



655 Eisenhower Drive Owatonna, MN 55060 USA Phone: (507) 455-7000 Tech. Serv.: (800) 533-6127 Fax: (800) 955-8329

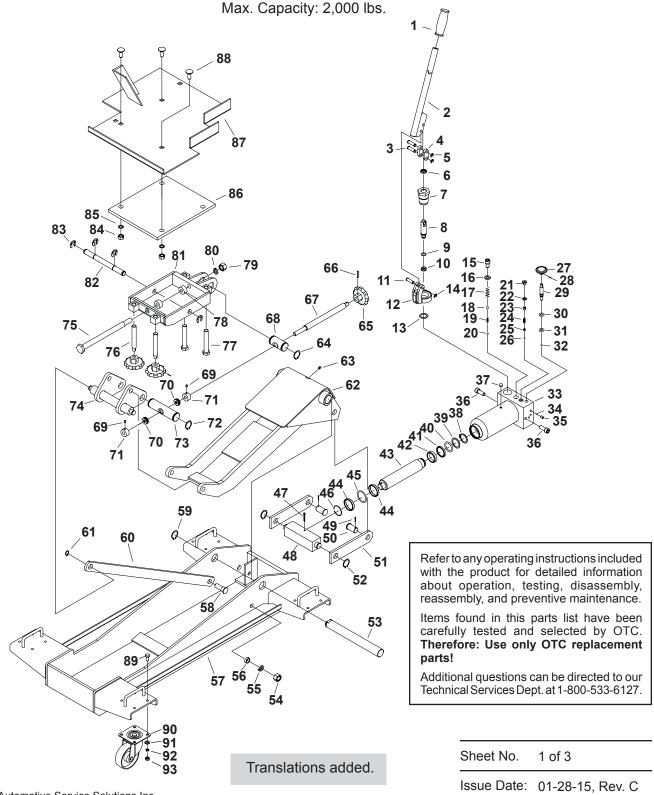
Order Entry: (800) 533-6127 Fax: (800) 283-8665

International Sales: (507) 455-7223

Fax: (507) 455-7063

Parts List &
Operating Instructions
for:
1522A

## **Low Lift Transmission Jack**



# Parts List

Item	Ot	Description	Item	04	Description
<u>No.</u>	<u>Qty.</u> 1	Description Handle Sleeve	<u>No.</u>	Qty. 1	Description Connecting Block
2	1	Handle	49	2	Pin
3	2	Pin	50	2	Shaft
4	2 2	Rod Joint	51	2	Rod Link
5	2	Snap Ring	52	2	Snap Ring
6 7	1	Dustproof	53 54	1 2	Shaft
8	1 1	Pump Cylinder Pump Plunger	54 55	2	Nut Lock Washer
9	1	O-ring	56	2	Washer
10	i	Y-seal	57	1	Frame
11	1	Pin	58	2	Shaft
12	1	Pump Seat	59	1	Snap Ring
13	1 1	Copper Washer	60 61	2	Connecting Bar
14 15	1	Snap Ring Bolt	62	2 1	Snap Ring Arm
16	1	Copper Washer	63	1	Oil Nipple
17	1	Spring	64	4	Snap Ring
18	1	Steel Ball	65	3	Knob
19	1	Spring	66	3	Pin
20 21	1 1	Steel Ball	67 68	1 1	Screw Shaft
22	1	Bolt Sealing Washer	69	2	Screw
23	1	Screw	70	2	Bearing
24	1	Spring	71	2	Bushing
25	1	Ball Seat	72	4	Snap Ring
26	1	Steel Ball	73	1	Shaft
27 28	1 1	Release Knob Pin	74 75	1 1	Bracket Bolt
20 29	1	Oil Release Valve Rod	75 76	2	Screw
30	1	O-ring	77	2	Bolt
31	1	O-ring	78	2	Bushing
32	1	Steel Ball	79	1	Nut
33	1	Oil Cylinder Assembly	80	1	Lock Washer
34 35	3 3	Steel Ball Screw	81 82	1 1	Bracket Shaft
36	2	Bolt	83	4	Snap Ring
37	1	Oil Filler Plug	84	3	Nut
38	1	Snap Ring	85	3	Washer
39	1	O-ring Retainer	86	1	Fixing Board
40	1	O-ring	87	1	Saddle
41 42	1 1	Sealing Washer Piston Ring	88 89	3 16	Bolt Bolt
42	1	Piston Rod	90	4	Swivel Caster
44	2	Bushing	91	<del>1</del> 6	Flat Washer
45	1	O-ring	92	16	Lock Washer
46	1	Snap Ring	93	16	Nut
47	1	Pin			

