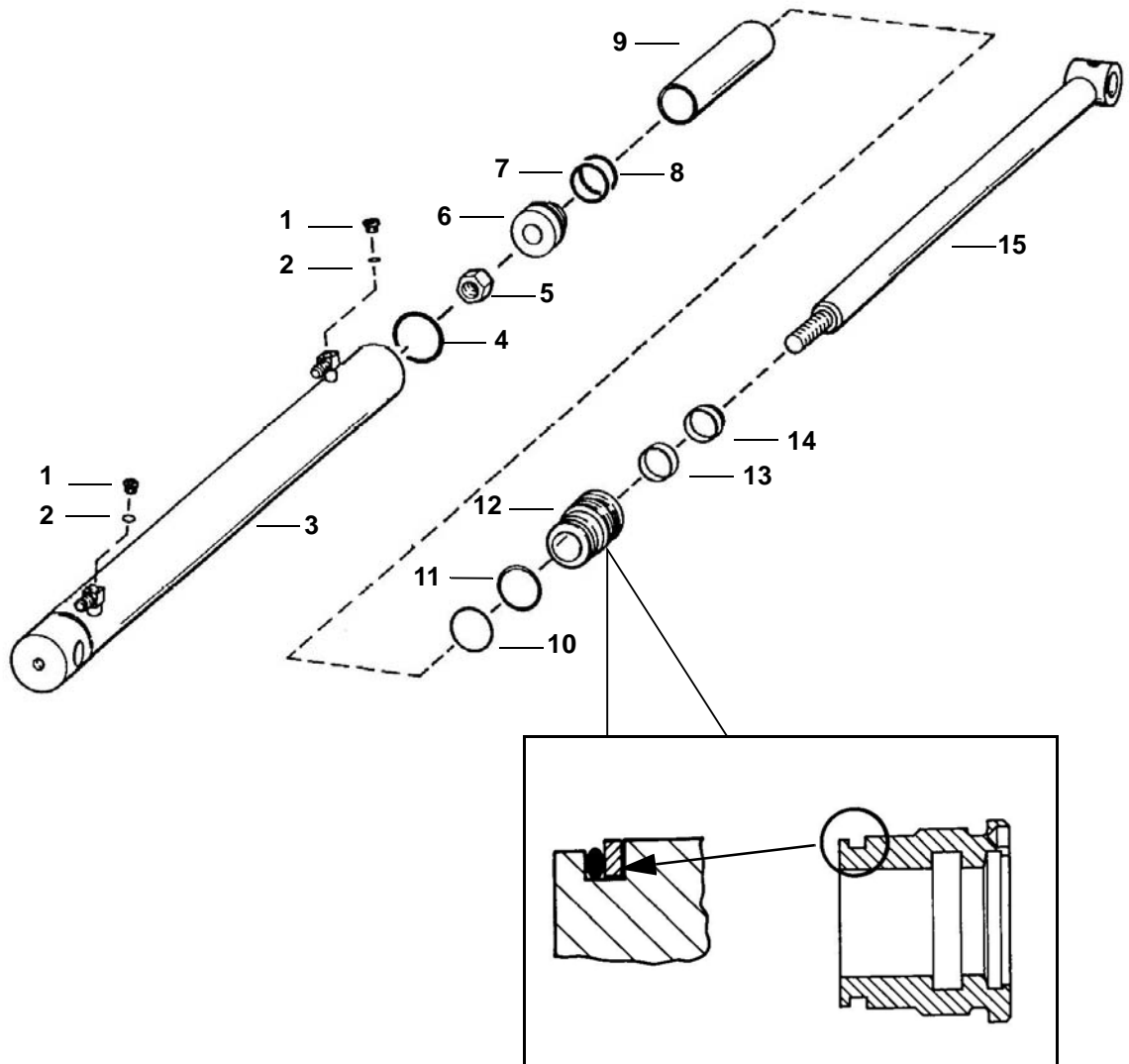


# CYLINDER (LIFT) (CONT'D)

## Parts Identification

- |             |                |
|-------------|----------------|
| 1. Plug     | 9. Spacer      |
| 2. O-ring   | 10. Seal       |
| 3. Cylinder | 11. O-ring     |
| 4. O-ring   | 12. Head       |
| 5. Nut      | 13. Rod Seal   |
| 6. Piston   | 14. Wiper Seal |
| 7. Seal     | 15. Rod        |
| 8. O-ring   |                |



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## CYLINDER (LIFT) (CONT'D)

### Disassembly And Assembly

Use the following tools to service the cylinder:

MEL1074 - O-ring Seal Hook  
Spanner Wrench

MEL1033 - Rod Seal Installation Tool

MEL1396 - Seal Installation Tool

Piston Ring Compressor

Wash the cylinder parts in solvent and air dry them.

