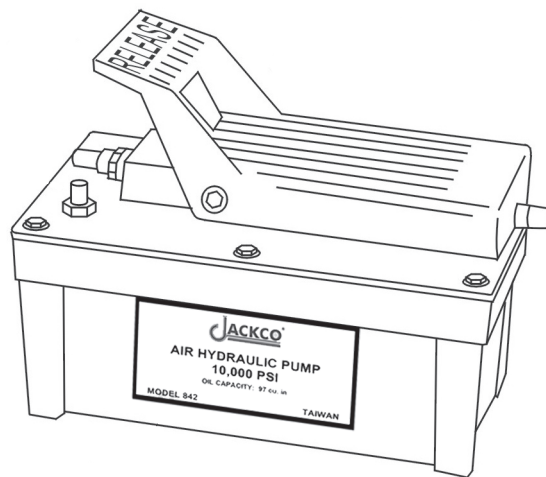




MODEL 842
AIR HYDRAULIC PUMP
INSTRUCTION



Jackco Transnational Inc. © 2009
South El Monte, CA
888-452-2526 www.jackco.com

FOR YOUR SAFETY

Read all instructions, warnings and cautions carefully. Follow all safety precautions to avoid personal injury or property damage during system operation. Jackco cannot be responsible for damage or injury resulting from unsafe product use, lack of maintenance or incorrect product and/or system operation. Contact Jackco when in doubt as to the safety precautions and operations.

Failure to comply with the following cautions and warnings could cause equipment damage and personal injury.

WARNING

- Stay clear of loads supported by hydraulics. A cylinder, when used as a load lifting device, should never be used as a load holding device. After the load had been raised or lowered, it must always be blocked mechanically.
- Do not exceed equipment rating never attempt to lift a load weighing more than the capacity of the cylinder. Overloading causes equipment failure and possible personal injury. The cylinders are designed for a maximum pressure of 10,000 psi. Do not connect a jack or cylinder to a pump with a higher pressure rating.
- The system operating pressure must not exceed the pressure rating of the lowest rated component in the system. Install pressure gauges in the system to monitor operating pressure. It is your window to what is happening in the system.
- Only use hydraulic cylinders in a coupled system. Never use a cylinder with unconnected couplers. If the cylinder becomes extremely overloaded, components can fail catastrophically causing severe personal injury.
- **BE SURE SETUP IS STABLE BEFORE LIFTING LOAD.**
Cylinders should be placed on a flat surface that can support the load. Where applicable, use a cylinder base for added stability. Do not weld or otherwise modify the cylinder to attach a base or other support.
- Avoid situations where loads are not directly centered on the cylinder plunger. Off-center loads produce considerable strain on cylinders and plungers. In addition, the load may slip or fall, causing potentially dangerous results.
- Immediately replace worn or damaged parts genuine JACKCO parts. Standard grade parts will break causing personal injury and property damage. JACKCO parts are designed to fit properly and withstand high loads.

DANGER

- To avoid personal injury keep hands and feet away from cylinder and work piece during operation.
- **NEVER** set the relief valve to a higher pressure than the maximum rated pressure of the pump. Higher settings may result in equipment damage and/or personal injury. Do not remove relief valve.
- Do not handle pressurized hoses. Escaping oil under pressure can penetrate the skin, causing serious injury. If oil is injected under the skin, see a doctor immediately.

CAUTION

- Avoid damaging hydraulic hose. Avoid sharp bends and kinks when routing hydraulic hoses. Using a bent or kinked hose will cause severe backpressure. Sharp bends and kinks will internally damage the hose leading to premature hose failure.
- Do not drop heavy objects on hose. A sharp impact may cause internal damage to hose wire strands. Applying pressure to a damaged hose may cause it to rupture.
- Do not lift hydraulic equipment by the hoses or swivel couplers. Use the carrying handle or other means of safe transport.
- Keep hydraulic equipment away from flames and heat. Excessive heat will soften packing and seals, resulting in fluid leaks. Heat also weakens hose materials and packings. For optimum performance do not expose equipment to temperatures of 150°F or higher. Protect hoses and cylinders from weld spatter.
- Hydraulic equipment must only be serviced by a qualified hydraulic technician. For repair service, contact JACKCO Inc. To protect your warranty, use

