

NOTE: The hoist valve weighs approximately 320 lbs. (145 Kg). Use a suitable lifting device that can handle the load safely.

7. Attach a suitable lifting device to the hoist valve and remove from truck.

Installation

1. Move the hoist valve into position and secure in place with capscrews, nuts and lockwashers. Alternately tighten capscrews to standard torque.
2. Using new O-rings at the flange fittings, connect hydraulic lines. Tighten flange capscrews to standard torque. Refer to Figure 8-1 for hydraulic line location.
3. Connect pilot supply lines, tighten fittings securely. Close body creep down valve on hydraulic tank.
4. If hydraulic tank was drained, add type C-4 oil.
5. Start the engine. Raise the body to remove the body sling cable. Lower and raise body to check for proper operation. Observe for leaks.
6. Service hydraulic tank if necessary.

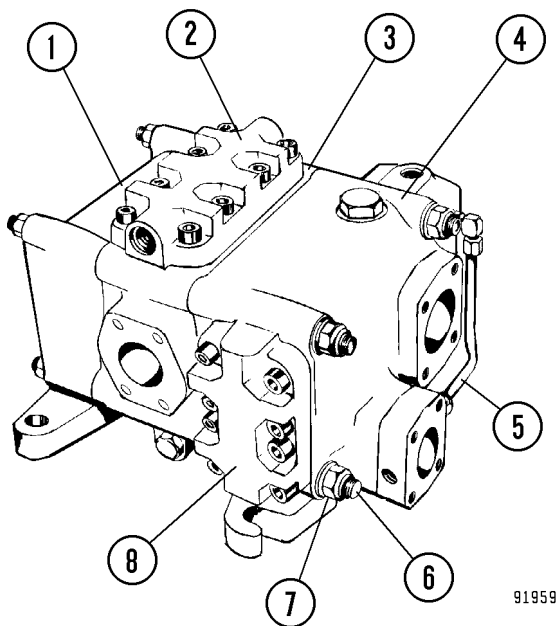
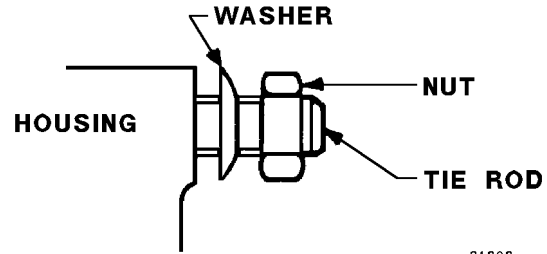


FIGURE 8-2. HOIST VALVE

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|------------------------|------------------------|
| 1. Outlet Section | 5. Tube |
| 2. Spool Section Cover | 6. Tie Rods |
| 3. Spool Section | 7. Nuts and Washers |
| 4. Inlet Section | 8. Inlet Section Cover |



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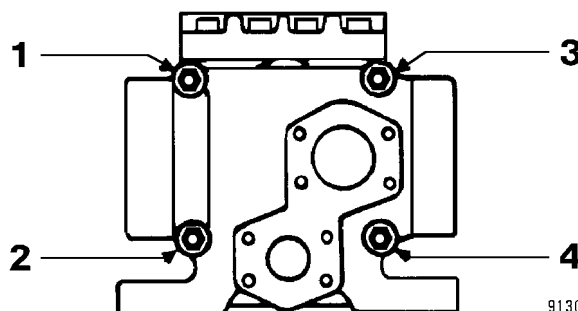
FIGURE 8-3. TIE ROD INSTALLATION

Disassembly

NOTE: It is not necessary to remove the individual valve sections to accomplish repair, unless emergency field repair is required to replace the O-rings between sections to prevent leakage. Loosening and retorquing of the main valve tie rod nut could cause distortion resulting in binding or severely sticking plungers, poppet and spools.

The following procedure is for replacing the O-rings between the valve sections.

1. Remove the four tie rod nuts and washers (7, Figure 8-2) from one end of the valve. Slide the tie rods from the valve and separate the sections.
2. Inspect the machined sealing surfaces for scratches or nicks. If scratches or nicks are found, remove by lapping on a smooth flat steel surface with fine lapping compound.
3. Lubricate the new O-rings lightly with multipurpose grease. Replace O-rings between sections. Stack the sections together making sure O-rings between the sections are properly positioned.
4. Install the four tie rods with the dished washer between the nut and housing as shown in Figure 8-3.



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FIGURE 8-4. TORQUE SEQUENCE

5. A torque wrench should be used to torque the nuts in the pattern shown in Figure 8-4. The tie rods should be torqued evenly to **105 ft. lbs. (217 N.m)** torque in the following sequence.
 - a. Torque nuts evenly to **15 ft. lbs. (20 N.m)** torque in order 1, 4, 2, 3.
 - b. Torque nuts evenly to **32 ft. lbs. (43 N.m)** torque in order 1, 4, 2, 3.
 - c. Torque nuts evenly to **105 ft. lbs. (142 N.m)** torque in order 1, 4, 2, 3.

