



MODEL B HYDRAULIC TOE JACK

Model J58T Maximum Capacity: 5 Ton
Model J109T Maximum Capacity: 10 Ton

Read and carefully follow the warnings and operating instructions before using this jack. Most problems with new equipment are caused by improper operation or setup.

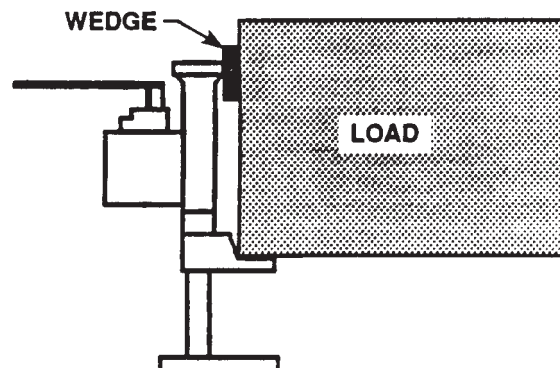
NOTE: Inspect the jack upon arrival. The carrier, not the manufacturer, is responsible for any damage resulting from shipment.

SAFETY PRECAUTIONS



WARNING: To help prevent personal injury or damage to equipment,

- Do not exceed the maximum load capacity of the jack.
- Do not add additional load to a lifted load.
- Do not use in unstable or hazardous positions.
- Unit must be used on flat surfaces able to carry the load.
- Keep clear of lifted loads.
- The load must be stable during lifting. An unstable load may cause the jack or load to slip.
- Do not use the jack(s) if damaged, altered, or in poor condition.
- Do not lift people or loads with people on them.
- This hydraulic jack is for professional use only and should be used only by persons trained in its use.
- Do not lift at the end of the toe. Fully engage the load with the toe.
- Use only Power Team hydraulic fluid in this unit.
- Do NOT, under any circumstances, tamper with the adjustment of the jack's internal relief valve screw. To do so may cause the jack to fail.
- When lifting by the toe, wedge the head of the jack on the load to avoid bending the column. Refer to illustration at right.
- Read operating instructions and A.N.S.I. B30.1 safety code for jacks.
- The owner of the jack must ensure that all safety-related decals are maintained and replaced as they become hard to read.
- This guide cannot cover every situation, so always do the job with safety first.



OPERATION OF THE JACK

IMPORTANT: Do not carry the jack by the jacking lever.

Lifting a Load

1. Position the load on the toe of the jack.



WARNING: Do not lift a load on the end of the toe. Fully engage the load with the toe.

IMPORTANT: When lifting by the toe, wedge the head of the jack on the load to avoid bending the column.

2. Turn the release valve knob in a clockwise direction until it is snug.
3. Pump the jacking lever in an up and down motion.

Lowering a Load

1. Slowly loosen the release valve knob by turning it in a counterclockwise direction. The more the knob is loosened, the faster the load will be lowered. To stop the jack from lowering a load, tighten the release valve knob by turning it in a clockwise direction.

DISASSEMBLY OF THE JACK

NOTE: Refer to parts lists on pages 3 and 4.

Draining the Jack

1. Extend the jack to full stroke. Wedge the toe of the jack on the base to hold in this position.
2. Remove the cylinder plug (6) and drain oil.

Disassembly of the Pump

1. Remove the hinge pin (41).
2. Pull out the lever assembly (2), piston (25), and connecting link (5).
3. Remove the four screws (30) that hold the pump to the reservoir. Separate the pump from the reservoir.
4. Remove the bladder (21) and drain the oil from it. Using a clean, absorbent cloth, wipe any remaining oil out of the bladder.

Disassembly of the Cylinder

1. Remove the spring clip (14) with a locking pliers.
2. Pull out the cylinder rod/base plate assembly (9) and the toe (16) from the jack body.
3. Heat the cylinder guide (8) slightly to soften the locking compound on the threads. Disassemble it from the cylinder rod.
4. Remove the o-ring (13) and U-cup (15) from the toe.

Disassembly of the Pump

1. Unthread the inlet check valve body (23).
2. Remove the inlet check found at the bottom of the body by unscrewing the hollow lock screw (22). Remove the ball (12) and spring (17).
3. Remove the breather valve screw (35) found at the top of the pump barrel (31) and remove the replaceable seat (36), ball (38) and spring (37).
4. Remove the outlet check valve (11) found between the o-rings (27).
5. Remove allen screw (47), and remove the release valve knob (46).
6. Remove the retaining ring (45) before removing the release valve assembly (48).
7. Using a small press or a mallet and a piece of soft metal tubing, push the piston cartridge (32) out of the pump body.
8. Remove the o-ring (29), wiper (33), and U-cup (28).

