

L-1277 3/90

IMPORTANT RECEIVING INSTRUCTIONS: Visually inspect all components for shipping damage. If any shipping damage is found, notify carrier at once. Shipping damage is NOT covered by warranty. The carrier is responsible for all repair or replacement costs resulting from damage in shipment.

SAFETY FIRST

Carefully plan your system by selecting components designed to perform the intended operation and which will adequately perform with existing equipment. Always check the product limitations regarding pressure ranges, load capacities and set-up requirements. The system operating pressure must not exceed the pressure rating of the lowest rated component in the system. Read all CAUTIONS, WARNINGS, and INSTRUCTIONS included with, or attached to, each product. Follow all safety precautions to avoid personal injury or property damage during the system operation. ENERPAC CANNOT BE RESPONSIBLE FOR DAMAGE OR INJURY RESULTING FROM UNSAFE PRODUCT USE, LACK OF MAINTENANCE OR INCORRECT PRODUCT AND SYSTEM APPLICATION.

Contact ENERPAC ENGINEERING when in doubt as to safety precautions, or applications.

WARNING: To avoid injury and equipment damage, always use suitable lifting devices when moving or lifting the cylinder mounting kits or component parts of the kit. Weights are given in chart "B".

IMPORTANT: READ ALL INSTRUCTIONS packaged with or attached to each hydraulic product before attempting to assemble and/or operate any of the hydraulic equipment or systems. Failure to read and adhere to the instructions could result in malfunctions or damage which is not covered under warranty.

The following general instructions and guides will be helpful to determine if your system components are properly connected:

1. Be sure all hydraulic connections, hoses, fittings are rated for the highest pressure your system is capable of generating. Always use hoses and tubing recommended by the hydraulic component manufacturer.
2. Be sure all connections are fully tightened. Seal all pipe connections with a high-grade pipe thread sealer.

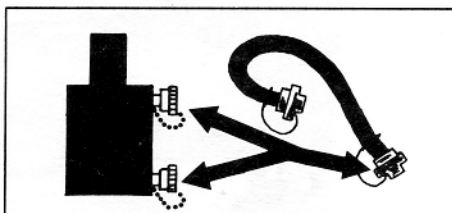
WARNING: Teflon tape is an excellent thread sealer, however, if the tape is not properly applied, pieces may enter the hydraulic system causing malfunctions and damage. Use 1½ wraps of tape on each thread. **DO NOT** leave loose ends.

3. **DO NOT** over-tighten any connections. All connections should be snug and leak-free. Excessive tightening will cause strain on the threads and castings which could cause fitting failure at pressures below rated capacity.
4. Fully tighten hydraulic couplers (avoid excessive force). Loose couplers will act as a partial or complete line restriction causing little or no oil flow and resulting in equipment damage or failure.
5. Be sure all hydraulic hoses and fittings are connected to the correct **inlet** and **outlet** ports of the pump, cylinder, valves and other system components.
6. Make sure all electrical connections are correct and complete. Check the pump name plate to insure correct voltage usage and to avoid dangerous electrical overloading.

KEEP OIL LINES CLEAN

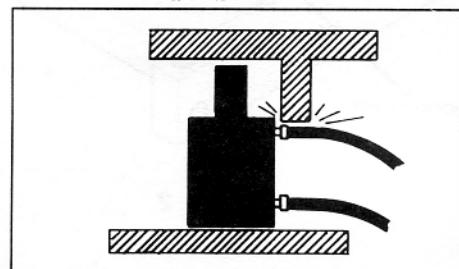
When coupler halves are disconnected, always attach the dust caps to prevent dirt from accumulating in the open coupler. Dirt in couplers and fittings will eventually enter the hydraulic system causing pump and component damage.

WARNING: DO NOT attempt to connect or disconnect hydraulic components, couplers or fittings while the system is pressurized. Make sure the power source is disconnected and no pressure is in the system prior to performing maintenance on the system. If in doubt, contact an ENERPAC Service Center for assistance.