Inspect the cylinder parts for nicks, scratches or other damage. Replace any damaged parts.

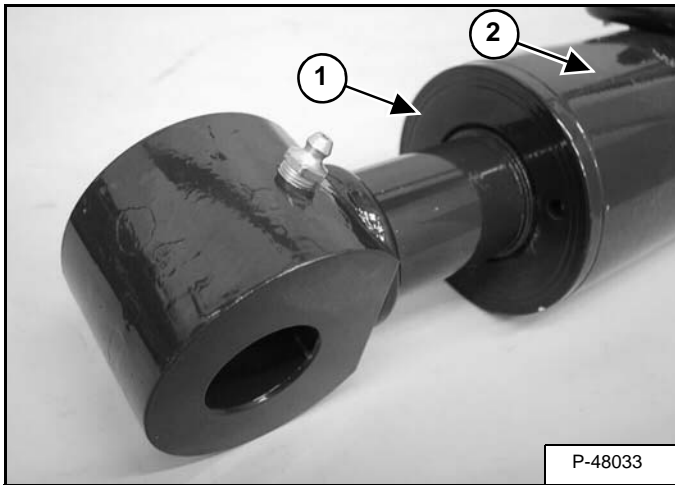
Always install new O-rings and seals during assembly.

Lubricate all O-rings and seals with hydraulic oil during installation.

Hold the hydraulic cylinder over a drain pan and move the rod in and out slowly to remove the fluid from the cylinder.

Put the base end of the cylinder in a vise.

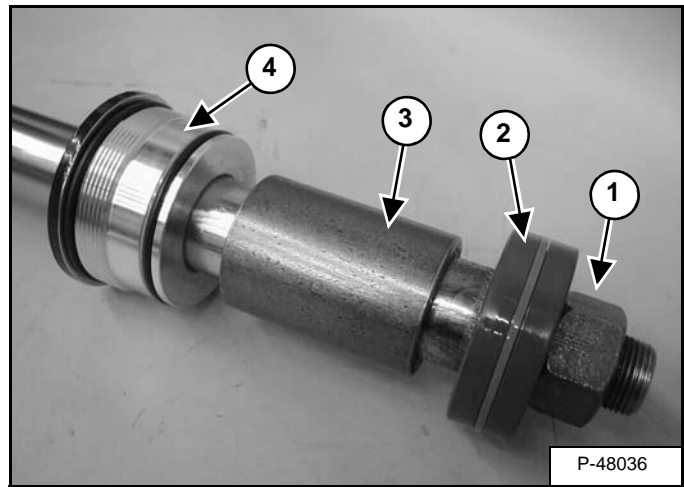
**Figure 20-20-10**



Use a spanner wrench to loosen the head (Item 1) [Figure 20-20-10] from the cylinder case.

**Assembly:** Tighten the head with a spanner wrench until the head is seated all of the way into the cylinder (Item 2) [Figure 20-20-10].

**Figure 20-20-11**

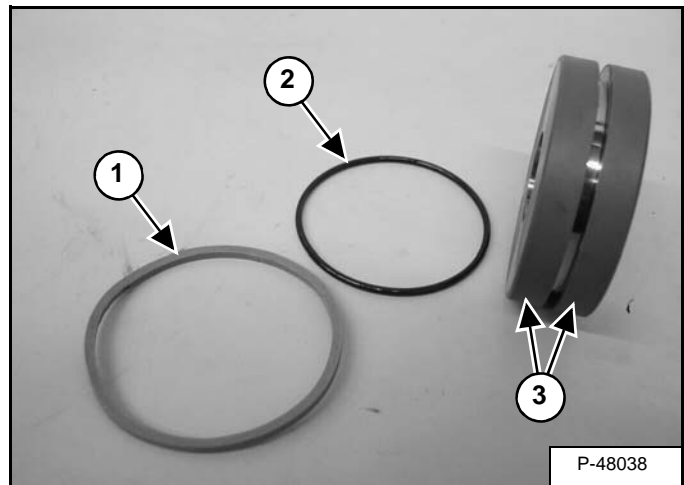


Remove the nut (Item 1), piston (Item 2), spacer (Item 3) and head (Item 4) [Figure 20-20-11].