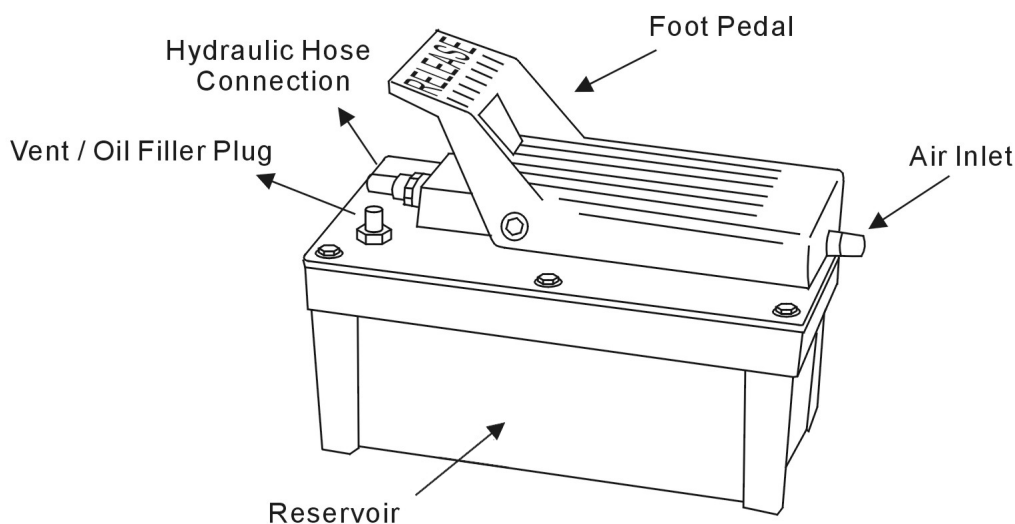
INSTRUCTION

PRODUCT DESCRIPTION

- 10,000 PSI AIR Hydraulic Pump designed to operate @90-120 PSI air source.
- This equipment allows quick displacement of hydraulic fluid up to 1600 c.c./97 cu.in..
- Foot pedal design delivers a smooth, controllable flow to and from the intended application.

SPECIFICATION

Capacity	Pump Size (L x W x H)	Usable Volume Oil	Oil Outlet Size
10,000 PSI	10" x 5.6"x 8.3"	1600c.c./97 cu.in.	3/8 NPT



IMPORTANT

1. Check for leaks in the system and repair as needed. Before repairs are made, disconnect air inlet and hydraulic connection, then depressurize reservoir. Do so simply by depressing the pedal for a few seconds.
2. Replace worn / damaged parts and assemblies with original new parts.
3. Use adequate eye protection when operating or near this equipment.
4. Check connections before use.

OPERATION

1. Pull up the air-vent before use.
2. Connect to a hydraulic cylinder, then to air source of at least 100 PSI, and then depress foot pedal slowly until motor starts to move.
3. Operate pump until desired position is reached. To stop, release pressure on the pedal.
4. To retract, simply press down on the "RELEASE" portion of the foot pedal.

AIR REMOVAL

Removing air from the hydraulic system will help the cylinder to advance and retract smoothly.

Pump with Single-Acting Cylinder

- Position pump at higher elevation than cylinder.
- Position cylinder with plunger end down (up if using pull cylinder)
- Operate pump to fully extend the cylinder (retract if using pull cylinder)
- Depress release valve to retract cylinder (extend if a pull cylinder). This will force the trapped air to move up to the pump reservoir.
- Repeat the above steps as necessary.
- Add oil if necessary.
- Return vent/fill cap to operating position.

How to fill the reservoir

1. Disconnect hydraulic coupler from application, remove air supply from pump.
2. Remove the vent /oil filler plug.
3. Fill reservoir to within ½ inch of the opening.
4. Wipe off any spilled fluid and install oil filler plug.

NOTE:

Use only quality hydraulic fluid. Never use brake fluid, transmission fluid, motor oil etc. Use of other than quality hydraulic oil will void the warranty and damage the equipment.

AIR SUPPLY

- To obtain maximum performance and rated hydraulic pressure, air pressure should be 100 psi minimum.
- To insure trouble-free performance, your air supply equipment should be equipped with an air filter/dryer and the compressor tank should be drained of water everyday.

LUBRICATION

- To insure long service life, add a few drops of # 30 oil into the air inlet once a week.

MAINTENANCE

Use only recommended JACKCO hydraulic oil with theses pumps to promote long pump life and protect your warranty. Contact your JACKCO representative for more information on these products and their applications.

KEEPING OIL LINES CLEAN

When coupler halves are disconnected, always screw on dust caps. Use every precaution to guard unit against entrance of dirt because foreign matter may cause pump, cylinder or valve failure.