Disassembly of the Release Valve



WARNING: The release valve assembly should NOT be disassembled as it will affect the relief valve setting which may result in damage to the jack or injury to the operator.

Lever Disassembly

1. Remove the pins (4) that will make it possible to separate the lever (2), piston (25) and link (5).

NOTE: Clean all jack parts (except o-rings, wipers, and bladder) with a degreasing agent and dry completely.

ASSEMBLY OF THE JACK

Assembly of the Cylinder

1. Replace o-ring (13) and U-cup (15) on the toe (16).
2. Grease the bore of the toe (16) with a non-silicone lubricant.
3. Mount the toe (16) on the cylinder rod (9).
4. Tighten the guide (8) on the cylinder rod using a thread locking compound. Remove any excess compound.
5. Grease the exterior machined portion of the toe (16) with a non-silicone lubricant.
6. Assemble the cylinder rod/base plate assembly (9), the toe (16), and the guide (8) into the body of the jack.
7. Grease the rounded end of the spring stock (14) and drive it round end first into the hole at the base of the jack body using a pliers to guide the spring.

Assembly of the Pump

1. Install o-ring (29), U-cup (28), and wiper (33) on the piston cartridge (32). Grease the pump barrel with a suitable lubricant.
2. Seat the piston cartridge assembly into its housing in the pump barrel (31) using a small mallet and a piece of soft metal.
3. Install the inlet check ball (12), spring (17), and hollow lock screw (22) to the end of its travel into the inlet valve body (23).
4. Replace copper washer (24) on the inlet valve body. Thread the valve body onto the pump barrel (31).
5. Reassemble the outlet check valve (11) into the pump barrel (31).
6. Reinstall the breather valve into the top of the pump barrel (31) by first installing the spring (37), then the ball (38) and breather seat (3).
7. Coat the inside of the jack body with a suitable lubricant to accept the pump body.

Assembly of the Release Valve

1. Grease and replace o-ring (44).
2. Install the release valve assembly (48) in the pump body.
3. Install the retaining ring (45).
4. Install the release valve knob (46) and secure in place with allen screw (47).

Assembly of the Lever

1. Using two pins (4), attach the connecting link (5) and the piston (25) to the lever (2). **IMPORTANT: Do NOT damage the piston. Piston surface must be completely free of nicks, scratches, or dents in areas that come in contact with the seals.**

Final Assembly

1. Place the bladder (21) in the reservoir of the jack body.
2. Mount the pump into its housing on the jack body. Tap the pump into place with a mallet, while protecting the top of the pump with a piece of wood. Secure with four screws (30).
3. Position the jack vertically and hold it in the extended position by wedging the toe on the base.
4. Close the release valve.
5. Using a funnel and filter, fill the jack with Power Team hydraulic fluid through the cylinder plug (6) hole until full to the top of the cylinder cap thread.
6. Open the release valve and hold the breather valve ball (38) off its seat (36) with a pin or punch until oil with no air bubbles flows from the breather valve. Release the breather ball and top off the jack with hydraulic fluid to the top of the cylinder cap threads. Install the cylinder plug (6) and washer (7).
7. Fill the piston cavity with hydraulic fluid, open the release valve, and install the piston lever assembly with the pin, nut and washer.
8. Remove the wedge from under the toe and allow the cylinder to retract half way. Again, carefully open the breather ball (38) to expel any air still trapped in the bladder. Retract the piston completely.
9. Operate the pump lever several times. Close the release valve and operate the pump lever. If the pump piston does not make a full stroke, there is still some air trapped in the pump chamber. Turn the jack 90° so that it is resting on the back side of the hand grip and the jack column is horizontal. Operate the pump lever several times with the release knob closed. This will expel any air left in the pump chamber into the column chamber.