## **Replacement Parts Kits**

Item No.	Qtv.	Description	Item No.	Qtv.	Description	Item No.	Qtv.	Description
		t No. 529028					_	•
89	4	Bolt	6 7	1 1	Dustproof Pump Cylinder		52903	
90	1	Swivel Caster	8	1	Pump Plunger	47 48	1 1	Pin Connecting Block
91	4	Flat Washer	9	1	O-ring	49	2	Pin
92	4	Lock Washer	10	i	Y-seal	50	2	Shaft
93	4	Nut	11	i	Pin	51	2	Rod Link
			12	<u>i</u>	Pump Seat	52	2	Snap Ring
Hane	dle Ki	it No. 529029	13	1	Copper Washer	53	1	Shaft
1	1	Handle Sleeve	14	1	Snap Ring	54	2	Nut
2	1	Handle	15	1	Bolt	55	2	Lock Washer
3	2	Pin	16	1	Copper Washer	56	2	Washer
4	2	Rod Joint	17	1	Spring	58	2	Shaft
5	2	Snap Ring	18	1	Steel Ball	59	1	Snap Ring
		101.11	19	1	Spring Stool Boll	60	2	Connecting Bar
Hardware Kit No. 529034		20 21	1 1	Steel Ball Bolt	61	2	Snap Ring	
47 49	1 2	Pin	22	1	Sealing Washer	Sada	lla Ki	t No. 529030
52	2	Pin Snap Ring	23	i	Screw	74	1 1	Bracket
54	2	Nut	24	<u>i</u>	Spring	81	1	Bracket
55	2	Lock Washer	25	1	Ball Seat	84	3	Nut
56	2	Washer	26	1	Steel Ball	85	3	Washer
58	2	Shaft	27	1	Release Knob	86	1	Fixing Board
59	1	Snap Ring	28	1	Pin	87	1	Saddle
61	2	Snap Ring	29	1	Oil Release Valve Rod	88	3	Bolt
63	1	Oil Nipple	30	1	O-ring			
64	4	Snap Ring	31	1	O-ring	Tilt S	crew	s Kit No. 529032
66	3	Pin	32 33	1	Steel Ball	64	4	Snap Ring
69	2	Screw	33 34	1	Oil Cylinder Assembly Steel Ball	65	3	Knob
70	2	Bearing	35	3	Screw	66	3	Pin
71 72	2 4	Bushing	36	2	Bolt	67	1	Screw
72 75	1	Snap Ring Bolt	37	1	Oil Filler Plug	68	1	Shaft
79	1	Nut	38	1	Snap Ring	69 70	2	Screw
80	1	Lock Washer	39	1	O-ring Retainer	70 71	2 2	Bearing Bushing
83	4	Snap Ring	40	1	O-ring	71 72	4	Snap Ring
84	3	Nut	41	1	Sealing Washer	73	1	Shaft
85	3	Washer	42	1	Piston Ring	75	i	Bolt
88	3	Bolt	43	1	Piston Rod	76	2	Screw
89	16	Bolt	44	2	Bushing	77	2	Bolt
91	16	Flat Washer	45	1	O-ring	78	2	Bushing
92	16	Lock Washer	46	1	Snap Ring	79	1	Nut
93	16	Nut	Miss	ع م ال	nous Dorto V:t	80	1	Lock Washer
		11!4 IZ!4 N - 500004	IVIISCE	:nane	eous Parts Kit	82	1	Shaft E.
Hydraulic Unit Kit No. 529031						83	4	Snap Ring

