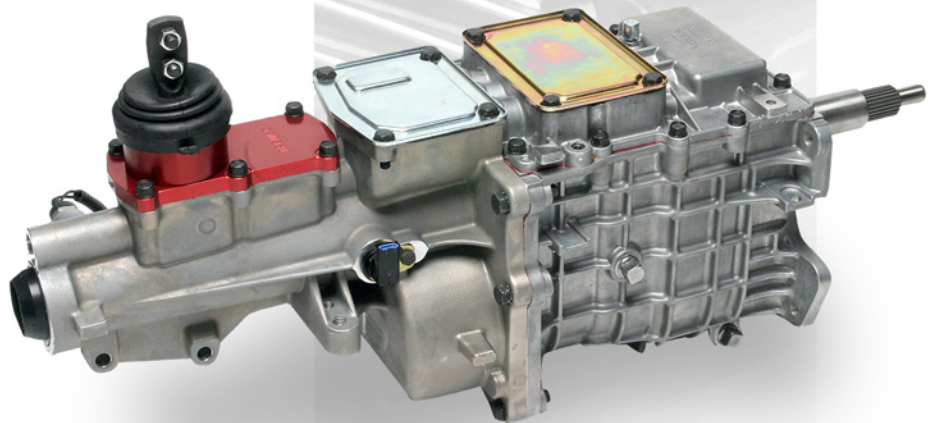
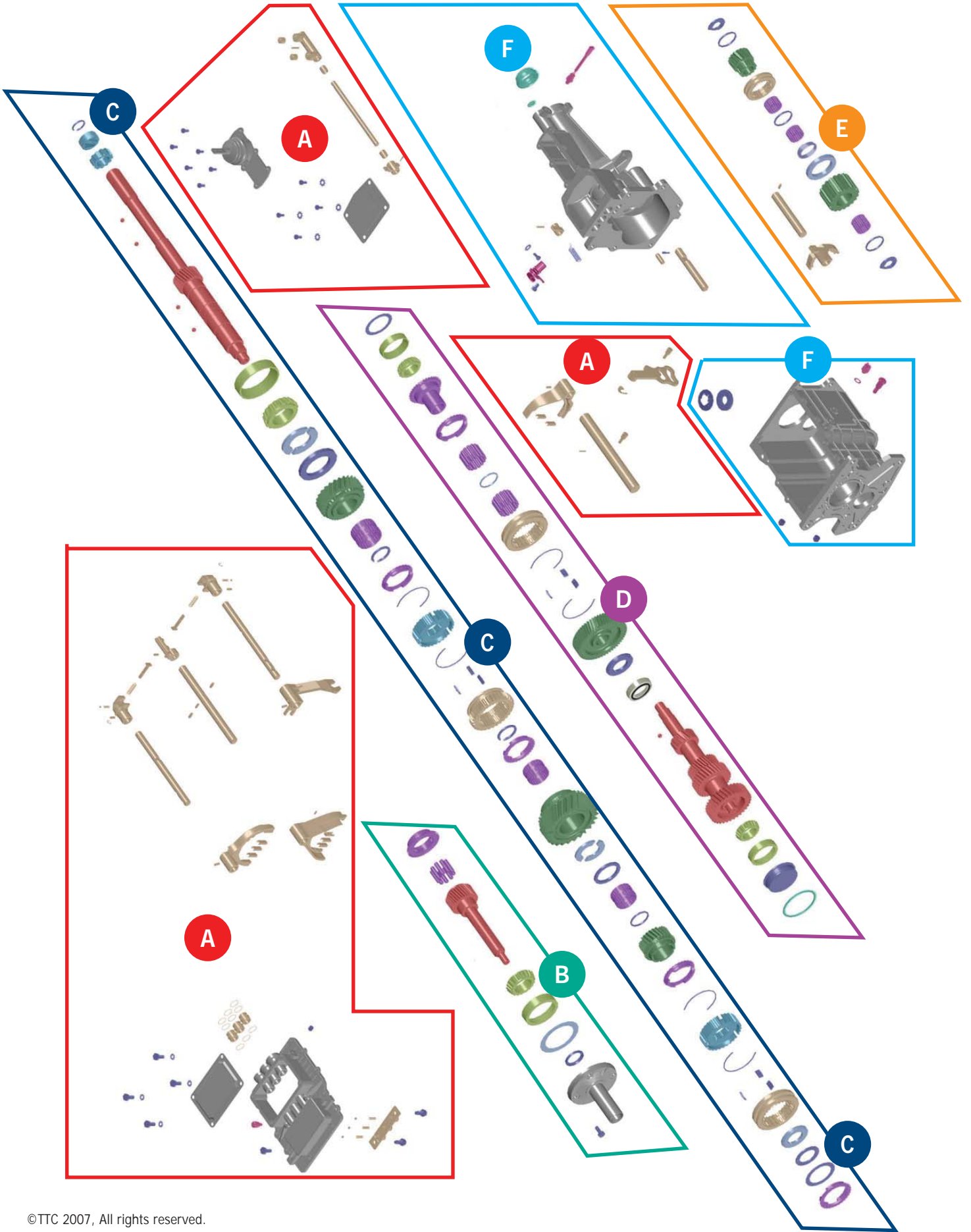


# **TREMEC**<sup>®</sup>

## **TR-3550 / TKO PARTS MANUAL**

BULLETIN NUMBER  
TRPM-TKO-0711





Features and Benefits .....2

Specifications & Dimensions.....3

Parts:

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## Features and Benefits

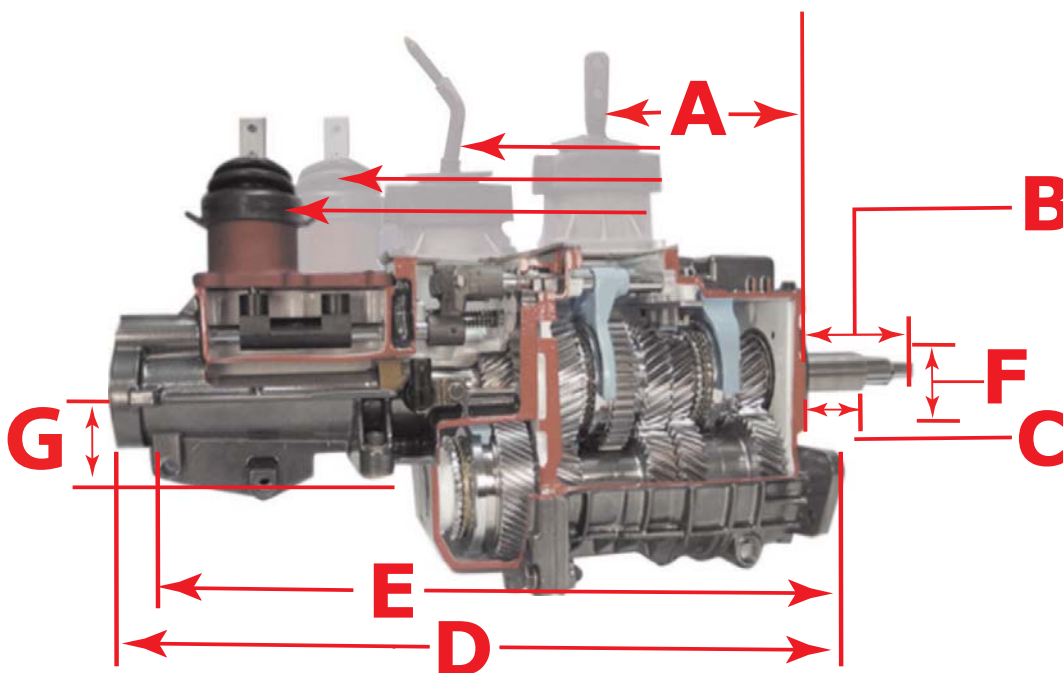
- Higher center distance (83 mm) from main shaft to countershaft allows for larger gear sizes and higher torque carrying capacity
- Close gear ratio (2.87 & 3.27) models available for high-performance racing applications
- Robust transmission design with internal 3-rail shift system with cast iron shift forks
- Tapered roller bearings on input, output and counter shafts improve performance (improved NVA).
- All gears and shafts made from special grade steel (ASTM 4615) that permits increased torque carrying capacity
- Single-piece countershaft provides increased torque carrying capacity
- Equipped with a high-performance short-throw billet aluminum shifter that isolates road noise, while providing clean crisp shifts
- Neutral start switch and back-up light sensor
- Flexible and versatile:
  - Eight possible shifter locations
  - Dual electronic and mechanical speedometer pick-ups
  - Three different input shafts available
  - Three available overdrive ratios
  - Three different crossmember mount patterns
- .64 or .68 ratios reduce engine rpm to a level that makes it fun to drive besides enhancing the fuel efficiency
- .82 ratio is ideal for long straight-aways for high performance racing

