

- 1124** Bearing pulling attachment
- 34510** Ram pushing adapter with 3/4" dia. shank
- 34511** Ram pushing adapter with 1" dia. shank
- 34807** V-pushing adapter
- 1891** 11-1/2" long V-blocks (pr.)
- 28229** Ram forcing cap
- 38953** Threaded adapter



55-Ton Press Accessory Set

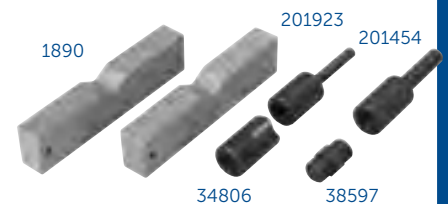
- Accessories attach to ram's forcing screw or support work on press bed.
- Set includes:

- 1126** Bearing pulling attachment
- 34755** Ram pushing adapter with 1" dia. shank
- 34756** Ram pushing adapter with 1-1/4" dia. shank
- 34808** V-pushing adapter
- 1892** 14" long V-blocks (pr.)
- 28230** Ram forcing cap
- 37368** Threaded adapter – for single acting only
- 38954** For 1872 double acting press



Accessories for 150-Ton Capacity Shop Presses

- 44458** Pushing adapter with 2-1/4" dia. shank
- 44457** V-pushing adapter



10-Ton Capacity Press Accessory Set

- Adapters and accessories are attached to the ram's forcing screw or used on the press bed to support the work. Set includes:

- 201923** Ram pushing adapter with a 1/2" dia. shank
- 201454** Ram pushing adapter with a 3/4" dia. shank
- 34806** V-pushing adapter
- 1890** V-blocks (pair)
- 38597** Adapter

BOTTLE JACKS SHOP EQUIPMENT

OTC 9300 STINGER SERIES BOTTLE JACKS GIVE YOU LIFTING RANGE FROM 2 TO 50 TONS.

- Forged base and cylinder to ensure strength and eliminate leaks.
- Chromed pump piston and ram for additional rust resistance.
- In-line design for increased ease of use in positioning and operation.
- Includes free seal kit with each unit to extend product life.
- ANSI/PALD compliant.



OTC 9300 Stinger Series Bottle Jacks

Cap. (tons)	Stroke	OTC No.	Retracted Height min.	Length of Screw Extension	Height with Screw Extension	Pump Strokes to Extend Piston One Inch	Saddle Dia.	Base Size	Carry Handle	Weight
2	4-5/8"	9302	7"	2-3/8"	14"	8	13/16"	4-5/16" x 2-9/16"	No	5.7 lbs.
3	4-1/2"	9303	7-1/2"	2-9/16"	14-9/16"	13	15/16"	4-9/16" x 2 7/8"	No	7 lbs.
5	4-13/16"	9305	7-13/16"	3"	15-5/8"	20	1-1/8"	5-3/16" x 3"	No	9 lbs.
8	4-15/16"	9308	7-13/16"	3"	15-3/4"	21	1-3/8"	6" x 3-9/16"	No	13.2 lbs.
12	6"	9312	9-3/8"	3-1/4"	18-5/8"	21	1-3/4"	6-9/16" x 4-3/16"	Yes	18.9 lbs.
12	3-11/16"	9314	7-1/16"	2-7/8"	13-5/8"	21	1-3/4"	6-9/16" x 4-3/16"	Yes	16.1 lbs.
20	6-7/8"	9320	10-5/8"	2-15/16"	20-7/16"	28	2-1/8"	7" x 4-11/16"	Yes	28.6 lbs.
20	3-7/16"	9322	7-3/16"	1-11/16"	12-5/16"	25	2-1/8"	7" x 4-11/16"	Yes	22.5 lbs.
30	6-5/8"	9330	11"	N/A	17-5/8"	41	2-1/2"	7-11/16" x 6"	Yes	43.2 lbs.
50	7-3/16"	9350	11-3/4"	N/A	18-15/16"	74	2-1/2"	8-11/16" x 7"	Yes	76.5 lbs.



5213A



5221A



5213TA



4313C



4321C

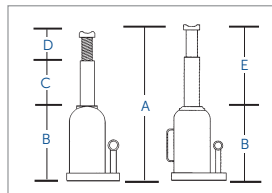
Bottle Jacks

- Base, pressure cylinder, and oil reservoir form one internal part, which results in a stronger jack.
- Piston never contacts cylinder, so pressure will be absorbed and not damage jack if vehicle tilts.
- The No. 5213T is telescopic, allowing for very low initial height with high lifting.

5213A – 12-Ton Bottle Jack.

5221A – 20-Ton Bottle Jack.

5213TA – 12-Ton Telescopic Bottle Jack.



Bottle Jack Dimensions

Jack	A	B	C	D	E
5213A	17-3/4"	8-7/8"	5-1/4"	3-1/2"	–
5221A	18-1/32"	9-1/4"	8-3/4"	3-5/8"	–
5213TA	22-5/16"	9-7/8"	–	–	12-7/16"

Air/Hydraulic Bottle Jacks

- Operate manually or pneumatically, 100 PSI minimum air pressure required.

4313C
12-ton air-assist bottle jack; lift range 9-1/2" to 18-3/8", stroke 6-1/8".

4321C
20-ton air-assist bottle jack; lift range 9-7/16" to 17-11/16", stroke 5-7/8".

No.	Cap.	Min. Height	Max. Height	Stroke	Screw/Adapter	Air Pressure	Base Area
4313C	12	9-1/2"	18-3/8"	6-1/8"	2-3/4"	100-200 psi	6-3/8" x 7-5/8"
4321C	20	9-7/16"	17-11/16"	5-7/8"	2-5/16"	100-200 psi	8-1/32" x 7-1/16"



1513B – 4-Ton

1515B – 10-Ton

Collision Repair Sets, Stinger Series 4- and 10-Ton

- Very competitively priced, yet high quality sets include single-speed hydraulic hand pump, hose, and ram.
- Components snap together for quick setups to apply pushing, spreading.
- Components include: hydraulic pump, hose, and ram; ram flat base; extension tubes (4); 1/2-ton spreader; tube coupling; ram toe; wedge head; serrated saddle; flex head; plunger toe; 90° wedge head; storage case. The case for the 10-ton set has wheels for mobility.

1513B 4-ton collision repair set. Has single speed hydraulic hand pump and ram with 4" stroke.

1515B 10-ton collision repair set. Has single speed hydraulic hand pump and ram with 6" stroke.



1517B – 4-Ton

1519B – 10-Ton

Collision Repair Sets, OTC Series 4- and 10-Ton

- We've matched our OTC hydraulics with versatile tooling.
- Components snap together, permitting you to apply pushing, spreading.
- Components include: hydraulic pump, hose, and ram; ram flat base; 1/2-ton hydraulic spreader; extension tubes (4); tube coupling; ram toe; wedge head; serrated saddle; flex head; plunger toe; 90° wedge head; storage case. The case for the 10-ton set has wheels for mobility.

