

# General Description

## AUTOMATIC TRANSMISSION (DIAGNOSTICS)

### 3. General Description

#### A: CAUTION

- **Supplemental Restraint System “Airbag”**

The airbag system wiring harness is routed near the TCM.

#### CAUTION:

- All the airbag system wiring harnesses and connectors are colored yellow. Do not use an electric test equipment to check these circuits.
- Be careful not to damage the airbag system wiring harness when performing diagnostics or servicing the TCM.

- **Measurement**

When measuring the voltage and resistance of the ECM, TCM or each sensor, use a tapered pin with a diameter of less than 0.64 mm (0.025 in) in order to avoid poor contact. Do not insert a pin of more than 0.65 mm (0.026 in) diameter.

#### B: INSPECTION

##### 1. BATTERY

Measure the battery voltage and specific gravity of the electrolyte.

**Standard voltage: 12 V or more**

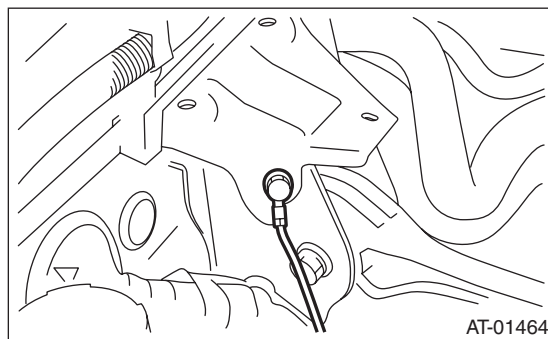
**Specific gravity: 1.260 or more**

##### 2. TRANSMISSION GROUND

Make sure that the ground terminal bolt is tightened securely.

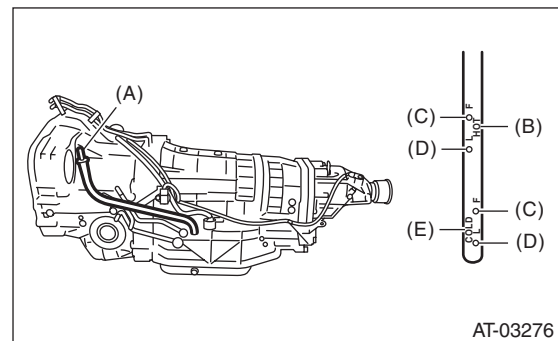
**Tightening torque:**

**13 N·m (1.3 kgf·m, 9.4 ft·lb)**



##### 3. ATF LEVEL

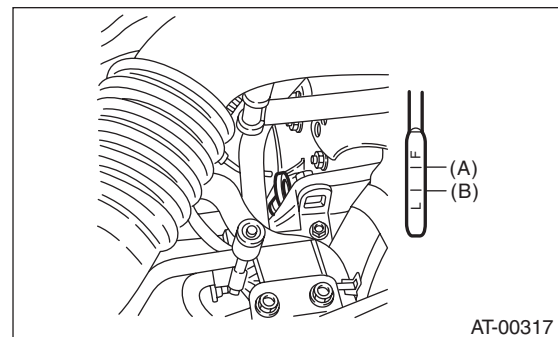
Make sure that ATF level is the specified amount. <Ref. to 5AT-26, INSPECTION, Automatic Transmission Fluid.>



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

##### 4. FRONT DIFFERENTIAL OIL LEVEL

Make sure the front differential oil level is the specified amount. <Ref. to 5AT-28, INSPECTION, Differential Gear Oil.>



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

## General Description

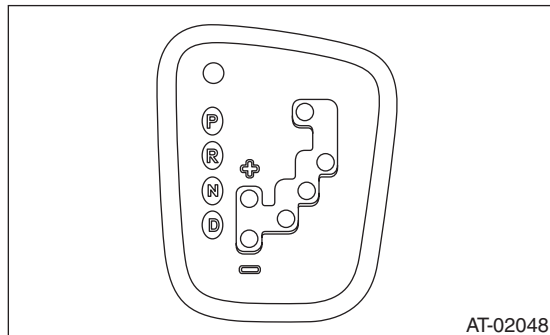
### AUTOMATIC TRANSMISSION (DIAGNOSTICS)

#### 5. OPERATION OF SHIFT SELECT LEVER

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

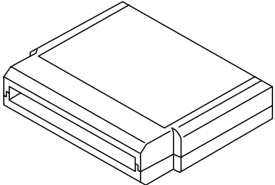
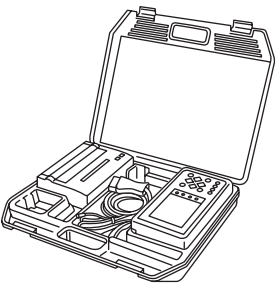
**WARNING:**

**Stop the engine while checking operation of the select lever.**



#### C: PREPARATION TOOL

##### 1. SPECIAL TOOL

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 ST18482AA010	18482AA010	CARTRIDGE	Troubleshooting for electrical system.
 ST22771AA030	22771AA030	SUBARU SELECT MONITOR KIT	Troubleshooting for electrical system.

##### 2. GENERAL TOOL

TOOL NAME	REMARKS
Circuit tester	Used for measuring resistance, voltage and current.
Oscilloscope	Used for measuring the sensor.