# Specifications & Dimensions

Part Number	OEM	Torque Cap. (lbs/ft)	Spline Tooth Count		Gear Ratios									
			Input Shaft	Output Shaft	1st	%	2nd	%	3rd	%	4th	%	5th	Rev
TCET4615	Ford	500	10	31	3.27	66	1.97	47	1.34	34	1	47	0.68	3.00
TCET4616	GM	500	26	31	3.27	66	1.97	47	1.34	34	1	47	0.68	3.00
TCET5201	Ford	500	26	31	3.27	66	1.97	47	1.34	34	1	47	0.68	3.00
TCET4617	Ford	600	26	31	2.87	52	1.89	48	1.28	28	1	22	0.82	2.56
TCET4618	GM	600	26	31	2.87	52	1.89	48	1.28	28	1	22	0.82	2.56
TCET5008	Ford	600	26	31	2.87	52	1.89	48	1.28	28	1	56	0.64	2.56
TCET5009	GM	600	26	31	2.87	52	1.89	48	1.28	28	1	56	0.64	2.56

Part Number	Dimensions (inches)									
	A				B	C	D	E	F	G
TCET4615	19.52	16.75	12.68*	7.02*	7.21	4.48	24.07	15.8	4.85	2.25
TCET4616	19.52	16.75	12.68*	7.02*	6.71	3.19	24.07	15.8	4.68	2.25
TCET5201	19.52	16.75	12.68*	7.02*	7.21	4.48	24.07	15.8	4.85	2.25
TCET4617	19.52	16.75	12.68*	7.02*	7.21	4.48	24.07	15.8	4.85	2.25
TCET4618	19.52	16.75	12.68*	7.02*	6.71	3.19	24.07	15.8	4.68	2.25
TCET5008	19.52	16.75	12.68*	7.02*	7.21	4.48	24.07	15.8	4.85	2.25
TCET5009	19.52	16.75	12.68*	7.02*	6.71	3.19	24.07	15.8	4.68	2.25

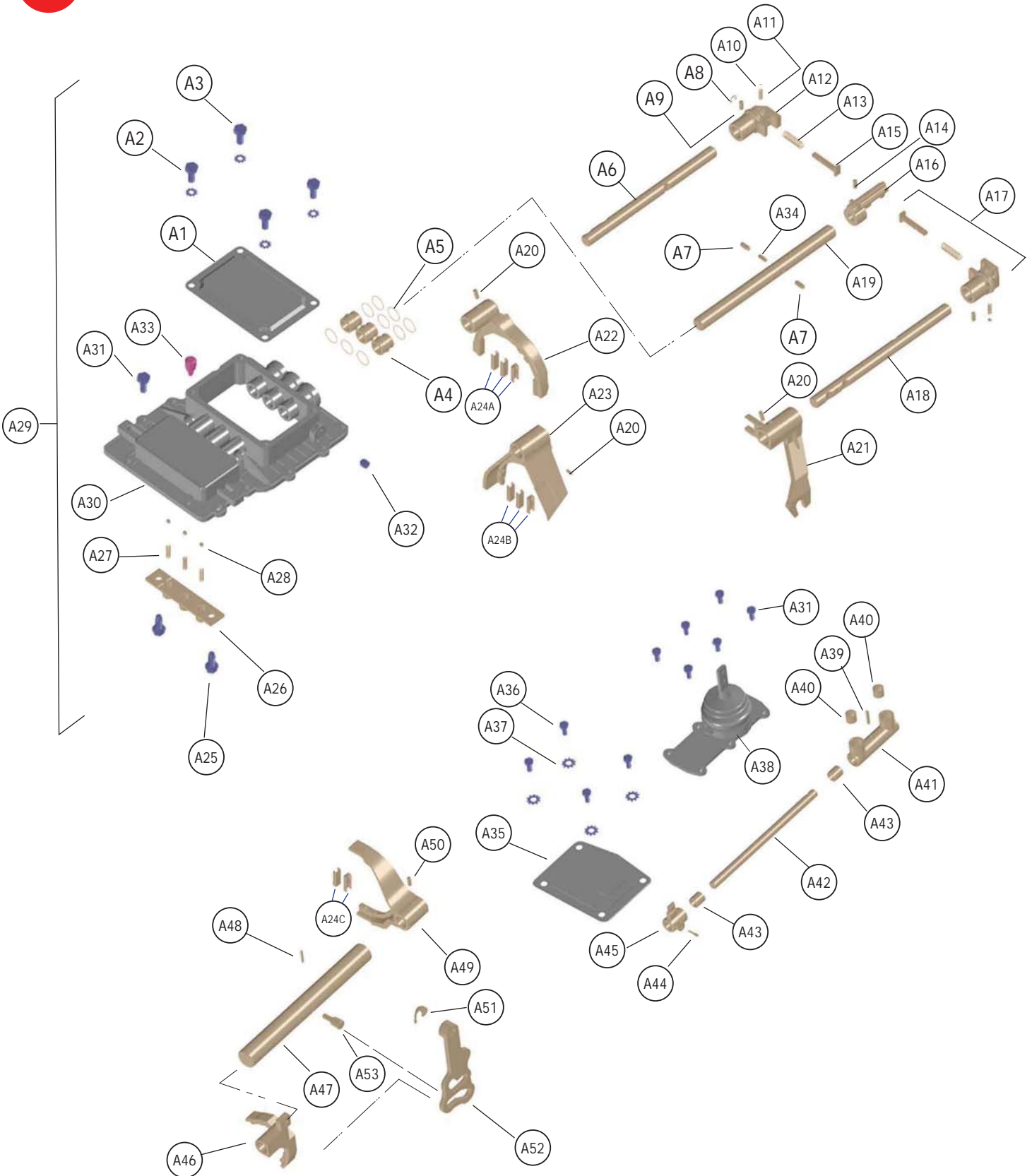
\* Conversion kit sold separately



- A** Shifter location from face of clutch housing
- B** Input shaft length
- C** Bearing retainer length
- D** Casting length from face to tail
- E** Cross member mounting location from engine block (integral clutch housing) or from face of clutch housing
- F** Bearing retainer diameter (large)
- G** Cross member mounting location from centerline
- H** Center distance from mainshaft to countershaft