1517B 4-ton collision repair set. Has single speed hydraulic hand pump (4000A) and ram (4082B) with 5" stroke.

1519B 10-ton collision repair set. Has two-speed hydraulic hand pump (4012A) and ram (4083C) with 6-1/8" stroke.

222618 6 ft. hose 1/4" NPT.



5086 10-Ton Collision Repair Set

- Exert hydraulic force just where it's needed to lift, spread, bend, or straighten. Handles the high-force jobs you face daily in trailer maintenance or other applications.
- Includes reliable components including 10-ton, 10-1/8" stroke hydraulic ram; air/hydraulic pumping unit; hydraulic hose; four snap-together extension tubes; extension tube coupling; serrated saddle; flat base; 90° wedge head; flex head; storage case.
- All set components are covered by OTC Lifetime Marathon Warranty®.



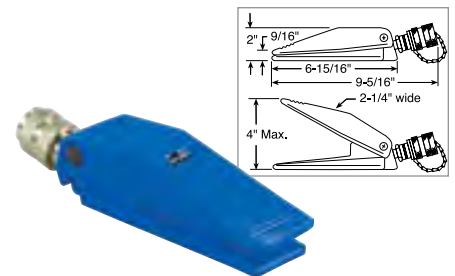
Hydraulic Spreaders

Included as standard equipment with our collision sets, these versatile hydraulic spreader tools are also available individually. Ideal for removing dents and creases, performing straightening jobs, or for use as a clamp. Makes working in tight spots easy.

- Maximum spread is 3-1/4".

9101B
1/2-ton spreader with 1/4" NPT ram half coupler

9102
1/2-ton spreader with 3/8" NPT ram half coupler



4085 1-ton Capacity Hydraulic Spreader

This hydraulic spreader is rated at a full 1-ton capacity at 10,000 PSI and that's enough for a wide variety of jobs. Working in tight spots is no problem—it needs only a 9/16" clearance to engage the jaws. With a big 4" spread, it's ready for a variety of applications: straightening work, removing dents and creases from sheet metal, or as a clamp. The device's spring-return jaws are made of high-strength alloy steel. It can be dead-ended at 4" spread under full load. Ideally suited to work with No. 4012 hand pump (not included).

THE OTC SERIES OF FLOW METERS

Unparalleled accuracy in testing hydraulic oil flow circuits for vehicles and machinery. All are protected by a durable steel case. Pressure accuracy is at +/- 1.6% of full scale. Due to their standard burst disc protection system, overpressure conditions prevent spillage of hydraulic fluid. All devices accommodate bi-directional flow and are CE marked as appropriate.



4277
50 gpm Mechanical Hydraulic Flow Meter

- Flow Accuracy to +/- 4% of full scale
- Measures flow from 4 to 54 gpm
- Pressure up to 6000 psi
- Fluid filled analog gage that dampens vibration
- Temperatures up to 230 deg F
- Reads flow in one direction
- No batteries required
- Port is 1-5/16" - 12 UN JIC Male
- 12.25" x 4.125" x 4.875"
- 14.5 lbs



4278
100 gpm Digital Hydraulic Flow Meter

- Flow Accuracy to +/- 1% of indicated value
- Measures flow from 2.5 to 100 gpm
- Pressure up to 6000 psi
- Digital display for flow, temperature, analog for pressure
- Temperatures up to 250 deg F
- Reads flow in both directions, pressure on the high side of valve
- Requires 1 9V battery (included)
- Port is 1-5/16" -12UN #16 SAE ORB
- 9.45" x 7.87" x 7.87"
- 14 lbs



4285
100 gpm Digital Hydraulic Flow Test Kit

- Includes OTC 4292 Digital Readout and OTC 4291 Flow Block with Loading Valve
- Flow Accuracy to +/- 1% of indicated value
- Measures flow from 2.5 to 100 gpm
- Pressure up to 6000 psi
- Digital display for flow, temperature, analog for pressure
- Reads flow in both directions, pressure on the high side of valve
- Require 1 9V battery (included)
- Port is 1-5/16" -12UN #16 SAE ORB
- 12.99" x 12.4" x 10.24"
- 17lbs



4290

16 gpm Flow Block

- Can be used with Digital Flow Meter Readout OTC 4292 included in OTC 4285 and OTC 4294
- Port is 1-1/16" -12UN #16 SAE ORB
- Flow range from 1 to 16 gpm
- Max pressure 6000 psi



4291

Flow Block with Loading Valve

- Can be used with Digital Flow Meter Readout OTC 4292 included in OTC 4285 and OTC 4294
- Knob allows for pressure loading/restriction
- Port is 1-5/16" -12UN #16 SAE ORB
- Flow range from 2 to 100 gpm
- Max pressure 6000 psi



4294

Deluxe 100 gpm Hydraulic Flow Measurement Set

- Comprised of OTC 4290, OTC 4291, OTC 4292, Long Cable and Hose Set and Short Cable
- Case included



4292

Hydraulic Flow Measurement Digital Readout

- For remote flow measurement by using Flow Blocks OTC 4290 or OTC 4291
- Included in OTC 4285 and OTC 4294
- Digital display for flow, temperature, analog for pressure



573295

Long Cable and Hose Set

- 20 feet long
- Flow, Temperature & Pressure



573296

Short Cable

- 6 1/2 feet long.
- Flow & Temperature



Hydraulic Rams for Collision Repair Sets

These premium quality rams are designed for long, trouble-free service. Backed by a life-time warranty, they are ideal replacements for worn-out, leaky rams. They feature a special piston rod that permits their use with the snap-together components of OTC's collision repair sets, or with most similar competitive products.

4082B

4-ton ram with 5" stroke and special piston rod end designed to fit most collision repair set components.

4083C

10-ton ram with 6-1/8" stroke and special piston rod end designed to fit most collision repair set components.

Specifications

	4082B	4083B
Min. height	10-7/8"	14-5/8"
Max. height	15-7/8"	20-3/4"
Spring return	Yes	Yes
Rod end dia.	.86"	1.3"
Max. operating. Pressure	8,950	9,186
Oil cap. (cu. in.)	4.78	13.69
Oil port	1/4" NPT	1/4" NPT



4004

2-Speed Hydraulic Hand Pump

Use with single-acting hydraulic rams. Rugged all-metal construction. Maximum handle effort is 90 lbs. Two-speed action provides rapid approach of ram piston to the work. An appropriate and economical power source for applications in which 20 cu. in. of usable oil is adequate.

Specifications

	4004
Max. operating pressure	10,000 psi
Volume per stroke (first stage)	.305 cu. in.
Volume per stroke (second stage)	.091 cu. in.
Reservoir capacity	24.4 cu. in.
Oil port	3/8" NPT



4000A

2-Speed Hydraulic Hand Pump

This 2-speed pump is ideal for single-acting rams. Developing up to 10,000 psi operating pressure, the pump operates horizontally or vertically in the "head down" position. Fingertip control provides instant release or pumping action. Has a built-in safety overload valve. Ideal for use with OTC single-acting rams, or similar competitors' rams.

Specifications

	4000A
Max. operating pressure	10,000 psi
Volume per stroke Stage 1	.23 cu. in.
Volume per stroke Stage 2	.055 cu. in.
Reservoir capacity	9 cu. in.
Oil port	3/8" NPT



4012A

2-Speed Hydraulic Hand Pump

This 2-speed pump is ideal for single-acting rams. Developing up to 10,000 psi operating pressure, the pump operates horizontally or vertically in the "head down" position. Fingertip control provides instant release or pumping action. Has a built-in safety overload valve. Ideal for use with OTC single-acting rams, or similar competitors' rams.

Specifications

	4012A
Max. operating pressure	10,000 psi
Volume per stroke Stage 1	.79 cu. in.
Volume per stroke Stage 2	.16 cu. in.
Reservoir capacity	43 cu. in.
Oil port	3/8" NPT



Hydraulic Rams for Collision Repair Sets

These premium quality rams are designed for long, trouble-free service. Backed by a two-year warranty, they feature a special piston rod that permits their use with the snap-together components of OTC Stinger's new collision repair sets, or with most similar competitive products.

9104B

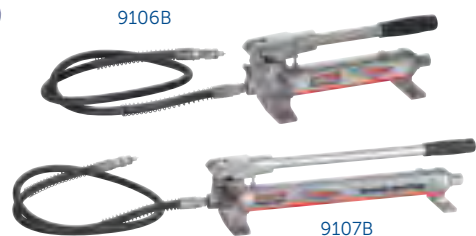
4-ton ram with 4" stroke and special piston rod end designed to fit most collision repair set components.

9110B

10-ton ram with 6" stroke and special piston rod end designed to fit most collision repair set components.

Specifications

	9104B	9110B
Min. height	10-3/8"	15"
Max. height	14-3/8"	21"
Spring return	Yes	Yes
Rod end dia.	.874"	1.310"
Max. operating. Pressure	8,950	8,950
Oil cap. (cu. in.)	4.97	13.69
Oil port	1/4" NPT	1/4" NPT



Single-Speed Hydraulic Hand Pumps

These single-speed pumps are ideal for single-acting rams. Developing up to 10,000 psi operating pressure, the pumps operate horizontally or vertically in the "head down" position. Finger tip control provides instant release or pumping action. Has a built-in safety overload valve. Ideal for use with OTC Stinger single-acting rams, or similar competitive rams.

9106B Hand pump only.

9107B Hand pump only.

Specifications

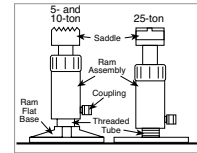
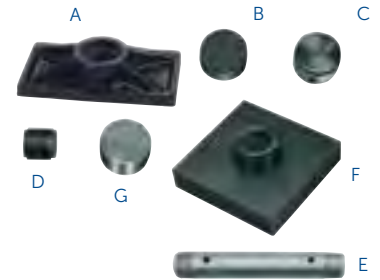
	9106B	9107B
Max. operating pressure	10,000 psi	10,000 psi
Volume per stroke	0.17 cu. in.	0.17 cu. in.
Reservoir capacity	18 cu. in.	30 cu. in.
Oil port	1/4" NPT	1/4" NPT



4026 Air/Hydraulic Power Unit

Features a heavy-duty, one-piece, aluminum body for durability and light weight. A perfect replacement pump for body and frame straightening equipment. Performs in either vertical or horizontal positions. Has a time-tested motor design. All internal moving parts are constructed of metal, not plastic! Unique external relief valve ensures damage-free operation should oil reservoir be overfilled. Internal vent eliminates external oil leakage. Rotary-style pressure release provides superior operator control. Carries OTC's unsurpassed Lifetime Warranty®.

Specifications	4026
Oil delivery	10 cu. in. of oil @ 9,500 psi
Reservoir capacity	39 cu. in. (34 cu. in. usable)
Internal relief setting	10,000 PSI
Air operating pressure	40-120 PSI
Dimensions	16-15/16" L x 6-3/8" H x 5-5/8" W



OTC Single Acting Cylinder Rams



		Capacity in Tons	Stroke	Height Collapsed	Height Extended	Oil Capacity (cu. in.)
4100A	5-Ton Single Acting Ram	5	3"	5-11/16"	8-11/16"	3.23
4101A	5-Ton Single Acting Ram	5	5-1/4"	10-7/16"	15-11/16"	5.74
4103A	10-Ton Single Acting Ram	10	2-1/8"	5-9/16"	7-11/16"	4.8
4104A	10-Ton Single Acting Ram	10	6-1/8"	11-1/2"	17-5/8"	13.9
4105A	10-Ton Single Acting Ram	10	10-1/8"	15-1/2"	25-5/8"	22.75
4106A	25-Ton Single Acting Ram	25	6-1/4"	13-3/8"	19-5/8"	32.2
4107A	25-Ton Single Acting Ram	25	14-1/4"	21-3/8"	35-5/8"	73.5
4108A	5-Ton LP Single Acting Ram	5	9/16"	1-5/8"	2-3/16"	.62
4110A	55-Ton Single Acting Ram	55	6-1/4"	11"	17-5/16"	69

Single-Acting Ram Accessories

These versatile attachments let you "harness" OTC hydraulic force and put it to work exactly where it's needed to handle various maintenance tasks. Accessories thread onto the ram's piston rod end or into the ram base.

Use with 10-ton hydraulic rams, Nos. 4103A, 4104A and 4105A.

Item	No.	Description
A	32325	*Ram flat base
B	31772	Serrated saddle
C	24016	Smooth saddle
D	25664	*Threaded tube coupling
E	38909	10" Extension tube

* NOTE: 32325 and 25664 cannot be used on No. 4103 hydraulic ram. Use with 25-ton hydraulic rams, Nos. 4106A and 4107A.

Item	No.	Description
F	25653	Ram flat base
G	31776	Serrated saddle with coupling

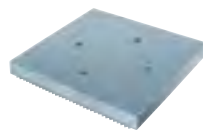
55- and 100-Ton Aluminum Rams

Get the strength of a steel ram but about half the weight. Easily carry these single-acting, spring-return rams around the garage, shop, or into the field for on-the-vehicle repairs. They are ideal for truck axle correction, trailer frame straightening, general vehicle maintenance, and heavy-duty lifting.

- 4111** 55-ton aluminum ram. 6-1/8" stroke.
- 4116** 100-ton aluminum ram. 6-1/4" stroke.

208406

Ram base. Attaches directly to bottom of ram by means of two 3/8"-16 screws, included. Serrated base provides extra support and stability. 7" square. For use on 55-ton ram only.



