



SPX Corporation
 655 Eisenhower Drive
 Owatonna, MN 55060-0995 USA
 Phone: (507) 455-7000
 Tech. Serv.: (800) 533-6127
 Fax: (800) 955-8329
 Order Entry: (507) 455-1480
 Fax: (800) 283-8665
 International Sales: (507) 455-7223
 Fax: (507) 455-7063

Form No. 102757

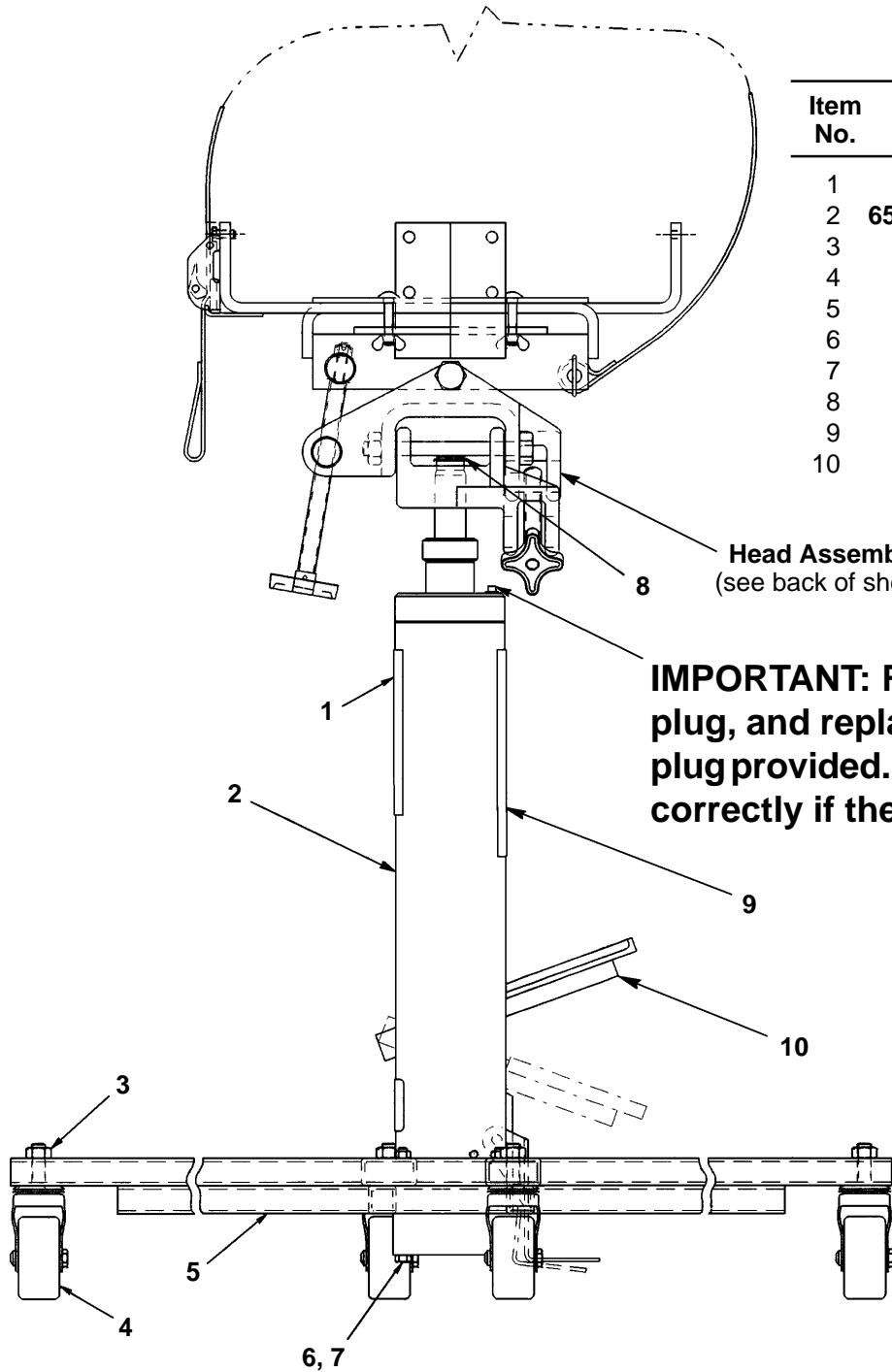
**Parts List &
 Operating Instructions**
 for:

1791

High Lift Transmission Jack

Max. Capacity: 1,000 lbs.