# Top Cover & Shift Components

A



# Top Cover & Shift Components

A

Item	Qty.	DESCRIPTION	PART NUMBER
A1	1	Cover, Shifter Housing	2605866
A2	4	Bolt, Front Position Cover	2604902
A3	4	Washer, Star - Front Position	2604899
A4	3	Guides, Shift Rail	2605811
A5	9	O-Ring, Shift Rail Guides	2605812
A6	1	Rail, First-Second Shift (Top Cover)	TCBR0004
A7	2	Pin, Interlock	2604895
A8	2	Snap Ring	2605817
A9	2	Pin, Shift Lug - Roll	1000-043-016
A10	2	Ball, Shift Lug	10J000008
A11	2	Spring, Transversal	2606264
A12	2	Lug, First-Second/Fifth Reverse	2606212
A13	2	Spring, Piston	2606263
A14	1	Pin, Shift Lug - Roll	14J1822
A15	2	Pin, Plunger	2605815
A16	1	Lug, Third-Fourth Shift	2606293
A17	2	Assy, Shift Lug First-Second/Fifth-Rev*	2606265
A18	1	Rail, Fifth-Reverse Shift (Top Cover)	TCBR0003
A19	1	Rail, Third-Fourth Shift (Top Cover)	TCBR0002
A20	3	Pin, Shift Fork - Roll	1000-043-016
A21	1	Lever, Fifth Reverse Shift**	2606214
A22	1	Assy, One-Two Shift Fork**	TCEC4271
A23	1	Assy, Three-Four Shift Fork**	TCEC4269
A24a	3	Fork Insert	TCNS4240
A24b	3	Fork Insert	TCNS4240
A24c	2	Fork Insert	TCNS4240
A25	2	Bolt, Interlock Bracket	2605829
A26	1	Bracket, Interlock Spring	2605810

Item	Qty.	DESCRIPTION	PART NUMBER
A27	3	Interlock Spring	2601082
A28	3	Ball	10J000012
A29	1	Assy, Shift Cover***	TCEC4937
A30	1	Cover, Front Shift With Dowels	2605802
A31	16	Bolt, Cover To Case	2603968
A32	1	Interlock Plug	2605083
A33	1	Vent	2124715
A34	1	Pin, Center Interlock	2604832
A35	1	Cover Extension	TCPT4265
A36	4	Bolt, Mid Position Cover	2604902
A37	4	Washer, Star - Mid-Position	2604899
A38	1	Assy, Performance Shifter	TCEC4273
A38a	1	Shifter Boot	1386-021-001
A39	1	Pin, Shift Lug - Roll	1000-043-016
A40	2	Bushing, Shift Lver Socket	2606246
A41	1	Shift Lever Socket (Double)	TCTP4257
A42	1	Rail, Selector (Rear Extension)	TCBR4642
A43	2	Bearing, Shift Rail Support	2605858
A44	1	Pin, Shift Lug - Roll	14J1822
A45	1	Shift Selector Finger	2606462
A46	1	Assy, Reverse Shift Fork	2606216
A47	1	Rail, Fifth-Reverse Shift	2605823
A48	1	Pin, Roll - Reverse/O/D Actuator	2604342
A49	1	Assy, Fifth Shift Fork**	TCEC4270
A50	1	Pin, Shift Lug - Roll	1000-043-016
A51	1	Clip, Wave "E"	2603965
A52	1	Lever, Reverse - Fifth	2605948
A53	1	Pin, Roll-Reverse/Fifth Actuator	2605824
N.S.	1	Wiring Clip	2605031

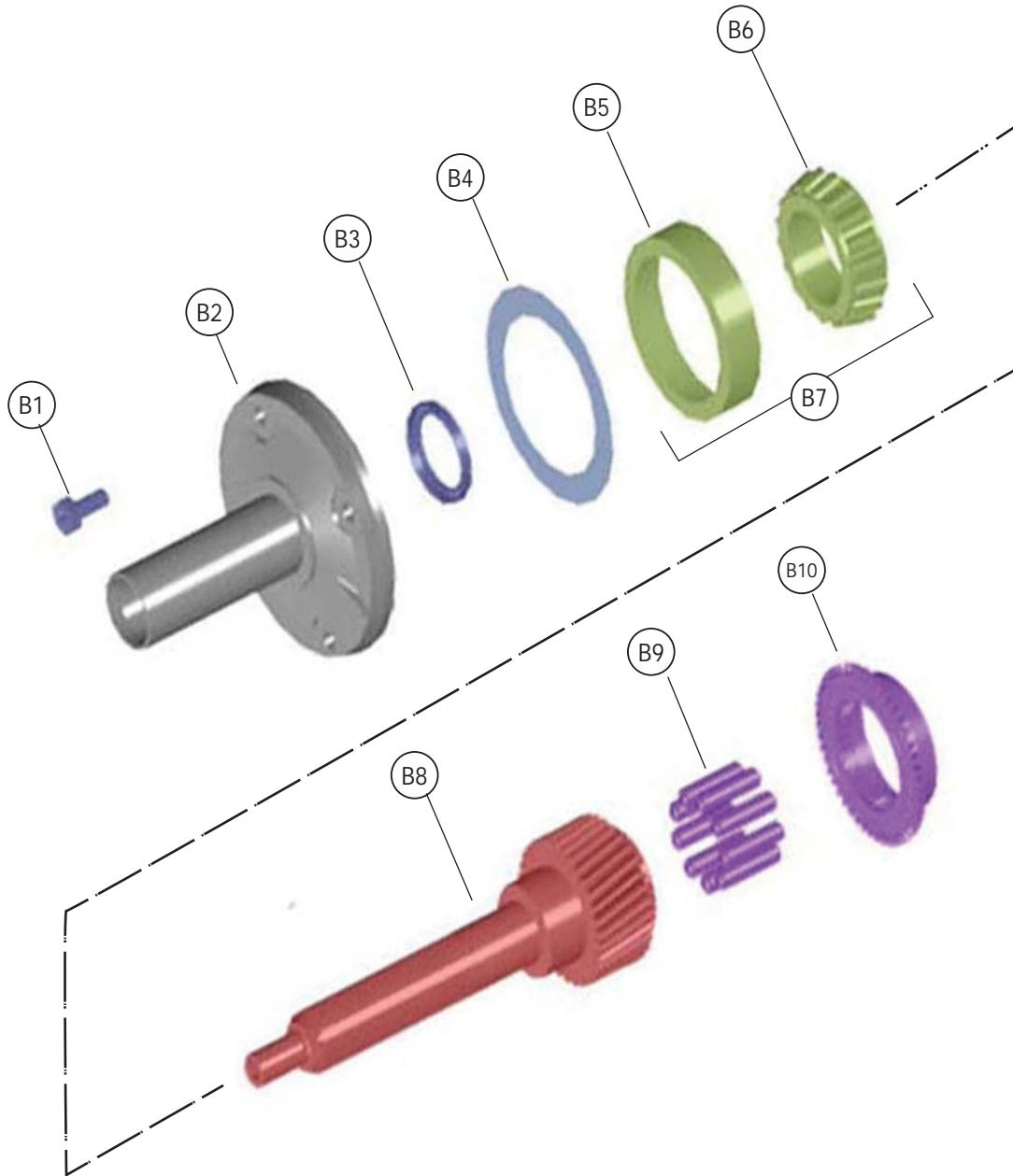
\* Includes A8, A10-A15

\*\* Includes TCNS4240 Fork Insert (A24)

\*\*\* Includes A6, A7, A18-A27, A28-A30, A32, A34  
(NOT included: A1-A5, A8-A17, A31, A33)

