

**Installing SAE O-Ring Fittings**

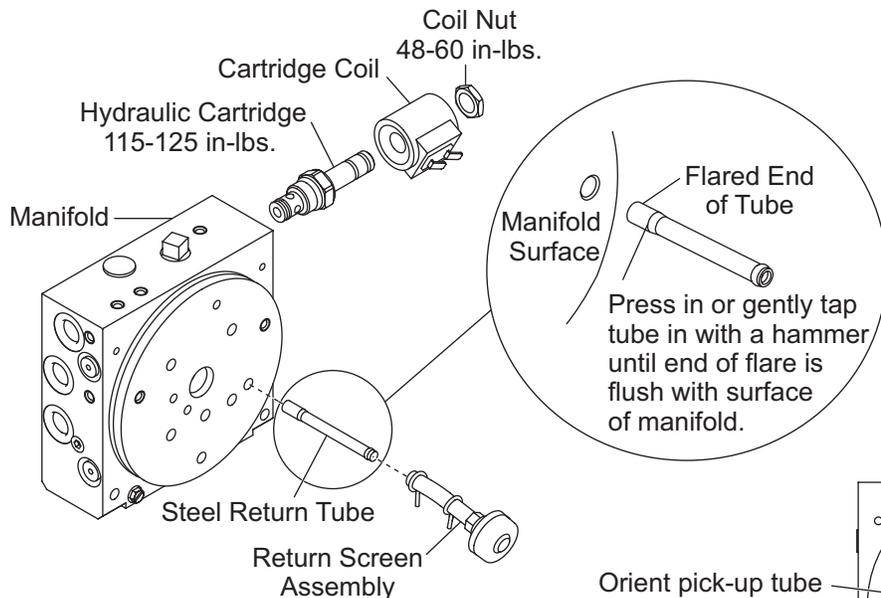
1. Turn jam nut on fitting as far back as possible.
2. Lubricate o-ring with clean hydraulic oil.
3. Screw fitting into port by hand until the washer contacts port face and shoulder of the jam nut threads.
4. Unscrew fitting to proper position — no more than one full turn.
5. Using two wrenches, hold fitting body in position and tighten jam nut until the washer again contacts port face, then tighten an additional 1/8 to 1/4 turn to lock fitting in place. Final torque on the jam nut should be approximately 20 ft-lbs.

**Manifold Assembly**

1. Thread the hydraulic cartridges in to the proper hole and tighten to a torque of 115-125 in-lbs.
2. Install the Cartridge Coil and Coil Nuts. Torque the coil nut to 48-60 in-lbs.

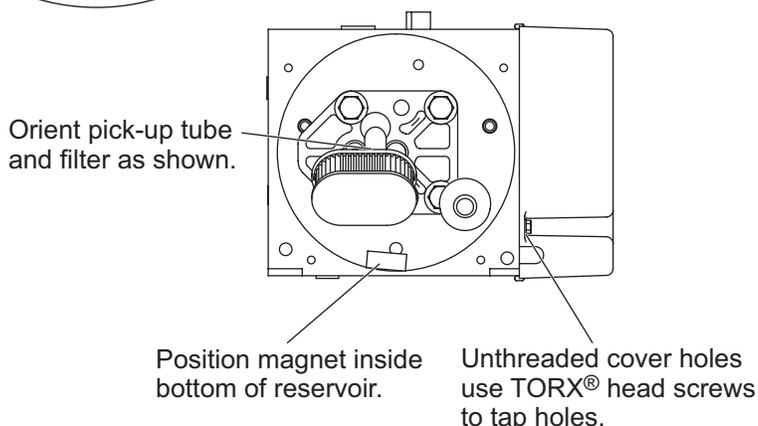
**All Kits**

3. Install the steel return tube by inserting the flared end into the manifold. Tap the tube gently with a hammer until the end of the flare is flush with the surface of the manifold.
4. Use pliers to install the return screen assembly.
5. Install the new pump o-ring and bolt the pump to the manifold as shown. Use existing fasteners and tighten to 150-160 in-lbs.
6. Install the new reservoir o-ring and reservoir. Tighten reservoir screws to 15-20 in-lbs .
7. Fill reservoir with clean fluid through fill hole on the reservoir. Refer to the Owner's Manual or Mechanics Guide for the proper fluid. **DO NOT** mix different types of oils. Actuate unit and refill reservoir. Adjust pump pressure relief valve if necessary. See Mechanic's Guide for the system you are working on for details about pump pressure adjustment.