PROVIDE ADEQUATE CLEARANCE

Always provide clearance for hoses and couplers to avoid moving objects, abrasion or sharp edges.



Cylinder mounting kits are available for H-frame presses in 50 thru 200 ton models. When installing the new mounting kit, be sure the kit model is compatible with the press rated capacity. (See Chart A) The kits will fit ENERPAC H-frame presses and most other brands of presses. Hydraulic cylinders are not included with the mounting kits. Depending on cylinder coupler location, some additional fittings and tubing may be required to provide clearance for pump hose connections.

CHART A

Kit Number	H-Frame Press
PK-501	50 Ton
PK-751	75 Ton
PK-1002	100 Ton
PK-1002	150 Ton
PK-2002	200 Ton

ASSEMBLY PROCEDURE:

1. Assemble upper support block components.
 - a. Assemble two axles by installing two retainer rings, one in each inner groove. Place one bearing on each end of the axle and secure with an outer retaining ring. (See Figure 1)

NOTE: Install bearings on shaft with shield facing out.

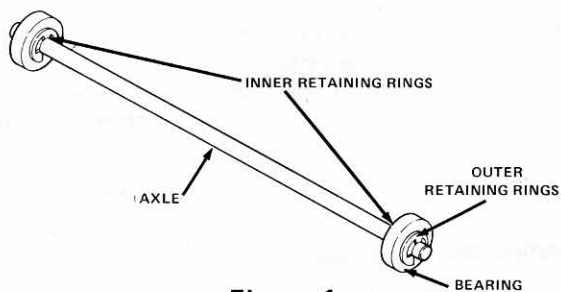


Figure 1

- b. Install a lock screw in each of four corner holes in the upper support block rails (Figure 2).

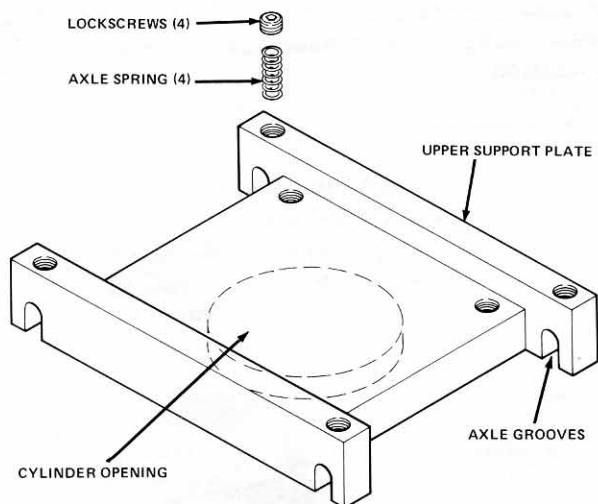


Figure 2

- c. Turn the support plate over. Install one axle spring in each of the holes in the axle groove. Springs sit on top of the lock screws installed earlier.
 - d. Place the assembled axles into the upper plate grooves. Use tape or wire to temporarily hold the axles in the support plate.

NOTE: On 50 - 100 Ton Presses, install 2 roll pins in the bottom of the upper block. Use two holes which are opposite the tie rod threaded holes.

- e. Use a suitable lifting device to turn the support plate over and then lift it to the top of the press upper frame. Place the support plate on top of the press frame with the bearings resting on the frame.
 - f. Remove the tape or wire used to hold the axles in place. The support plate should roll easily along the press frame. Be sure the surface is clean before installing the remaining kit parts.

2. Assemble Lower Support Plate

- a. Remove couplers or other fittings from the hydraulic cylinder.
- b. Thread the lower plate onto the cylinder until cylinder is flush with the plate surface.
- c. Thread the hex grip nuts onto the tie rods, two rods for 50 thru 100 ton presses, four tie rods on 150 thru 200 ton model presses. Secure the nut to the rod with set screws.

