Pressure Reducing Valve Pressure Test

Pressure Reducing Valve Pressure Test



TX1090545-UN: Pilot Pressure Diagnostic Test Ports

LEGEND:

- 28 Pressure Reducing Valve Pressure Diagnostic Test Port (pilot oil)
- 42 Main Control Valve (inlet section)
- 43 Supply Pressure Diagnostic Test Port (main system)

-: Specifications

SPECIFICATIONS			
Hydraulic Oil Temperature	60—70°C		
	140—160°F		
Engine Speed	895—910 rpm		
Pressure Reducing Valve Pressure (pilot oil)	3102—3792 kPa		
	450—550 psi		

-: Essential Tools

ESSENTIAL TOOLS

JT02156A Digital Pressure and Temperature Analyzer

-: Service Equipment and Tools

SERVICE EQUIPMENT AND TOOLS		
Gauge 6895 kPa (68 bar) (1000 psi)		

The purpose of the pilot pressure reducing valve test is to assure there is main pump supply and the pressure reducing valve is functioning properly to supply oil to pilot functions. The pressure reducing valve is located in the main control valve inlet section and is serviced as an assembly. The pressure reducing valve is not adjustable.

- 1. Monitor hydraulic oil temperature and engine speed using the standard display monitor (SDM). See Standard Display Monitor (SDM) Display . (Operator's Manual.)
- 2. Connect JTO2156A Digital Pressure and Temperature Analyzer and transducer or gauge to pilot pressure test port (28) on main control valve inlet section (42).
- 3. Warm hydraulic oil to test specification. See Hydraulic Oil Warm-Up Procedure . (Group 9025-25.)

ature 60—70°C

4. Start the engine and run at specification.

ltem	Measurement	Specification
Engine	Speed	895—910 rpm

5. Record the pressure reading.

Item	Measurement	Specification
Pressure Reducing Valve (pilot oil)	Pressure	3102—3792 kPa 31—37.9 bar 450—550 psi

6. If not to specification:

Check main hydraulic pump standby pressure. See Main Hydraulic Standby Pressure Test . (Group 9025-25.)

If OK, operate pilot controller valve function for grapple or arch. If pilot pressure changes, check for pinched system supply line to control valve inlet section port.

If OK, replace control valve inlet section.

Go to Section_9025:Group_25

TX04577,00000A2-19-20110509