

8.



TX1034315A-UN: Pilot Pressure Regulating Valve and Test Port

LEGEND:

- 1 - Test Port Plug
- 2 - Pilot Pressure Regulating Valve

Remove pilot pressure regulating valve (2). Add shims to increase pressure. Remove shims to decrease pressure.

Item	Measurement	Specification
Pilot Pressure Regulating Valve Shim	Pressure Change	0.078 MPa approximate per 0.25 mm (0.010 in.) 78 kPa approximate per 0.25 mm (0.010 in.) 0.78 bar approximate per 0.25 mm (0.010 in.) 11 psi approximate per 0.25 mm (0.010 in.) 0.160 MPa approximate per 0.5 mm (0.020 in.) 160 kPa approximate per 0.5 mm (0.020 in.) 1.6 bar approximate per 0.5 mm (0.020 in.) 22 psi approximate per 0.5 mm (0.020 in.) 0.31 MPa approximate per 1.00 mm (0.040 in.) 304 kPa approximate per 1.00 mm (0.040 in.) 3.1 bar approximate per 1.00 mm (0.040 in.) 44 psi approximate per 1.00 mm (0.040 in.)

9. Tighten plug to specification.

Item	Measurement	Specification
Plug to Pilot Pressure Regulating Valve Housing	Torque	25 N·m 220 lb-in.

10. Check the pressure settings again.

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Control Valve Spool Actuating Pilot Pressure Test

-: Specifications

SPECIFICATIONS	
Hydraulic Oil Temperature	45—55°C 110—130°F
Engine Speed	1750—1850 rpm and 850—950 rpm
Work Mode Switch Position	Dig Mode
Power Mode Switch Position	P (Standard) Mode
Auto-Idle Switch Position	OFF
Travel Speed Switch Position	Fast (Rabbit)
Control Valve Spool Actuating Pressure	3.4—4.0 MPa 3432—4021 kPa 34.3—40.2 bar 495—583 psi

-: Service Equipment and Tools

SERVICE EQUIPMENT AND TOOLS
Tee 9/16-18 F Sw 37° x 7/16-20 M 37° x 9/16-18 M 37°
Gauge 7000 kPa (70 bar) (1000 psi)
JT02162 Transducer 35 000 kPa (350 bar) (5000 psi)
JT02156A Digital Pressure/Temperature Analyzer

Purpose of test is to ensure that the pilot pressure to the valve spools is enough to completely shift the spools.

1. Release hydraulic oil tank pressure by pushing pressure release button at top of hydraulic oil tank.

2.

NOTE:

Spool actuating pressure can be checked for each function by installing a tee and gauge in pilot line and then actuating that function.