

GENERAL DESCRIPTION

AUTOMATIC TRANSMISSION (DIAGNOSTICS)

3. General Description

A: CAUTION

- **Supplemental Restraint System “Airbag”**

The airbag system wiring harness is routed near the transmission control module (TCM).

CAUTION:

- All airbag system wiring harness and connectors are colored yellow. Do not use an electrical test equipment on these circuit.
- Be careful not to damage the airbag system wiring harness when performing diagnostics and servicing the TCM.

- **Measurement**

When measuring the voltage and resistance of ECM, TCM or each sensor, use a tapered pin with diameter of less than 0.64 mm (0.025 in) in order to avoid poor contact. Do not insert the pin more than 0.65 mm (0.256 in).

B: INSPECTION

1. BATTERY

Measure the battery voltage and specific gravity of electrolyte.

Standard voltage: 12 V or more

Specific gravity: Above 1.260

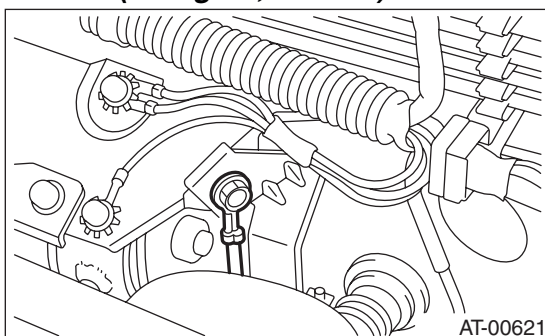
2. TRANSMISSION GROUND

Make sure that the ground terminal bolt is tightened securely.

- **Chassis side**

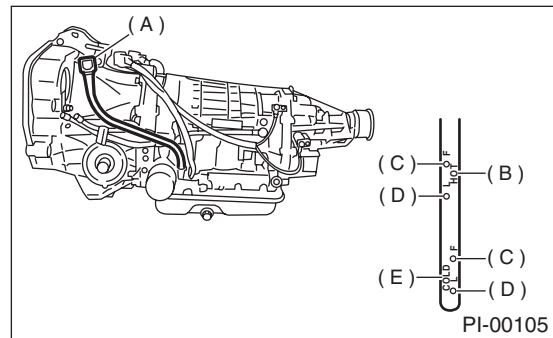
Tightening torque:

13 N·m (1.3 kgf·m, 9.4 ft·lb)



3. ATF LEVEL

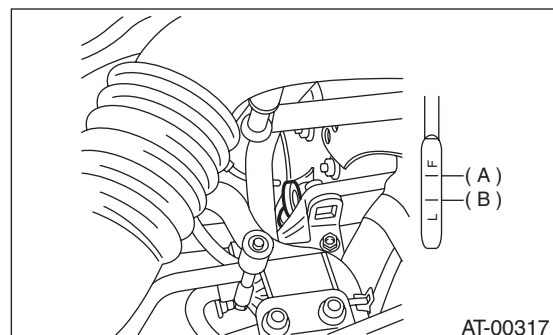
Make sure that ATF level is in the specification. <Ref. to 4AT-31, INSPECTION, Automatic Transmission Fluid.>



- (A) Level gauge
- (B) “HOT” side
- (C) Upper level
- (D) Lower level
- (E) “COLD” side

4. FRONT DIFFERENTIAL OIL LEVEL

Make sure that the front differential oil level is in specification. <Ref. to 4AT-32, INSPECTION, Differential Gear Oil.>



- (A) Upper level
- (B) Lower level

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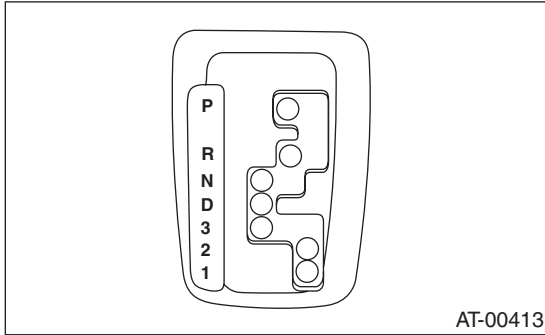
5. OPERATION OF SHIFT SELECT LEVER

Make sure there is no abnormal noise, dragging or contact pattern in each select lever range.

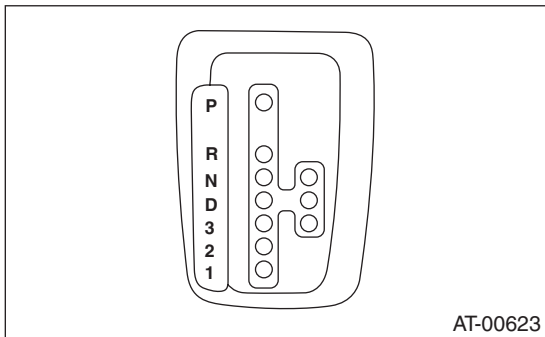
WARNING:

Stop the engine while checking operation of selector lever.

- Without SPORT shift



- With SPORT shift

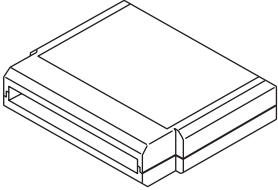



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C: PREPARATION TOOL

1. SPECIAL TOOLS

| ILLUSTRATION | TOOL NUMBER | DESCRIPTION | REMARKS |
|--|-------------|--------------------|---|
|  ST24082AA260 | 24082AA260 | CARTRIDGE | Troubleshooting for electrical systems. |
|  ST22771AA030 | 22771AA030 | SELECT MONITOR KIT | Troubleshooting for electrical systems. |

2. GENERAL PURPOSE TOOLS

| TOOL NAME | REMARKS |
|----------------|--|
| Circuit Tester | Used for measuring resistance, voltage and ampere. |
| Oscilloscope | Used for measuring sensor. |

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MEMO: