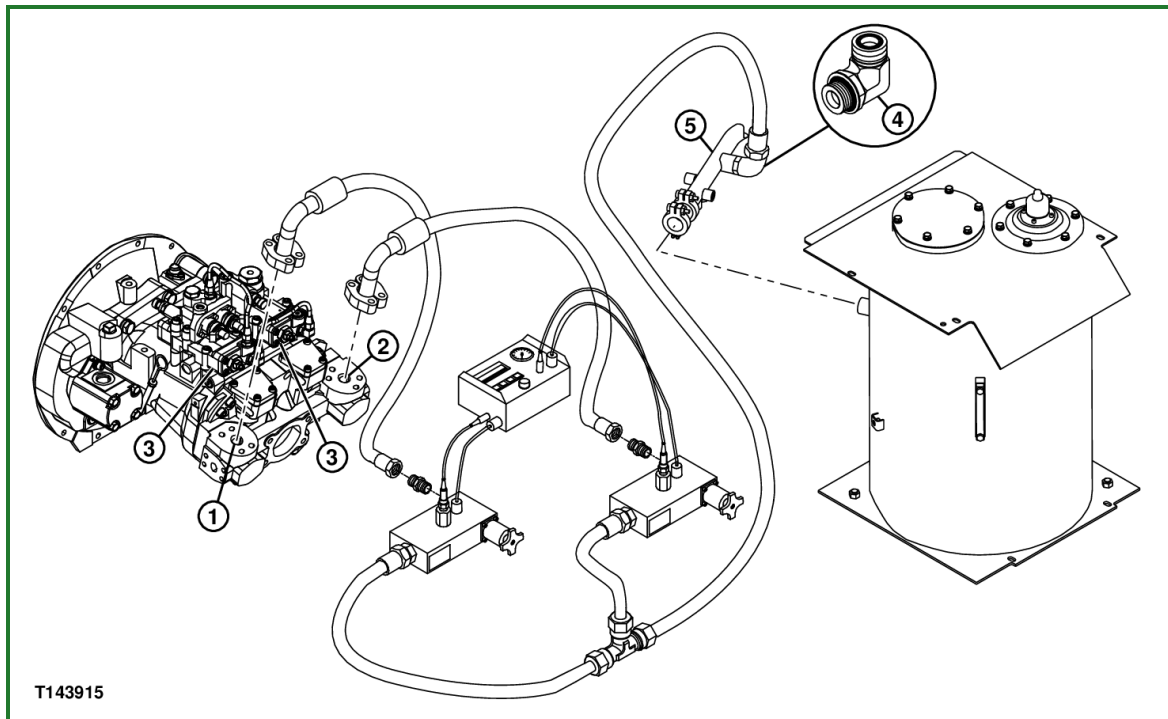


- See Hydraulic Pump Regulator Test and Adjustment—Minimum Flow—230CLC . (Group 9025-25.)
- See Hydraulic Pump Regulator Test and Adjustment—Maximum Flow—200CLC . (Group 9025-25.)
- See Hydraulic Pump Regulator Test and Adjustment—Maximum Flow—230CLC . (Group 9025-25.)
- See Hydraulic Pump Regulator Test and Adjustment—Engine Pulldown—200CLC . (Group 9025-25.)
- See Hydraulic Pump Regulator Test and Adjustment—Engine Pulldown—230CLC . (Group 9025-25.)

1.



**T143915-UN: Flow Meter Connections**

**LEGEND:**

- 1 - Hydraulic Pump 2 Discharge Port
- 2 - Hydraulic Pump 1 Discharge Port
- 3 - Hydraulic Pump Regulators
- 4 - TH108325 Elbow Fitting
- 5 - Return Manifold

Loosen cap on hydraulic oil tank to release pressure.

2. Connect vacuum pump to hydraulic oil tank to minimize oil loss.
3. Disconnect hydraulic pump-to-control valve lines from hydraulic pump discharge ports (1 and 2) and install split flange hose caps to lines. See [DFT1218 Split Flange Hose Cap](#) . (Group 9900.)
4. Connect the flow meter as shown. If available, connect a flow meter to both hydraulic pumps.
5. Check that the flow meter loading valve is open.

6.

**NOTE:**

*Test can also be done using monitor controller and display diagnostic system. See [Monitor Display Diagnostic System Operation](#) . (Group 9015-20.) Only one reading at a time can be displayed with monitor display.*

Connect laptop computer to diagnostic port. See [Service ADVISOR System Computer Connection](#) . (T133991.)

For Service ADVISOR application select the following template:

- Hydraulic Test Template. Perform Hydraulic Test .

For **Excavator Diagnostics** program select the following items from the Monitor Data Items menu:

- 1-Hydraulic Pump 1 Delivery Pressure
- 3-Hydraulic Pump 2 Delivery Pressure
- 7-Actual Engine Speed
- 16-Hydraulic Oil Temperature

7. Operate the machine at specification.

Item	Measurement	Specification
Hydraulic Pump Flow		
Engine RPM Dial	Position	1900 rpm (Adjust to maintain throughout test)
Work Mode Switch	Position	Dig Mode
Power Mode Switch	Position	HP (High Power) Mode
Auto Idle/Acceleration Switch	Position	Off

8. Push and hold left propel lever for hydraulic pump 1 or right propel lever for hydraulic pump 2 to full actuation and hold throughout test.

9. Heat the hydraulic oil to the specified temperature by closing flow meter loading valve to increase pressure to specification.

Item	Measurement	Specification
Oil	Temperature	45—55°C 110—130°F

10. Adjust the flow meter loading valve to obtain the specified test pressures. Adjust engine speed to specified rpm. Record pump flow at each pressure.

Item	Measurement	Specification
Hydraulic Pump Flow		
Hydraulic Pump at 1890—1910 rpm and 20 685 kPa	Flow Rate	180—198 L/min new
Hydraulic Pump at 1890—1910 rpm and 207 bar	Flow Rate	180—198 L/min new
Hydraulic Pump at 1890—1910 rpm and 3000 psi	Flow Rate	47.5—52.5 gpm new
Hydraulic Pump at 1890—1910 rpm and 13 790 kPa	Flow Rate	182—201 L/min new
Hydraulic Pump at 1890—1910 rpm and 138 bar	Flow Rate	182—201 L/min new
Hydraulic Pump at 1890—1910 rpm and 2000 psi	Flow Rate	48—53 gpm new
Hydraulic Pump at 1890—1910 rpm and 20 685 kPa	Flow Rate	145 L/min minimum allowable
Hydraulic Pump at 1890—1910 rpm and 207 bar	Flow Rate	145 L/min minimum allowable
Hydraulic Pump at 1890—1910 rpm and 3000 psi	Flow Rate	38 gpm minimum allowable
Hydraulic Pump at 1890—1910 rpm and 13 790 kPa	Flow Rate	146 L/min minimum allowable
Hydraulic Pump at 1890—1910 rpm and 138 bar	Flow Rate	146 L/min minimum allowable
Hydraulic Pump at 1890—1910 rpm and 2000 psi	Flow Rate	38.4 gpm minimum allowable