**Assembly:** Tighten the nut (Item 1) [Figure 20-20-11] to 1152 N•m (850 ft-lb) torque.

**NOTE:** Clean and dry the threads before installing the nut. Install the new nut from the kit.

**Figure 20-20-12**



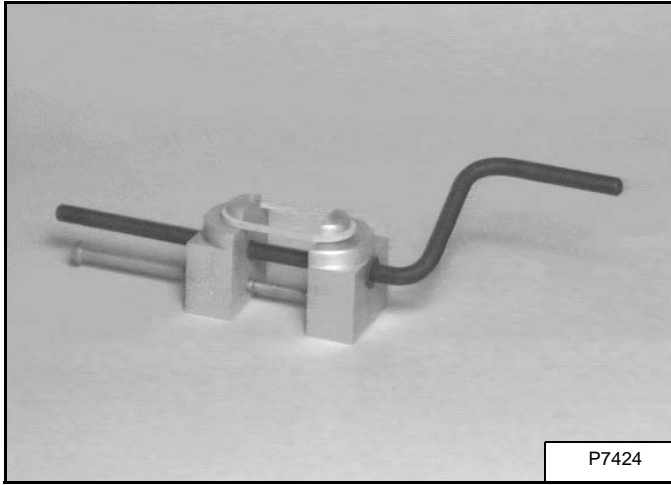
Remove the seal (Item 1) and O-ring (Item 2) [Figure 20-20-12] from the piston.

**NOTE:** If the fiber surface (Item 3) [Figure 20-20-12] on the piston head, becomes damaged, the complete piston head must be replaced.

## CYLINDER (LIFT) (CONT'D)

### Disassembly And Assembly (Cont'd)

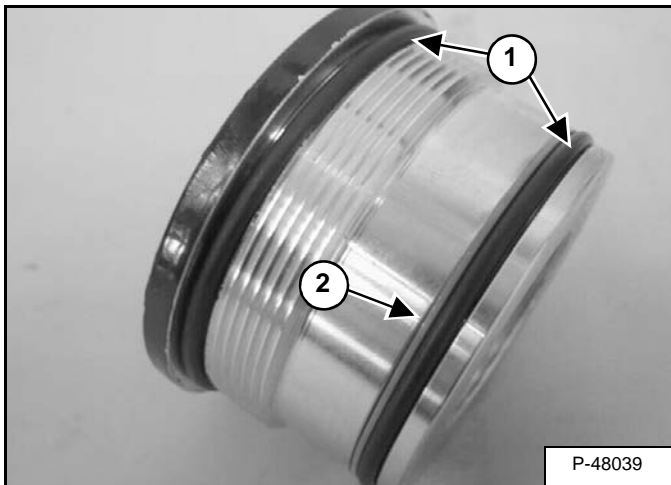
Figure 20-20-13



**Assembly:** Install the new seal on the tool and slowly stretch it until it fits the piston [Figure 20-20-13]. Allow the seal to stretch for 30 seconds before installing it on the piston.

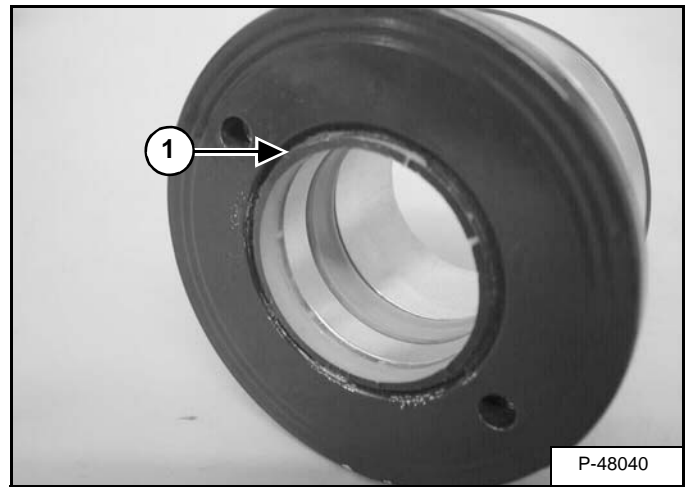
Once the seal is installed on the piston, a piston ring compressor can be used on the piston for 3 minutes to compress the seal into place.