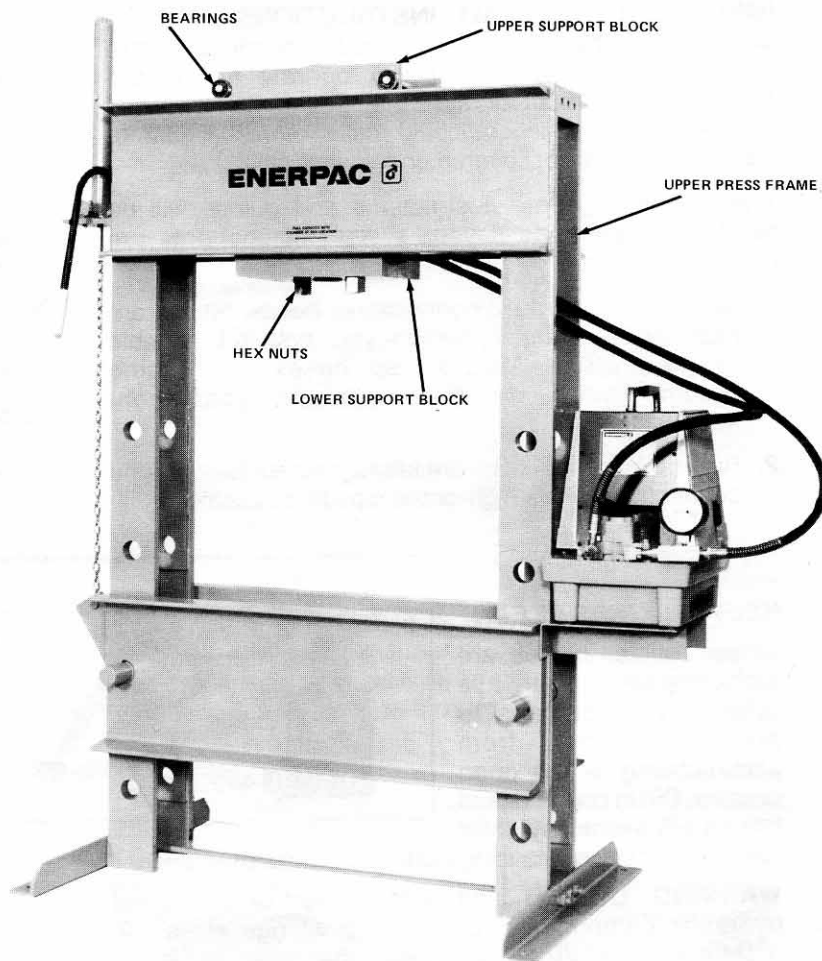


Figure 3

3. Assemble upper and lower plates to the press frame.
 - a. Position the lower support block with the cylinder plunger facing down. Using a suitable lifting device, raise the lower block and cylinder and position it below the press upper frame. (See Chart B for approximate item weights.) Raise the block until the cylinder extends through the hole in the upper support block.
 - b. Insert the tie rods through the lower support block and thread them into the holes in the upper support block. Tighten the hex nuts until the upper and lower blocks are firmly against the press frame. (Figure 3)
 - c. Install a pin in the hole of each tie rod (threaded end).
- d. Various cylinder configurations will require fittings and tubing to provide cylinder to pump hose connections. The following describes ENERPAC cylinders using the items provided in the mounting kit.
 - (1) **For 100 Ton Presses:** Install the connector in the upper cylinder port, attach the offset tube assembly and female connector. Install the female coupler half. The lower port uses the standard coupler half without any other fittings. Connect the pump hoses.
 - (2) **For 75, 150 & 200 Ton Presses:** The upper cylinder port uses the standard female coupler half. Install the long nipple in the lower cylinder port then the female coupler half. Connect the cylinder to pump hose assemblies.

CHART B

Kit Number	Used on Presses	Weights	
		Upper Block	Lower Block
PK-501	50 Ton	39.2 lb.	39.9 lb.
PK-751	75 Ton	48.9 lb.	69.1 lb.
PK-1002	100 Ton	45.5 lb.	67.5 lb.
PK-1502	150 Ton	181.2 lb.	212.0 lb.
PK-2002	200 Ton	222.5 lb.	248.0 lb.

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