Sheet No. 2 of 3

Issue Date: 01-28-15, Rev. C

### **Safety Precautions**



To avoid possible personal injury, damage to equipment, or property:



- Study, understand, and follow all instructions, including the ANSI B30.1 safety code for jacks.
- Wear eye protection that meets ANSI Z87.1 and OSHA standards.
- Inspect the jack before each use; do not use the jack if it is damaged, altered, or in poor condition.

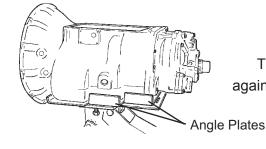


- No alterations shall be made to this product.
- Only attachments and/or adapters supplied by the manufacturer shall be used.
- Use the jack only on hard, level surfaces.



- Adequately support the vehicle before starting repairs.
- Use of this product is limited to the removal, installation, and transportation in the lowered position of transmissions, transfer cases, and transaxles.
- The load must never exceed the rated jack capacity.
- · Stay out from underneath the load at all times.
- · Secure the load to the jack.
- · Lower the load completely before moving the jack.
- SLOWLY AND CAREFULLY move the jack around corners, because the load could tip.
- 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.

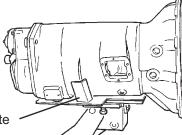
### **Operating Instructions**



#### Figure 1

The transmission must rest against the angle plates as shown.





#### **Operating Instructions**

- 1. Position the jack under the transmission.
- 2. Close the control valve. Operate the pump handle to raise the boom and align the mounting plate with the transmission. See Figure 1.
- 3. Remove the transmission according to the instructions in the vehicle service manual.
- 4. Position the transmission on the mounting plate, resting against the angle plates as shown in Figure 1.
  - 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 hd. cap screws.
- 5. Secure the transmission to the mounting plate.
- 6. Lower the load by slowly opening the control valve. The control valve regulates how fast the boom is lowered.

#### **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 elements.
- 2. Regularly lubricate the moving parts.
- 3. 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. Do not overfill. If necessary, add approved anti-wear hydraulic jack oil, and install the filler plug again. **IMPORTANT: The use of alcohol, hydraulic brake fluid or detergent motor oil could damage the 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.	1. Close release valve.		
	<ol><li>Low/no oil in reservoir.</li></ol>	2. Fill with oil and bleed system.		
	<ol><li>Air-locked system.</li></ol>	3. Bleed system.		
	<ol><li>Load is above capacity of jack.</li></ol>	<ol><li>Use correct equipment.</li></ol>		
	<ol><li>Delivery valve and/or bypass valve not working correctly.</li></ol>	<ol><li>Clean to remove dirt or foreigr matter. Replace oil.</li></ol>		
	6. Packing worn out or defective.	6. 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.	1. Replace power unit.		
	Leaking seals.	2. Replace power unit.		
Jack lifts load, but doesn't hold	Cylinder packing is leaking.	1. Replace power unit		
	<ol><li>Valve not working correctly</li></ol>	<ol><li>Inspect valves. Clean and</li></ol>		
	(suction, delivery, release, or bypass).	repair seat surfaces.		
	Air-locked system.	3. Bleed system.		
Jack leaks oil	Worn or damaged seals.	1. Replace power unit.		
Jack will not retract	Release valve is closed.	1. Open or clean release valve.		
Jack retracts slowly	Cylinder damaged internally.	Send jack to OTC authorized		
		service center for repair.		
	Link section is binding.	2. Lubricate link section.		
		Sheet No. 3 of 3		

Issue Date: 01-28-15, Rev. C