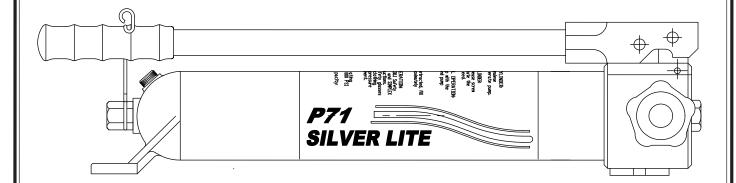
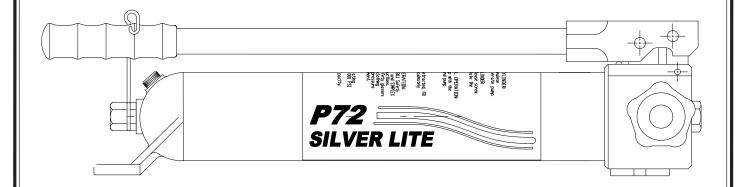


# P71, P72 HAND PUMP

**OPERATIONAL & REPAIR PART SHEET** 

PART SHEET # 54417 / 54418 08/06 Rev. B







SIMPLEX products are warranted to be free of defects in materials and workmanship under normal use for as long as the original purchaser owns them, subject to the guidelines and limitations listed. This warranty does not cover: normal wear & tear, cosmetic items, abuse, overloading, alterations, improper fluid, or use in a manner for which they are not intended. If the customer believes a product is defective, the product must be delivered, or shipped freight prepaid, to the nearest SIMPLEX Authorized Service Center for evaluation and repair.

2525 GARDNER ROAD \* BROADVIEW \* ILLINOIS \* 60155 \* PHONE (708) 865-1500 \* FAX (708) 865-0894

# NOTE: BE SURE TO READ THESE INSTRUCTIONS COMPLETELY BEFORE OPERATING ANY PUMP. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY AND/OR DAMAGE TO THE PUMP.



FIGURE 1

## **KEEP AWAY FROM FIRE AND HEAT**

Keep your equipment away from excessive heat which tends to soften the packings. For best performance, DO NOT expose equipment to temperatures above 160 F.

#### **ASSEMBLY**

- Remove SHIPPING PLUG from the 3/8" NPT port and discard (refer FIGURE 1).
   NOTE: THE PLUG IS STRAIGHT THREAD TO PREVENT DISTORTION TO THE 3/8" NPT THREADING.
- Assemble hose or quick-disconnect coupling directly to this port. Use a sealant or Teflon to seal threads.
- The reservoir is vented so there is no need to open any air vents prior to using the pump.

#### **WORKING PRESSURE**

The pump's maximum working pressure is 10,000 PSI (700 kg/cm 2). Make sure that all hydraulic equipment such as rams, hoses, etc. used with this pump is rated at 10,000 PSI operating pressure.

## **HYDRAULIC CONNECTIONS**

Never disconnect or connect any hydraulic hoses or fittings without first unloading the ram. Open the release valve counterclockwise to assure that the system has been depressurized. If the system includes a gauge, double check the gauge to assure pressure has been released.

All Simplex cylinders and tools are equipped with quick-disconnect couplings. These couplings ease the assembly of your system. These couplings must be assembled by hand. Wrenches or pliers should not be required for this operation.

If couplings will not fully engage (refer to FIGURE 2 for proper engagement), turn the release knob counter-clockwise to release any pressure that may have built up. Threaded connections such as fittings, gauges, etc. must be securely tightened and leak free. DO NOT over tighten connections. Connections need only be secure and leak free. Over tightening can cause premature thread failure.

#### **HOSES**

DO NOT DROP HEAVY OBJECTS ON HOSE. A sharp impact may kink wire strands on which the strength of the hose depends. AVOID SHARP KINKS IN HOSE. Never apply pressure when hose is swung in sharp curves or when the hose is visibly kinked.

CAUTION: Loose or cross threaded fittings can be potentially dangerous if pressurized. Never hold or stand directly in line with any hydraulic connections while pressurizing. Never grab, touch or in any way come in contact with a hydraulic pressure leak. Escaping oil can penetrate the skin and a serious injury can result.

## **OPERATING INSTRUCTIONS**

- Open the release knob counter-clockwise.
   Operate pump handle several times to remove air from the system and to prime the pump.
- You may operate a single-acting cylinder, ram or tool with this style pump by merely connecting the hose to the application. Make sure you turn the cylinder upside down to purge the air prior to use.
- 3. Close the release knob clockwise until you hit a mechanical stop.
- Be sure the pump reservoir is full of hydraulic oil. NEVER FILL THE RESERVOIR UNLESS THE CONNECTED application is FULLY RETRACTED.
- Use the handle to advance your application.
   Be sure to take full strokes to get the optimal flow rated for the pump in use.

# **GENERAL MAINTENANCE**

Change oil at least once a year. The following conditions require more frequent oil changes:

#### FLUSHING THE PUMP:

- Remove the old oil from the reservoir, then thoroughly clean the reservoir and refill with a clean, nonflammable flushing oil.
- Reassemble the pump head to the reservoir and pump the pump handle approximately 50 times with the RELEASE KNOB open.
- Empty the reservoir, REPLACE GASKET, and refill with clean SIMPLEX oil.

