

LINE PRESSURE TEST

AUTOMATIC TRANSMISSION

7. Line Pressure Test

A: MEASUREMENT

1. GENERAL DESCRIPTION

If the clutch or the brake shows a sign of slippage or shift feel 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)

CAUTION:

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

- Maintain the temperature of ATF at approx. 50°C (122°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)

CAUTION:

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

- Measure the line pressure when select lever is in "R", "2" with engine under stall conditions.

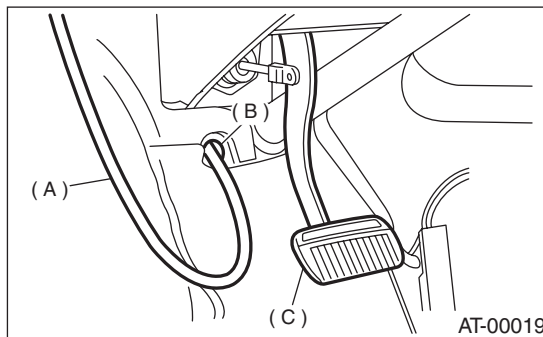
- Measure the line pressure within 5 seconds after shifting the select lever to each position. (If line pressure needs to be measured again, allow the engine to idle, and then stop it. Wait at least 1 minute before taking measurements.)

- Maintain the temperature of ATF at approx. 50°C (122°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. TEST METHODS

1) 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



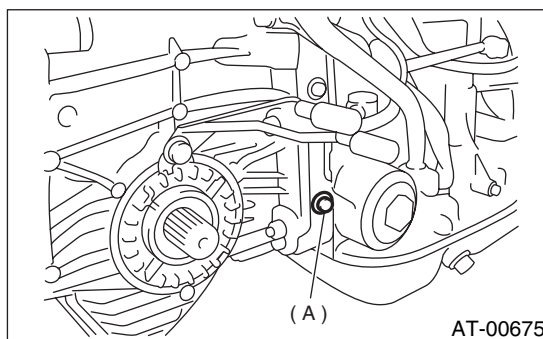
(A) Pressure gauge hose

(B) Hole in toe board (blank cap hole)

(C) Brake pedal

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

ST 498897200 OIL PRESSURE GAUGE ADAPTER



(A) Test plug

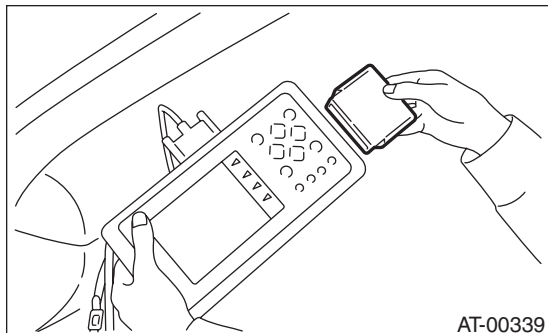
3) Connect the ST1 with ST2.

ST1 498897200 OIL PRESSURE GAUGE ADAPTER

ST2 498575400 OIL PRESSURE GAUGE ASSY

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

(1) Insert the cartridge into Subaru Select Monitor. <Ref. to AT-19, PREPARATION TOOL, General Description.>



(2) Connect the Subaru Select Monitor to data link connector.

5) Check the line pressure in accordance with the following chart.

3. EVALUATION

Standard line pressure			
Range position	Line pressure duty ratio (%)	Throttle position	Line pressure kPa (kg/cm ² , psi)
2	5	Wide open	1,128 — 1,304 (11.5 — 13.3, 164 — 189)
R	5	Wide open	1,520 — 1,716 (15.5 — 17.5, 220 — 249)
D	95	Full closed	304 — 412 (3.1 — 4.2, 44 — 60)