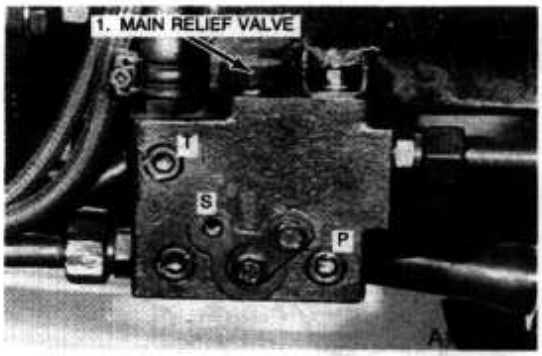
MAIN HYDRAULIC PUMP FLOW AND PRESSURE TEST

POWER BEYOND VALVE TEST PORTS



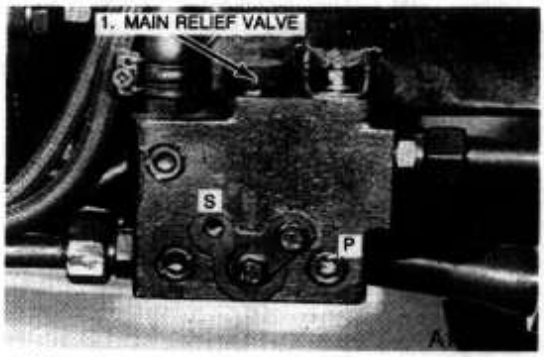
1. Move the power beyond valve lever to the S position.
2. Connect the inlet hose on the flowmeter to the P port on the power beyond valve.
3. Connect the outlet hose on the flowmeter to the T port on the power beyond valve.
4. With the load valve on the flowmeter fully open, start and run the engine at 2500 RPM.

NOTE: *The hydraulic oil must be heated to 55°C (130°F) before testing.*

5. Watch and record the flow reading with the load valve open. The flow reading must be 20.4 L/min (5.4 GPM) for the 719 * model and 27.6 L/min (7.3 GPM) for the 723 * and 727 * models.
6. Slowly close the load valve until a pressure reading of 137.9 bar (13 790 kPa)(2000 PSI) occurs. The flow must be within 10% of the recorded reading.
7. If the flow decreases more than 10% of the recorded reading or the pressure will not increase to 137.9 bar (2000 PSI) the problem is in the main relief valve or the main hydraulic pump.
8. Turn the load valve on the flowmeter fully closed to read the main relief pressure. The main relief pressure must be 147.1 bar (14 707 kPa)(2133 PSI)
9. Put the power beyond valve lever in the 0 position.

MAIN RELIEF PRESSURE TEST

POWER BEYOND VALVE TEST PORTS



1. Move the power beyond valve lever to the S position.
2. Connect a 206.8 bar (20 684 kPa)(3000 PSI) gauge to test port P.
3. Start and run the engine at 1500 RPM. The gauge must read 147.1 bar (14 707 kPa)(2133 PSI).

NOTE: *The hydraulic oil must be heated to 55°C (130°F) before testing.*

4. A low pressure reading indicates a main relief valve that is bad or needs adjusting, or a bad main pump.
5. Put the power beyond valve lever in the 0 position.