

# LINE PRESSURE TEST

## AUTOMATIC TRANSMISSION

### 7. Line Pressure Test

#### A: MEASUREMENT

##### NOTE:

If the clutch or the brake shows a sign of slippage or shifting sensation is not correct, the line pressure should be checked.

- Excessive shocks during upshifting or shifting takes place at a higher point than under normal circumstances, may be due to the line pressure being too high.
- Slippage or inability to operate the vehicle may, in most cases, be due to loss of oil pressure for the operation of the clutch, brake or control valve.

##### 1) Line pressure measurement (under no load)

(1) Before measuring the line pressure, jack-up all wheels.

(2) Maintain the temperature of ATF at approx. 70 — 80°C (158 — 176°F) during measurement.

(ATF will reach the above temperature after idling the engine for approx. 30 minutes with select lever in “N” or “P”.)

##### 2) Line pressure measurement (under heavy load)

(1) Before measuring the line pressure, apply both foot and parking brakes with all wheels chocked (Same as for “stall” test conditions).

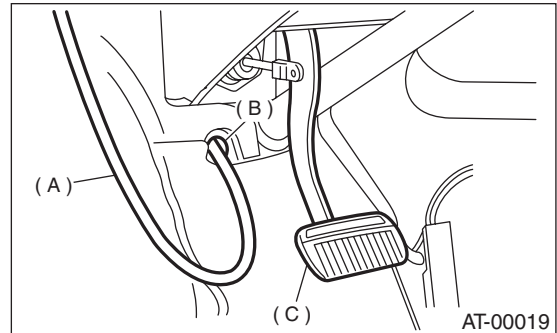
(2) Measure the line pressure when select lever is in “R”, “2” with engine under stall conditions.

(3) Measure the line pressure within 5 seconds after shifting the select lever to each position. (If line pressure needs to be measured again, allow the engine to idle, and then stop it to cool down for at least one minute.)

(4) Maintain the temperature of ATF at approx. 70 — 80°C (158 — 176°F) during measurement (ATF will reach the above temperature after idling the engine for approx. 30 minutes with the select lever in “N” or “P”.)

3) Temporarily attach the ST to a suitable place in the driver’s compartment, remove the blind plug located in front of the toe board and pass the hose of the ST to engine compartment.

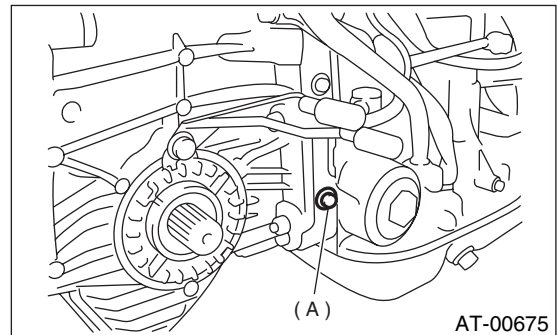
ST 498575400 OIL PRESSURE GAUGE ASSY



- (A) Pressure gauge hose  
(B) Hole in toe board (blank cap hole)  
(C) Brake pedal

4) Remove the test plug and install the ST instead.

ST 498897200 OIL PRESSURE GAUGE ADAPTER



- (A) Test plug

5) Connect the ST1 with ST2.

ST1 498897200 OIL PRESSURE GAUGE ADAPTER

ST2 498575400 OIL PRESSURE GAUGE ASSY

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6) Check for duty ratio changes by opening and closing the throttle valve using SUBARU Select Monitor.

- Non-TURBO model

| Standard line pressure |                              |                   |  |
|------------------------|------------------------------|-------------------|--|
| Range position         | Line pressure duty ratio (%) | Throttle position | Line pressure kPa (kg/cm <sup>2</sup> , psi) |
| 2                      | 5                            | Fully open        | 1,130 — 1,275 (11.53 — 13.01, 163.9 — 184.9) |
| R                      | 5                            | Fully open        | 1,520 — 1,716 (15.5 — 17.5, 220 — 249)       |
| D                      | 9 5                          | Fully closed      | 300 — 410 (3.06 — 4.18, 43.5 — 59.5)         |

- TURBO model

| Standard line pressure |                              |                           |  |
|------------------------|------------------------------|---------------------------|--|
| Range position         | Line pressure duty ratio (%) | Accelerator pedal opening | Line pressure kPa (kg/cm <sup>2</sup> , psi) |
| 2                      | 25 — 35                      | Fully open                | 1,000 — 1,300 (10.20 — 13.26, 145.0 — 188.5) |
| R                      | 15 — 25                      | Fully open                | 1,500 — 1,850 (15.30 — 18.87, 217.5 — 268.3) |
| D                      | 35 — 43                      | Fully closed              | 500 — 800 (5.10 — 8.16, 72.5 — 116.0)        |