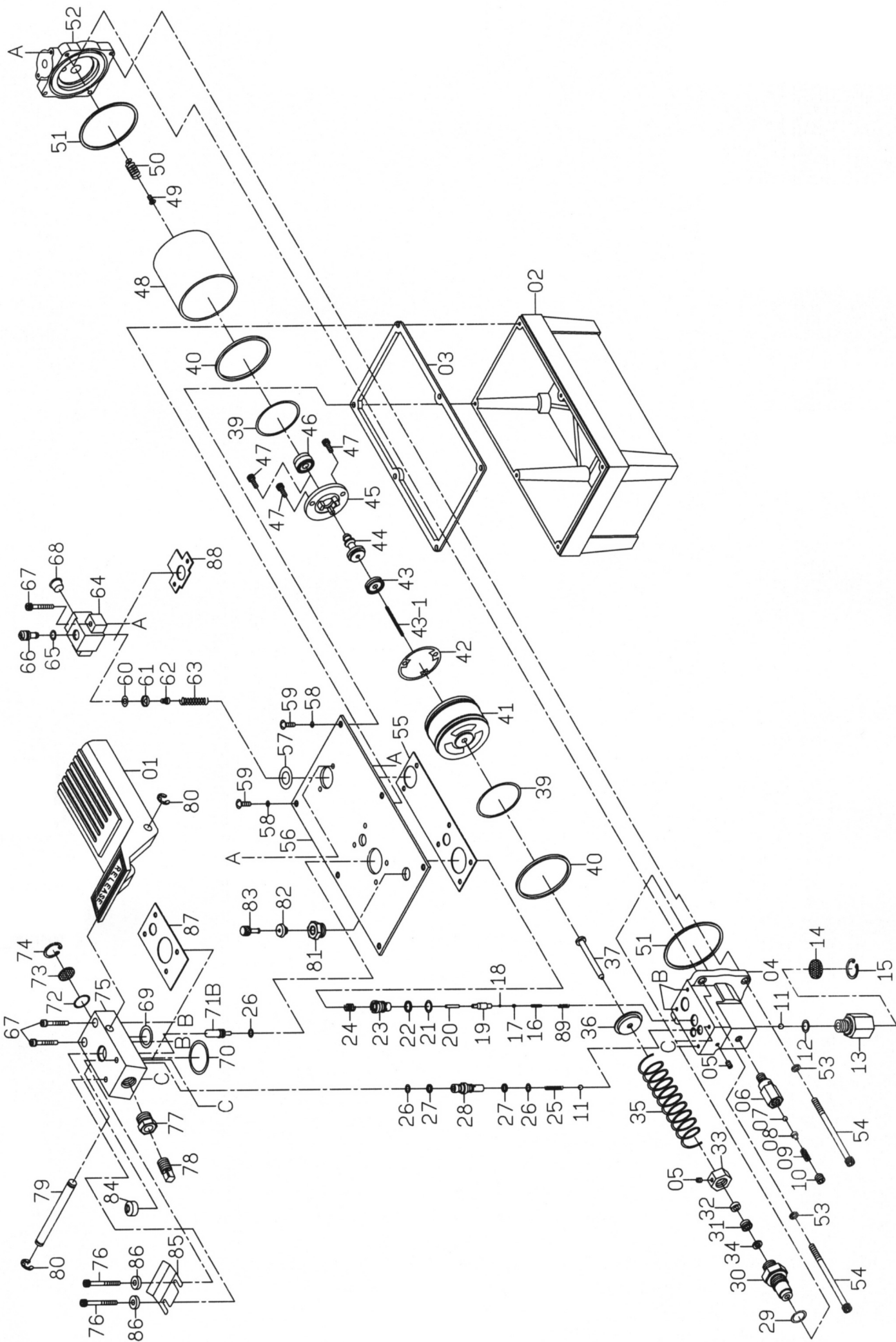
CHANGING THE OIL

- Drain all oil and refill with clean JACKCO hydraulic oil every 12 months, if pump is used in dirty environments, change the oil more often.
- Remove vent/fill cap or plug from reservoir
- Tilt pump to drain out old oil.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Cylinder does not advance, advances slowly, or advances in spurts.	<ol style="list-style-type: none"> 1. Oil level in pump reservoir is low. 2. Release valve open. 3. Loose hydraulic coupler. 4. Load is too heavy. 5. Air trapped in system. 6. Cylinder plunger binding. 	<ol style="list-style-type: none"> 1. Add oil according to the maintenance instructions. 2. Close the release valve. 3. Check that all couplers are fully tightened. 4. Do not attempt to lift more than rated tonnage. 5. Remove air according to the instructions. 6. Check for damage to cylinder. Have cylinder serviced by a qualified hydraulic technician.
Cylinder advance, but does not hold pressure.	<ol style="list-style-type: none"> 1. Leaking connection. 2. Leaking seals. 3. Internal leakage in pump. 	<ol style="list-style-type: none"> 1. Check that all connections are tight and leak free. 2. Locate leak(s) and have equipment serviced by qualified hydraulic technician. 3. Have pump serviced by a qualified hydraulic technician.
Cylinder does not retract, retracts part way, or retracts more slowly than normal.	<ol style="list-style-type: none"> 1. Pump reservoir is over-filled 2. Loose hydraulic coupler. 3. Air trapped in system. 4. Cylinder retraction spring broken or other cylinder damage. 	<ol style="list-style-type: none"> 1. Drain oil level to fill mark. 2. Check that all couplers are fully tightened. 3. Remove air according to the instructions. 4. Have cylinder serviced by a qualified hydraulic technician.

Model: 842 Parts List



Part #	Description	Q'TY	Part #	Description	Q'TY	Part #	Description	Q'TY
01	Treadle	1	31	Cup Seal	1	60	O-ring	1
02	Reservoir	1	32	Copper Ring	1	61	Air Valve Stem	1
03	Packing	1	33	Nut	1	62	Bolt M4	1
04	Pump Base	1	34	Back-up Ring	1	63	Spring	1
05	Set Screw	2	35	Spring	1	64	Air Valve Body	1
06	Spring	1	36	Cap Washer	1	65	O-ring	1
07	Bearing φ 7/32"	2	37	Plunger	1	66	Plug	1
08	Spring Safety Valve	1	38	Stem	1	67	Bolt 3/16 x 32 L	4
09	Spring Safety	1	39	O-ring	2	68	Plastlook	1
