

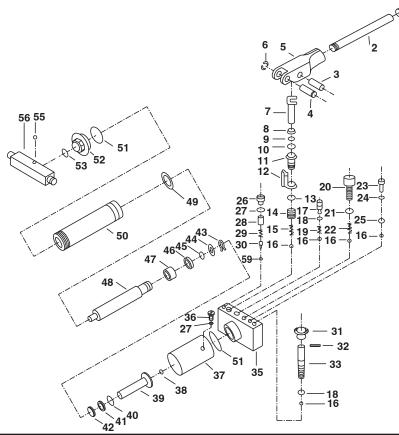
Parts List & Operating Instructions for:

1521

Low Lift Transmission Jack

Max. Capacity: 1,000 lbs. (500 kg)

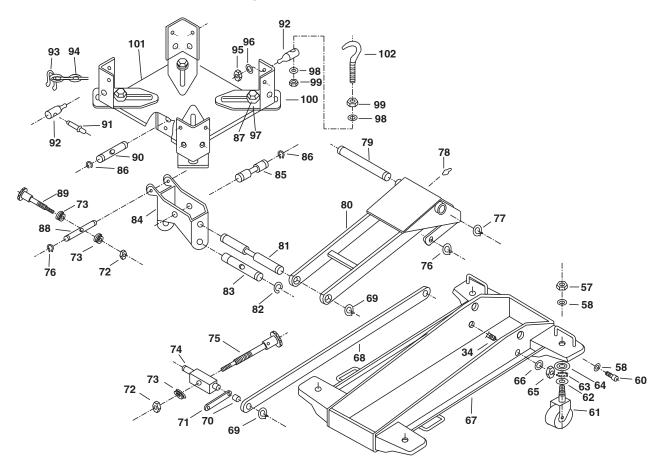
Hydraulic Unit Hardware and Handle



Parts List

ltem	No.		ltem	No.		ltem	No.	
Part No.	Reqd.	Description	Part No.	Reqd.	Description	Part No	. Reqd.	Description
1	1	Handle Grip	19	1	Spring	37	1	Reservoir
2	1	Handle	20	1	Screw	38	1	O-ring
3	1	Rivet	21	1	Seal Ring	39	1	Ram
4	1	Rivet	22	1	Spring	40	1	Retaining Ring
5	1	Socket	23	1	Screw	41	1	O-ring
6	1	Snap Ring	24	1	Seal Ring	42	1	Y-ring
7	1	Plunger	25	1	Ball	43	1	Retaining Ring
8	1	Wiper	26	1	Screw	44	1	Washer
9	1	Back-up Ring	27	1	O-ring	45	1	O-ring
10	1	O-ring	28	1	Screw	46	1	Retaining O-ring
11	1	Pump	29	1	Spring	47	1	Bushing
12	1	Pump Seat	30	1	Ball Seat	48	1	Piston Rod
13	1	Seal Ring	31	1	Knob	49	1	O-ring
14	1	Screw	32	1	Pin			Continued 🕸
15	1	Spring	33	1	Release Rod			Continued 🕬
16	5	Ball	34	2	Bolt			
17	1	Screw	35	1	Valve Block			
18	2	O-ring	36	1	Oil Fill Plug			

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Hydraulic Unit Base

Parts List contd.

ltem	No.		ltem	No.	
Part No.	Reqd.	Description	Part No.	Reqd.	Description
50	1	Cylinder	77	2	Snap Ring
51	2	Seal Ring	78	1	Grease Fitting
52	1	Cylinder Nut	79	1	Shaft Arm
53	1	O-ring	80	1	Lifting Arm Assembly
55	1	Pin	81	1	Axle
56	1	Link Rod	82	2	Retaining Ring
57	4	Nut	83	1	Axle
58	6	Lock Washer	84	1	Saddle Base
59	1	Ball	85	1	Axle
60	2	Screw	86	4	Snap Ring
61	4	Caster Assembly	87	4	Screw
62	4	Lower Plate	88	1	Axle
63	80	Ball	89	1	Screw
64	4	Upper Plate	90	1	Axle
65	2	Nut	91	2	Chain Screw
66	2	Lock Washer	92	4	Hook Guide
67	1	Side Plate	93	2	Chain Connector
68	2	Long Link Rod	94	2	Chain
69	4	Snap Ring	95	4	Nut
70	2	Spacer	96	4	Washer
71	2	Short Link Rod	97	4	Washer
72	2	Nut	98	4	Washer
73	3	Thrust Bearing	99	4	Nut
74	1	Guide Axle	100	4	Containing Angle
75	1	Screw	101	1	Saddle
76	4	Snap Ring	102	1	Chain Hook

