

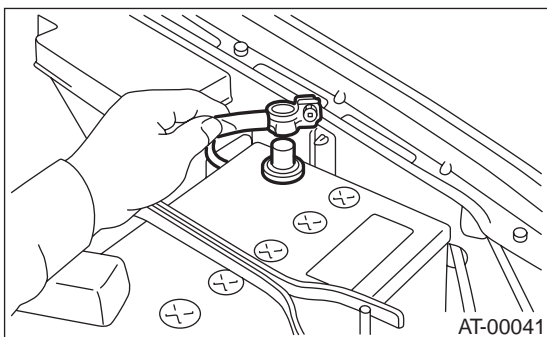
## FRONT VEHICLE SPEED SENSOR

AUTOMATIC TRANSMISSION

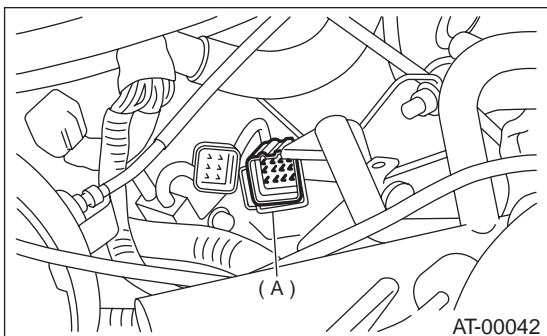
### 13. Front Vehicle Speed Sensor

#### A: REMOVAL

- 1) Set the vehicle on a lift.
- 2) Disconnect the ground cable from battery.



- 3) Remove the air cleaner case. (2.5 L model)  
<Ref. to IN(H4SO)-5, REMOVAL, Air Cleaner Case.>
- 4) Remove air intake chamber. (3.0 L model)  
<Ref. to IN(H6DO)-6, REMOVAL, Air Intake Chamber.>
- 5) Disconnect the transmission connector.



(A) Transmission connector

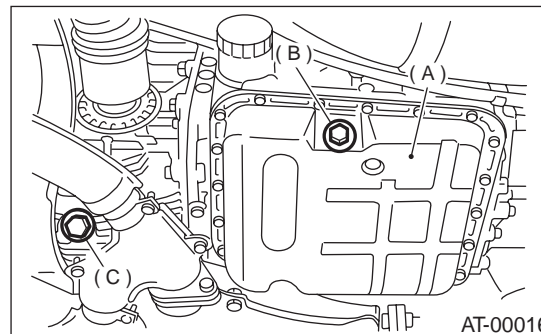
- 6) Remove the pitching stopper. <Ref. to AT-46, REMOVAL, Transmission Mounting System.>
- 7) Remove the transmission connector from stay.
- 8) Lift-up the vehicle.
- 9) Clean the transmission exterior.
- 10) Drain the ATF completely.

#### NOTE:

- Tighten the ATF drain plug after draining the ATF.
- Replace the gasket with a new one.

#### Tightening torque:

25 N·m (2.5 kgf-m, 18.1 ft-lb)



- (A) Oil pan  
(B) Drain plug  
(C) Differential oil drain plug

- 11) Remove the front, center, rear exhaust pipes and muffler.

#### 2.5 L model

<Ref. to EX(H4SO)-5, REMOVAL, Front Exhaust Pipe.>, <Ref. to EX(H4SO)-9, REMOVAL, Rear Exhaust Pipe.> and <Ref. to EX(H4SO)-10, REMOVAL, Muffler.>

#### 3.0 L model

<Ref. to EX(H6DO)-5, REMOVAL, Front Exhaust Pipe.>, <Ref. to EX(H6DO)-8, REMOVAL, Rear Exhaust Pipe.> and <Ref. to EX(H6DO)-9, REMOVAL, Muffler.>

- 12) Remove the shield cover.

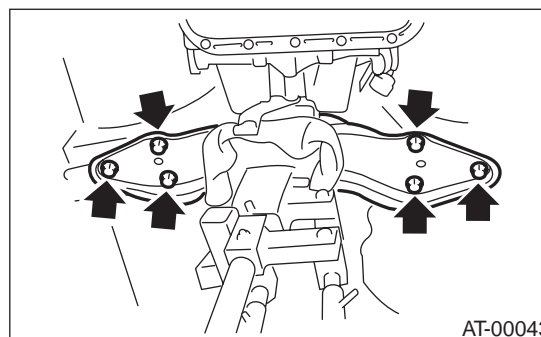
13) Remove the propeller shaft. <Ref. to DS-14, REMOVAL, Propeller Shaft.>

- 14) Place the transmission jack under transmission.

#### NOTE:

Make sure that the support plates of transmission jack don't touch the crossmember.

- 15) Remove the transmission rear crossmember bolts.



- 16) Lower the AT jack.

#### NOTE:

Do not separate the AT jack and transmission.

