

S-22552

Figure 68
Oil Flow Bucket Cylinder Dump -
Two Spool Valve

- | | | | |
|--------------------------------------|-------------------------------|--|---|
| 1. Oil Pump | 4. Bucket Control Valve Spool | 8. Load Check Valve | A ² Bucket Cylinder Piston Port |
| 2. System Relief - Diverter Manifold | 5. Control Lever | A ¹ Lift Cylinder Rod Port | B ² Bucket Cylinder Rod Port |
| 3. Lift Control Valve Spool | 6. Lift Cylinder | B ¹ Lift Cylinder Piston Port | P Pump Pressure Port |
| | 7. Bucket Cylinder | | C Return-to-Sump Port |
| | | | D Pump Pressure to Three-Point Hydraulic System |

During assembly observe the following:

1. Be sure all components are free of dirt and foreign matter and lubricate all components with clean hydraulic oil on assembly.
2. Install all new O-rings and seals on assembly.

INSTALLATION

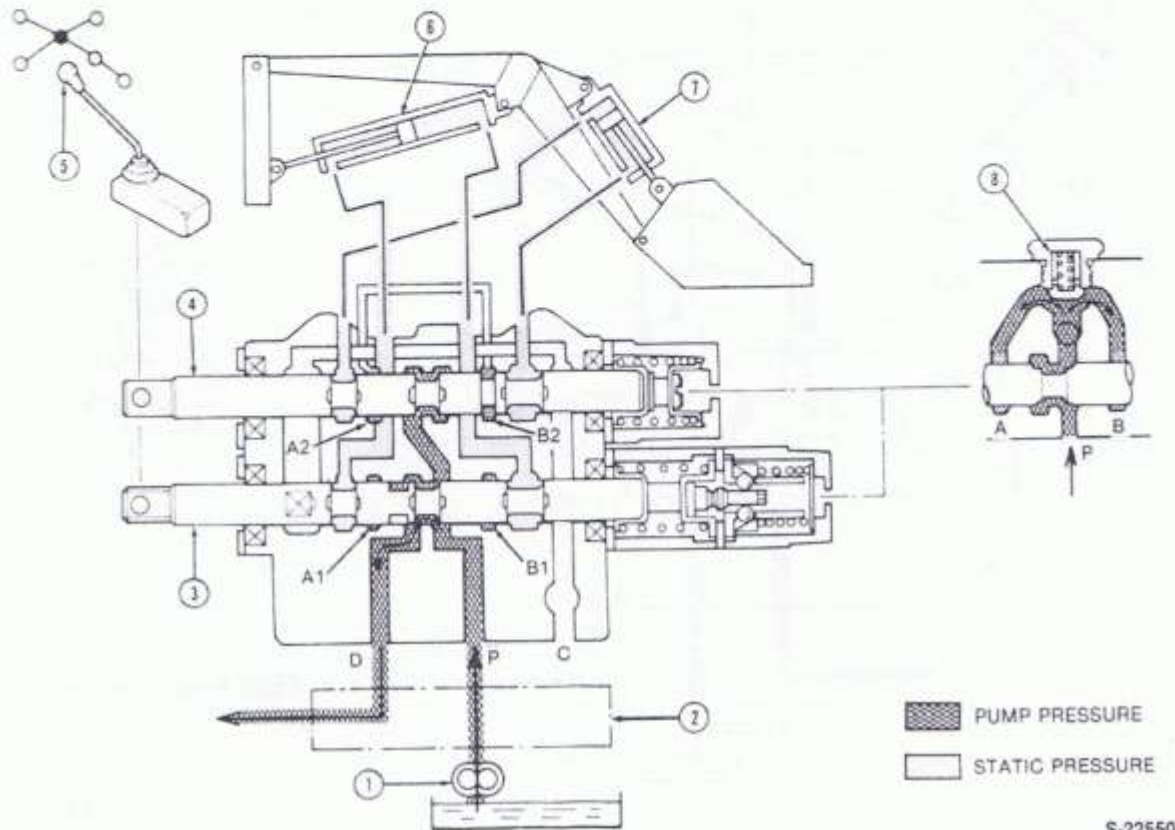
Installation generally follows the removal procedure in reverse.

During installation observe the following:

1. Be sure the mounting surfaces are free of dirt and foreign material.
2. Install new O-rings on assembly.
3. Tighten the mounting bolts gradually to the specified torque.

