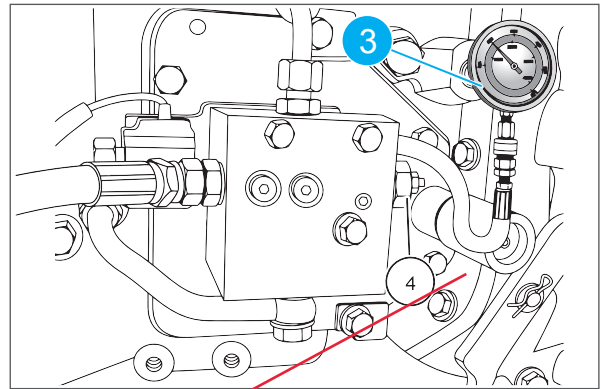
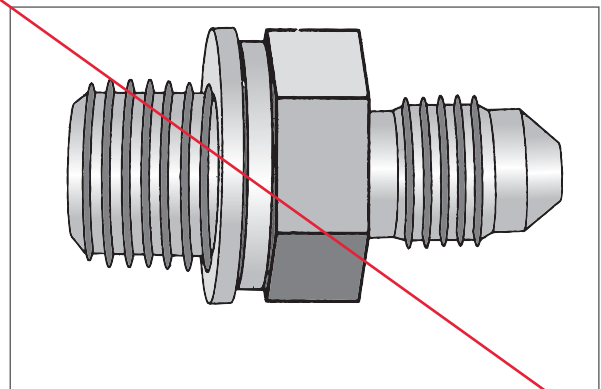


7. Push and rotate the P.T.O switch to ON. After a 1 second delay, the pressure gauge ③ should read 16 - 18 kg/cm<sup>2</sup> (200 - 227 psi). If pressure adjustment is required, turn the adjusting screw on the reduction valve ④ to increase or decrease the pressure to the P.T.O clutch. A quarter turn of the adjusting screw can increase or decrease the pressure by approximately 3.09 kg/cm<sup>2</sup> (20 psi).
8. Turn off the engine. Remove the test fitting and insert the plug into G2.
9. If the hydraulic pressure to the P.T.O clutch cannot be adjusted to 16 - 18 kg/cm<sup>2</sup> (200 - 227 psi), check the system hydraulic pressure for adequate supply pressure and volume.



**Special tool**

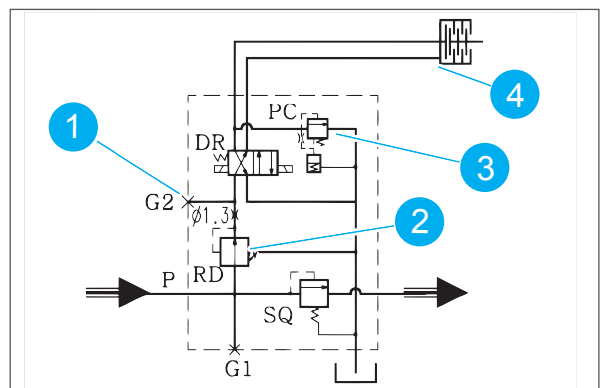
- Test fitting for P.T.O pressure test
- Pressure gauge (capacity: 20.7 kg/cm<sup>2</sup> (300 psi))



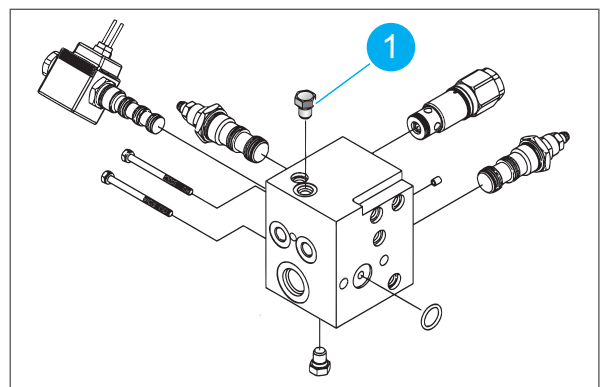
3

**2) P.T.O control valve pressure test (HST tractor)**

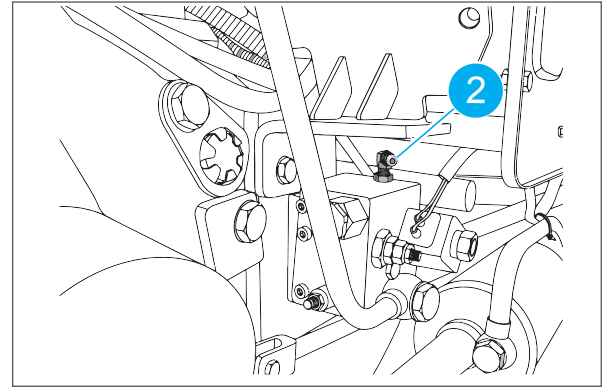
1. Test the P.T.O clutch operating pressure at the G2 port ① of the P.T.O control valve. System hydraulic pressure is reduced to 16 - 18 kg/cm<sup>2</sup> (200 - 227 psi) by the sequence valve ② in the P.T.O control valve. The P.T.O modulation valve ③ provides a 1 second time delay to prevent hydraulic shock to the P.T.O clutch ④ and drive line.