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## FRONT VEHICLE SPEED SENSOR

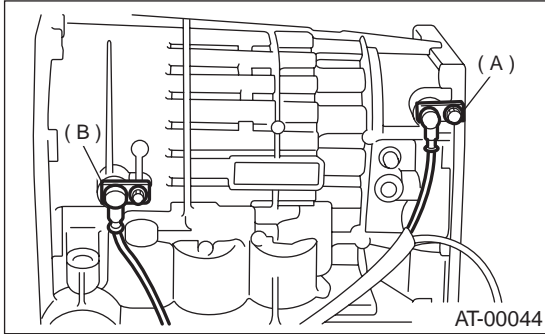
AUTOMATIC TRANSMISSION

17) Remove the oil cooler inlet and outlet pipe.

**NOTE:**

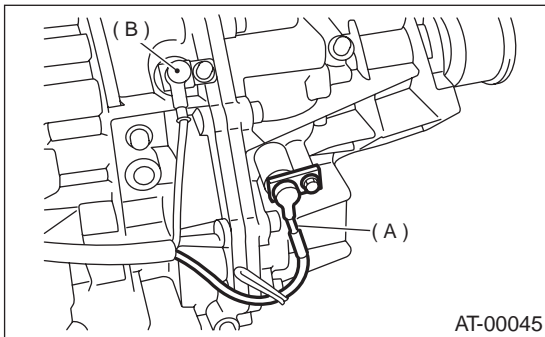
When removing the outlet pipe, be careful not to lose balls and springs used with retaining screws.

18) Remove the front torque converter turbine speed sensor.



- (A) Front vehicle speed sensor
- (B) Torque converter turbine speed sensor

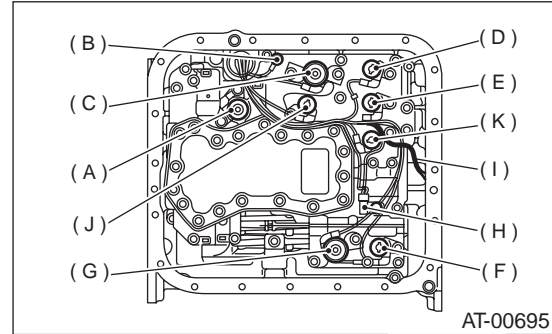
19) Remove the rear vehicle speed sensor.



- (A) Rear vehicle speed sensor
- (B) Front vehicle speed sensor

20) Remove the oil pan.

21) Disconnect the duty solenoid connector and ATF temperature sensor. Remove the connectors from clip and disconnect the connector.



- (A) Lock-up duty solenoid (Blue)
- (B) Low clutch timing solenoid (Gray)
- (C) Line pressure duty solenoid (Red)
- (D) Shift solenoid 2 (Yellow)
- (E) Shift solenoid 1 (Green)
- (F) 2-4 brake timing solenoid (Black)
- (G) 2-4 brake duty solenoid (Red)
- (H) ATF temperature sensor
- (I) Transfer duty solenoid (Brown)
- (J) Transmission ground
- (K) Sport shift solenoid (Beige) (if equipped)

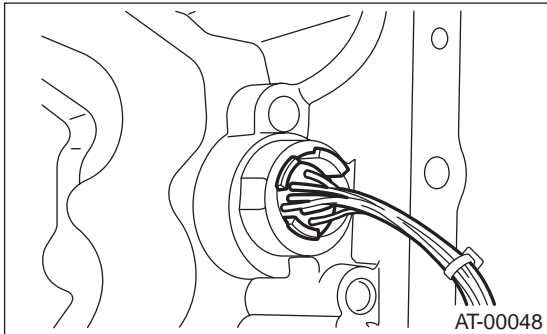
22) Remove the harness assembly.

## FRONT VEHICLE SPEED SENSOR

### AUTOMATIC TRANSMISSION

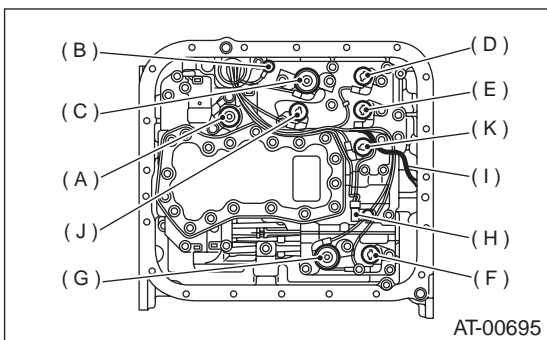
#### B: INSTALLATION

1) Pass the harness assembly through the hole in the transmission case.



2) Connect the harness connectors. Connect the connectors of same color, and secure the connectors to valve body using clips.

