

6. Connect hose from tee fitting to front pump load sense (E) at the flow control valve.

*NOTE: With pump discharge pressure on the spring side of the load sense valve, the load sense valve will be taken out of test. Only the pump section and its regulator will be affected by this test.*

7. Connect flow meter outlet to the bottom port of the control valve manifold using fitting (A).

8. Connect gauge to X1 port.

*NOTE: X1 port is the pressure port to the front pump section, large control piston.*

9. Run engine at specification.

10. Connect gauge to flow meter inlet.

11. Slowly close flow meter to 9998 kPa (100 bar)(1450 psi) and record pump flow.

*NOTE: At 9998 kPa (100 bar)(1450 psi) there must be less than 690 kPa (6.9 bar)(100 psi) in X1 port. If pressure is more, the front section regulator (F) is misadjusted or malfunctioning.*

12. Slowly close flow meter to 29 993 kPa (300 bar)(4350 psi) and record pump flow.

13. If pump regulator is set correctly and pump does not meet specification, disassemble the pump and inspect.  
Rear Pump Section Test

14. Connect flow meter inlet hose to top pump discharge port.

15. Connect hose from tee fitting to rear pump section load sense port.

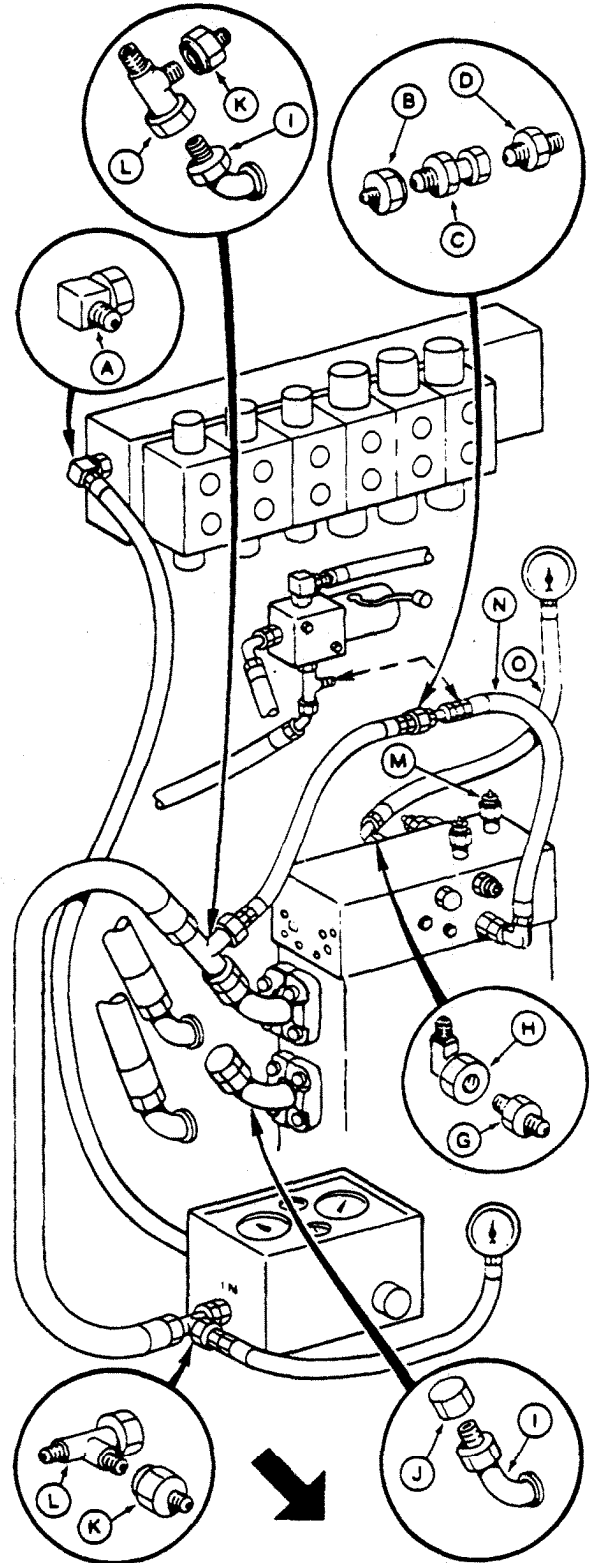
16. Plug bottom pump discharge port.

*NOTE: X2 port is the pressure port to the rear pump section large destroke piston.*

17. Connect gauge hose (O) to X2 port on the pump regulator.

18. Repeat flow meter test for rear pump section.

*NOTE: At 9998 kPa (100 bar)(1450 psi) there must be less than 690 kPa (6.9 bar)(100 psi) in X2 port. If pressure is more, the rear section regulator (M) is misadjusted or malfunctioning.*



## MAIN HYDRAULIC PUMP PERFORMANCE TEST (CYCLE TIME METHOD)

### SPECIFICATIONS

Oil Temperature .....	50 ± 6°C (120 ± 10°F)
Engine Speed .....	Fast Idle
Flow Control Switch .....	Fast Mode
Propel Course Distance .....	25 m (100 ft)
Propel Speed .....	1st gear
Maximum Time Per Course Distance .....	36.0 sec

### SERVICE EQUIPMENT AND TOOLS

Temperature Reader  
Stop Watch

Test can be used to check pump efficiency. Each propel motor is rated at 190 L/min (50 gpm), and pump at 378 L/min (100 gpm). With the engine at fast idle and the flow control switch in fast mode, the unit must propel in less time than specified.

1. Connect temperature reader. (See Tachometer/Temperature Reader Installation Procedure in Group 9025-25.)
2. Heat hydraulic oil. (See Hydraulic System Warm-up Procedure in Group 9025-25.)
3. Measure course distance as specified.
4. Time unit through course in forward and reverse.

*NOTE: Check course several times and take average.*

5. If unit is slower in one direction, check spool stop adjustment. (See Group 9025-20.)
6. If unit is slower than time specified, check dig function cycle times and perform Main Pump Regulator Test and Adjustment. (See Group 9025-25.)