Parts List & Operating Instructions

Form No. 527900

Repair Kits

Item		Description	lten
		Description	No No
	ter K 52790	AIT 01 includes:	Hyo No.
57	1	Nut	7
58	1	Lock Washer	8
61	1	Caster Assembly	9
62 63	1 20	Lower Plate Ball	10 11
64	1	Upper Plate	12
			13
	in K		14
		04 includes:	15
91 92	2 4	Chain Screw Hook Guide	16 17
93	2	Chain Connector	18
94	2	Chain	19
95	4	Nut	20
96 98	4 4	Washer Washer	21 22
99	4	Nut	23
102	1	Chain Hook	24
-			25
		Fitting 10 includes:	26
NO. 3	1	Grease Fitting	27 28
10		Groubor haing	29
	dle I		30
		03 includes:	31
1	1	Handle Grip Handle	32 33
2	•	Harraio	35
		Pivot Kit	36
		17 includes:	37
3 4	1	Rivet Rivet	38 39
5	1	Socket	40
6	1	Snap Ring	41
Used			42
Пуа Наго	raun dwar	ic Unit e Kit	43 44
		18 includes:	45
		Ball	46
17	1	Screw	47
18 19	1 1	O-ring Spring	48 49
20	1	Screw	50
21	1	Seal Ring	51
22	1	Spring	52
23	1	Screw	53
24 25	1 1	Seal Ring Ball	59
26	1	Screw	Loa
27	1	O-ring	No.
28	1	Screw	55 56
29 30	1	Spring Ball Seat	56 76
59	1	Ball	70
			Mai

ltem No.	Qty.	Description
lydi	rauli	c Unit Kit
l o . 5		1 includes:
7	1	Plunger
8	1	Wiper
9	1	Back-up Ring
10 11	1 1	O-ring Pump
12	1	Pump Seat
13	1	Seal Ring
14	1	Screw
15	1	Spring
16	5	Ball
17	1	Screw
18	2	O-ring
19	1	Spring
20 21	1 1	Screw Seal Ring
≤1 22	1	Spring
23	1	Screw
24	1	Seal Ring
25	1	Ball
26	1	Screw
27	2	O-ring
28	1	Screw
29	1	Spring
30 31	1	Ball Seat Knob
32	1	Pin
33	i	Release Rod
35	1	Valve Block
36	1	Oil Fill Plug
37	1	Reservoir
38	1	O-ring
39	1	Ram
40	1 1	Retaining Ring
41 42	1	O-ring Y-ring
43	1	Retaining Ring
44	1	Washer
45	1	O-ring
46	1	O-ring Retaining
47	1	Bush
48	1	Piston Rod
49	1	O-ring
50 51	1 2	Cylinder Seal Ring
52	1	Cylinder Nut
53	i	O-ring
59	1	Ball
		ock Kit
		3 includes:
55 56	1	Pin Link Rod
56 76	2	Snap Ring
10	4	Shap hing

Main Pivot Pin Kit No. 528674 includes:

77 2 Snap Ring Shaft Arm 79 1

ltem No.	Qty.	Description	ltem No. Qt
Pivot	Sc	rew (Long) Kit	Reserv
		06 includes:	No. 527
70	2	Spacer	37 1
71	2	Short Link Rod	51 2
72	1	Nut	52 1
73	1	Thrust Bearing	53 1
74	1	Guide Axle	
75	1	Screw	Saddle
82	2	Retaining Ring	No. 527
83	1	Axle	101 1
Pivot	Sc	rew (Short) Kit	Saddle
)7 includes:	No. 527
72	2	Nut	87 1
73	3	Thrust Bearing	97 1
76	4	Snap Ring	100 1
86	4	Snap Ring	Coddle
88	1	Axle	Saddle
89 90	1 1	Screw Axle	No. 527 34 2
90	1	AXIE	65 2
Dum	n 91	tation Kit	66 2
		13 includes:	68 2
7	1	Plunger	69 2
8	1	Wiper	00 2
9	i	Back-up Ring	Saddle
10	1	O-ring	No. 527
11	1	Pump	69 2
12	1	Pump Seat	81 1
13	1	Seal Ring	84 1
14	1	Screw	85 1
15 16	1 1	Spring Ball	86 2
	•	Dall	Seal K
Ram			No. 527
	2791	<pre>16 includes:</pre>	8 1
38	1	O-ring	9 1
39	1	Ram	10 1
40	1	Retaining Ring	13 1
41	1	O-ring	18 2
42	1	Y-ring	21 1
43	1	Retaining Ring	24 1
44	1	Washer	27 2
45 46	1 1	O-ring	36 1 38 1
46 47	1	O-ring Retaining Bush	38 1 40 1
47 48	1	Piston Rod	40 1
40 49	1	O-ring	41 1
49 50	1	Cylinder	42 1
50		Cymrucer Cymrucer	

Release Valve Kit

Seal Ring

O-ring

No. 527914 includes:

16 1 Ball O-ring 18 1

2

1

51

53

- 31 1 Knob
- 32 1 Pin
- Release Rod 33 1

ty. Description voir Kit 7915 includes: 1 Reservoir 2 Seal Ring Cylinder Nut 1 O-ring 1 е 7902 includes: 1 Saddle e Angle Kit 7905 includes:

- Screw 1 Washer 1
- 1 **Containing Angle**

e Level Arms Kit

). t	52790	J9 Includes:			
4	2	Bolt			
5	2	Nut			
6	2	Lock Washer			
8	2	Long Link Rod			
9	2	Snap Ring			
addle Pivot Base Kit					

