

# Section 8015

UNLOADING AND FLOW CONTROL VALVE

**8015**

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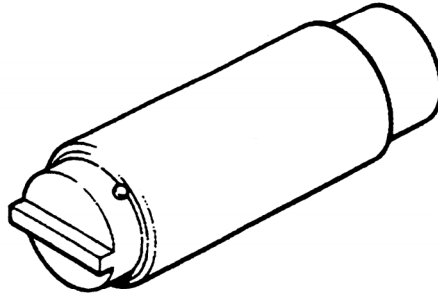
## SPECIFICATIONS

<b>UNLOADING VALVE SPRING</b>		
Free Length .....	39.88 mm	1.57 inch
<b>FLOW CONTROL VALVE SPRING</b>		
Free Length .....	43.18 mm	1.70 inch
<b>CHECK VALVE SPRING</b>		
Free Length .....	11.68 mm	0.46 inch

## SPECIAL TORQUES

Unloading and Flow Control Valve Retaining Bolts .....	44.7 to 50 Nm	33 to 37 lb ft
Seat Belt Anchor Bolts (Non Cab Tractors) .....	47.5 to 51.5 Nm	35 to 38 lb ft

## SPECIAL TOOLS



**UNLOADER VALVE SEAT WRENCH  
CAS 1922**

**IMPORTANT:** *Parts in the hydraulic system are machined to very small tolerances. Any dirt in the system will result in component damage and incorrect operation of the hydraulic system. Always work in clean conditions and follow all cleaning and drying procedures.  
Use petroleum jelly and clean transmission oil ONLY to lubricate parts.*

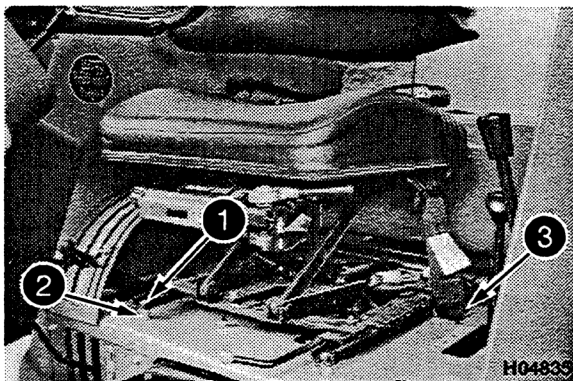
## UNLOADING AND FLOW CONTROL VALVE

### Removal and Installation

#### STEP 1

Park the machine on hard, level ground and apply the parking brake. Stop the engine.

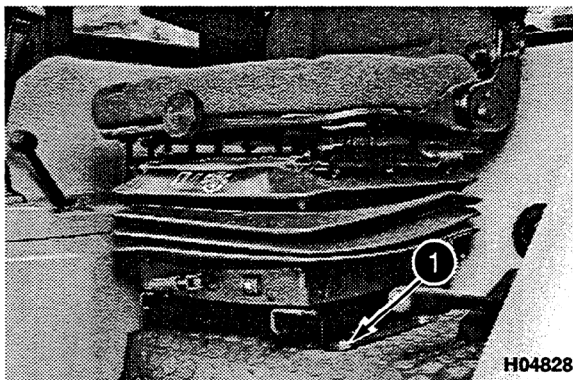
#### STEP 2 Non Cab Tractors



Remove the four retaining screws (1) and spacers (2). Remove the seat belt anchor bolts (3) and remove the seat.

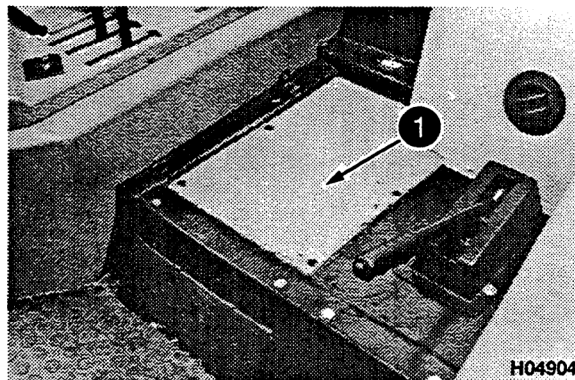
**NOTE:** For Installation, tighten the seat belt anchor bolts to a torque of 44.7 to 50 Nm (33 to 37 lb ft).

#### STEP 3 Low Profile Cab Tractors



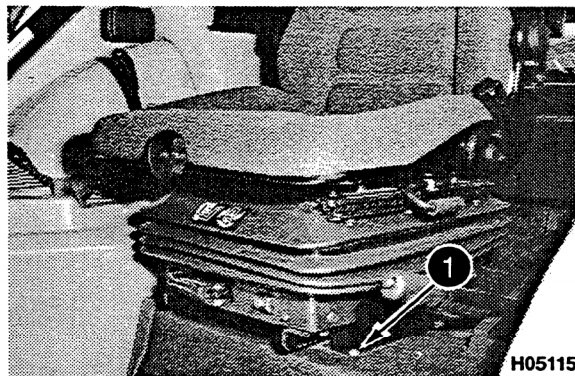
Remove the four retaining bolts (1) and remove the seat.

#### STEP 4 Low Profile Cab Tractors



Remove the four spacers and remove the seat deck insulation. Remove the retaining bolts and remove the access panel (1).