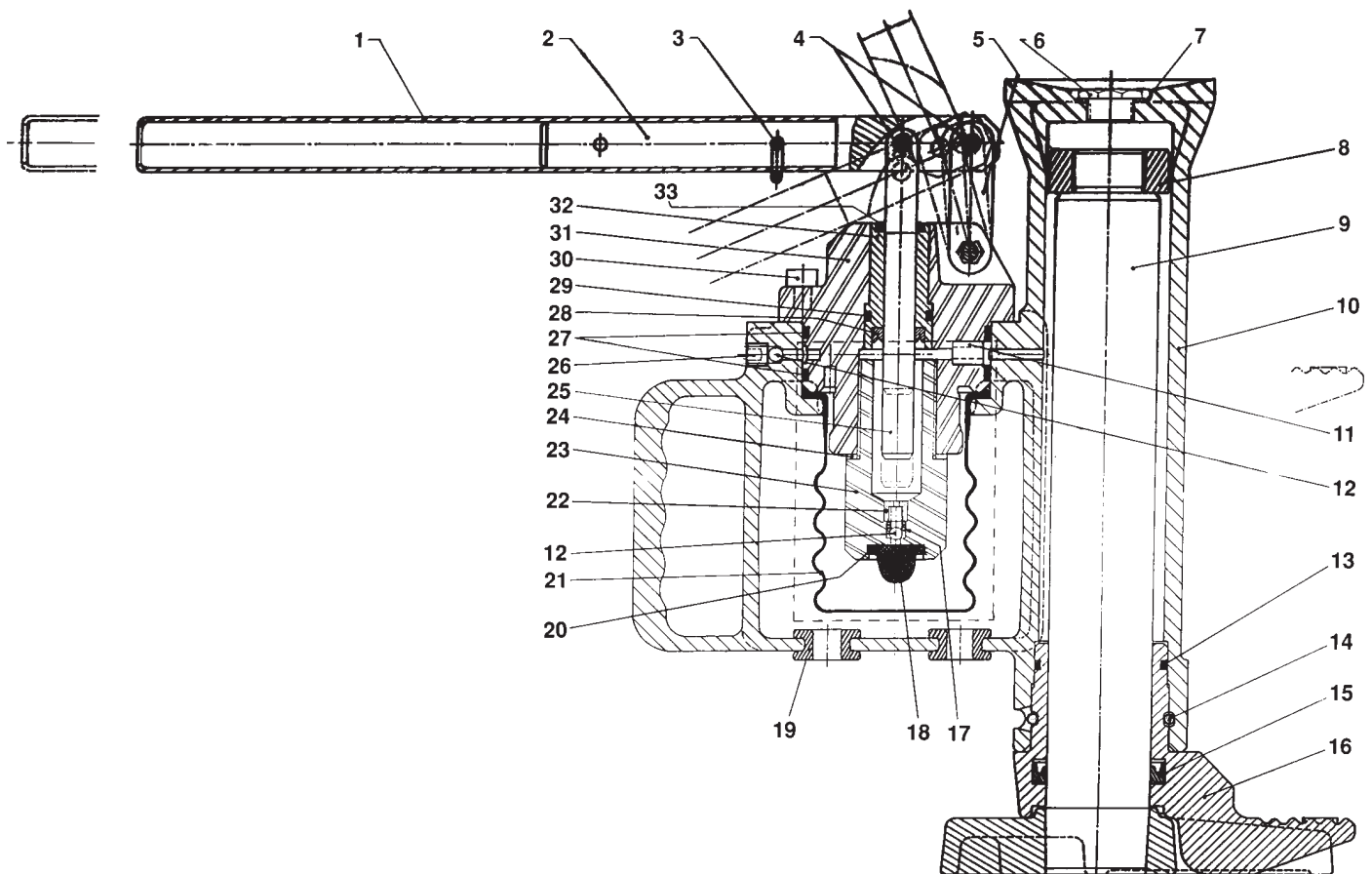
Final Assembly (continued)

10. Turn the jack back up so that it is again resting on the column foot. Pump the jack to its maximum extension and wedge the toe on the base. Loosen and remove the cylinder plug. Top off the cylinder again to the top of the cylinder cap threads and open the release valve. Allow the oil level to drop approximately 1" and close the release valve. Again, top off the cylinder with hydraulic fluid until flush with the top thread.
11. Reinstall the cylinder plug and tighten. Remove the wedge and allow the jack to fully retract. Close the valve pump to full extension and build pressure. Check for leaks. Retract the jack. Check for leaks.
12. Install protective screw (35) and washer (34).

NOTE: To extend service life, periodically lubricate pivot pins 250547 and 250076.