**Manifold Assemblies include:**

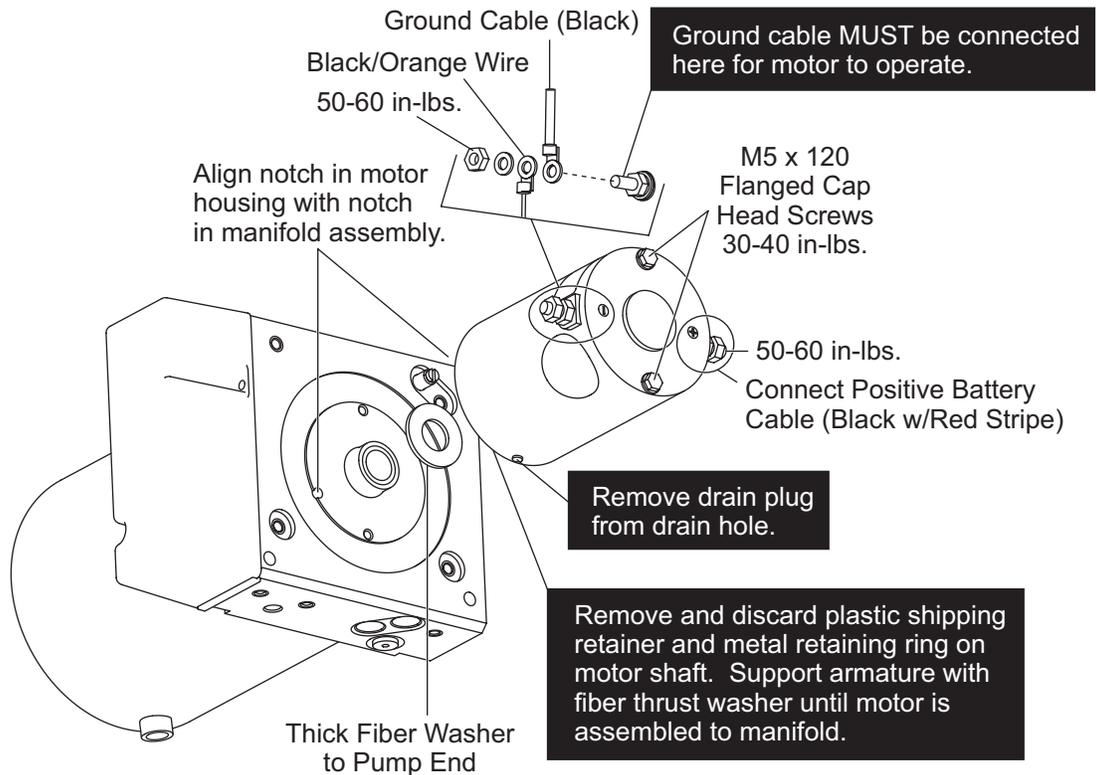
- a pump O-ring - 013
- a reservoir O-ring 2-250
- reservoir fasteners



### Replacement Motor Installation

**▲ CAUTION**  
**Operating the unit without oil in the reservoir will damage the pump. Ensure that reservoir is filled before testing operation.**

1. Do not allow armature to slip out of motor frame. **Washer placement is critical.**
2. Bolt motor to manifold and tighten to 30-40 in-lbs.
3. Connect all cables as shown in illustration below and secure to 50-60 in-lbs.
4. Ensure that the hydraulic reservoir is filled before actuating motor.
5. Reattach coil wires per diagram on inside of coil cover. Reinstall coil cover.



| <b>HYDRAULIC UNIT TORQUE SPECIFICATIONS</b>                    |   |                   |
|--|---|-------------------|
| Alternately, torque fasteners to torque specifications listed. |   |                   |
| Location   | Fastener Size   | Torque (In. Lbs.) |
| Pump Cap Screws  | 5/16"-18 x 2-1/2" <b>with Flat Washer</b> or 5/16"-18 x 2-1/4" <b>without Flat Washer</b> | 150-160           |
| Motor Terminals (+ and -)                                      | 5/16"-24 Nut  | 50-60             |
| Motor to Manifold Cap Screws                                   | M5 x .80 x 120  | 30-40             |
| Reservoir Screws   | #10-24 x 5/16"  | 15-20             |
| Valve Cartridges   | 7/8" Hex  | 115-125           |
| Coil Nuts  | 3/4" Hex Jam Nut  | 48-60             |
| Cartridge/Coil Cover Screws                                    | #8-32 x 1/2" or Standoff Screws   | 15-20             |
| Check Valve  | 3/8"-24 Hex Socket SAE O-Ring Plug  | 55-65             |
| Manifold Mount Bolts   | 1/4"-20 x 2-3/4"  | 105-115           |

The company reserves the right under its product improvement policy to change construction or design details and furnish equipment when so altered without reference to illustrations or specifications used.

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