7908 includes: 2 Snap Ring Axle 1 Saddle Base 1 Axle 1 Snap Ring

2

(it 7912 includes:

NO.	52791	2 includes:
8	1	Wiper
9	1	Back-up Ring
10	1	O-ring
13	1	Seal Ring
18	2	O-ring
21	1	Seal Ring
24	1	Seal Ring
27	2	O-ring
36	1	Oil Fill Plug
38	1	O-ring
40	1	Retaining Ring
41	1	O-ring
42	1	Y-ring
43	1	Retaining Ring
44	1	Washer
45	1	O-ring
46	1	O-ring Retaining
49	1	O-ring
51	2	Seal Ring
53	1	O-ring

Safety Precautions



WARNING: To prevent personal injury and/or property damage,



- Study, understand, and follow all instructions before operating this device. If the operator cannot read or understand these operating instructions and safety precautions, they must be read and discussed in the operator's native language.
- Wear eye protection that meets ANSI Z87.1 and OSHA standards.
- Use only on hard, level surfaces.
 - Inspect the jack before each use; do not use the jack if it is damaged, altered, or in poor condition.
 - No alterations shall be made to this product unless approved by OTC. If a modification is needed, contact OTC Technical Services.



- Use of this product is limited to the removal, installation, and transportation in the lowered position of only automotive or truck transmissions.
- Do not exceed the rated capacity of 1,000 lbs. (500 kg).
- Adequately support the vehicle before starting repairs.
- Stay out from underneath the load at all times.
- Secure the load to the jack.
- Lower the jack slowly and carefully while watching the position of the load.
- SLOWLY AND CAREFULLY move the jack around corners.
- Use only approved hydraulic fluid (Chevron AW Hydraulic Oil MV or equivalent). The use of alcohol or hydraulic brake fluid could damage seals and result in jack failure.

Operating Instructions

- 1. Position the jack under the transmission.
- 2. Close the control valve.
- 3. Operate the pump handle to raise the boom and align the mounting plate with the transmission.
- 4. Remove the transmission according to the instructions in the vehicle service manual.
- 5. Position the transmission on the mounting plate, resting against the angle plates.
 - The mounting plate may be tilted forward and backward by turning the tilt knob.
 - The mounting plate may be tilted side-to-side by adjusting the two vertical hex head cap screws.
- 6. Secure the transmission to the mounting plate.
- 7. Lower the load by slowly opening the control valve. The control valve regulates how fast the boom is lowered.

Parts List & Operating Instructions

Preventive Maintenance

IMPORTANT: Dirt is the greatest single cause of failure in hydraulic units. Keep the jack clean and well lubricated to prevent foreign matter from entering the system. If the jack has been exposed to rain, snow, sand, or grit, it must be cleaned before it is used.

- 1. Store the jack in a well-protected area where it will not be exposed to corrosive vapors, abrasive dust, or any other harmful element.
- 2. Regularly lubricate the moving parts.
- 3. Replace the oil in the reservoir at least once per year. To check the oil level, place the jack on level ground and lower the lift arm completely. Remove the filler plug. The oil level should be within 3/8" of the filler plug hole. If necessary, add approved anti-wear hydraulic jack oil, and install the filler plug again. IMPORTANT: Use only approved hydraulic fluid (Chevron AW Hydraulic Oil MV or equivalent). The use of alcohol or hydraulic brake fluid could damage seals and result in jack failure.
- 4. Inspect the jack before each use. Take corrective action if any of the following problems are found:
 - a. Cracked or damaged housing
 - b. Excessive wear, bending, or other damage
 - c. Leaking hydraulic fluid
 - d. Scored or damaged piston rod

- e. Malfunctioning swivel heads or adjusting screws
- f. Loose hardware
- g. Modified or altered equipment

Troubleshooting Guide

Repair procedures must be performed in a dirt-free environment by qualified personnel who are familiar with this equipment.

Trouble	Cause	Solution
Jack does not lift	 Release valve is open Low/no oil in reservoir Air-locked system Load is above capacity of jack Delivery valve and/or bypass valve not working correctly Packing worn out or defective 	 Close release valve. Fill with oil and bleed system. Bleed system. Use correct equipment. Clean to remove dirt or foreign matter. Replace oil. Replace power unit.
Jack lifts only partially	1. Too much or not enough oil	1. Check oil level.
Jack advances slowly	 Pump not working correctly Leaking seals 	1. Replace power unit. 2. Replace power unit.
Jack lifts load, but doesn't hold	 Cylinder packing is leaking Valve not working correctly (suction, delivery, release, or bypass) Air-locked system 	 Replace power unit. Inspect valves. Clean and repair seat surfaces. Bleed system.
Jack leaks oil	1. Worn or damaged seals	1. Replace power unit.
Jack will not retract	1. Release valve is closed	1. Open or clean release valve.
Jack retracts slowly	 Cylinder damaged internally Link section is binding 	1. Send jack to OTC authorized service center for repair. 2. Lubricate link section.