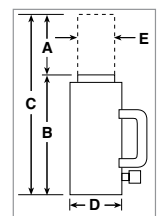
208406



4111



4116

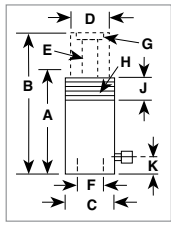


OTC No.	Capacity in Tons	Stroke "A"	Oil Cap. (cu. in.)	Effective Ram Area (sq. in.)	Tons at 10,000 PSI	Spring Return	Height		Piston Protrusion at Collapsed Height	Diameter		Piston Thread (N.P.T.) "F"	Collar Thread (Straight) "G"	Internal Base Thread (N.P.S.M.) "H"	Wt. (lbs./oz.)
							Collapsed "B"	Extended "C"		"D"	"E"				
4111	55	6-1/8"	67.6	11.04	55.2	Yes	10-3/4"	16-7/8"	1/4"	5-1/4"	3-1/8"	None	None	None	25 / 10
4116	100	6-1/4"	129.0	20.62	103.1	Yes	11-3/4"	18"	1/8"	7-3/8"	4-1/8"	None	None	None	64

HYDRAULIC RAMS SHOP EQUIPMENT

Spring-Return Hollow Center Hydraulic Rams

Hydraulic Twin Rams have been engineered for increased strength and durability and meets the ASME B30.1 standards. A center-hole design is ideal for push/pull applications while allowing for the extension of cables, screws or wires through the cylinder. Tapped base mounting holes allow for easy installation in fixed applications. Made in USA.



Head Inserts		
For Use With	Threaded Insert No.	Inside Dia. of Plain Insert *
4131A	28632 3/4"-16 **	49/64"
4132A	28612 1"-8 **	1-3/64"
4139	38904 1-1/4"-7 **	1-19/64"
4140A	34251 1-5/8"-5-1/2 **	2-1/8"

* Plain insert comes standard with rams.
** Internal thread size.

Cylinder Cap. (tons)	Stroke (in.)	OTC No.	A Re-Tracted Height (in.)	B Extended Height (in.)	C Outside Dia. (in.)	D Piston Rod Dia. (in.)	E Center Hole Dia. (in.)	F Inches Between Base Holes	G Insert Thread Size (in.)	H Collar Thread (in.)	J Thread Length (in.)	Oil Cap. (cu. in.)	Int. Press. at Cap. (PSI)	K Base to Inlet Port (in.)	Mounting Holes (in.)	Base Cyl. Eff. Area (sq. in.)	Prod. Wt. (lbs.)
10	2-1/2	4131A	5-5/8	8-1/8	3-3/16	1-1/2	3/4	2-3/8	3/4	1-3/4-12	2	5.53	10,000	1-1/16	2 x 1/4-10	2.21	11.0
20	3	4132A	6	9-7/32	4	2	1	3-1/4	1	None	None	11.76	10,000	1	3/8-16	4.72	18.5
30	2-1/2	4139	6-1/4	8-3/4	4-3/4	3-1/4	1-19/64	3-5/8	2-3/4-12	4-3/4-12	1-1/2	15.85	9,457	1-5/32	7/16-20	6.34	25.6
60	6	4140A	12-3/4	18-3/4	6-1/2	2-3/4	1-5/8	5-1/8	3-12	6-1/4-12	2-1/2	76.38	10,000	1	1/2-13	12.31	86.5

Hollow Center Hydraulic Rams

Center-hole rams are ideal for jobs that require a great deal of force and a relatively short stroke. Compared to the force it develops, the ram is lightweight, compact, and easy to handle, permitting its use in confined quarters. Center-hole feature allows extending jacking screws, cables, puller screws and more to be inserted through the ram.

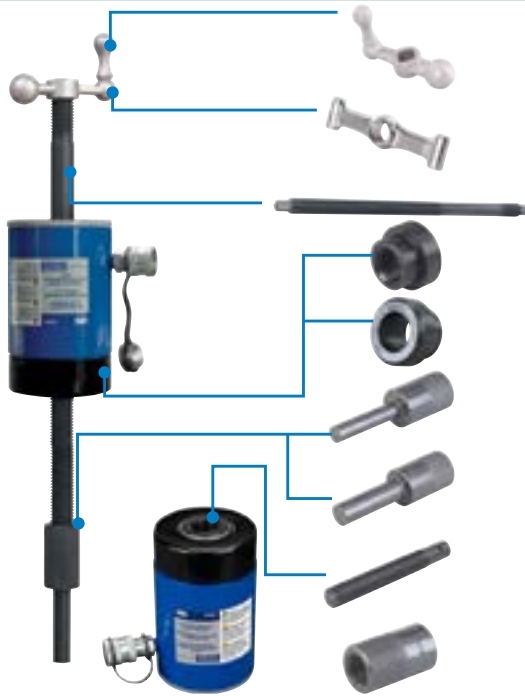
- Engineered for increased strength and durability and meets the ASME B30.1 standards
- For use with Grip-O-Matic® pullers, push-pullers and shop presses



Hollow Center Hydraulic Ram		Capacity in Tons	Stroke	Height Collapsed	Height Extended	Adapter Plate	Eff. Ram Area (sq. in.)	Oil Capacity (cu. in.)
4120A	Single acting ram	17-1/2	2"	5-1/2"	7-1/2"	yes	3-1/2	7.01
4120A-MA	Single acting ram	17-1/2	2"	5-1/2"	7-1/2"	-	3-1/2	7.01
4121A	Single acting ram	30	2-1/2"	7-3/4"	10-1/4"	yes	6-1/8	15.45
4121A-MA	Single acting ram	30	2-1/2"	7-3/4"	10-1/4"	-	6-1/8	15.45
4122A	Single acting ram	50	3"	10-1/4"	13-1/4"	yes	9-3/4	29.19
4122A-MA	Single acting ram	50	3"	10-1/4"	13-1/4"	-	9-3/4	29.19
4130	Twin double-acting hydraulic ram	100	4-7/8"	15-1/8"	20"	-	19-1/4*	93.8