Application: Installation and removal of automobile transmissions



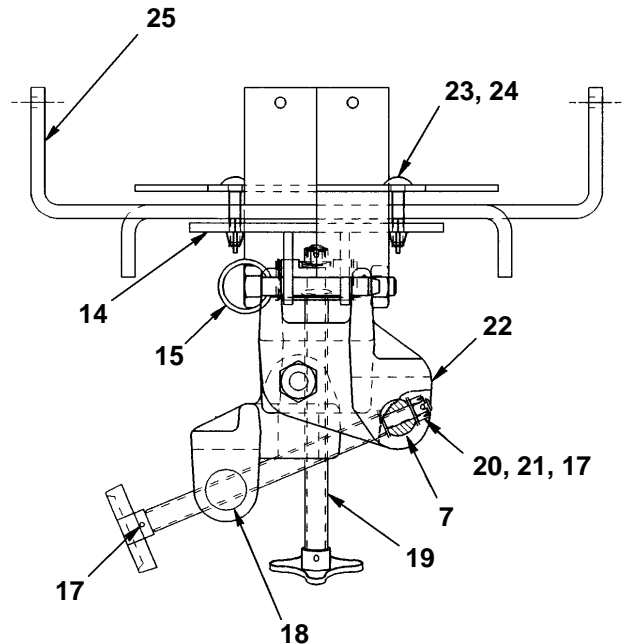
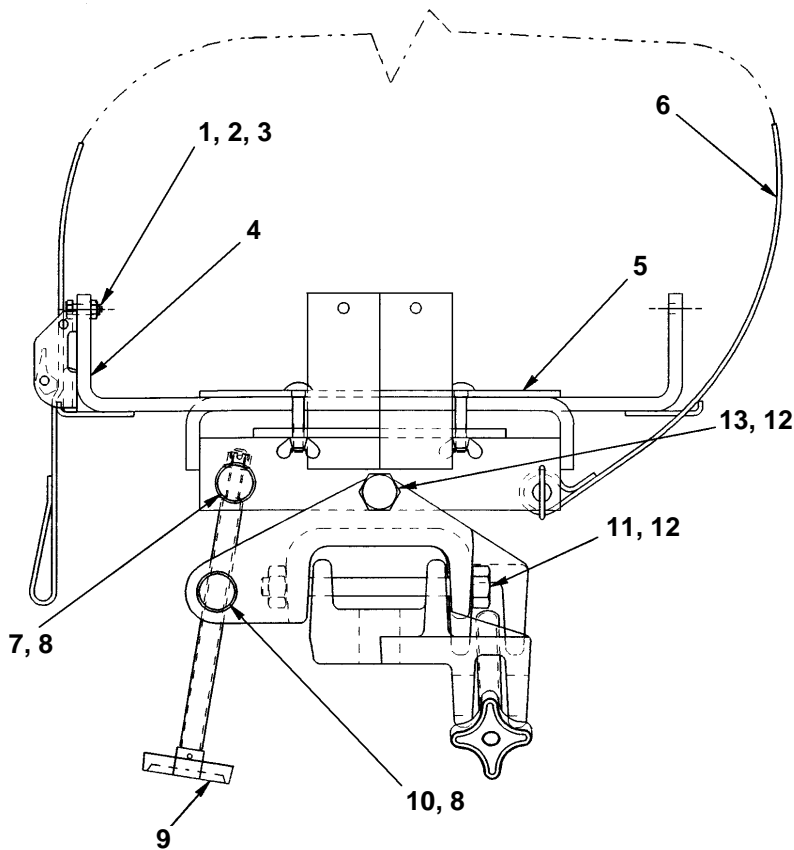
Item No.	Part No.	No. Req'd	Description
1	309135	1	Warning Decal
2	65533-BL2	1	Cylinder
3	10208	4	Hex Nut (1/2-13)
4	222259	4	Swivel Caster
5	62988	1	Base
6	13116	4	Locknut
7	13338	4	Hex Hd. Cap Screw
8	11903	1	Retaining Ring
9	314159	1	Decal
10	222263	1	Grip Pad

Head Assembly
 (see back of sheet)

IMPORTANT: Remove the shipping oil plug, and replace it with the vented oil plug provided. The jack will not function correctly if the shipping plug is left in.