Figure 20-20-14



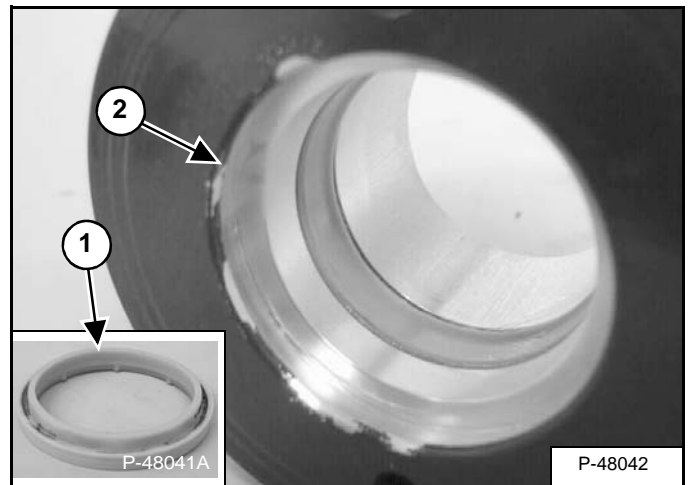
Remove the two O-rings (Item 1) and the back-up washer (Item 2) [Figure 20-20-14] from the cylinder head.

Figure 20-20-15



Remove the wiper seal (Item 1) [Figure 20-20-15] from the cylinder head.

Figure 20-20-16

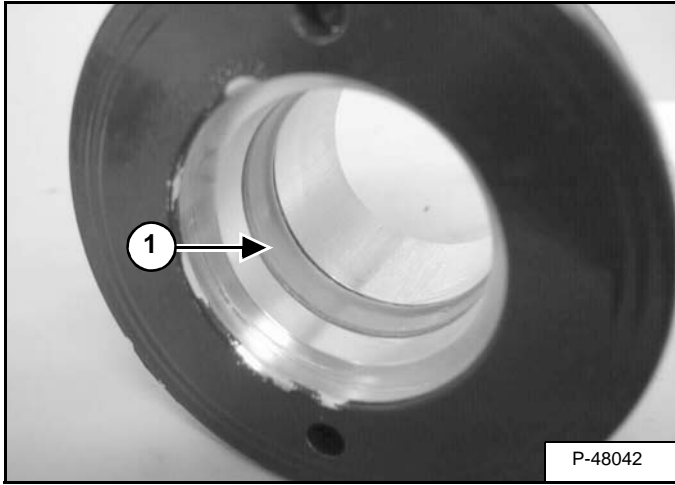


Install the wiper seal, with the wiper side of the seal (Item 1), toward the outside of the head (Item 2) [Figure 20-20-16].

## CYLINDER (LIFT) (CONT'D)

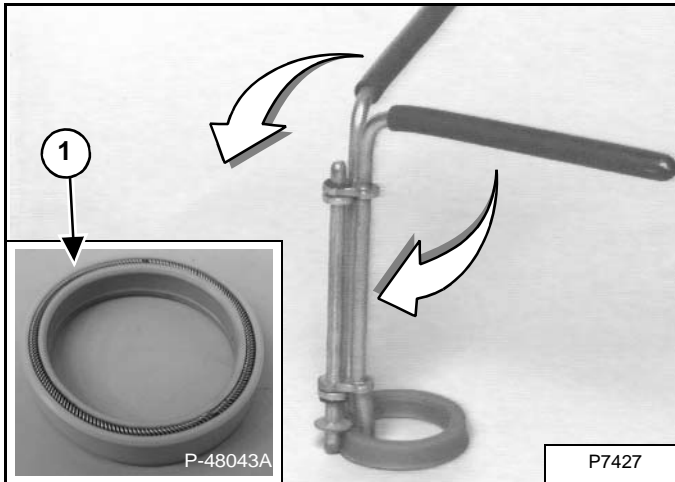
### Disassembly And Assembly (Cont'd)

Figure 20-20-17



Remove the rod seal (Item 1) [Figure 20-20-17] from the cylinder head.