* Push side only

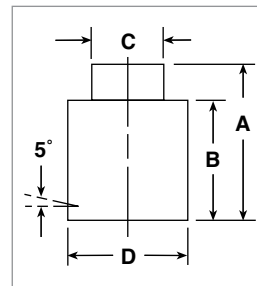
Ram Accessories



Description	17-1/2 Ton	30-Ton	50-Ton	100-Ton
Speed crank	24814	27198	29595	303785
Speed nut	302482 1"-8 thread	302483 1-1/4"-7 thread	33439 1-5/8"-5-1/2 thread	34136 2-1/2"-8 thread
Adjusting screw	32118 1"-8 thread, 20" long	34758 1-1/4"-7 thread, 24" long	32698 1-5/8"-5-1/2 thread, 30" long	32699 2-1/2"-8 thread, 36" long
Threaded insert	21669 1"-8 thread	21873 1-1/4"-7 thread	22274 1-5/8"-5-1/2 thread	24197 2-1/2"-8 thread
For "A" version rams	573825 1"-8 thread	573834 1-1/4"-7 thread	573810 1-5/8"-5-1/2 thread	24197 2-1/2"-8 thread
Plain-hole insert	21714 1-1/16" dia. hole	21872 1-5/16" dia. hole	22275 1-11/16" dia. hole	24196 2-9/16" dia. hole
Pushing adapter	201923 1"-8 thread, 1/2" dia. shank	34510 1-1/4"-7 thread, 3/4" dia. shank	34755 1-5/8"-5-1/2 thread, 1" dia. shank	-
Pushing adapter	201454 1"-8 thread, 3/4" dia. shank	34511 1-1/4"-7 thread, 1" dia. shank	34756 1-5/8"-5-1/2 thread, 1-1/4" dia. shank	-
Jack screw	24813 1"-8 thread, 7" long	25931 1-1/4"-7 thread, 9" long	-	-
Ram cap	28228 1"-8 thread, 1-1/2" dia.	28229 1-1/4"-7 thread, 1-3/4" dia.	28230 1-5/8"-5-1/2 thread, 2-1/4" dia.	-

"Shorty" Rams, Single-Acting, Spring-Return

Forcing a gravity return ram to retract wastes both time and money. This OTC series of single-acting, spring-return rams eliminates that waiting. With their low collapsed height and the stroke you really need, these rams are ideal for a variety of applications. You can choose from capacities of 10 to 100 tons and strokes from 1-1/2" to 2-7/16", with the largest ram being only 7-3/4" high! Bronze-plated piston rods resist scoring, and each ram can be "dead-ended" at full capacity for maximum safety. Each "Shorty" ram has an angled coupler port (5°) for easy hook-up. So, if you're tired of waiting for your rams to retract, these OTC "Shorty" rams are just the answer to your problems!



OTC No.	Capacity (tons)	Stroke No.	(A) Extended Height (in.)	(B) Retracted Height (in.)	(C) Piston Rod Dia. (in.)	(D) Outside Dia. (in.)	Cyl. Eff. Area (sq. in.)	Oil Capacity (cu. in.)	Oil Port Return	Type Piston NPTF	Wt. (lbs./oz.)
4141A	10	1-1/2	5	3-1/2	1-1/2	2-3/4	2.24	3.4	3/8"-18	Spring	6
4142A	20	1-3/4	5-1/2	3-7/8	2-5/32	3-9/16	4.39	7.7	3/8"-18	Spring	11 / 3
4143A	30	2-7/16	7-1/16	4-5/8	2-1/2	4	6.49	15.8	3/8"-18	Spring	15
4144A	50	2-3/8	7-3/8	4-7/8	3-1/8	4-7/8	9.86	23.28	3/8"-18	Spring	24
4145A	100	2-1/4	7-3/4	5-1/2	4-3/8	6-1/2	20.58	46.18	3/8"-18	Spring	43



4175 "Shorty" Ram and Pump Set

- Shorty rams provide lifting or pushing force in limited working space. Visual centering of load is simplified by a concentric ring pattern on piston top.
- Single-acting, spring-return.
- Two-speed hand pump gives fast piston approach. (See chart below for specifications.)
- Set includes 4143 30-ton, 2-7/16" stroke single-acting spring-return hydraulic ram; 4016 pump; 9767 hose; and 9798 hose half coupler.

OTC Set No.	Capacity (tons)	Ram Stroke	Ram Collapsed Height	Strokes to Obtain Full Ram Stroke	Pump Speed
4175	30	2-7/16"	4-5/8"	55*	Two

* Based on 50% of the stroke being made in low-pressure stage, 50% in high-pressure stage.



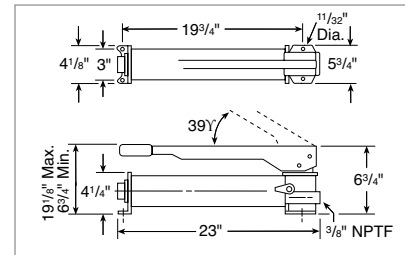
4180 Power Twin Ram and Pump Set

- Center-hole feature permits extending adjusting screws, cables, puller screws, etc., straight through the ram.
- This spring return unit is compact and lightweight.
- Ideal for jobs having restricted working space.
- Set includes 4120 17-1/2 ton, 2" stroke single-acting hydraulic ram; 4002 pump; 9650 gauge; 24815 tee; 9767 hose; and 9798 hose half coupler.

OTC Set No.	Capacity (tons)	Ram Stroke	Ram Collapsed Height	Strokes to Obtain Full Ram Stroke	Pump Speed
4180	17-1/2	2"	6-7/8"	48	Single



4016



Dualmaster Jr. Two-Stage Hand Pumps

Here's two-stage flexibility at a popular price! These pumps have extra-large reservoirs (125 cu. in. usable oil) and permit use with large hydraulic rams or in multiple small ram applications. Compact and lightweight, Dualmaster Jr. provides maximum flexibility with minimum effort in a portable pump. The 4016 and 4017 deliver... providing high oil volume (2.6 cu. in. per stroke) for rapid ram approach and return. Then they automatically switch at 300 PSI to the high pressure, low volume stage (.16 cu. in. per stroke) for high force applications. Both have a large, non vented reservoir with safety relief valve to prevent over-pressurization of the reservoir. Piston stroke is 3/4", maximum handle effort is 130 lbs. at 10,000 PSI. The 4016 is equipped with a 2-way valve for use with single-acting rams. The 4017 has a 4-way valve for use with double-acting rams. Two versatile hydraulic pumps...dependable power for automotive, heavy-duty truck, agricultural, and construction maintenance needs.

4016

Pump with a 2-way valve for use with single-acting rams. Delivers 2.6 cu. in. of oil per stroke in low pressure stage.

4017

Pump with a 4-way valve for use with double-acting rams. Delivers 2.6 cu. in. of oil per stroke in low pressure stage.

4016 and 4017 Specifications:

Maximum Operating pressure – 1st- 300 psi / 2nd- 10,000 psi

Volume per stroke – 1st- 2.6 cu. in. / 2nd- .16 cu. in.

Piston dia. – 1st- 2" / 2nd- 1/2"

Piston stroke – 3/4"

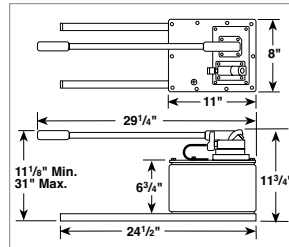
Reservoir capacity – 125 cu. in. usable

Oil port – 3/8" NPT



Dualmaster® Two-Stage Hand Pumps

Our finest hand-operated power units! These fast acting, two-stage pumps not only handle high force, high pressure requirements up to 10,000 PSI, but deliver extremely high volume at low pressure (7.35 cu. in. per stroke from 0 to 200 PSI) to quickly move the ram piston to and from the work! Pumps have a built-in relief valve, pre set at the factory for 10,000 PSI. Maximum handle effort is 90 lbs. Two basic Dualmaster models are offered: No. 4008 for use with single-acting rams, and No. 4009 for use with double acting rams. For information on pressure gauges, hoses, and other accessories for your Dualmaster, see pages 233 and 234.