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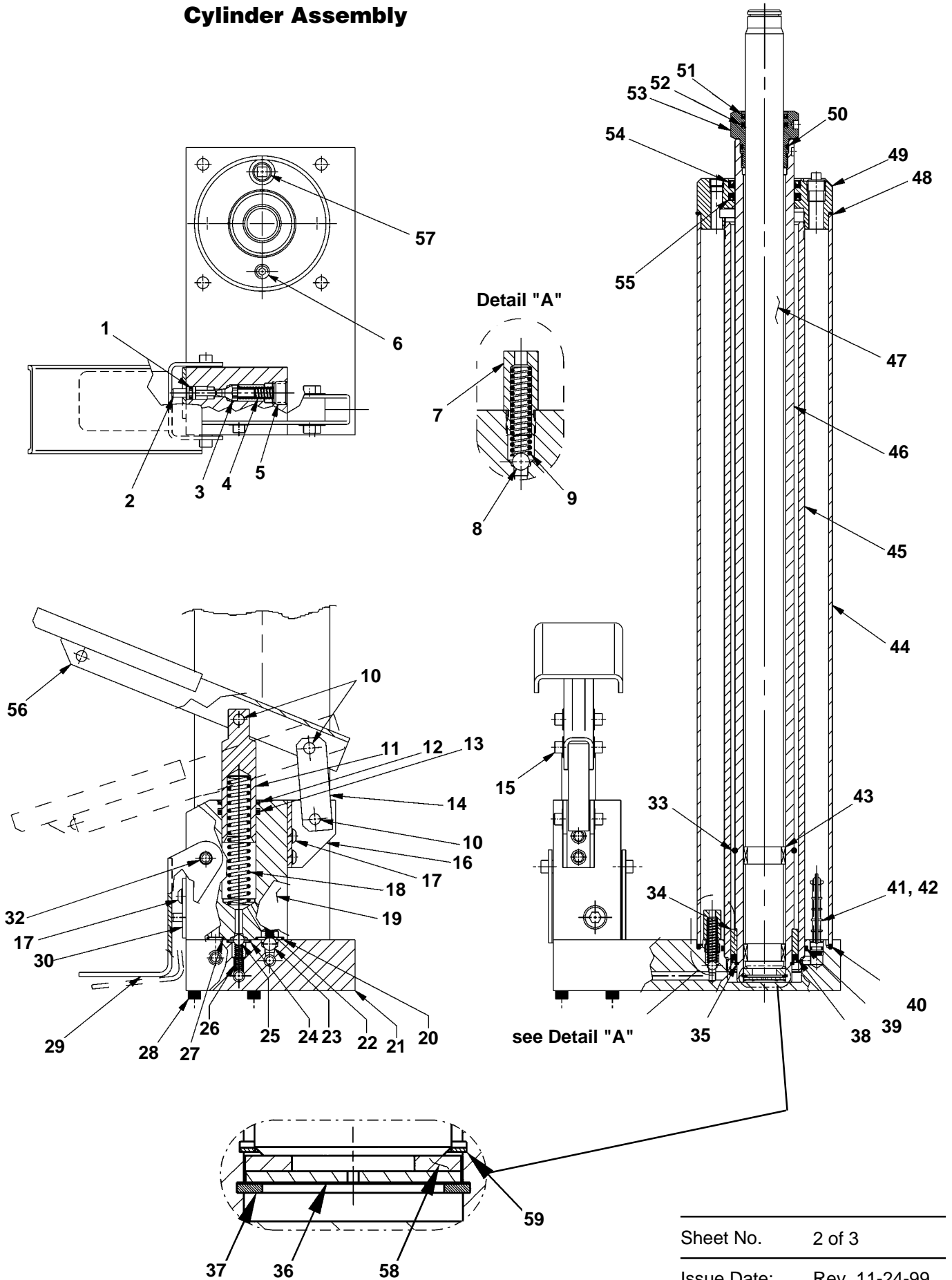
Issue Date: Rev. 11-24-99



Head Assembly

Item No.	Part No.	No. Req'd	Description
1	10017	1	Hex Hd. Cap Screw
2	10383	1	Hex Jam Nut (1/4-20)
3	12719	1	Washer
4	440398	2	Bracket
5	440399-BL2	1	Top Plate
6	314153	1	Strap Assembly
7	222237	2	Pivot Shaft
8	12365	4	Retaining Ring
9	23272	2	Knob
10	222238	1	Pivot Shaft
11	222239	1	Hex Hd. Screw (1/2-13 x 6" lg.)
12	15013	2	Hex Lock Nut (1/2-13)
13	10093	1	Hex Hd. Cap Screw
14	63007	1	Plate
15	15997	1	Cotterless Hitch Pin
17	10895	4	Roll Pin
18	222236	1	Pivot Shaft
19	314152	2	Threaded Rod
20	222235	2	Slotted Hex Nut
21	214021	4	Thrust Bearing Washer
22	440400	1	Pivot Linkage Assembly
23	10590	4	Wing Nut (5/16-18)
24	222234	4	Carriage Bolt (5/16 x 1.75" lg.)
25	222243	2	Adapter Bracket