PARTS LIST

TOE LIFT JACK SIDE VIEW



Item No.	Part No.	No. Req'd	Description
1	250072	1	Tube
2	●250546	1	Lever
3	250073	1	Straight Pin
4	●250547	2	Pin (Lubricate periodically)
5	●250557	1	Link
6	250558	1	Plug
7	◆❖250559	1	Special Washer
8	*▼250582	1	Guide (For J58T)
	†▲250581	1	Guide (For J109T)
9	*250560	1	Cylinder and Base Plate (For J58T)
	†250580	1	Cylinder and Base Plate (For J109T)
10	250561	1	Body (For J58T)
	250579	1	Body (For J109T)
11	■☆250563	1	Valve
12	250087	2	Ball
13	◆▼250574	1	O-ring (For J58T)
	❖▲250577	1	O-ring (For J109T)
14	◆▼250060	1	Retaining Ring (For J58T)
	❖▲250105	1	Retaining Ring (For J109T)
15	◆250064	1	U-cup (For J58T)
	❖250109	1	U-cup (For J109T)
16	▼250562	1	Toe (For J58T)
	▲250578	1	Toe (For J109T)
17	250088	1	Spring
18	■☆250555	1	Filter
19	250068	2	Perforated Rubber Plug
20	■☆250554	1	Ring
21	250067	1	Bladder (For J58T)
	250576	1	Bladder (For J109T)
22	☆250090	1	Perforated Screw
23	☆250553	1	Valve Body
24	◆❖☆250552	1	O-ring
25	●250551	1	Piston
26	250091	1	Screw
27	◆❖☆250086	2	O-ring
28	◆❖☆250085	1	U-cup
29	◆❖☆250084	1	O-ring
30	250070	4	Screw
31	☆250550	1	Pump Barrel
32	☆250548	1	Piston Cartridge
33	◆❖☆250549	1	Wiper

PARTS INCLUDED BUT NOT SHOWN

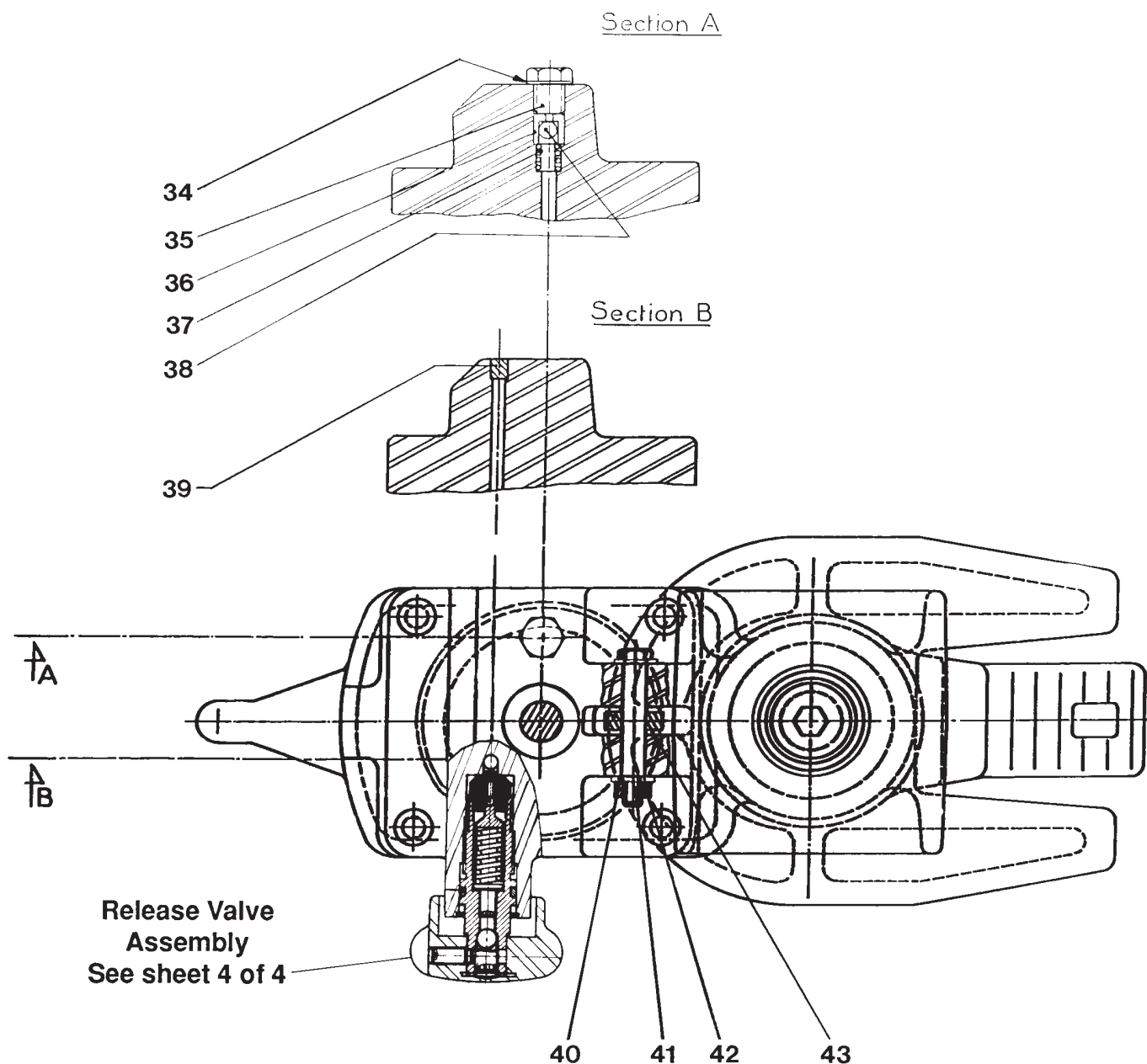
250536	2	Trade Name Decal (For J58T)
250537	1	Trade Name Decal (For J109T)
253234	1	Instruction Decal (Oil pivot points)