Pump and valving mount on common cover plate; permits use on other than standard OTC reservoirs.



4008

Hydraulic hand pump with No. 9584 2-position, 3-way control valve (for operating single-acting rams), and No. 4006 BL2 2-gallon reservoir with legs.

4009

Hydraulic hand pump with No. 9500 3-position, 4-way control valve (for operating double-acting rams), and No. 4006 BL2 2-gallon reservoir with legs.

Performance Example

Pump No.	Maximum Pressure	Piston Dia.	Piston Stroke	Reservoir Capacity	Oil Port	Job: To fully extend an OTC 4105 ram (has 10-1/8" stroke)	4008/4009 Pump	4016 Pump	4002 Pump
4008 and 4009	1st stage 200 PSI 2nd stage 10,000 PSI	2-1/2" 1/2"	1-1/2"	460 cu. in. usable	3/8" NPTF	5" of ram travel is under no load, 5" is under load	37 strokes	74 strokes	141 strokes

Air / Hydraulic Pump

With shop air as the energy source, these pumps have the power and oil capacity (80 cu. in. usable oil) to drive even the large 55-ton rams. They are ideal all-around power sources for dozens of body, frame, and alignment applications. They can be used with a variety of rams, presses, and hydraulic pullers operating at up to 10,000 PSI. An internal relief valve protects the hydraulic components regardless of hydraulic pressure. In addition, a two-stage release mechanism gives fast or metered ram return while reducing hydraulic shock. In addition to all the features and performance characteristics of the 4020/4025, the 4021 is equipped with a 15 ft. remote control cord. The 4022 is equipped with a 2-gal. reservoir. These pumps require 9 cfm at 100 PSI air pressure at the pump.

4020 Air/hydraulic pump. Develops 10,000 PSI at 100 PSI air pressure. 3/8" NPTF oil port. 98 cu. in. usable oil capacity in plastic reservoir.

4021 Air/hydraulic pump with a remote control actuator, 15 ft. cord. Develops 10,000 PSI at 100 PSI air pressure. 3/8" NPTF oil port. 105 cu. in. capacity plastic reservoir.

4022 Air/hydraulic pump with a 2-gallon (442 cu. in.) plastic reservoir.

4025 Air/hydraulic pump. Develops 10,000 PSI at 100 PSI air pressure. 3/8" NPTF oil port. 98 cu. in. usable oil capacity in metal reservoir.

213896 Metal reservoir. 98 cu. in. usable oil capacity. Includes gasket and fasteners.

61243 Replacement plastic reservoir for 4020 pump, 98 cu. in. usable oil capacity.

33853 Replacement gasket for 4020 pump reservoir

300871 Repair kit for 4020 pump



4020



4021



2510A

Air/Hydraulic Pump

- 10,000 PSI air/hydraulic pump.
- Internal relief valve.
- Two-stage release mechanism.
- Pump, hold, or release load with pedal control.
- 98 cu. in. useable capacity.
- 3/8 NPT oil port.

538592 Seal kit for 2510A

Performance @ 100 PSI

Hydraulic Pressure* Oil Delivery

0 PSI	59 cu. in./min.
5,000 PSI	30 cu. in./min.
10,000 PSI	4 cu. in./min.

* Oil delivery based on 20 cfm air supply at the pump.

HYDRAULIC PUMPS SHOP EQUIPMENT

Vanguard® Two-Stage, High-Pressure Power Units

Thousands of users have put Vanguard to work in a variety of hydraulic power applications. And the reputation for trouble-free performance this pumping unit has earned is a proven, documented fact, not just a sales claim! Vanguard is a fast-acting, precision-built, two-stage pumping unit consisting of a gear pump for the low-pressure stage and an axial-piston pump for the high-pressure stage, the latter being "supercharged" by the gear pump. Vanguard delivers low volume at high pressure, yet provides high volume at low pressure for fast cylinder piston approach and return. Units feature a 10,000 PSI universal motor, which starts under full load. They are suitable for operation up to 10,000 PSI. Motor is 1-1/8 h.p., 12,000 RPM, (27 amp draw). Rated for intermittent duty.

4062

Vanguard 2-stage hydraulic pump with 2-position/ 3-way valve and 6 ft. remote motor control (115V). 2 gal. of oil supplied.

4064

Vanguard 2-stage hydraulic pump with 3-position/ 4-way valve and 6 ft. remote motor control (115V). 2 gal. of oil supplied.

Speed Comparison Chart

The job — Fully extend a 10-ton ram with a 10-1/8" stroke:

Pump No.	5" travel No load	5" travel Under load	Total Time
4062 Power	1.5 sec.	12 sec.	13.5 sec.
4012A Hand Pump	141 strokes of pump handle		4 to 5 min.*

* Handle effort at max. pressure is 140 lbs.

Performance Oil Delivery

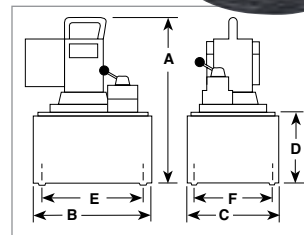
100 PSI	1,000 PSI	5,000 PSI	10,000 PSI
650 cu. in./min.	80 cu. in./min.	70 cu. in./min.	55 cu. in./min.

Pump No.	For use with:	Control Valve	Reservoir	Motor Control	Voltage
4062	Single-acting rams	2-pos., 3-way	2 gal.	Remote 6 ft. cord	1-1/8 H.P., 115V*
4064	Double-acting rams	3-pos., 4-way	2 gal.	Remote 6 ft. cord	50/60Hz, Sgl. Phase

* For 230 volt, please specify.

61217 Electric Pump

- 10,000 PSI max. pressure output
- 3,450 RPM
- 3 PH, 230V/60HZ
- Hose port; 3/8 NPT
- Gauge port; 1/4 NPT
- Useable reservoir 462 sq. in.
- 4-way/3 position solenoid valve
- Valve function; advance, hold, return
- Weight 52.9 lbs.

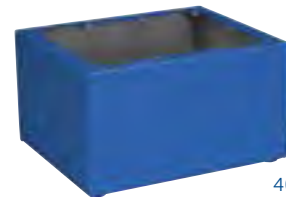


Universal Motor Version



Specifications

A	B	C	D	E	F
18-1/4"	12-1/2"	10-1/2"	7"	10"	8"



Two-Gallon Reservoir

Increase the oil capacity of your 4020, 4021, or 4025 air/hydraulic pumps with this kit. It gives you a two-gallon reservoir and everything else needed to make those pumps ideal for large, single-acting rams or for multiple ram applications.