# Input Shaft

B







Item	Qty.	DESCRIPTION	TCET4615 (FORD)	TCET4616 (GM)	TCET5201 (FORD)	TCET4617 (FORD)	TCET4618 (GM)	TCET5008 (FORD)	TCET5009 (GM)
B1	4	Bolt, Front Bearing Retainer	2603968	2603968	2603968	2603968	2603968	2603968	2603968
B2	1	Retainer, Front Bearing (No Seal)	2606243	TCRB0131	2606243	2606243	TCRB0131	2606243	TCRB0131
B3	1	Seal, Input Shaft Retainer	2603865	2603865	2603865	2603865	2603865	2603865	2603865
B4	NSS	Shim, Front Bearing Retainer*	—	—	—	—	—	—	—
B5	NSS	Bearing Cup, Input Shaft To Case (Use B7)	—	—	—	—	—	—	—
B6	NSS	Bearing, Cone (Use B7)	—	—	—	—	—	—	—
B7	1	Assy, Bearing - Input Shaft To Case	2606064	2606064	2606064	2606064	2606064	2606064	2606064
B8	1	Shaft, Input	TCFM4244	TCFM4619	TCFM5198	TCFM4741	TCFM4756	TCFM4741	TCFM4756
B9	17	Bearing, Input Shaft Pocket	1332-131-001	1332-131-001	1332-131-001	1332-131-001	1332-131-001	1332-131-001	1332-131-001
B10	1	Fourth Gear Clutch Cone	2605768	2605768	2605768	2605768	2605768	2605768	2605768

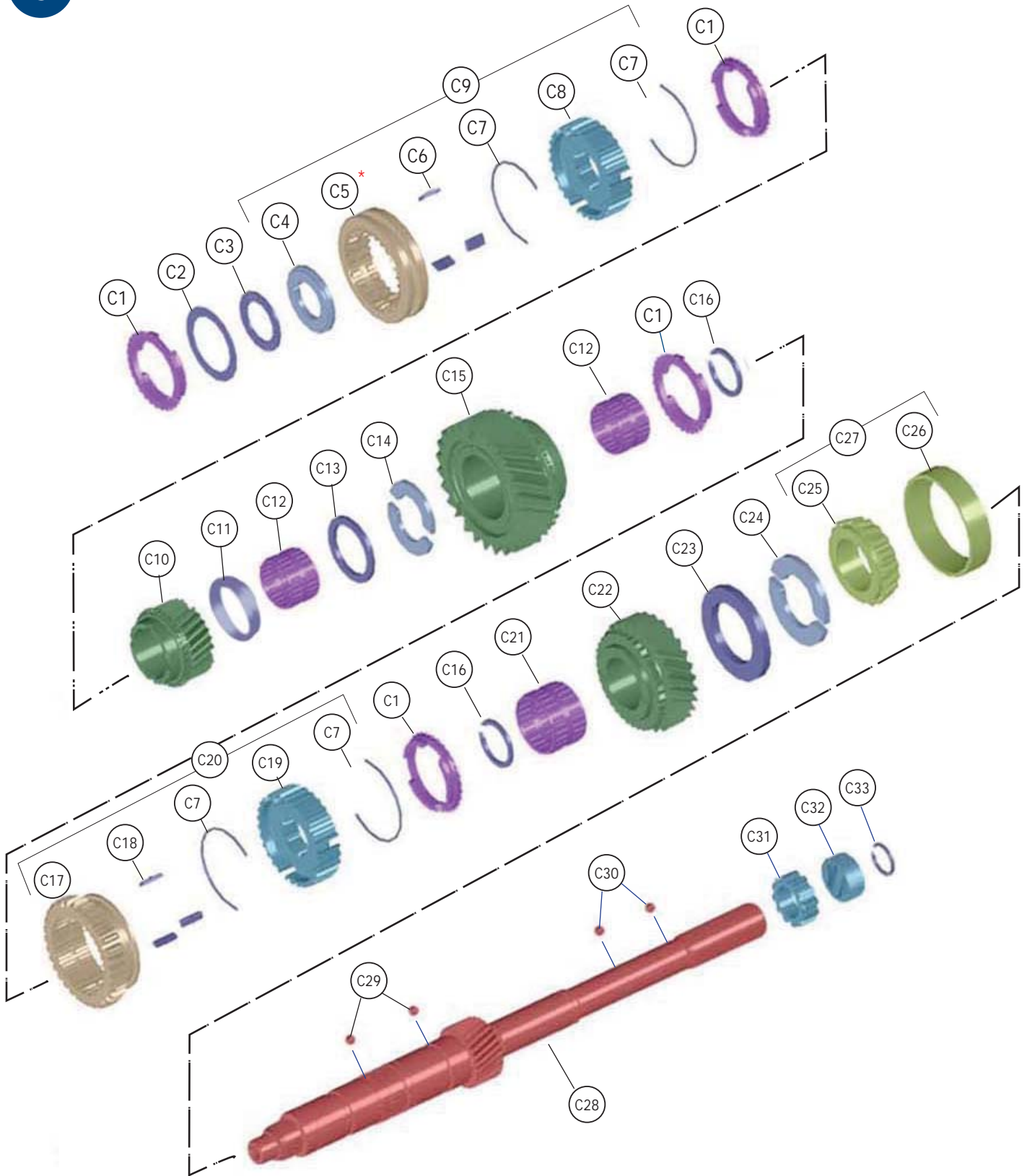
### Input Shaft Dimensions

Spline Count	10	26	26	26	26	26	26
Spline OD	1 1/16	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8
Pilot OD	.668	.59	.668	.668	.59	.668	.59
Length	7.21	6.71	7.21	7.21	6.71	7.21	6.71

\* Kit Part #2670741 (See page 18 for kit contents)