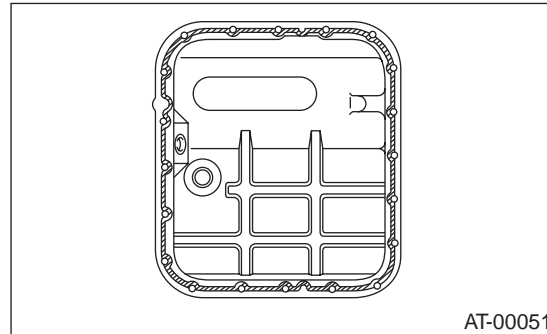
**Tightening torque (Transmission ground cable and ATF temperature sensor)**  
**8 N·m (0.8 kgf·m, 5.8 ft·lb)**



- (A) Lock-up duty solenoid (Blue)
- (B) Low clutch timing solenoid (Gray)
- (C) Line pressure duty solenoid (Red)
- (D) Shift solenoid 2 (Yellow)
- (E) Shift solenoid 1 (Green)
- (F) 2-4 brake timing solenoid (Black)
- (G) 2-4 brake duty solenoid (Red)
- (H) ATF temperature sensor
- (I) Transfer duty solenoid (Brown)
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- (K) Sport shift solenoid (Beige) (if equipped)

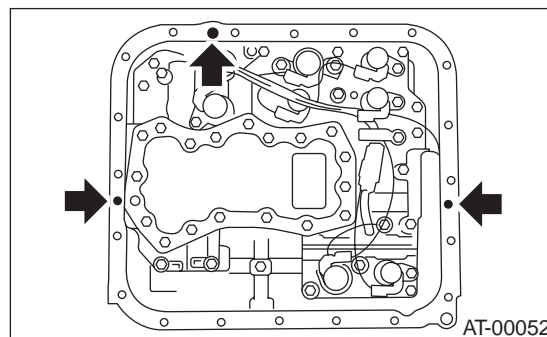
3) Apply proper amount of liquid gasket to the entire oil pan mating surface.

**Fluid packing:**  
**THREE BOND 1217B (Part No. K0877YA020)**



4) Apply liquid gasket fully to three holes other than screw holes on transmission case.

**Fluid packing:**  
**THREE BOND 1217B (Part No. K0877YA020)**



5) Install the oil pan.

**Tightening torque:**  
**5 N·m (0.5 kgf·m, 3.6 ft·lb)**

6) Install the front and rear vehicle speed sensor, and also the torque converter turbine speed sensor, and then fasten the harness.

**Tightening torque:**  
**7 N·m (0.7 kgf·m, 5.1 ft·lb)**

## FRONT VEHICLE SPEED SENSOR

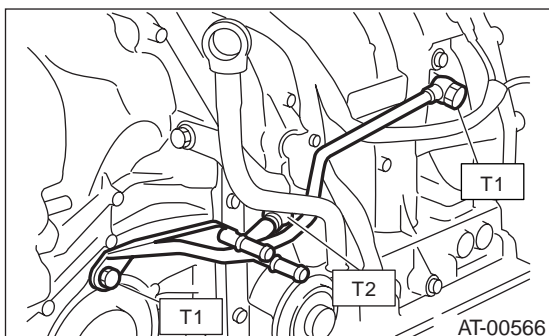
AUTOMATIC TRANSMISSION

7) Install a new aluminum washer and oil cooler pipes.

**Tightening torque:**

**T1: 25 N·m (2.5 kgf-m, 18.1 ft-lb)**

**T2: 44 N·m (4.5 kgf-m, 32.5 ft-lb)**



8) Install the transmission rear crossmember bolts.

**Tightening torque:**

**75 N·m (7.6 kgf-m, 55 ft-lb)**

9) Install the propeller shaft. <Ref. to DS-15, INSTALLATION, Propeller Shaft.>

10) Install the shield cover.

11) Install the front, center, rear exhaust pipes and muffler.

2.5 L model

<Ref. to EX(H4SO)-6, INSTALLATION, Front Exhaust Pipe.>, <Ref. to EX(H4SO)-9, INSTALLATION, Rear Exhaust Pipe.> and <Ref. to EX(H4SO)-10, INSTALLATION, Muffler.>

3.0 L model

<Ref. to EX(H6DO)-6, INSTALLATION, Front Exhaust Pipe.>, <Ref. to EX(H6DO)-8, INSTALLATION, Rear Exhaust Pipe.> and <Ref. to EX(H6DO)-9, INSTALLATION, Muffler.>

12) Lower the vehicle.

13) Install the transmission connector to the stay.

14) Install the pitching stopper. <Ref. to AT-47, INSTALLATION, Transmission Mounting System.>

15) Install the air cleaner case. (2.5 L model)

<Ref. to IN(H4SO)-5, INSTALLATION, Air Cleaner Case.>

16) Install air intake chamber. (3.0 L model)

<Ref. to IN(H6DO)-6, INSTALLATION, Air Intake Chamber.>

17) Fill ATF and check ATF level.

<Ref. to AT-30, Automatic Transmission Fluid.>

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