Key to Repair Kit No.'s

(See back of sheet 4 of 4 for descriptions of Repair Kits)

◆ = No. 250591	* = No. 250595	▲ = No. 250598
❖ = No. 250589	† = No. 250596	☆ = No. 250599
■ = No. 250592	▼ = No. 250597	● = No. 250602

TOE LIFT JACK TOP VIEW, SECTION A & SECTION B

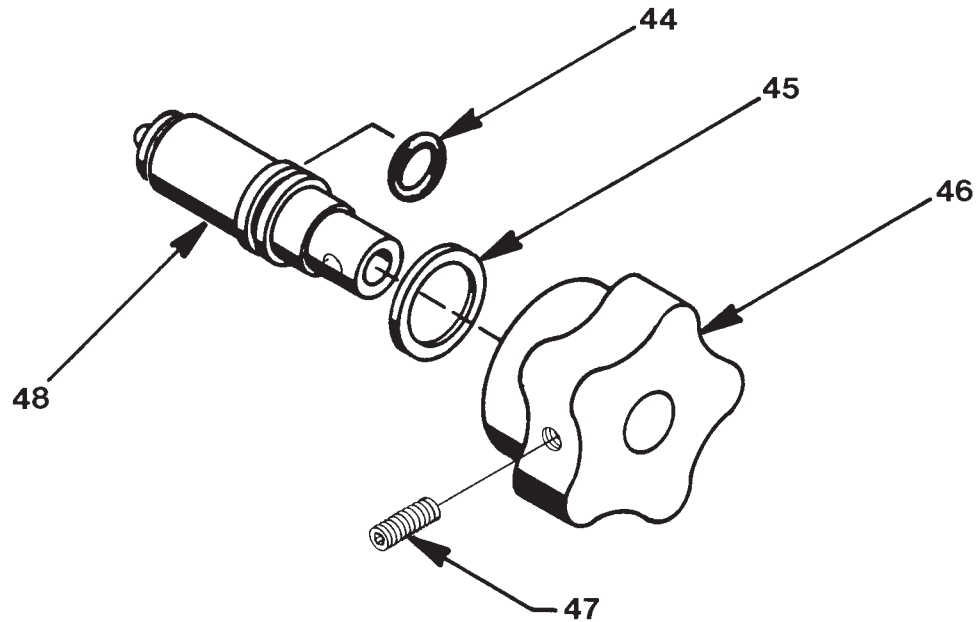


Item No.	Part No.	No. Req'd	Description
34	◆❖☆250556	1	Washer
35	☆250540	1	Screw
36	■250090	1	Breather Seat
37	■☆250088	1	Spring
38	■☆250087	1	Ball
39	250069	1	Plug
40	●250564	2	Washer
41	●250076	1	Hinge Pin (Lubricate periodically)
42	●250077	3	Nut
43	●250545	3	Washer