#### STEP 5 XL Cab Tractors



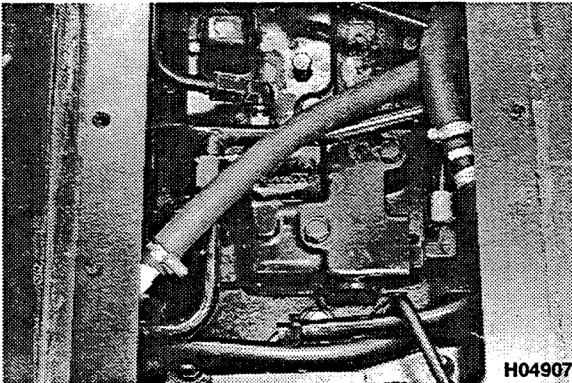
Remove the four retaining nuts (1) and washers and remove the seat.

#### STEP 6 XL Cab Tractors

Remove the four spacers and remove the seat deck insulation. Remove the retaining bolts and remove the access panel.

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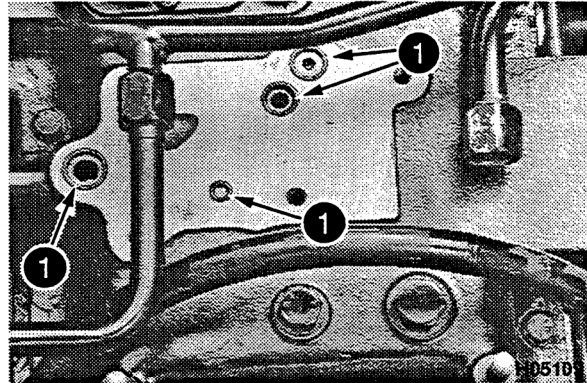
### STEP 7



Clean the area around the unloading and flow control valve. Disconnect and cap the tubes, remove the four retaining bolts and remove the valve.

**NOTE:** For Installation, tighten the valve retaining bolts to a torque of 44.7 to 50 Nm (33 to 37 lb ft).

### STEP 8

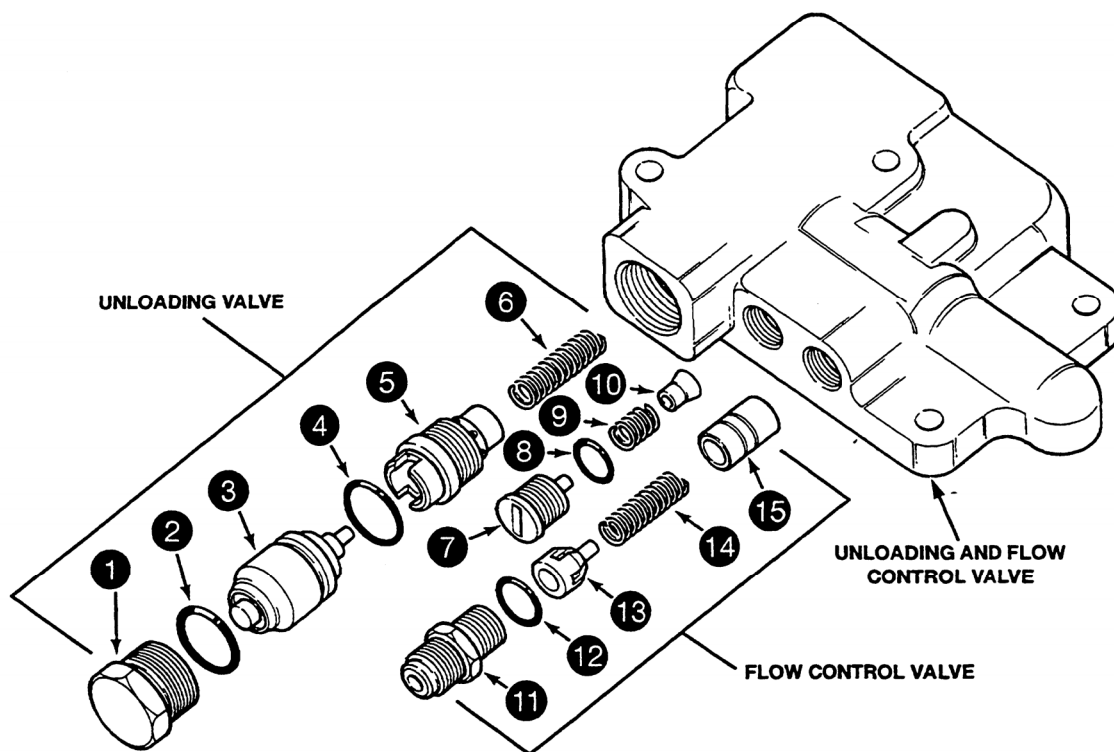


Remove and discard the four o-rings (1) from the hydraulic housing.

**NOTE:** For Installation, install new o-rings (1) into the hydraulic housing.

**NOTE:** For Installation, follow the same procedure in reverse order.

## Disassembly and Assembly



### UNLOADING VALVE

- 1. PLUG
- \*2. O-RING
- 3. VALVE PISTON
- \*4. O-RING
- 5. VALVE BODY
- 6. SPRING

### CHECK VALVE

- 7. PLUG
- \*8. O-RING
- 9. SPRING
- 10. CHECK VALVE

### FLOW CONTROL VALVE

- 11. FITTING
- \*12. O-RING
- 13. GUIDE
- 14. SPRING
- 15. SPOOL

**NOTE:** Use Special Tool, CAS 1922, to Remove and Install the valve body (5). For Installation, tighten to a torque of 47 to 54 Nm (35 to 40 lb ft)

**NOTE:** Items are numbered in order of Disassembly. Assembly is in the reverse order of Disassembly. Items marked (\*) must be replaced.

**NOTE:** Check all parts of the Unloading and Flow Control Valve for wear or damage and replace if necessary. If the Flow Control Valve Spool (15) needs replacing, it is necessary to replace the valve body. The unloading valve piston (3) and unloading valve body (5) are a matched set and must be replaced together if worn or damaged.

