

Steering Neutralizer Valve Test

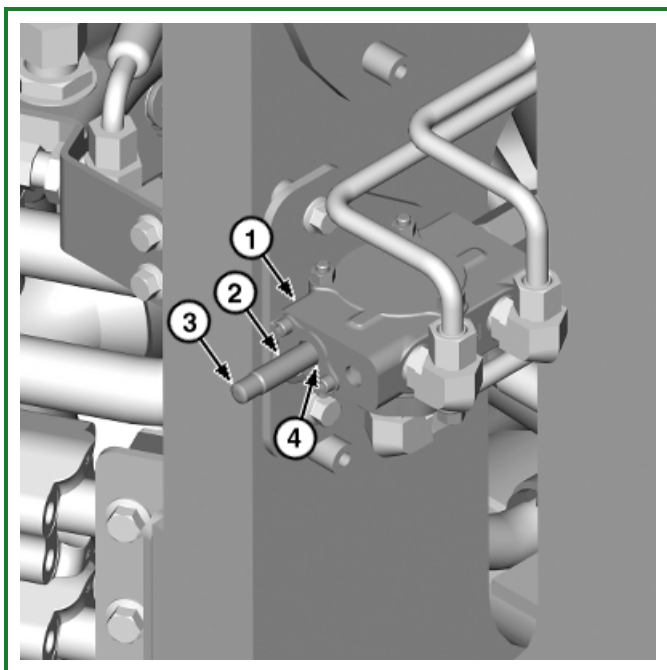
-: Specifications

SPECIFICATIONS	
Hydraulic Oil Temperature	60—70°C 140—160°F
Engine Speed	Slow Idle
Steering Pump Cut-Off Pressure (approximate)	24 500—25 200 kPa 245—252 bar 3550—3650 psi
Steering Neutralizer Valve Spool Length (approximate)	56 mm 2.2 in.

-: Service Equipment and Tools

SERVICE EQUIPMENT AND TOOLS
JT02158 Digital Pressure and Temperature Analyzer
JT02162 Transducer 35 000 kPa (350 bar) (5000 psi)

Perform this test to check steering neutralizer valves are operating properly.



TX1192042A-UN: Steering Neutralizer Valve Spool Measurement

LEGEND:

- 1 - Steering Neutralizer Valve
- 2 - Steering Neutralizer Valve Spool
- 3 - Measurement Point
- 4 - Measurement Point

1. Park and prepare machine for service. [See Park and Prepare for Service Safely](#) . (Group 9000-01.)
2. Connect JT02158 Digital Pressure and Temperature Analyzer and JT02162 Transducer 35 000 kPa

(350 bar) (5000 psi) to steering pump pressure test port. See [JT02156A Digital Pressure and Temperature Analyzer Kit Installation](#) . (Group 9025-25.)

For location of steering pump pressure test port, see [Hydraulic System Test Connections, Ports, and Locations](#) . (Group 9025-10.)

3.

⚠ CAUTION:

Prevent possible burn injury from hot exhaust components. Disable exhaust filter auto cleaning.

Disable exhaust filter auto cleaning. See [Operation—Exhaust Filter Auto Cleaning](#) . (Operator's Manual.)

4. Perform hydraulic oil warm-up procedure. See [Hydraulic Oil Warm-Up Procedure](#) . (Group 9025-25.)

Item	Measurement	Specification
Hydraulic Oil	Temperature	60—70°C 140—160°F

5. Install frame locking bar.

6. Run engine at specification.

Item	Measurement	Specification
Engine	Speed	Slow Idle

7. Move steering pilot controller to full left and right position. Observe steering pump pressure and compare to specification.

Item	Measurement	Specification
Steering Pump	Cut-Off Pressure (approximate)	24 500—25 200 kPa 245—252 bar 3550—3650 psi

8. If steering pump cut-off pressure is out of specification, see [Steering Pump Control Test and Adjustment](#) . (Group 9025-25.)

9. Measure length of steering neutralizer valve spool (2) between measurement points (3 and 4) and compare to specification.

Item	Measurement	Specification
Steering Neutralizer Valve	Spool Length (approximate)	56 mm 2.2 in.

10. If steering neutralizer valve spool length is less than specification, steering neutralizer valve spool is malfunctioning. Repair or replace steering neutralizer valve (1) as necessary. See [Steering Neutralizer Valve Remove and Install](#) . (Group 0960.)

11. Remove frame locking bar.

12. Observe and record steering pump pressure with steering pilot controller not activated.