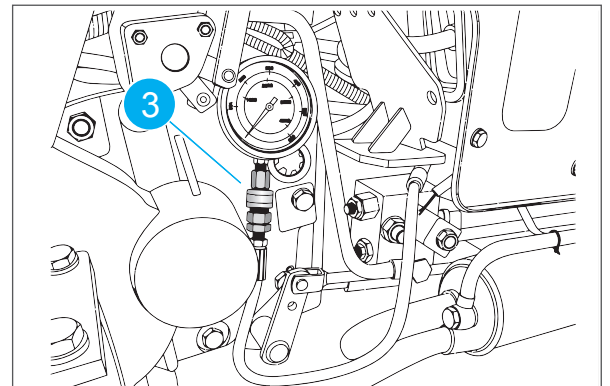
2. Relieve the pressure from the hydraulic system.
3. Remove the plug from the G2 port ① located on the top of the P.T.O control valve.



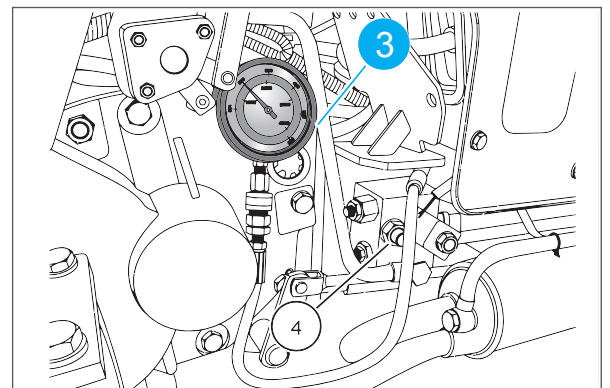
4. Install the test fitting ② and pressure gauge ③ capable of 20,7 kg/cm<sup>2</sup> (300 psi) into the G2 port.



5. Start the engine.
6. The pressure at G2 with the P.T.O switch in OFF should read 0 kg/cm<sup>2</sup> (0 psi).



7. Push and rotate the P.T.O switch to ON. After a 1 second delay, the pressure gauge ③ should read 16 - 18 kg/cm<sup>2</sup> (200 - 227 psi). If pressure adjustment is required, turn the adjusting screw on the reduction valve ④ to increase or decrease the pressure to the P.T.O clutch. A quarter turn of the adjusting screw can increase or decrease the pressure by approximately 3,09 kg/cm<sup>2</sup> (20 psi)

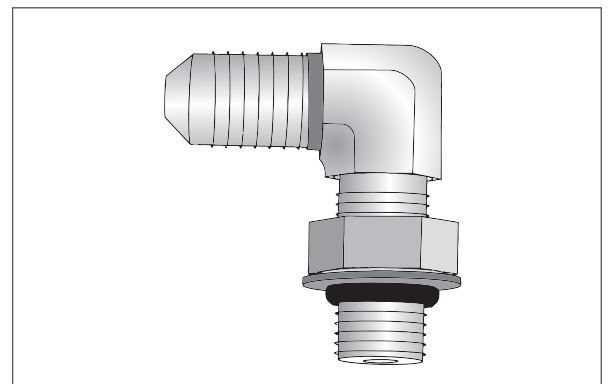


3

8. Turn off the engine. Remove the test fitting and insert the plug into G2.
9. If the hydraulic pressure to the P.T.O clutch cannot be adjusted to 16 - 18 kg/cm<sup>2</sup> (200 - 227 psi), check the system hydraulic pressure for adequate supply pressure and volume.

**Special tool**

- Test fitting for P.T.O pressure test
- Pressure gauge (capacity: 20,7 kg/cm<sup>2</sup> (300 psi))



### 3.6.3 Troubleshooting

#### 3.6.3.1 Rear P.T.O and mid P.T.O operation test



Hazard to bystanders! Before using the external P.T.O switches, make sure no persons or objects are in the area of the implement or 3-point linkage.

**Warning** Otherwise, it may cause death or serious injuries.

**Note** Check all items before troubleshooting.

- ① System hydraulic operating normally
- ② Parking brake ON
- ③ Mid P.T.O switch OFF
- ③ No implements attached to the rear P.T.O or mid P.T.O

N°	Test Point	Expected Result	Other Result (Possible Cause)
1	Check Turn on the key switch. Do lights illuminate in the instrument panel?	Result Yes Action: Go to test 2	Result No Action: Inspect the key switch, wiring, and instrument panel.
2	Condition Push and rotate the P.T.O switch to ON. Does the P.T.O indicator illuminate in the instrument panel?	Result Yes Action: Go to test 3	Result No Action: Repair or replace the P.T.O switch.
3	Check Turn off the P.T.O switch. Disconnect the P.T.O solenoid connector and check for 12 V DC from the tractor wire harness when the P.T.O switch is ON and 0 V DC when the P.T.O switch is OFF.	Result Yes Action: Go to test 4	Result No Action: Check for continuity between the wiring harnesses.
4	Check Perform the pressure test on the P.T.O control valve. With the hydraulic system not in use, the pressure at G1 should be approximately 34,61 kg/cm <sup>2</sup> (227 psi). When the P.T.O switch is ON, the pressure at G2 should be approximately 16 - 18 kg/cm <sup>2</sup> (200 - 227 psi). Is the P.T.O control valve operating normally?	Result Yes Action: Repair the P.T.O clutch or P.T.O drive line.	Result No Action: Repair or replace the P.T.O control valve.