

Do not push on the inching brake pedal.
This action disengages the clutches.

CAUTION



Do not hold the throttle open for more than 15 seconds. Run the engine at idle for 2 minutes between tests.



Release the pedal immediately if the engine speed increases to the governor limit speed.

If the engine speed is 50 to 200 RPM below the specification, the engine is not operating at full power. Check the ignition timing, fuel system and compression.

If the engine speed is 250 to 500 RPM below the specification, the clutch in the torque converter has a defect. The torque converter must be replaced as a unit.

If the engine speed is greater than the specification, the clutch that is engaged is not holding. Test the other clutch by changing the direction control. If the engine RPM is again too high, do the pressure checks.

Disconnect the jumper wire to the inching solenoid.

CHECKING THE OIL PRESSURES (See Figure 23)

See Troubleshooting, Pressure Tests for causes of pressures that are not within the specified limits.

Before checking the four circuit pressures, do the following:

A. Connect a tachometer to the engine. When the engine is at the normal operating temperature, make sure the engine will operate at the governor limit speed.

B. Install the four 0 to 150 psi (0 to 1 MPa) pressure gauges in the ports shown in Figure 23.

C. Start the engine and tilt the upright backwards. Put blocks under the outer upright channels. Tilt the upright forward to raise the wheels from the ground.

D. Make sure the oil level in the transmission is correct and at 120°F (49°C).

Monotrol Pressure (Check Port "1")

The Monotrol regulator prevents the oil pressure in the Monotrol circuit from decreasing to less than 65 psi (450 kPa) when changing directions.