207436

2-gallon reservoir kit for 4020, 4021, or 4025 air/hydraulic pumps. Includes reservoir, gasket, top mounting plate, bolts, and fittings. Gives 442 cu. in. usable oil capacity. 11-1/2" x 9-1/2" x 6-1/2".

40063BL2

2-gallon (462 cu. in. usable) "standard" reservoir only for Vanguard® pumps. Size: 12-1/2" x 10-1/2" x 6-1/2" high.

Two-Stage Electric / Hydraulic Pumps

They're called "RamRunners" and that's just what they do...run large single- or double-acting rams for fast frame straightening, wheel alignment, etc. They deliver up to 45 cu. in./min. at max. operating pressure of 10,000 PSI. The 4044 has a 2-position/2-way valve with "advance" and "return" positions and is for use with single-acting rams. The 4046 and 4057 have a 3-position/4-way valve with "advance," "hold," and "return" positions; for use with double-acting or multiple single-acting rams. Nos. 4044 and 4046 are equipped with a 1/2 h.p. single-phase, 60 Hz, 115 volt thermal-protected electric motor and are designed to start under load. No. 4057 has a 1-1/2 h.p. electric motor. The RamRunners also feature a 6 ft. remote control cord for "on/off" control. One gallon and two quarts of oil are supplied.

- 4044** RamRunner two-stage hyd. pump with 2-position/2-way manual valve and a 6 ft. remote control cord. Supplied with one gallon and two quarts of oil.
- 4046** RamRunner two-stage hydraulic pump with 3-position/4-way manual valve for double-acting rams, and a 6 ft. remote control cord. Supplied with one gallon and two quarts of oil.
- 4057** RamRunner two-stage hydraulic pump with 3-position/4-way valve for double-acting rams, and a 6 ft. remote control cord. Supplied with one gallon and two quarts of oil.

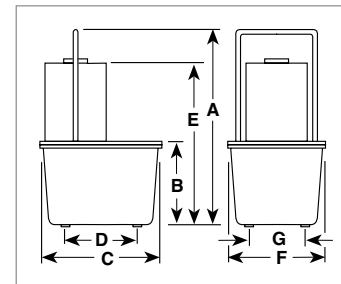
Speed Comparison Chart

The job — Fully extend a 10-ton ram with a 10" stroke:

Pump No.	5" travel No Load	5" travel Under Load	Total Time
4044 / 4046	3 sec.	39 sec.	42 sec.
4057	1.2 sec.	14 sec.	15.2 sec.



4044



Pump No.	Max. Press. Output	RPM	Oil Del.* (cu. in./min. @)			Voltage	Reservoir								
			0 PSI	100 PSI	10,000 PSI		Cap.	Usable	A	B	C	D	E	F	G
4044 / 4046	10,000 psi	3,450	290	240	17	1/2 h.p., 115 volt** 60 Hz, Sgl. Phase	1.9 gal.	295 cu. in.	18-1/2"	7"	11-3/8"	7-1/8"	14-7/8"	9-1/4"	5-1/8"
4057	10,000 psi	3,450	525	490	45	1-1/2 h.p., 115 volt** 60 Hz, Sgl. Phase	1.9 gal.	315 cu. in.	20"	7"	11-3/8"	7-1/8"	14-7/8"	9-1/4"	5-1/8"

* Typical delivery, actual flow will vary with field conditions. ** For 230 volt, please specify.

OTC'S CONTROL VALVES WORK IN A VARIETY OF AUTOMOTIVE AND INDUSTRIAL APPLICATIONS.



9582

9500

Control Valves

9582 This is a 2-position/3-way, lever operated, detent positioned valve for use with single-acting rams. It has "advance" and "hold" positions..

9500 A 3-position/4-way, lever operated, detent positioned valve for use with double-acting rams. Has "advance," "neutral," and "return" positions. Cylinder ports are blocked in "neutral" and pump flow is directed back to the reservoir.

Vanguard Jr.® Two-Stage, High-Pressure Power Units

Combines compact size and light weight with 2-stage high performance. Choose from several models with electric motors and many options. Designed for operating pressures up to 10,000 PSI. Vanguard Jr. gives you just what you need: 2-stage flexibility with high performance, and a selection of units and options that lets you tailor the pump to your needs. Refer to the performance and speed tables below, and you'll see how these pumps cut down the time needed for almost any job. The 2-stage operation automatically matches pump performance to the job requirements. The low-pressure, high-volume stage provides fast ram approach and return. Then at approximately 200 PSI, the high-pressure, low-volume stage takes over to handle high force requirements. These pumps are ideal for hundreds of hydraulic applications such as clamping, bending, straightening, pressing, forming, testing, pushing, and pulling. Each is equipped with a relief valve factory-set at 10,000 PSI (the maximum operating pressure of the pump). Choose from models with electric (115 or 220 volt) motors and options that include remote hand- and foot-operated motor controls, adjustable pressure regulator, and pressure switch. Vanguard Jr. starts easily under load and has been thoroughly field-tested for high cycle reliability.

- 4031** Vanguard Jr. two-stage hydraulic pump 115V with 2-position/3-way valve and 6 ft. remote motor control. 1 gal. of oil supplied.
- 4031-220V** Vanguard Jr. two-stage hydraulic pump 220V with 2-position/3-way valve and 6 ft. remote motor control. 1 gal. of oil supplied.
- 4033** Vanguard Jr. two-stage hydraulic pump 115V with 3-position/4-way valve and 6 ft. remote motor control. 1 gal. of oil supplied.
- 4033-220V** Vanguard Jr. two-stage hydraulic pump 220V with 3-position/4-way valve and 6 ft. remote motor control. 1 gal. of oil supplied.
- 4036** Vanguard Jr. two-stage hydraulic pump 115V with 3-position/4-way valve and run/off/jog motor control. 2 gal. of oil supplied.
- 4036-220V** Vanguard Jr. two-stage hydraulic pump 220V with 3-position/4-way valve and run/off/jog motor control. 2 gal. of oil supplied.

Speed Comparison Chart

The job — Fully extend a 10-ton ram with a 10-1/8" stroke:

Pump No.	5" travel No Load	5" travel Under Load	Total Time
4031	4 sec.	34 sec.	38 sec.
4002 Hand pump	141 strokes of pump handle		4 to 5 min. *

* Handle effort at max. pressure is 140 lbs.