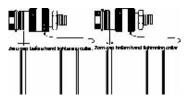
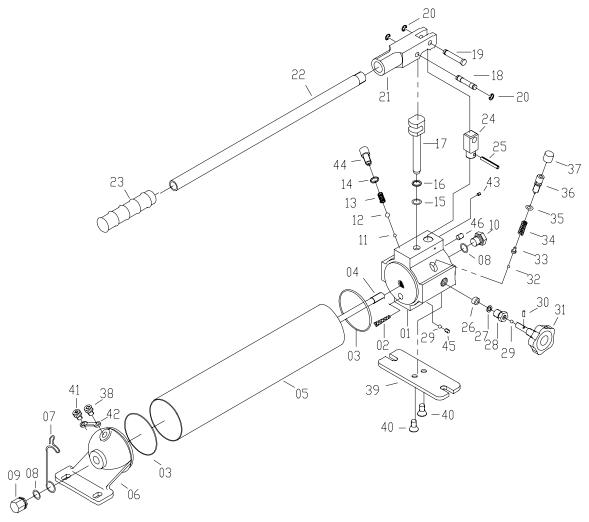


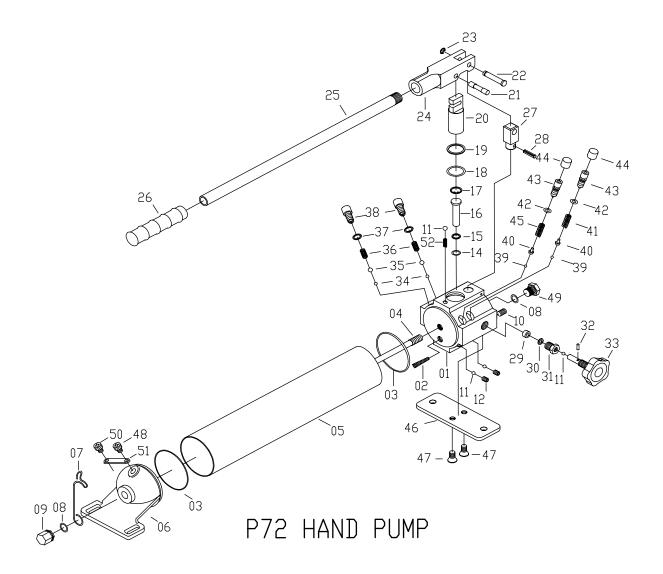
FIGURE 2



P71 HAND PUMP

REF N□.	T.K. PART DESCRIPTION		QTY
01	6067093	Pump Housing	1
02	6067094	🛮 il Filter	1
03	*	□-Ring	2
04	6045050	Screw	1
05	6045051	Reservoir	1
06	6045005	Tail base	1
07	6045006	Fixing Hook	1
08	*	□-Ring	2
09	6045008	Nipple	1
10	6067035	Screw	1
11	6067012	Check Ball (3/16")	1
12	6067013	Check Ball (5/16")	1
13	6067049	Spring	1
14	*	Washer	1
15	*	□-Ring	1
16	*	Back-Up Ring	1
17	6045057	Pump Piston	1
18	6067096	Piston Pin	1
19	6067027	Yoke Pin	1
20	6067026	Retaining Ring	3

REF N□.	T.K. PART N□.	DESCRIPTION	QTY
21	6045023	Yoke	1
22	6045058	Handle	1
23	6067025	Handle Grip	1
24	6045026	Yoke Base	1
25	6067097	Pin	1
26	*	□il Seal	1
27	*	Washer	1
28	6067038	Couplers	1
29	6067010	Check Ball (1/4")	3
30	6045031	Pin	1
31	6067039	Release Valve	1
32	6067034	Check Ball (5/32")	1
33	6067033	Spring End Cap	1
34	6045059	Spring	1
35	*	□-Ring	1
36	6067029	Overload Cover Screw	1
37	6045061	Cap	1
38	6067009	Air Release Screw	1
39	6045045	Base Plate	1
40	6045046	Screw	2
41	*	Vented Screw	1
42	6045063	Gasket	1
43	6067098	Screw	1
44	6067015	valve Cover Screw	1
45	6067099	Screw	1
46	6067050	Screw	1
*	54415	Packing Kit (*= components)	1
	•	•	



REF NO.	T.K. PART N□.	DESCRIPTION	QTY
01	6045000	Pump Housing	1
02	6045001	🛮 il Filter	1 2
03	*	□-Ring	
04	6045003	Screw	1
05	6045004	Reservoir	
06	6045005	Tail base	1
07	6045006	Fixing Hook	1 1 2
08	6067006	□-Ring	
09	6045008	Nipple	1
10	6067050	Screw	
11	6067052	Check Ball	4
12	6067051	Set Screw	2
14	*	□-Ring	1
15	*	Back-Up Ring	1 1
16	6067018	Pump Piston	1
17	6067019	Snap Ring	1
18	*	□-Ring	1
19	*	Back-Up Ring	1
20	6067022	Pump Piston	1
21	6067028	Piston Pin	1 1
22	6067027	Yoke Pin	
23	6067026	Retaining Ring	1
24	6045023	Yoke	1
25	6045024	Handle	1

REF	T.K. PART	DESCRIPTION	QTY
ND.	N□.		
26	6067025	Handle Grip	1
27	6045026	Yoke Base	1
28	6045027	Pin	1
29	*	🛮 il Seal	1
30	6045029	Washer	1
31	6067038	Couplers	1
32	6045031	Pin	1
33	6067039	Release Valve	1
34	6067012	Check Ball	2
35	6067013	Check Ball	2
36	6067049	Spring	2
37	6067014	Washer	2
38	6067015	Valve Cover Screw	2
39	6067034	Check Ball	2
40	6067033	Spring End Cap	2
41	6067032	Long Separator Spring	1
42	*	□-Ring	2
43	6067029	Overload Cover Screw	2
44	6045043	Cap	2
45	6045044	Short Separator Spring	1
46	6045045	Base Plate	1
47	6045046	Screw	2
48	6067009	Air Release Screw	1
49	6067035	Screw	1
50	6045062	vented screw	1
51	6045063	Gasket	1
52	6045064	Spring	1
	54416	Repair Kit (* = contents)	1