REMOVAL TWO SPOOL REMOTE VALVE

1. Clean the area around the remote control valve and disconnect the remote tube from the valve.
2. Remove the cover.



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Figure 67
Oil Flow Bucket and Lift Cylinder —
Neutral Position — Two Spool Valve

- | | | |
|---|--|--|
| 1. Oil Pump | 6. Lift Cylinder | B ² Bucket Cylinder Rod Port |
| 2. System Relief —
Diverter Manifold | 7. Bucket Cylinder | P Pump Pressure Port |
| 3. Lift Control Valve
Spool | 8. Load Check Valve | C Return-to-Sump Port |
| 4. Bucket Control
Valve Spool | A ¹ Lift Cylinder Rod Port | D Pump Pressure to Three-Point
Hydraulic System |
| 5. Control Lever | B ¹ Lift Cylinder Piston Port | |
| | A ² Bucket Cylinder Piston Port | |

- If required, remove the bolt (5) and separate the centering spring and seats from the spool.

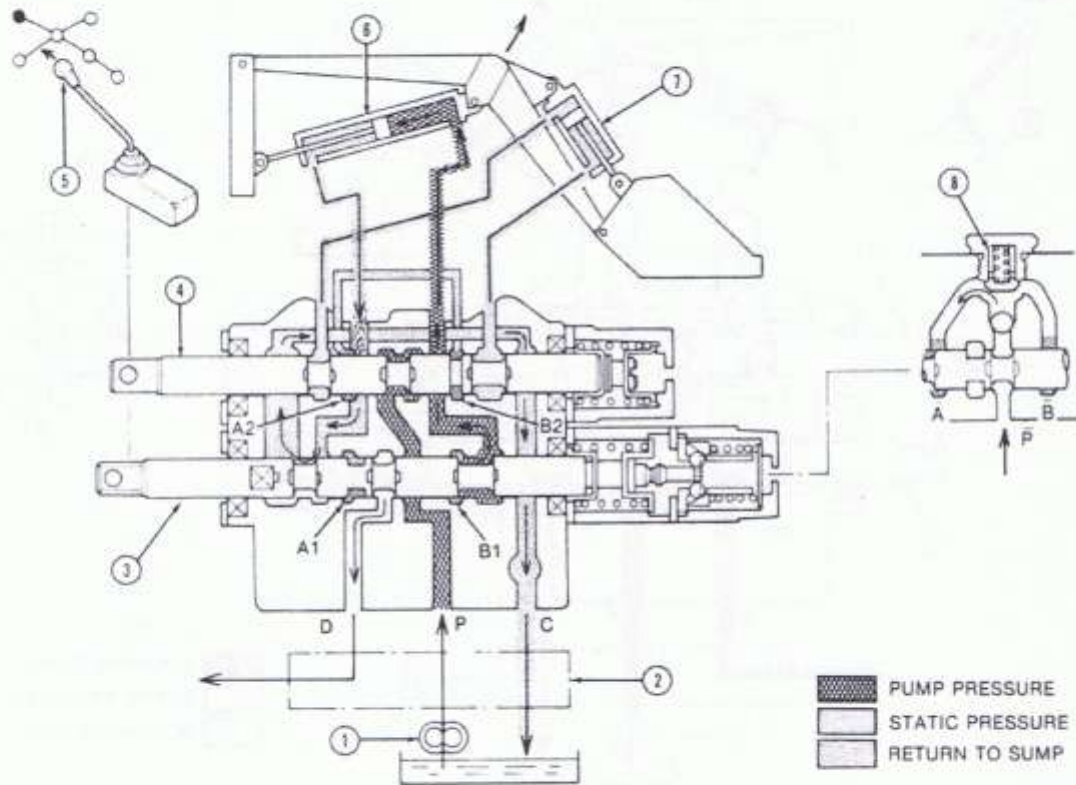
- Check that the spool moves freely in the spool bore. If defective, replace the control valve assembly.

INSPECTION

- Inspect the spool and spool bore for pitting, scratches or excess wear. If inspection reveals defects, a new control valve assembly must be installed.

ASSEMBLY

Reassembly generally follows the disassembly procedure in reverse.



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Figure 69
Oil Flow Lift Cylinder Raised — Two Spool Valve

- | | | |
|---|---------------------------|--|
| 1. Oil Pump | 5. Control Lever | B ¹ Lift Cylinder Piston Port |
| 2. System Relief —
Diverter Manifold | 6. Lift Cylinder | A ² Bucket Cylinder Piston Port |
| 3. Lift Control Valve
Spool | 7. Bucket Cylinder | B ² Bucket Cylinder Rod Port |
| 4. Bucket Control
Valve Spool | 8. Load Check Valve | P Pump Pressure Port |
| | | C Return-to-Sump Port |
| | | D Pump Pressure to Three-Point
Hydraulic System |
| | A' Lift Cylinder Rod Port | |