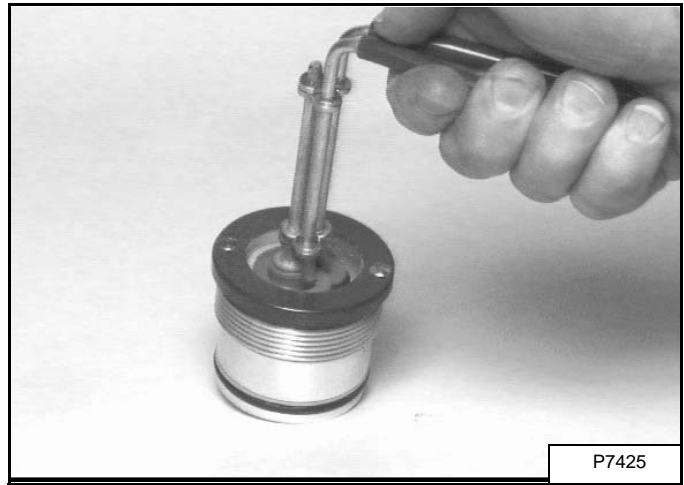
Figure 20-20-18



**Assembly:** Install the rod seal on the rod seal tool [Figure 20-20-18].

**NOTE:** During installation the spring side of the seal (Item 1) [Figure 20-20-18] must be installed toward the inside of the cylinder.

Figure 20-20-19



**Assembly:** Install the rod seal in the head. Rotate the handles to collapse the rod seal.

Reverse the disassembly procedure to assemble the lift cylinder.

## CYLINDER (TILT)

### Testing

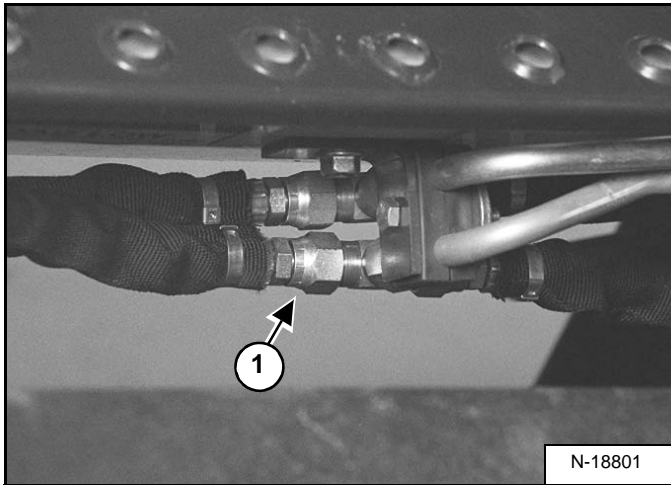
# WARNING

Hydraulic fluid escaping under pressure can have sufficient force to enter a person's body by penetrating the skin. This can cause serious injury and possible death if proper medical treatment by a physician familiar with this injury is not received immediately.

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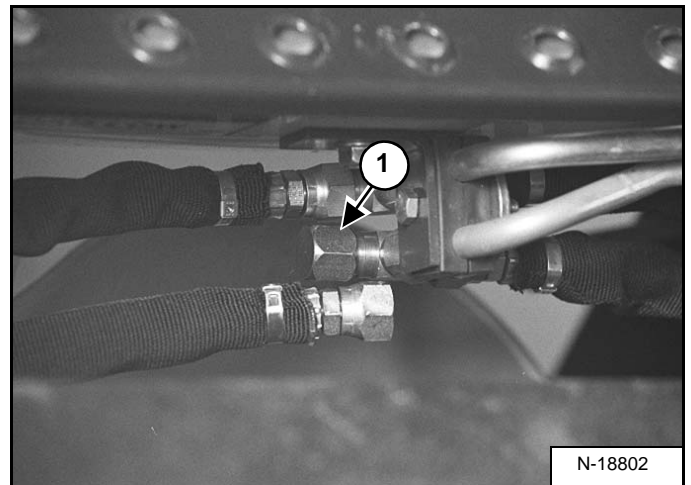
Remove the attachment. Roll the Bob-Tach fully back. Stop the engine. Raise the seat bar.

Figure 20-21-1



Disconnect the hose (Item 1) [Figure 20-21-1] which goes to the base end of the tilt cylinder.

Figure 20-21-2



Install a cap (Item 1) [Figure 20-21-2] on the fitting and tighten.

Engage the parking brake. Lower the seat bar.

Start the engine and push the Press to Operate button. Push the bottom (heel) of the tilt pedal.

If there is leakage from the open port, remove the tilt cylinder for repair.