10	Adjustment Bolt	1	40	Back-up Ring	2	69	O-ring	1
11	Bearing φ 9/32"	1	41	Piston	1	70	O-ring	1
12	O-ring	1	42	Stem	1	71B	Release	1
13	Check valve kit	1	43	Seal Cap	1	72	O-ring	1
14	Filter	1	43-1	Spring	1	73	Muffler	1
15	Snap-Ring "C" R22	1	44	Valve Stem	1	74	Snap-Ring "C"	1
16	Spring	1	45	Piston Gland	1	75	Pump Base Right	1
17	Spring Safety Valve	1	46	Seal Cap	1	76	Bolt 3/16 x 45 L	2
18	Bearing φ 1/8"	1	47	Bolt 3/16 x 13 L	3	77	Reducer	1
19	Sleeve	1	48	Motor Sleeve	1	78	Hose Plug	1
20	Pin	1	49	Bolt 3/16 x 7L	1	79	Spindle	1
21	O-ring	1	50	Spring	1	80	Snap-Ring "E"	2
22	Piston Ring	1	51	Stem	2	81	Filler Plug	1
23	Return Valve	1	52	Motor Body Gland	1	82	Filler Plug Seal	1
24	Spring	1	53	Spring Washer 1/4	4	83	Filler Plug-Breather	1
25	Spring	1	54	Bolt 1/4 x 4 L	4	84	Release Seal(optional)	1
26	O-ring	3	55	Gasket	1	85	Release Clip(optional)	1
27	Back-up Ring	2	56	Base	1	86	Copper Ring	2
28	Pump High Pressure	1	57	O-ring	1	87	Gasket	1
29	O-ring	1	58	O-ring	6	88	Across Gasket	1
30	Pump Cylinder	1	59	Bolt 3/16 x 6 L	6	89	Spring	1

LIMITED ONE YEAR WARRANTY

Jackco Transnational Inc. warrants all Jackco equipment and tools to the original purchaser against any manufacturing defect in material or workmanship for a period of one (1) year from the original date of purchase. If the defective equipment or tool is determined to be covered under this warranty, it shall be repaired or replaced at manufacturer's discretion without charge, provided that the equipment or tool must be returned with proof of purchase to the dealer and freight prepaid, if returned to the manufacturer. This warranty shall not apply to damage due to accident, negligent use, and lack of maintenance, abuse or applications other than the specific function the equipment or tool is designed for.

No other warranties, expressed or implied, including those of merchantability or fitness for particular purpose shall be applicable to Jackco except as specifically stated herein. In no event shall Jackco be liable to any party for any special, direct, indirect, consequential, punitive damage of any nature caused by the sale or use of the equipment or tool.

Note: This warranty gives the original purchaser specific legal rights which may vary from state to state.

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