# Mainshaft & Gears

C



\* NOTE: thick side toward 3rd gear



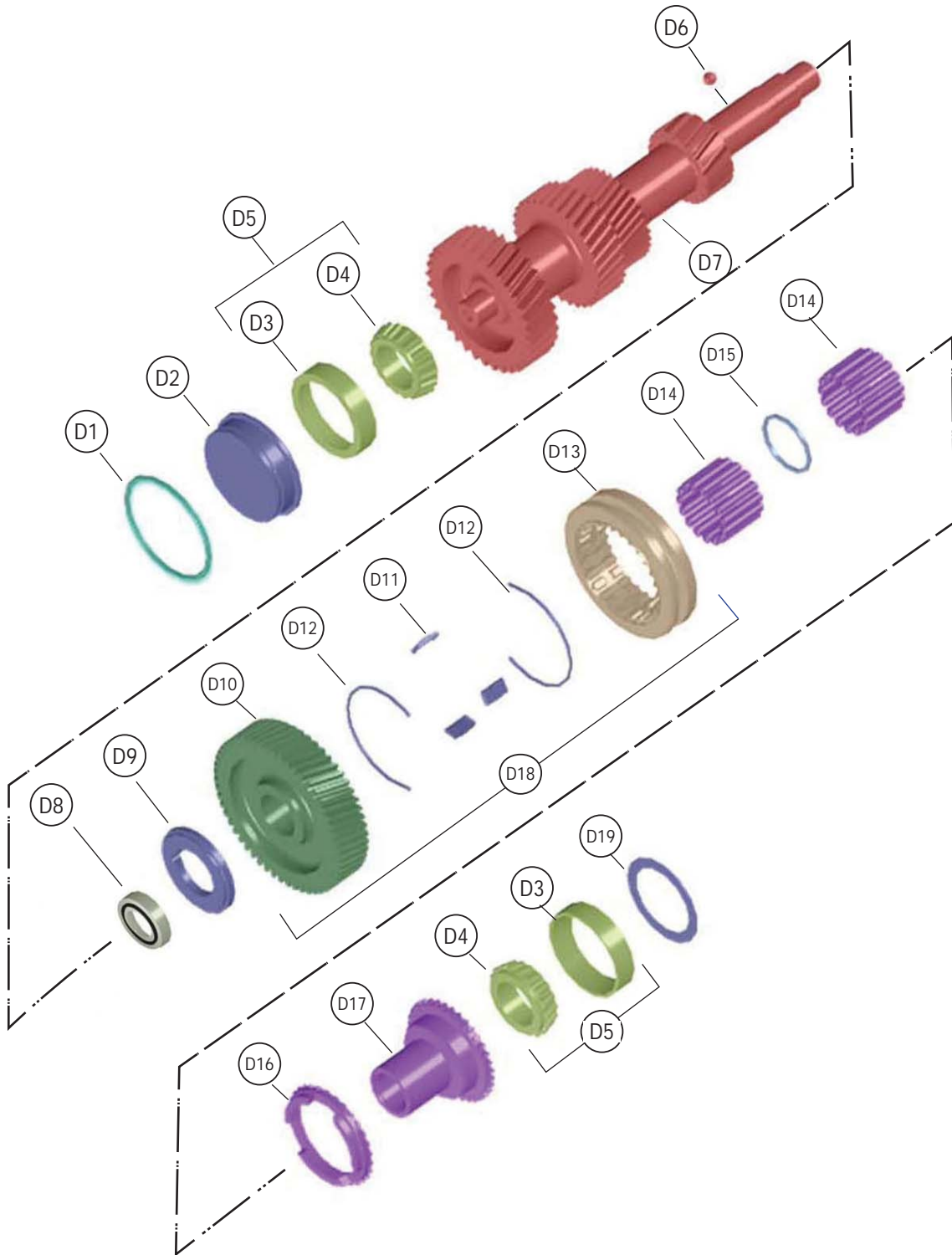
Item	Qty.	DESCRIPTION	TCET4615 (FORD)	TCET4616 (GM)	TCET5201 (FORD)	TCET4617 (FORD)	TCET4618 (GM)	TCET5008 (FORD)	TCET5009 (GM)
C1	4	Ring, Synchronizer Blocker	2605124	2605124	2605124	2605124	2605124	2605124	2605124
C2	1	Thrust Washer	2605766	2605766	2605766	2605766	2605766	2605766	2605766
C3	1	Thrust Bearing	235382	235382	235382	235382	235382	235382	235382
C4	1	Thrust Washer	2605767	2605767	2605767	2605767	2605767	2605767	2605767
C5	NSS	Collar Synchronizer 3-4 (Use C9)*	—	—	—	—	—	—	—
C6	3	Insert, Synchronizer*	2604372	2604372	2604372	2604372	2604372	2604372	2604372
C7	4	Spring, Synchronizer (2 Per Synchro)***	2605117	2605117	2605117	2605117	2605117	2605117	2605117
C8	NSS	Hub, Synchronizer (Use C9)*	—	—	—	—	—	—	—
C9	1	Assy, Third-Fourth Synchronizer	2606082	2606082	2606082	2606082	2606082	2606082	2606082
C10	1	Assy, Third Gear	TCEN0010	TCEN0010	TCEN0010	TCEN0010	TCEN0010	TCEN0010	TCEN0010
C11	1	3rd Gear Spacer	2606081	2606081	2606081	2606081	2606081	2606081	2606081
C12	2	Caged Needle Bearing	2606075	2606075	2606075	2606075	2606075	2606075	2606075
C13	1	Retainer, T/W Split Ring	2606077	2606077	2606077	2606077	2606077	2606077	2606077
C14	2	Thrust Washer, Split Ring	2606076	2606076	2606076	2606076	2606076	2606076	2606076
C15	1	Gear, Second	TCEN4243	TCEN4243	TCEN4243	TCEN4243	TCEN4243	TCEN4243	TCEN4243
C16	2	Snap Ring	2602650	2602650	2602650	2602650	2602650	2602650	2602650
C17	NSS	Collar Synchronizer (Use C20)**	—	—	—	—	—	—	—
C18	3	Insert, Synchronizer**	2602648	2602648	2602648	2602648	2602648	2602648	2602648
C19	NSS	Hub, Synchronizer (Use C20)**	—	—	—	—	—	—	—
C20	1	Assy, One - Two Synchronizer	2670739	2670739	2670739	2670739	2670739	2670739	2670739
C21	1	Caged Needle Bearing	2606109	2606109	2606109	2606109	2606109	2606109	2606109
C22	1	Gear, First	TCEN4242	TCEN4242	TCEN4242	TCEN4322	TCEN4322	TCEN4322	TCEN4322
C23	1	Retainer, Split Ring	2605708	2605708	2605708	2605708	2605708	2605708	2605708
C24	2	Ring, Split	2605707	2605707	2605707	2605707	2605707	2605707	2605707
C25	1	Bearing (Use C27)	—	—	—	—	—	—	—
C26	1	Race, Bearing (Use C27)	—	—	—	—	—	—	—
C27	1	Assy, Bearing - Output Shaft To Case	2605700	2605700	2605700	2605700	2605700	2605700	2605700
C28	1	Shaft, Output	TCFP4310	TCFP5067	TCFP4310	TCFP4258	TCFP5066	TCFP4310	TCFP5067
C29	2	Ball, Steel	10J00006	10J00006	10J00006	10J00006	10J00006	10J00006	10J00006
C30	2	Ball, Steel	10J000008	10J000008	10J000008	10J000008	10J000008	10J000008	10J000008
C31	1	Electronic Speedo Rotor (F 12T, GM 17T)	TCEV1276	TCEV5065	TCEV1276	TCEV1276	TCEV5065	TCEV1276	TCEV5065
C32	1	Mechanical Speedo Gear (7 T)	TCEV4259	2601215	TCEV4259	TCEV4259	2601215	TCEV4259	2601215
C33	1	Snap Ring, Speedo Gear	2604502	2604502	2604502	2604502	2604502	2604502	2604502

\* Included in 2606082

\*\* Included in 2670739 with two (2) 2605124 Blocker Rings.

# Countershaft

D

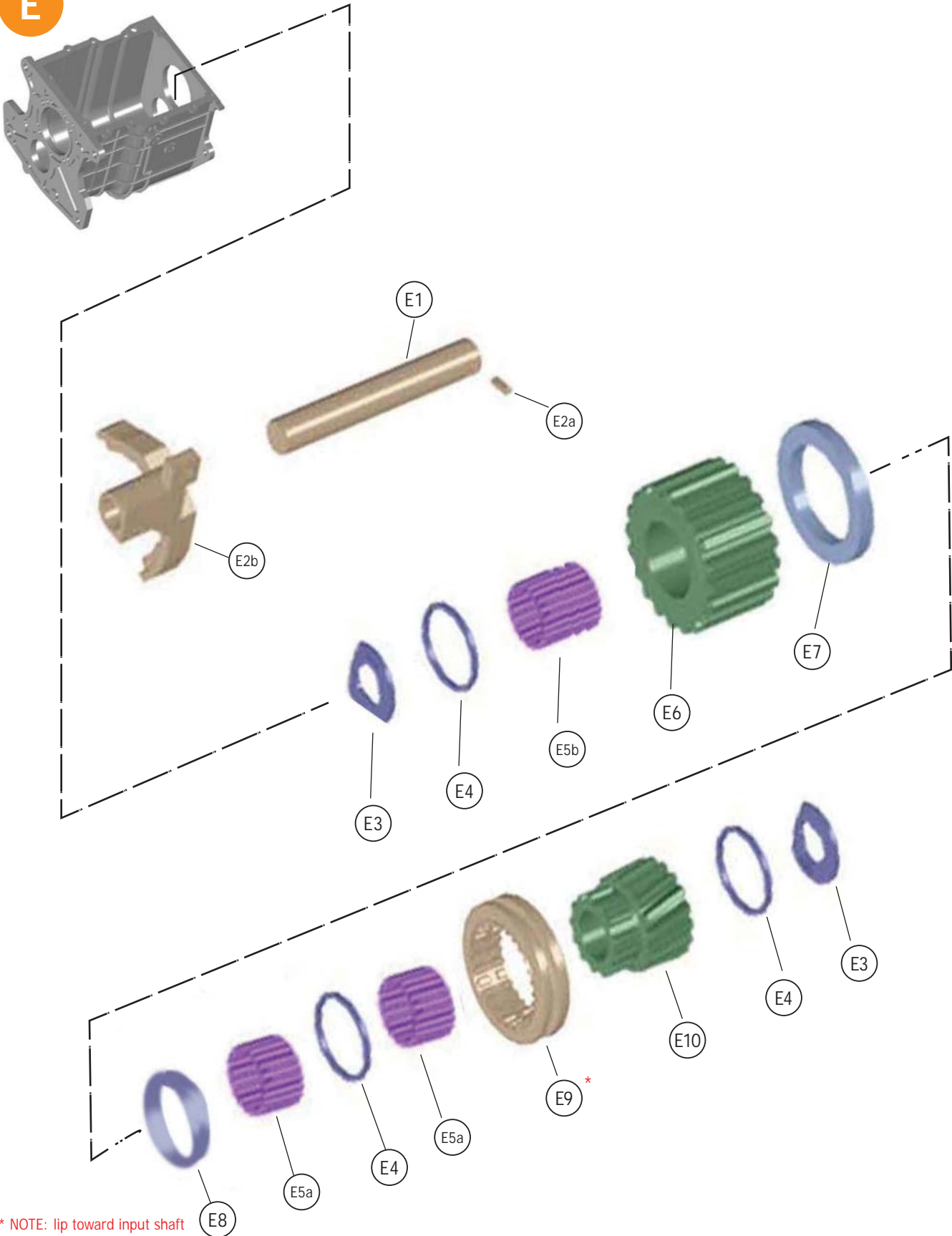


Item	Qty.	DESCRIPTION	<i>TCET4615 (FORD)</i>	<i>TCET4616 (GM)</i>	<i>TCET5201 (FORD)</i>	<i>TCET4617 (FORD)</i>	<i>TCET4618 (GM)</i>	<i>TCET5008 (FORD)</i>	<i>TCET5009 (GM)</i>
D1	1	O-Ring, C/S Front Cup	2606258	2606258	2606258	2606258	2606258	2606258	2606258
D2	1	Retainer, Front C/S Bearing	2606195	2606195	2606195	TCRB5175	TCRB5175	TCRB5175	TCRB5175
D3	NSS	Bearing Cup (Use D5)	—	—	—	—	—	—	—
D4	NSS	Bearing Cone (Use D5)	—	—	—	—	—	—	—
D5	2	Assy, Bearing/Cup Front C/S	2605786	2605786	2605786	2605786	2605786	2605786	2605786
D6	1	Ball, Steel	10J00006	10J00006	10J00006	10J00006	10J00006	10J00006	10J00006
D7	1	Countershaft, One Piece	TCCF3435	TCCF3435	TCCF3435	TCCF4282	TCCF4282	TCCF4282	TCCF4282
D8	1	Bearing, C/S To Case	2606087	2606087	2606087	2606087	2606087	2606087	2606087
D9	1	Thrust Washer Fifth Gear	2606118	2606118	2606118	2606118	2606118	2606118	2606118
D10	NSS	Gear-Hub Fifth Assy (Use D18)	—	—	—	—	—	—	—
D11	3	Insert, Synchronizer (3 Per Synchro)	2604372	2604372	2604372	2604372	2604372	2604372	2604372
D12	2	Spring, Synchronizer (2 Per Synchronizer)	2605117	2605117	2605117	2605117	2605117	2605117	2605117
D13	NSS	Collar, Fifth Synchronizer (Use D18)	—	—	—	—	—	—	—
D14	86	Bearing, Needle (Individual)	2602661	2602661	2602661	2602661	2602661	2602661	2602661
D15	1	Spacer, Roller Bearing	2606092	2606092	2606092	2606092	2606092	2606092	2606092
D16	1	Ring, Synchronizer Blocker	2605124	2605124	2605124	2605124	2605124	2605124	2605124
D17	1	Fifth Gear Clutch Cone	2606091	2606091	2606091	2606091	2606091	2606091	2606091
D18	1	Assy, Fifth Gear and Synchronizer	TCES4626 .68	TCES4626 .68	TCES4626 .68	TCES4745 .82	TCES4745 .82	TCES4626 .64	TCES4626 .64
D19	NSS	Shim, Rear Countershaft*	—	—	—	—	—	—	—

\* Kit Part #2670741 (See page 18 for kit contents)

# Reverse Gears

E

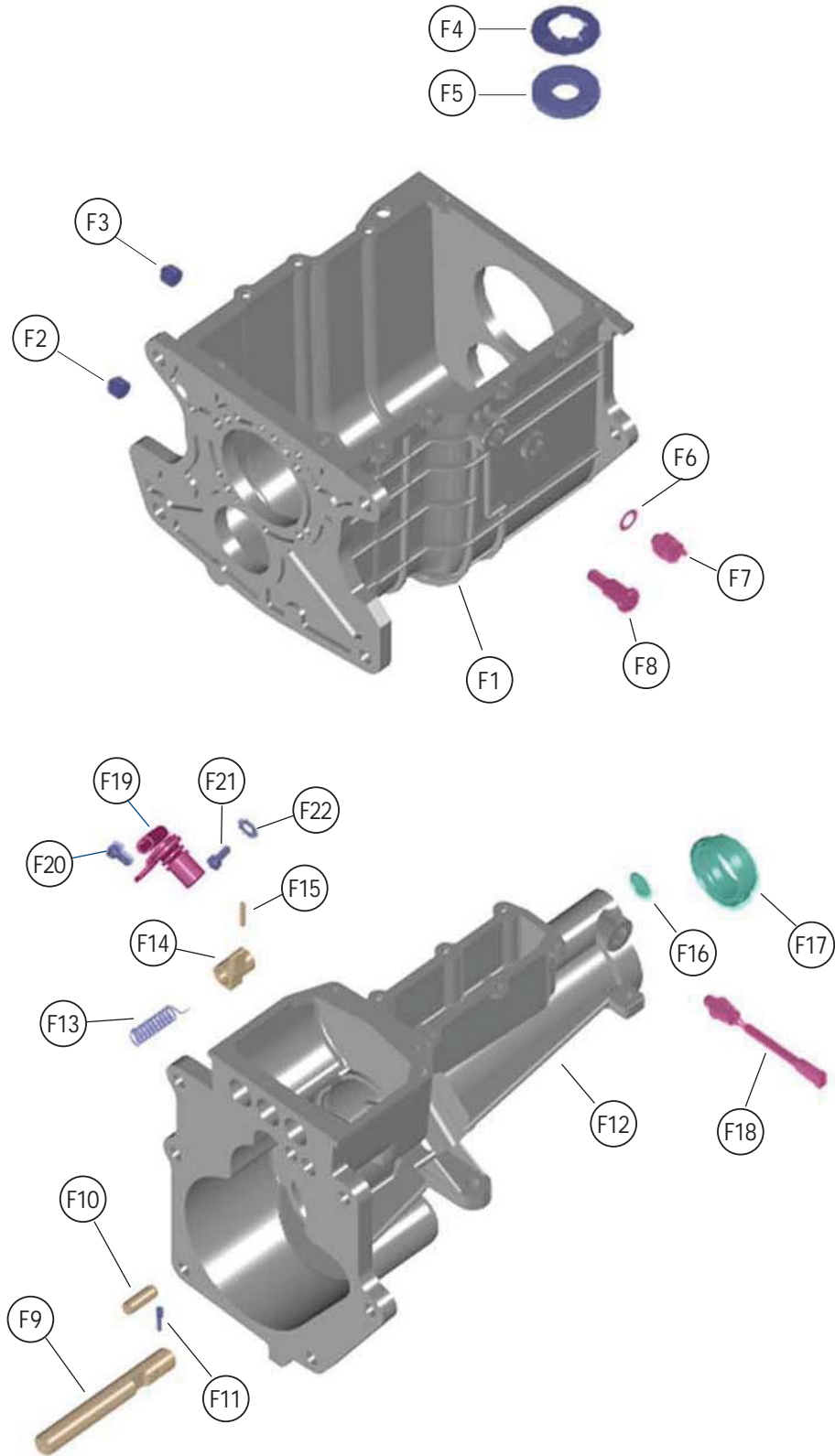


\* NOTE: lip toward input shaft

Item	Qty.	DESCRIPTION	TCET4615 (FORD)	TCET4616 (GM)	TCET5201 (FORD)	TCET4617 (FORD)	TCET4618 (GM)	TCET5008 (FORD)	TCET5009 (GM)
E1	1	Shaft, Reverse Gear	2605793	2605793	2605793	2605793	2605793	2605793	2605793
E2a	1	Pin Reverse Shaft	14J2524	14J2524	14J2524	14J2524	14J2524	14J2524	14J2524
E2b	1	Assy, Fifth Shift Fork	TCEC4270	TCEC4270	TCEC4270	TCEC4270	TCEC4270	TCEC4270	TCEC4270
E3	2	Thrust Washer, Reverse Idler	2603695	2603695	2603695	2603695	2603695	2603695	2603695
E4	3	Spacer, Roller Bearing	2606465	2606465	2606465	2606465	2606465	2606465	2606465
E5a	44	Bearing, Needle - Front/Mid Reverse Idler	2602661	2602661	2602661	2602661	2602661	2602661	2602661
E5b	22	Bearing, Needle - Front Reverse Idler	2605797	2605797	2605797	2605797	2605797	2605797	2605797
E6	1	Gear, Reverse	2606094	2606094	2606094	2606094	2606094	2606094	2606094
E7	1	Thrust Washer Reverse Idler	2605795	2605795	2605795	2605795	2605795	2605795	2605795
E8	1	Spacer, Roller Bearing	2606466	2606466	2606466	2606466	2606466	2606466	2606466
E9	1	Coller, Reverse Gear	2605800	2605800	2605800	2605800	2605800	2605800	2605800
E10	1	Gear, Reverse Idler	2606093	2606093	2606093	TCEN4281	TCEN4281	TCEN4281	TCEN4281

# Case and Extension

F





Item	Qty.	DESCRIPTION	TCET4615 (FORD)	TCET4616 (GM)	TCET5201 (FORD)	TCET4617 (FORD)	TCET4618 (GM)	TCET5008 (FORD)	TCET5009 (GM)
F1	1	Assy, Transmission Case	2606106	TCEP2058	2606106	2606106	TCEP2058	2606106	TCEP2058
F2	1	Plug, Drain	10F000008	10F000008	10F000008	10F000008	10F000008	10F000008	10F000008
F3	1	Plug, Fill	10F000008	10F000008	10F000008	10F000008	10F000008	10F000008	10F000008
F4	1	Retainer, Magnet Lock*	2603939	2603939	2603939	2603939	2603939	2603939	2603939
F5	1	Magnet, Case*	2602631	2602631	2602631	2602631	2602631	2602631	2602631
F10	1	Dowel, Extension HSG to Case*	2604636	2604636	2604636	2604636	2604636	2604636	2604636
F6	1	Gasket, Back Up Switch	2605032	2605032	2605032	2605032	2605032	2605032	2605032
F7	1	Reverse Switch	2606249	2606249	2606249	2606249	2606249	2606249	2606249
F8	1	Pin, Pivot - Reverse	2604720	2604720	2604720	2604720	2604720	2604720	2604720
F9	1	Shaft, Reverse Idler	2606095	2606095	2606095	2606095	2606095	2606095	2606095
F10	1	Dowel, Extension HSG to Case	2604636	2604636	2604636	2604636	2604636	2604636	2604636
F11	1	Set Screw, Inhibitor	6501092	6501092	6501092	6501092	6501092	6501092	6501092
F12	1	Assy, Extension Housing and Bushing	TCEP4307	TCEP5089	TCEP4307	TCEP4307	TCEP5089	TCEP4307	TCEP5089
F13	1	Spring, Reverse Inhibitor	2605832	2605832	2605832	2605832	2605832	2605832	2605832
F14	1	Reverse Inhibitor	2605831	2605831	2605831	2605831	2605831	2605831	2605831
F15	1	Pin, Reverse Inhibitor	2603897	2603897	2603897	2603897	2603897	2603897	2603897
F16	1	Plug, Rear Extension	12F000015	12F000015	12F000015	12F000015	12F000015	12F000015	12F000015
F17	1	Seal, Extension Housing Rear	TCSJ1277	TCSJ1277	TCSJ1277	TCSJ1277	TCSJ1277	TCSJ1277	TCSJ1277
F18	1	Neutral Safety Switch	2606244	2606244	2606244	2606244	2606244	2606244	2606244
F19	1	Sensor, Electric Speedo	4400-640-019	TNSW1137	4400-640-019	4400-640-019	TNSW1137	4400-640-019	TNSW1137
F20	1	Plug, Mechanical Speedo Opening	TCTA5707	TCTA5707	TCTA5707	TCTA5707	TCTA5707	TCTA5707	TCTA5707
F21	6	Bolt, Extension To Case	1C000728	1C000728	1C000728	1C000728	1C000728	1C000728	1C000728
F22	6	Washer, Star - Extension To Case	5E000007	5E000007	5E000007	5E000007	5E000007	5E000007	5E000007

\* Included in Case Assembly

## Part Kits

### TCKT5954 Major Overhaul Kit

Part no.	Illustration	Description	Qty.
235382	C3	Bearing, Thrust	1
2602650	C16	Snap Ring	2
2602661	E5a	Bearing, Roller - Front/Middle Reverse Idler	44
2602661	D14	Bearing, Roller (Individual)	86
2603865	B3	Seal, Input Shaft Retainer	1
2603965	A51	Clip, Wave "E"	1
2604342	A48	Pin, Roll - Reverse/O/D Actuator	1
2604502	C33	Snap Ring, Speedo Gear	1
2605700	C27	Assy, Bearing - Output Shaft to Case (includes C25 and C26)	1
2605766	C2	Thrust Washer	1
2605767	C4	Thrust Washer	1
2605786	D5	Assy, Bearing/Cup Front & Rear C/S	2
2605797	E5b	Bearing, Roller - Front Reverse Idler	22
2605812	A5	O-Ring, Shift Rail Guides	9
2605858	A43	Bearing, Shift Rail Support	2
2606064	B7	Assy, Bearing - Input Shaft to Case (includes B5 and B6)	1
2606075	C12	Caged Needle Bearing	2
2606087	D8	Bearing, C/S To Case	1
2606109	C21	Caged Needle Bearing	1
2606465	E4	Spacer, Roller Bearing	3
2606466	E8	Spacer, Roller Bearing	1
2670741	-	Shim Set/Kit	1
1000-043-016	A9, A20, A39, A50	Pin, Shift Lug - Roll	7
1332-131-001	B9	Bearing, Input Shaft Pocket	17
14J1822	A14	Pin, Shift Lug - Roll	1
TCSJ1277	F17	Seal, Extension Housing Rear	1

