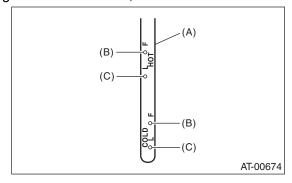
# 2. Automatic Transmission Fluid

## A: INSPECTION

#### NOTE:

The level of ATF varies with fluid temperature. Pay attention to the ATF temperature when checking ATF level.

- 1) Raise the ATF temperature by driving a distance of 5 to 10 km (3 to 6 miles). Idle the engine to raise ATF temperature to 70 80°C (158 176°F) on the Subaru Select Monitor. <Ref. to 4AT(D)(diag)-14, READ CURRENT DATA, OPERATION, Subaru Select Monitor.>
- 2) Make sure the vehicle is level.
- 3) After slowly selecting all positions (P, R, N, D, 3, 2, 1), set the select lever in the "P" range. Idle the engine for 1-2 minutes, and measure the ATF level.



- (A) ATF level gauge
- (B) Upper level
- (C) Lower level
- 4) Make sure that ATF level is between the upper level and lower level on the HOT side.

If the ATF level is below the lower level, check for leaks in the transmission. If there are leaks, it is necessary to replace the gasket, oil seals, plugs, or repair other parts.

5) If the ATF level is below the mid level between upper and lower marks, add the recommended ATF until the fluid level is above mid level.

### **CAUTION:**

- Be careful not to exceed the upper level.
- Adding ATF up to the upper level when the transmission is cold will overfill the ATF. Do not fill beyond the upper level as overfilling can cause problems.
- 6) Check the ATF level after raising ATF temperature to  $70-80^{\circ}\text{C}$  (158 176°F) by running the vehicle or by idling the engine again.

## **B: REPLACEMENT**

- 1) Lift-up the vehicle.
- 2) Drain the ATF completely.

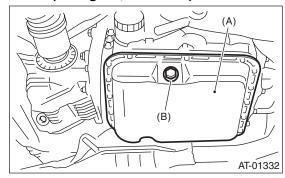
#### **CAUTION:**

After running the engine or after idling for a long time, the ATF is hot. Be careful not to burn yourself.

3) Replace the gasket with new one, and then tighten the drain plug (ATF).

## Tightening torque:

25 N·m (2.5 kgf-m, 18.1 ft-lb)



- (A) Oil pan
- (B) Drain plug (ATF)
- 4) Lower the vehicle.
- 5) Pour ATF from the oil charge pipe.

## Recommended fluid:

SUBARU ATF HP

## Substitute fluid:

IDEMITSU: ATF HP Castrol: Transmax J

Pennzoil Quaker State: Pennzoil ATF-J

#### Capacity:

Fill with the same amount of ATF that was drained from drain plug hole.

Capacity when transmission is overhauled:  $9.3 - 9.6 \ \ell$  ( $9.8 - 10.1 \ US \ qt, 8.2 - 8.4 \ Impath{mp}$ 

6) Bleed the air of control valve.

<Ref. to 4AT-59, Air Bleeding of Control Valve.>

7) Check the level and leaks of ATF.

<Ref. to 4AT-28, INSPECTION, Automatic Transmission Fluid.>

# **Automatic Transmission Fluid**

# **C: CONDITION CHECK**

## NOTE:

When replacing ATF, check the inside condition of the transmission body by inspecting the drained ATF.

Fluid condition	Trouble and possible cause	Corrective action
Large amount of metallic pieces are found.	Excessive wear of the internal of the transmission body.	Replace ATF and check if AT operates correctly.
Thick and varnish-form fluid.	Burned clutch and etc.	Replace ATF and check AT itself and vehicle for faulty.
Clouded fluid or bubbles are found in fluid.	Water mixed in fluid.	Replace ATF and check the water entering point.