

Line Pressure Test

AUTOMATIC TRANSMISSION

7. Line Pressure Test

A: MEASUREMENT

NOTE:

If the clutch or brake shows a signs of slipping or shift feel is not correct, check the line pressure.

- Excessive shock during up-shift may be due to the line pressure being too high.
- Slippage or inability to operate the vehicle may, in most cases, be due to insufficient oil pressure for the operation of clutch, brake or control valve.

1) Line pressure measurement (under no load):

- (1) Before measuring line pressure, lift up the vehicle.
- (2) Maintain the ATF temperature at approx. 70 — 80°C (158 — 176°F) during measurement. (ATF will reach the temperature above after idling the engine for approx. 30 minutes with the select lever in “N” or “P”.)

2) Line pressure measurement (under heavy load)

- (1) Before measuring line pressure, place wheel chocks at the front and rear of all wheels, then apply both the foot and parking brakes (same as for stall test conditions).
- (2) Measure the line pressure when the select lever is in “R” or 2nd gear of manual mode with engine under stall conditions.
- (3) Measure the line pressure within 5 seconds after shifting the select lever to each position. (If the line pressure needs to be measured again, allow the engine to idle and cool it down for more than 1 minute.)
- (4) Maintain the ATF temperature at approx. 70 — 80°C (158 — 176°F) during measurement. (ATF will reach the temperature above after idling the engine for approx. 30 minutes with the select lever in “N” or “P”.)

3) Remove the test plug and attach the ST instead.

ST 498897200 OIL PRESSURE GAUGE
ADAPTER

4) Connect the ST1 with ST2.

ST1 498897200 OIL PRESSURE GAUGE
ADAPTER

ST2 498575400 OIL PRESSURE GAUGE
ASSY

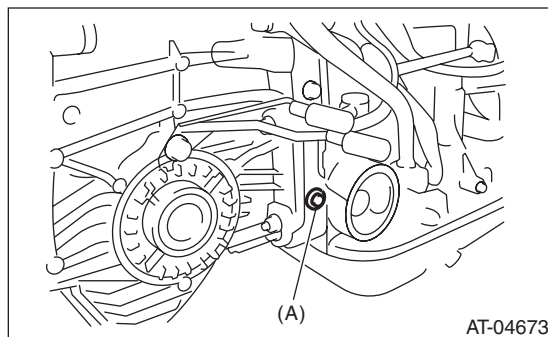
5) Check for duty ratio changes by adjusting the acceleration pedal position using the Subaru Select Monitor.

Standard line pressure			
Range position	Line pressure duty ratio (%)	Throttle valve opening angle	Line pressure kPa (kg/cm ² , psi)
Manual mode (2nd)	25 — 35	Full open	1,000 — 1,300 (10.2 — 13.3, 145 — 188)
R	15 — 25	Full open	1,500 — 1,850 (15.3 — 18.9, 217 — 268)
D	35 — 43	Full closed	500 — 800 (5.1 — 8.2, 72 — 116)

6) Remove the ST and install the test plug.

Tightening torque:

13 N·m (1.3 kgf-m, 9.6 ft-lb)



(A) Test plug