INLET SECTION

Disassembly

1. Match mark or identify each part when removed in respect to its location or respect to its mating bore to aid reassembly.
2. Disconnect the external tube at the cover end and remove. Remove capscrews (14, Figure 8-5), and cover (13). Remove springs (12), poppets (11) and O-rings (10).

NOTE: Inlet section shown removed from main valve body for clarity.

3. Remove capscrews (1) and cover (2). Remove springs (3 & 5) and main relief valve (4). Remove sleeve (6), low pressure relief (7) and O-rings (8). The main relief valve (4) is factory preset at 2500 psi (17,238 kPa). Replace only as a complete assembly. If adjustment is necessary, refer to "Checking Hoist System Pressure Relief Valve" later in this section.

NOTE: If restrictor poppet removal in cover (2) is required, refer to step 4 and Figure 8-6.

4. Remove sleeve (6, Figure 8-6), backup ring (5), O-ring (4), and backup ring (3). Remove restrictor poppet (2).

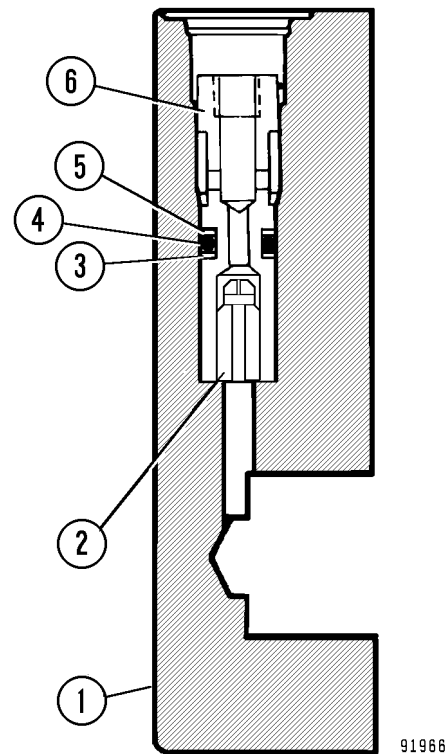


FIGURE 8-6. RESTRICTOR POPPET REMOVAL

- | | |
|----------------------|----------------|
| 1. Inlet Cover | 4. O-Ring |
| 2. Restrictor Poppet | 5. Backup Ring |
| 3. Backup Ring | 6. Sleeve |

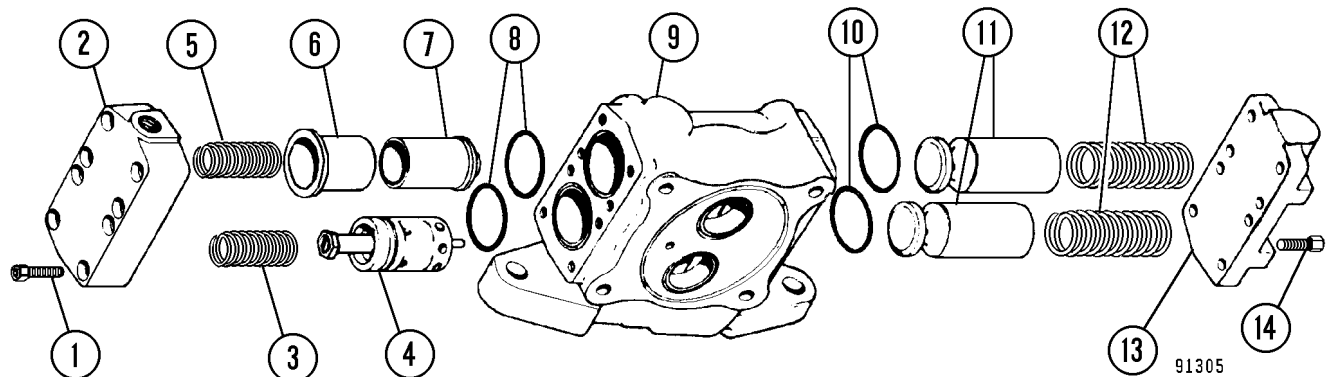


FIGURE 8-5. INLET SECTION DISASSEMBLY

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|----------------------|------------------------|---------------------|---------------|
| 1. Capscrew | 5. Spring | 9. Inlet Valve body | 12. Springs |
| 2. Inlet Cover | 6. Sleeve | 10. O-Rings | 13. Cover |
| 3. Spring | 7. Low Pressure Relief | 11. Poppets | 14. Capscrews |
| 4. Main Relief Valve | 8. O-Rings | | |