Key to Repair Kit No.'s
(See back of sheet 4 of 4 for descriptions of Repair Kits)

- ◆ = No. 250591
- ❖ = No. 250589
- = No. 250592
- ☆ = No. 250599
- = No. 250602

RELEASE VALVE ASSEMBLY



Item No.	Part No.	No. Req'd	Description
44	◆❖250542	1	O-ring
45	250099	1	Retaining Ring
46	250100	1	Knob
47	250543	1	Screw
48	250601	1	Release Valve Assembly (For J58T)
	250593	1	Release Valve Assembly (For J109T)

Key to Repair Kit No.'s
 (See back of sheet 4 of 4 for descriptions of Repair Kits)

◆ = No. 250591 ❖ = No. 250589

REPAIR KITS

◆ Repair Kit No. 250591 (O-ring Set for J58T)

Includes:		
1	250084	O-ring
1	250085	O-ring
1	250542	O-ring
2	250086	O-ring
1	250559	Special Washer
1	250552	O-ring
1	250549	Scraper Ring
1	250556	O-ring
1	250574	O-ring
1	250064	O-ring
1	250060	Spring Ring

▼ Repair Kit No. 250597 (Toe for J58T)

Includes:		
1	250562	Toe
1	250060	Spring Ring
1	250582	Guide
1	250574	O-ring

❖ Repair Kit No. 250589 (O-ring Set for J109T)

Includes:		
1	250084	O-ring
1	250085	O-ring
1	250542	O-ring
2	250086	O-ring
1	250559	Special Washer
1	250552	O-ring
1	250549	Scraper Ring
1	250556	O-ring
1	250577	O-ring
1	250109	O-ring
1	250105	Spring Ring

▲ Repair Kit No. 250598 (Toe for J109T)

Includes:		
1	250578	Toe
1	250105	Spring Ring
1	250581	Guide
1	250577	O-ring

☆ Repair Kit No. 250599 (Complete Pump Barrel for J58T & J109T)

Includes:		
1	250550	Barrel of Pump
1	250548	Sleeve
1	250084	O-ring
2	250090	Screw
1	250555	Filter
1	250554	Retaining Ring
1	250540	Plug
1	250556	O-ring
1	250085	O-ring
1	250549	O-ring
2	250086	O-ring
1	250553	Valve Body
1	250552	O-ring
2	250087	Ball
2	250088	Spring
1	250563	Valve

■ Repair Kit No. 250592 (Filter & Valve for J58T and J109T)

Includes:		
3	250087	Bearing
2	250088	Spring
2	250090	Screw
1	250554	Ring
1	250563	Valve
1	250555	Filter

* Repair Kit No. 250595 (Complete Column for J58T)

Includes:		
1	250560	Cylinder and Base Plate
1	250582	Guide

† Repair Kit No. 250596 (Complete Column for J109T)

Includes:		
1	250580	Cylinder and Base Plate
1	250581	Guide

● Repair Kit No. 250602 (Assembled Lever for J58T & J109T)

Includes:		
1	250546	Lever
1	250551	Piston
1	250557	Link
2	250547	Pin
1	250076	Pin
3	250545	Washer
3	250077	Nut
2	250564	Washer

EC Declaration of Conformity

MANUFACTURER'S NAME:

SPX FLUID POWER

MANUFACTURER'S ADDRESS:

5885 11th Street
Rockford, Illinois 61109
USA

Telephone: 815-874-5556
Fax: 815-874-7853

TYPE OF EQUIPMENT: Hand operated hydraulic jacks

ORDER NUMBER OR PART NUMBER: J58T & J109T

APPLICATION OF EC COUNCIL DIRECTIVE(S): 89/392/EEC, 91/368/EEC, and 93/44/EEC, and 98/37/EEC.

STANDARD(S) TO WHICH CONFORMITY IS DECLARED: EN292-1, EN292-2, prEN1494:2000, and ANSI B30.1

I, the undersigned, hereby declare that the equipment specified above conforms to the above European Communities Directive(s) and Standard(s).

PLACE: Rockford, Illinois USA



(Signature)

DATE: Rev. 29 AUG 2005
(date / month / year)

Don Blackman
Director of Engineering