A. Release the parking brake, put the Monotrol pedal in REVERSE and run the engine at low idle.

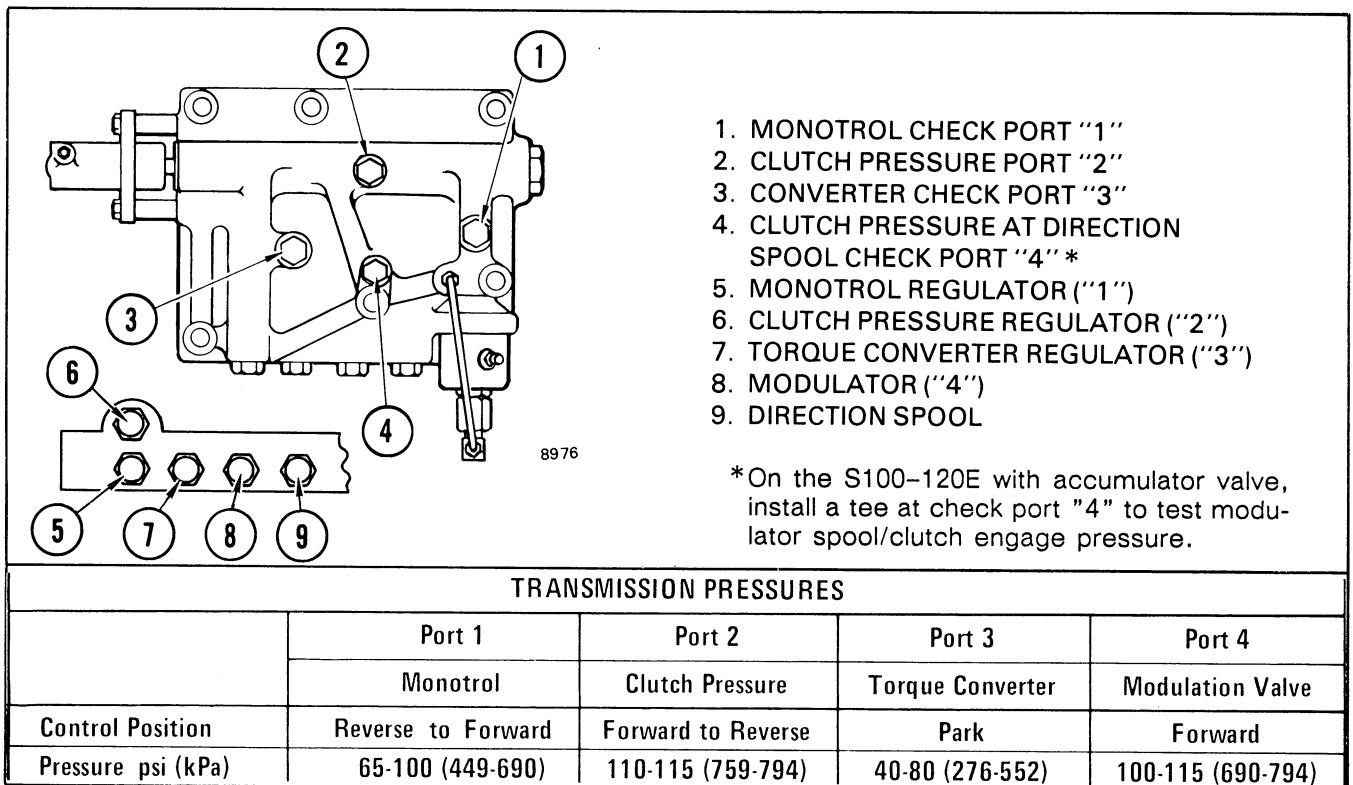
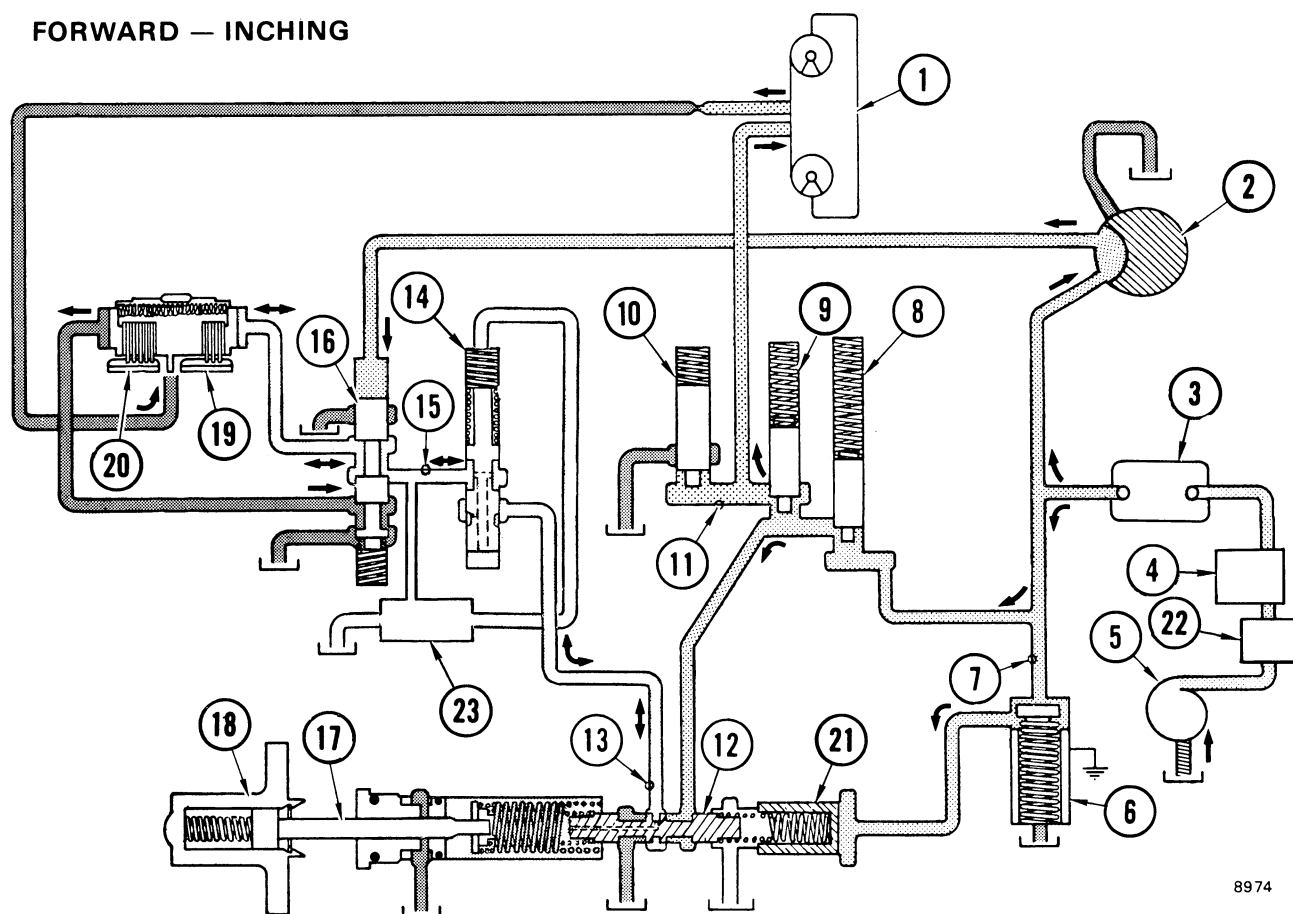


FIGURE 23. CHECK PORTS FOR PRESSURE TESTS

FORWARD — INCHING



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- ▨ SUCTION
- ▩ TO SUMP
- ▧ 110-115 PSI (760-795 kPa)
- ▦ 75-85 PSI (517-587 kPa)
- INCHING PRESSURE

- | | |
|---------------------------------------|---------------------------------------|
| 1. TORQUE CONVERTER | 13. CHECK PORT "2" - CLUTCH PRESSURE |
| 2. MONOTROL PEDAL | 14. MODULATION SPOOL |
| 3. FILTER | 15. CHECK PORT "4" - CLUTCH PRESSURE |
| 4. OIL COOLER | 16. DIRECTION SPOOL |
| 5. PUMP | 17. PUSH ROD |
| 6. PARKING SOLENOID | 18. BRAKE CYLINDER |
| 7. MONOTROL CHECK PORT "1" | 19. FORWARD CLUTCH |
| 8. MONOTROL REGULATOR | 20. REVERSE CLUTCH |
| 9. CLUTCH REGULATOR | 21. PARKING BRAKE SPOOL |
| 10. TORQUE CONVERTER REGULATOR | 22. FLOW CONTROL VALVE |
| 11. CHECK PORT "3" - TORQUE CONVERTER | 23. ACCUMULATOR VALVE, S100-120E ONLY |
| 12. INCHING SPOOL | |

FIGURE 24. CONTROL VALVE DIAGRAM