Cylinder Assembly



Item No.	Part No.	No. Req'd	Description
1	* 10266	1	O-ring (.37 x .25)
2	351587	1	Release Valve Button
3	351433	1	Metering Poppet
4	13165	1	Spring (.36 OD x 1.5 x .06)
5	16232	1	Plug Fitting (3/8)
6	251279	4	Plug Fitting (1/8)
7	252652	1	Relief Body
8	10375	1	Ball (1/4" dia.)
9	16470	1	Spring (.30 OD x 1.75 x .06)
10	252751	3	Pin
11	351434	1	Pump Rod
12	* 15087	1	Rod Wiper (1.25 x 1.00)
13	* 252660	1	U-cup (1.25 x 1.00)
14	351339	1	Pivot Link
15	252752	6	Cap Push Nut
16	351340	1	Foot Bracket
17	251437	3	Button Hd. Screw (1/4-20 x 1/2" lg.)
18	210362	1	Spring (.67 OD x 4.31 x .10)
19	58918	1	Support Block
20	* 10273	1	O-ring (.81 x .62)
21	58917	1	Cylinder Manifold Block
22	207355	1	Spring (.26 OD x .63 x .02)
23	10378	1	Ball (3/8" dia.)
24	* 10275	1	O-ring (.93 x .75)
25	10377	1	Ball (5/16" dia.)
26	251295	1	Spring (.24 OD x 1.13 x .04)
27	* 252104	1	O-ring (.50 x .31)
28	10890	4	Socket Hd. Screw (1/4-20 x 2" lg.)
29	421490	1	Foot Pedal
30	252534	1	Plate
32	252661	1	Roll Pin (.38 x 3.00)
33	212013	1	Internal Retaining Ring (1.58 ID)
34	351440	1	Piston Head
35	250999	1	External Retaining Ring (1.53 x .062)
36	252632	1	Spacer
37	252657	1	Internal Retaining Ring (1.39 x .050)
38	* 251964	1	U-cup (2.00 x 1.63)
39	* 252533	1	O-ring (2.56 x 2.37)
40	* 11931	1	O-ring (4.00 x 3.75)
41	215075	1	Filter Screen
42	* 12557	1	O-ring (.34 x .21)
43	252659	2	Wear Ring
44	351436	1	Reservoir Tube
45	421485	1	Cylinder Tube
46	421484	1	Piston Rod
47	351437	1	Shaft
48	* 252658	1	Reservoir Gasket
49	421483	1	Reservoir Rod Cap
50	* 104485	1	O-ring (1.43 x 1.25)
51	* 15089	1	Rod Wiper (1.38 x 1.13)
52	* 252656	1	U-cup (1.37 x 1.12)
53	421531	1	End Rod
54	* 212160	1	Rod Wiper (2.13 x 1.75)
55	* 252655	1	U-cup (2.12 x 1.75)
56	58970	1	Foot Pedal Assembly
57	222262	1	Vented Oil Plug
58	250971	1	Washer (1.25 x .70)
59	253402	1	Internal Retaining Ring (1.29 x .025)

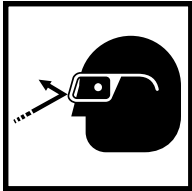
Items marked with an asterisk (*) are included in Repair Kit No. 300948.

Safety Precautions



Caution: To help prevent personal injury and damage to equipment,

- Read, understand, and follow all safety precautions and operating instructions.
- Wear eye protection that meets the requirements of ANSI Z87.1 and OSHA.
- A load must never exceed the rated lifting capacity of the jack.
- Do not lift or support the vehicle with this jack. Place support stands under the vehicle before starting repairs.
- Only use the jack on a hard, level surface.
- Center the load on the jack saddle. Off center loads can damage the seals in the ram and cause jack failure.
- Never move the jack with a load any higher off the ground than necessary. Slowly and carefully move the jack around corners because the load could tip. Stay clear of a lifted load.
- Lower the jack slowly and carefully while watching the position of the load.
- Do not modify the jack or use adapters unless approved or supplied by OTC.
- Use only anti-wear hydraulic jack oil with a 215 SUS viscosity rating at 100° F. The use of alcohol, hydraulic brake fluid, or transmission oil could damage seals and result in jack failure.