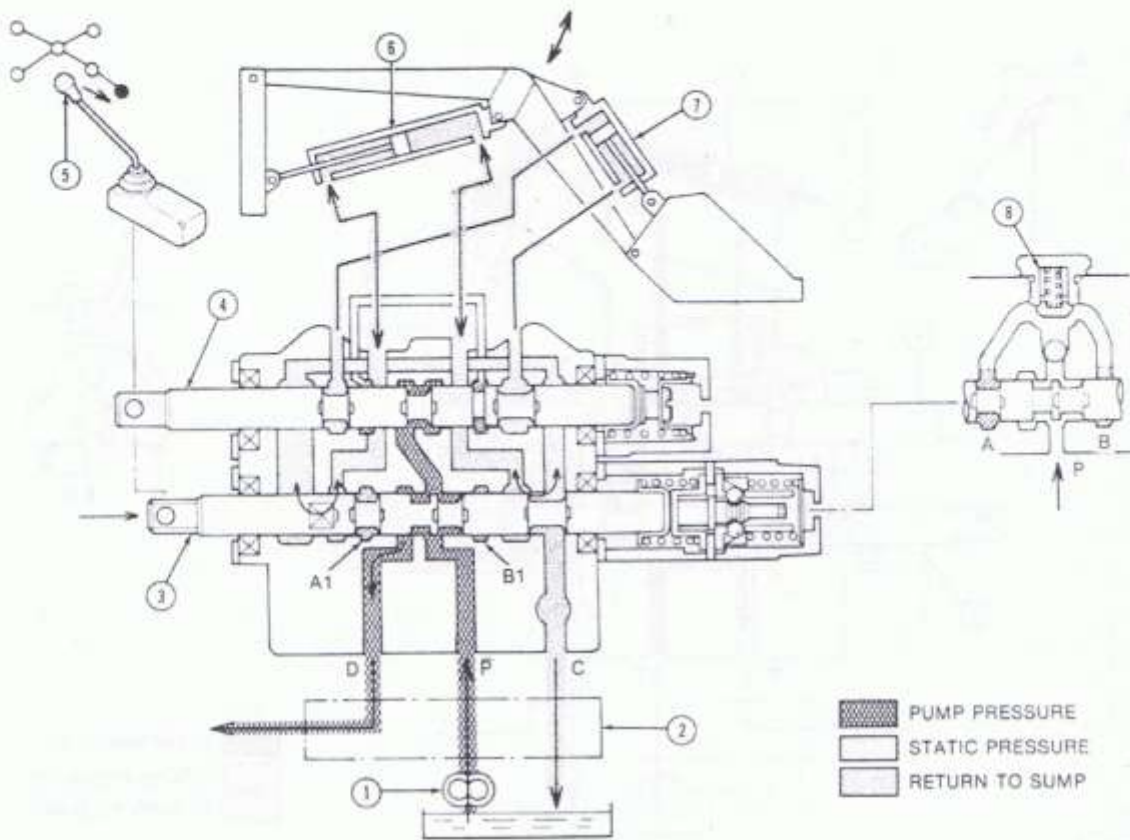
3. Remove the roll pin and control lever from the valve spool.
4. Remove the valve mounting bolt and carefully remove the valve from the bracket.

DISASSEMBLY
TWO SPOOL REMOTE VALVE
Reference — Figure 72

1. Unscrew the bolts (11) and remove the plate (5).
2. Remove the end cap and gently withdraw the spool, complete with the coil spring assembly.

3. Remove the plugs (24) and remove the check valve spring and plunger.
4. Unscrew the plug (35) and remove the relief valve assembly.
5. Remove the oil seals (4) from each end of the spool bores.
6. If required, remove the spool end bolt and separate the centering springs, seats and detent components.

NOTE: Use care to not lose the detent balls out of the end cap.



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Figure 70

Oil Flow Lift Cylinder Float Position – Two Spool Valve

- | | | | |
|--------------------------------------|-------------------------------|--|---|
| 1. Oil Pump | 4. Bucket Control Valve Spool | 8. Load Check Valve | A ² Bucket Cylinder Piston Port |
| 2. System Relief – Diverter Manifold | 5. Control Lever | A ¹ Lift Cylinder Rod Port | B ² Bucket Cylinder Rod Port |
| 3. Lift Control Valve Spool | 6. Lift Cylinder | B ¹ Lift Cylinder Piston Port | P Pump Pressure Port |
| | 7. Bucket Cylinder | C Return-to-Sump Port | D Pump Pressure to Three-Point Hydraulic System |

INSPECTION

1. Inspect the spool and spool bore for pitting, scratches or excess wear. If inspection reveals defects, a new control valve assembly must be installed.
2. Check that the spool moves freely in the spool bore. If defective, replace the control valve assembly.

ASSEMBLY

Reassembly generally follows the disassembly procedure in reverse.

During assembly observe the following:

1. Be sure all components are free of dirt and foreign matter and lubricate all components with clean hydraulic oil on assembly.

2. Install all new O-rings and seals on assembly.

INSTALLATION

Installation of the valve on the tractor generally follows the removal procedure in reverse.

During installation observe the following:

1. Be sure the mounting surfaces are free of dirt and foreign material.
2. Install new O-rings on assembly.
3. Tighten the mounting bolts gradually to the specified torque.

