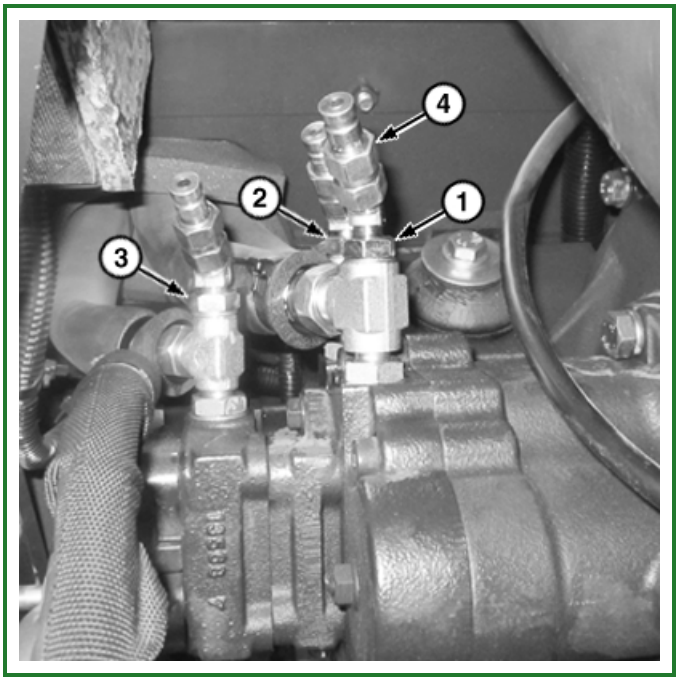
SERVICE EQUIPMENT AND TOOLS
JT02156A Digital Pressure and Temperature Analyzer
JT02162 Transducer 35 000 kPa (350 bar) (5000 psi)
Gauge 35 000 kPa (350 bar) (5000 psi)
19 mm Combination Wrench
4 mm Hex Wrench

The purpose of circuit relief valves is to relieve high-pressure spikes caused by external forces when functions are in neutral. The valves are checked and adjusted to specification to protect components from damage.

1. 

TX1180347A-UN: Circuit Relief Valve Test Connections

LEGEND:

1 - Hydraulic Pump 1 Test Port

2 - Hydraulic Pump 2 Test Port

3 - Hydraulic Pump 3 Test Port

4 - Adapter (3 used)

Stop the engine.

2. Release hydraulic oil tank pressure by loosening hydraulic oil tank cap. See Hydraulic Oil Tank Pressure Release Procedure . (Group 9025-25.)

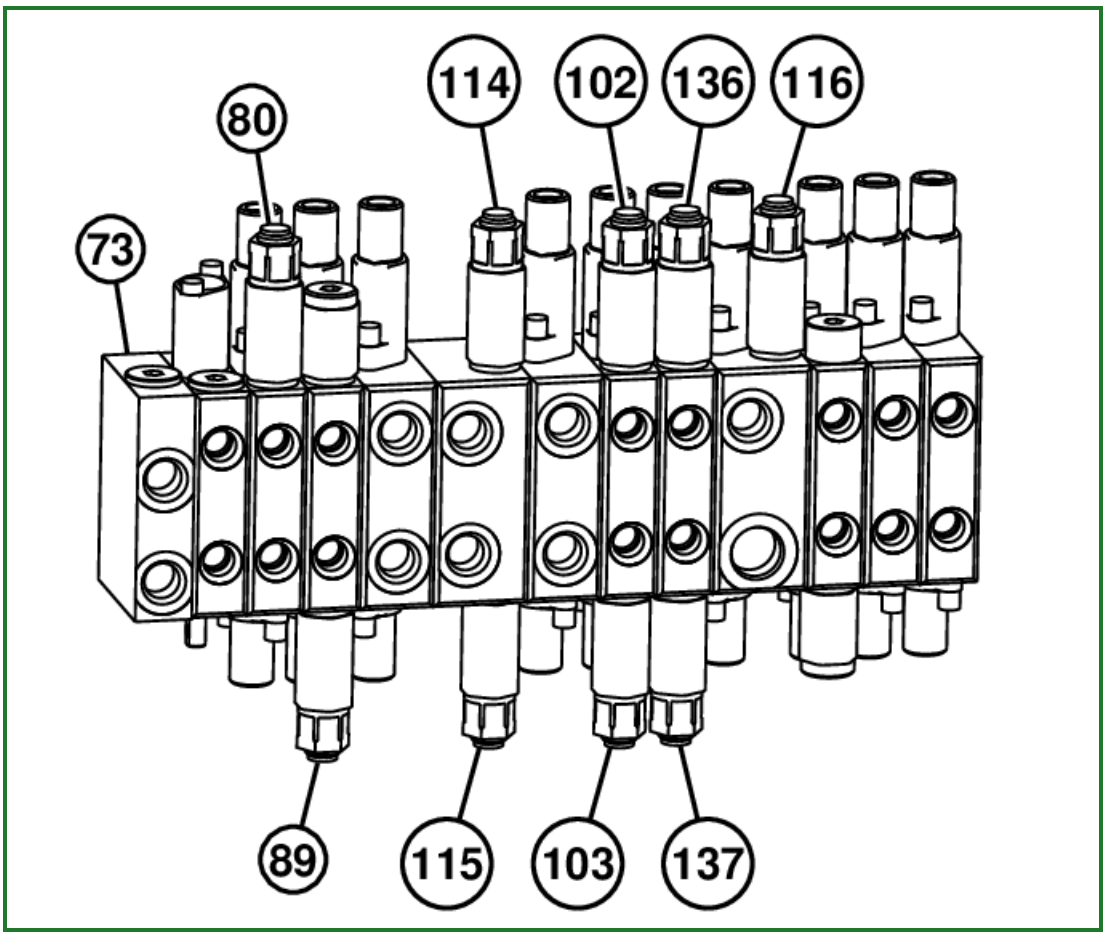
3. Install JT05800 Digital Thermometer onto hydraulic oil cooler supply line to monitor hydraulic oil temperature. See JT05800 Digital Thermometer Installation . (Group 9025-25.)

4. Remove plugs from hydraulic pump test ports (1—3) and install adapters (4).

5. Connect JT02156A Digital Pressure and Temperature Analyzer and JT02162 Transducer or 35 000 kPa (350 bar) (5000 psi) gauge to adapter.

6. *NOTE:*

The pressure setting for the circuit relief valves is higher than the main relief valves. The main relief valves must be adjusted to a higher pressure setting to check the circuit relief valve pressure settings.



TX1180351-UN: Main and Circuit Relief Valve Locations

LEGEND:

73 - Control Valve

80 - Bucket Curl Circuit Relief and Anticavitation Valve

89 - Boom Down Circuit Relief and Anticavitation Valve

102 - Arm In Circuit Relief and Anticavitation Valve

103 - Arm Out Circuit Relief and Anticavitation Valve

114 - Pump 1 Main Relief Valve

115 - Pump 2 Main Relief Valve

116 - Pump 3 Main Relief Valve

136 - Auxiliary Circuit Relief and Anticavitation Valve

137 - Auxiliary Circuit Relief and Anticavitation Valve

Turn main relief valves (114—116) adjusting screw IN 1/2 turn to increase the system pressure setting. See Hydraulic Pump 1, 2, and 3 Main Relief Valve Test and Adjustment . (Group 9025-25.)

7. Warm hydraulic oil to specification. See Hydraulic System Warm-Up Procedure . (Group 9025-25.)

8. Run machine at specification.