This guide cannot cover every situation, so always do the job with safety first.

Setup Instructions

1. Remove the transmission jack from the pallet, and attach the casters using the hex nuts provided.
2. Remove the hex nuts holding the head assembly plate, and replace them with the wing nuts provided.
3. **Remove the shipping oil plug**, and replace it with the vented oil plug (Item No. 57) provided.
4. The reservoir tube is shipped filled with hydraulic oil. Before using the jack for the first time, press the release pedal to open the release valve, and operate the foot pump eight full strokes to distribute the oil.

Operating Instructions

1. Follow the vehicle's recommended service procedure for removal of the component.
2. Position the jack under the vehicle.
3. Raise the jack by operating the foot pump until the saddle touches the component.
4. Adjust the support brackets to fit the component.
5. Use the tilt crank to align the saddle with the component.
6. Finish raising the jack to the component. Secure the strap assembly around the component.

Maintenance

1. Use only anti-wear hydraulic jack oil. The use of alcohol, hydraulic brake fluid, or transmission oil could damage the seals in the cylinder and result in jack failure.
2. Check the oil level periodically: Lower the jack to its lowest position; remove the filler plug (Item No. 57); add hydraulic oil (215 SUS viscosity at 100° F) until the oil level is within 2" to 2-1/2" of the filler hole opening; install the filler plug.
3. Lubricate the foot pump pivot points as needed with SAE 30 motor oil to prevent premature wear.

Important: The greatest single cause of failure in hydraulic units is dirt. Keep the jack clean and well lubricated to prevent foreign matter from entering the hydraulic system.

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Issue Date: Rev. 11-24-99

Shaded areas reflect the last revisions made to this form.

Bleeding Air from the Jack

1. Retract the jack to its lowest position.
2. Remove the filler plug (Item No. 57). Fill the reservoir tube with hydraulic jack oil (215 SUS viscosity rating at 100° F) to the correct fluid level of 2" to 2-1/2" from the top.
3. Remove the foot pedal and piston assembly by removing the button hd. screws (Item No. 17).
4. Fill the foot pedal piston bore and rod internal spring cavity with fluid.
5. Plug the rod internal spring cavity, and quickly install the rod into the rod bore. **Note:** This must be done quickly to ensure the cavities are filled with fluid and not air.
6. Attach the foot pedal assembly using the button hd. screws.
7. Pump the foot pedal, extend the cylinder to a full stroke, and then retract. **Note:** It may be necessary to do this two or three times.
8. Check the fluid level.

Troubleshooting Guide

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

Trouble	Cause	Solution
Unit fails to extend or extends partially	1. Low fluid level	1. Fill to correct fluid level.
Incomplete or spongy cylinder response when foot pedal is pumped	1. Low fluid level 2. Air in system	1. Fill to correct fluid level. 2. Follow instructions to bleed air from system.
Abnormal leakage through unit breather	1. Low fluid level	1. Fill to correct fluid level.
Unit fails to extend when foot pedal is pumped	1. Release valve malfunction 2. Contamination 3. Cylinder packing failure	1. Pump foot pedal with release valve open. 2. Disassemble and clean unit. 3. Install repair kit.
Cylinder creeps	1. Load exceeds maximum lifting capacity 2. Release valve is leaking	1. Reduce load. 2. Flush release valve by pumping foot pedal with release valve open.
Cylinder doesn't retract when release pedal is activated	1. Light load 2. Cylinder is binding	1. Unit requires 35 lbs. to return. 2. Disassemble unit; replace defective parts.
Cylinder doesn't extend	1. Contamination 2. Bad packing	1. Disassemble and clean unit. 2. Install repair kit.
Cylinder extends when foot pedal is pressed, and retracts as foot pedal retracts	1. Release valve malfunction 2. Contamination	1. Flush release valve by pumping foot pedal with release valve open. 2. Disassemble and clean unit.

Refer to any operating instructions included with the product for detailed information about operation, testing, disassembly, reassembly, and preventive maintenance.

Items found in this parts list have been carefully tested and selected by OTC. **Therefore: Use only OTC replacement parts!**

Additional questions can be directed to the OTC Technical Services Dept.