**TCKT5953 Small Parts Kit**

Part no.	Description	Qty.
2602650	Snap Ring	2
2603965	Clip, Wave "E"	1
2604342	Pin, Roll - Reverse/O/D Actuator	1
2604502	Snap Ring, Speedo Gear	1
2605766	Thrust Washer	1
2605767	Thrust Washer	1
2605812	O-Ring, Shift Rail Guides	9
2606339	Snap Ring	1
2606465	Spacer, Roller Bearing	3
2606466	Spacer, Roller Bearing	1
1000-043-016	Pin, Shift Lug - Roll	7
10J00006	Ball	3
10J000012	Ball	3
14J1822	Pin, Shift Lug - Roll	1

**2670739 Assy, Synchro 1-2, w/Rings**

2602648	Synchronizer Insert	3
2605117	Synchronizer Spring	2
2605124	Ring, Synchronizer Blocker	2
2606071	Assy, Reverse Gear, One-Two Synchronizer	1
2606072	1st & 2nd Synchronizer Hub	1
2606073	First-Second Synchronizer Sleeve	1

**2670740 Assy, Synchro - 3-4, w/Rings**

2604372	Synchronizer Insert	3
2605117	Synchronizer Spring	2
2605124	Ring, Synchronizer Blocker	2
2605764	Third-Fourth Synchronizer Sleeve	1
2606082	Assy, Third-Fourth Synchronizer	1
2606083	3rd & 4th Synchronizer Hub	1

## Part Kits

### 2670741 Shim Kit

Part no.	Description	Qty.
2605789	Shim, Rear Countershaft .004	1
2605790	Shim, Rear Countershaft .007	1
2605791	Shim, Rear Countershaft .020	1
2605792	Shim, Rear Countershaft .035	1
2606066	Shim, Front Bearing Retainer .016	1
2606067	Shim, Front Bearing Retainer .020	1
2606068	Shim, Front Bearing Retainer .024	1
2606069	Shim, Front Bearing Retainer .023	1

### TCKT5956 Assy, Synchro Fifth Gear w/ Rings (.64 OR .68 O/D)

2604372	Synchronizer Insert	3
2605117	Synchronizer Spring	2
2605124	Ring, Synchronizer Blocker	1
2605780	Collar, Fifth Synchronizer	1
2605783	Fifth Speed Hub	1
TCEE4625	Fifth Countershaft Gear Assy	1
TCEN4624	Fifth Gear Countershaft	1
TCES4626	Assy, Fifth Gear and Synchronizer (.64 OR .68 O/D)	1

### TCKT5957 Synchro Fifth Gear w/ Rings (.82 O/D)

2604372	Synchronizer Insert	3
2605117	Synchronizer Spring	2
2605124	Ring, Synchronizer Blocker	1
2605780	Fifth Synchronizer Sleeve	1
2605783	Fifth Speed Hub	1
TCEE4744	Fifth Countershaft Gear Assy	1
TCEN4743	Fifth Gear Countershaft	1
TCES4745	Assy, Fifth Gear and Synchronizer (.82 O/D)	1

Show off your TREMEC™ transmission with a new TREMEC Shift Ball. Inscribed with the esteemed TREMEC logo, these shift balls are available with a 5 speed pattern for the popular T-5, TR-3650, and TKO, or a 6 speed pattern for the T-56, TR-6060, and the new T-56 Magnum. All Shift Balls include thread adaptors, thread locker, and jam nuts to fit most shift handles (Please specify SAE or Metric.)

## 5 Speed

**Color/Finish      Part No.      Thread Type**

Brushed Aluminum

	5BR-SX 5BR-MX	SAE Metric
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Polished Aluminum

	5PO-SX 5PO-MX	SAE Metric
--	------------------	---------------

Black

	5BL-SX 5BL-MX	SAE Metric
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White

	5WH-SX 5WH-MX	SAE Metric
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## 6 Speed

**Color/Finish      Part No.      Thread Type**

Brushed Aluminum

	6BR-SX 6BR-MX	SAE Metric
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Polished Aluminum

	6PO-SX 6PO-MX	SAE Metric
---	------------------	---------------


Black

	6BL-SX 6BL-MX	SAE Metric
--	------------------	---------------





White

	6WH-SX 6WH-MX	SAE Metric
--	------------------	---------------



Thread Adapter (included with every shift ball)

	Part No.	Type	Internal Thread Adapters	Ball I.D. Thread
	M-999-13	SAE	.312 x 18, .375 x 16, .375 x 24, .50 x 24	M16 x 1.5
	M-999-14	Metric	M10 x 1.25, M12 x 1.75	

## Shift Location Conversion Kits

	Description	Part Number	Height	Note
	Offset Shift Lever (Low Profile)	30-17-2X	2.375"	Can be mounted at 19.5" or 16.75" from face of transmission. Shift lever can be easily switched to alternative side.
	Mid Shift Conversion Kit	30-17-4X	3.5"	Use to move your shift lever to the Mid Shift point at 12.68" from face of transmission.  Includes Conversion Instructions, Shift Lever Assembly with boot, new 3/4 lug, and cover for the rear shift lever opening.
	Front Shift Conversion Kit	TCKT1960	3.5"	Use to move your shift lever to the Front Shift point at 7.03" from face of transmission.  Includes Conversion Instructions, Shift Lever Assembly with boot, shift rails and lugs, and cover for the rear shift lever opening.
	Rear Shift Cover	TCPT5706		Included in Midshift and Front Shift conversion kits.




## Clutch Housing (Ford vehicles only)

	Engine	Part Number	Pilot Dia	Includes
	4.6L/5.4L	TCCM1899	4.85"	M-96-1 Clutch Fork Cover & Mounting Screws 4 Transmission Mounting Bolts
	5.0L/5.8L	D9CZ-6392-C	4.85"	1.9685" Ball Stud, Part # 1381-146-001 (installed) 4 Transmission Mounting Bolts

### Installation Precautions

Always remember to check transmission to clutch housing to engine fit. The clutch housing pilot will need to be dial indicated into the crank shaft to ensure proper alignment. Check the input shaft to pilot bearing fit, and the depth of the input shaft pilot to the crankshaft pilot bore to ensure clearance & proper alignment of the input shaft. TTC is not responsible for installation errors or damage as the result of failure to check fitment of transmission to engine and vehicle.

## Miscellaneous Transmission Components

	Description	Part Number	Dimensional Info	Note
	Ball Stud	1381-146-001	1.9685"	Must use with lockwasher to ensure proper pivot height
	Ball Stud	TNTN1261	1.476"	Must use with lockwasher to ensure proper pivot height
	Lock Washer, Ball Stud	1381-050-001	1/2"	For use with Ball Stud

## Miscellaneous Transmission Components

	Description	Part Number	Dimensional Info.	Note
	Mounting Bolt, Clutch Housing	57661-52	7/16 x 1½	Transmission to Clutch Housing
	Clutch Fork Cover	M-96-1		Fits TCMM1899 Clutch Housing. Includes 2 mounting screws
	Mechanical Speedo Plug Kit	30-360-1X		Use to seal mechanical speedo opening on TKO transmission when electronic speedo is used
	Short Shaft Kit	TCKT5727	10 Spline, 1 1/16" Pilot, .669" Pilot	Used for FE Engine. Includes Input Shaft & Front Bearing Retainer and Seal
	Short Shaft Kit	TCKT5729	26 Spline, 1 1/16" Pilot, .669" Pilot	Used for FE Engine. Includes Input Shaft & Front Bearing Retainer and Seal
	Slip Yoke	2-3-6041X	1330 Series, 31 Spline	Fits TKO-500 & TKO-600 Transmission
	Thread Locker, Shift Ball	545080-1	.05 CC	Included in Shift Ball Thread Adapter kits
	Gasket Eliminator	2670644	50 CC	Anerobic Gasket Eliminator