Universal Motor Version



Universal Motor Version and Large Reservoir Models

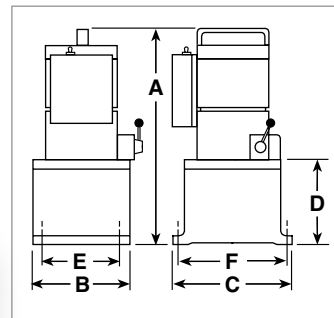
These all have a 10,000 PSI pump and universal motor: 1/2 h.p., 12,000 RPM, 115 or 230 volt (specify), 60/50 cycle A.C. single phase. No. 4036 has an extra-large 2-gallon (462 cu. in.) reservoir to permit full stroke of large displacement rams. Also suited for applications where several rams are used.

Pump No.	For use with	Control Valve	Reservoir	Motor Control
4031 / 4031-220V	Single-acting rams	2-position, 3-way	.45 gallon, 104 cu. in.	Remote 6 ft. cord
4033 / 4033-220V	Double-acting rams	3-position, 4-way	.45 gallon, 104 cu. in.	Remote 6 ft. cord
4036 / 4036-220V	Double-acting rams	3-position, 4-way	2 gallon, 462 cu. in.	Run / off / jog

Specifications

Note: Dimensions shown apply to pumps with 104 cu. in. reservoir.

A	B	C	D	E	F
16"	6"	8"	4-3/4"	5-1/8"	7-1/8"



Performance

The low-pressure, high-volume stage provides fast ram approach. When high force is needed, the high-pressure, low-volume stage takes over. The figures below indicate oil delivery of the electric power unit at various pressure levels.

- 170 cu. in./min. at 100 PSI
- 32 cu. in./min. at 1,000 PSI
- 25 cu. in./min. at 5,000 PSI
- 18 cu. in./min. at 10,000 PSI









THOUSANDS OF USER'S HAVE PUT VANGUARD JR. PUMPS TO WORK IN A VARIETY OF HYDRAULIC POWER APPLICATIONS.









Pressure Regulator/Check Valves and Accessories








OTC No.	Description
 9623	Pressure regulator valve. For remote location in a hydraulic system. Adjusts from 1,000 to 10,000 PSI.
 9575	Needle valve for fine metering. Use several for controlling multiple single-acting rams simultaneously, yet independently. 3/8" NPTF ports.
 9596	Load lowering valve. 3/8" NPTF ports, 10,000 PSI max. operating pressure.
 7312	O-ring/oil seal pick. An extremely handy little tool! Makes removal and installation of oil seals and o-rings a snap. Pick has a metal shaft.
 10461	Remote control foot switch, 10 ft. cord. Press for "on," release for "off."
 25017	Remote control hand switch, 10 ft. cord. Press for "on," release for "off." (Replacement rocker switch only, No. 16772)
 9625	Pressure switch. 1/4" NPTF external thread.

Gauges - All gauges have 1/4" NPTF threads

 9650	Pressure and tonnage gauge. Four scales: 0-10,000 PSI, 0-17-1/2-ton, 0-30 ton, and 0-50 ton. 3-1/2" dia. face (Dry)
 9651	Pressure and tonnage gauge. Four scales: 0-10,000 PSI, 0-55 ton, 0-75 ton, and 0-100 ton. 3-1/2" dia. face (Dry).
 9652	Pressure and tonnage gauge. Four scales: 0-10,000 PSI, 0-5 ton, 0-10 ton, and 0-25 ton. 3-1/2" dia. face (Dry).
 9653	Pressure gauge. Two scales: 0-10,000 PSI, and 0-689 BAR. 3 -1/2" dia. face. Use with any OTC pump or ram (Dry)
 9654	Pressure gauge. Two scales: 0-10,000 PSI, and 0-689 BAR. 2 -1/2" dia. face. Use with any OTC pump (Dry).
 9655	Pressure gauge. One scale: 0-6,000 PSI. 3 -1/2" dia. face (Dry).
 9658	Pressure gauge. Two scales: 0-10,000 PSI, and 0-689 BAR. 2 -1/2" dia. face. Gauge is filled with glycerin or silicone to dampen vibration and fluid pulsation. Use with any OTC pump or ram.
 9659	Pressure gauge. Same as 9658 except is liquid filled and has 3-1/2" diameter face.

Adapters and Fittings

 24815	Tee adapter. For installing gauge between pump and hose coupling. Has 1/4" and 3/8" NPTF internal and 3/8" NPTF external.
 25919	Double tee adapter. Permits use of more than one ram in series with one pump. Three 3/8" NPTF ports.
 9617	Manifold block. For use when a multiple-ram system is required. Has six 3/8" NPTF ports.
 9691	"Y" manifold. Useful when connecting two rams to a single line. Three 3/8" NPTF ports.
 10645	45° fitting. Used when mounting gauge at an angle on connection such as 24815. External and internal 1/4" NPTF ends.
 10469	Swivel connector. 3/8" NPTF external, 3/8" NPSM internal.
 10682	Coupling. Both ends 3/8" NPTF internal.
 10474	Street elbow. Internal and external 3/8" NPTF ends.
 10673	Short nipple. 1-1/2" long, 3/8" NPTF external ends.
 13828	Long nipple. 2" long, 3/8" NPTF external ends.
 10647	90° elbow. 3/8" NPTF internal ends.
 13888	Coupling. Ends - 3/8" NPTF internal and 1/2" NPTF external.

Quick Couplers Precision built and designed for high pressure. Permits disconnecting hose without loss of oil.	
 9795	Complete quick coupler and rubber dust cap. 3/8" NPTF
 9796	Ram half coupler and rubber dust cap. 3/8" NPTF
 9797	Ram half coupler steel dustcap only. 3/8" NPTF
 9798	Hose half coupler only. 3/8" NPTF
 9799	Hose half coupler steel dust cap only. 3/8" NPTF
 9866	Hose or ram rubber half cap. 3/8" NPTF
 9195A	1/4" automotive coupler



Hydraulic Oil

Ensure dependable performance of rams and pumps by using this high-grade, specially prepared oil. Contains foam suppressant additives; high viscosity index.



Hydraulic Hose

Lightweight, rugged hose in lengths to 20 ft. Choose from 1/4" I.D. or 3/8" I.D. high flow hose. All have 3/8" NPTF ends. Operating pressure is 10,000 PSI. Hoses comply with MHI Std. IJ100.

OTC No.	Size	Viscosity	Recommended for use with
9636	1 quart	215 SSU	4000, 4002, 4016, 4017, 4020, 4021
9637	1 gallon	@ 100°F	Vanguard, RamRunner and Stinger pumps

OTC No.	Hose Length	Hose Inside Dia.	Hose Type
9766	3 ft.	1/4"	Braid (2-ply Rating)
9767	6 ft.	1/4"	
9768	8 ft.	1/4"	
9769	10 ft.	1/4"	
9770	12 ft.	1/4"	
9780	6 ft.	3/8"	Nylon Core
9781	10 ft.	High	Synthetic Fiber
9782	20 ft.	Flow	Reinforced *

* Note: This hose is not recommended for use where heat or weld spatter conditions exist.