

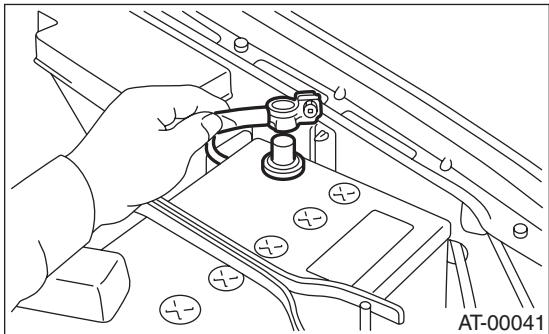
FRONT VEHICLE SPEED SENSOR

AUTOMATIC TRANSMISSION

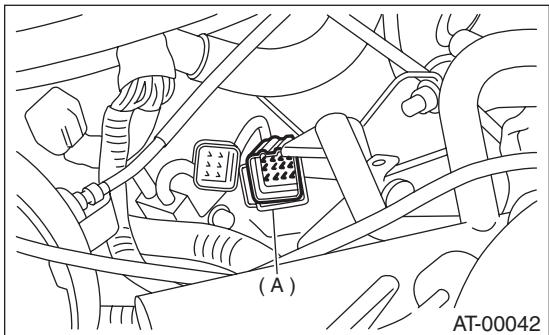
13. Front Vehicle Speed Sensor

A: REMOVAL

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



- 3) Remove the air cleaner case. (Non-turbo model)
<Ref. to IN(H4SO)-6, REMOVAL, Air Cleaner Case.>
- 4) Remove the intercooler. (Turbo model)
<Ref. to IN(H4DOTC)-11, REMOVAL, Intercooler.>
- 5) Disconnect the transmission connector.



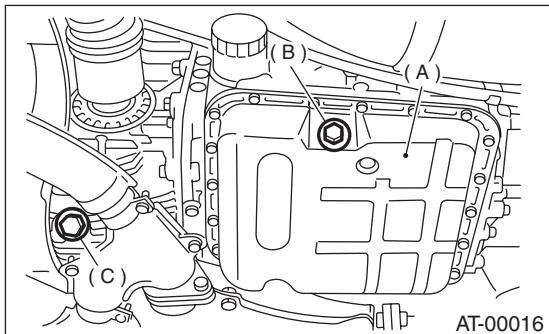
(A) Transmission connector

- 6) Remove the transmission connector from stay.
- 7) Lift up the vehicle.
- 8) Clean the transmission exterior.
- 9) Drain the ATF completely.

NOTE:

Tighten the ATF drain plug after draining the ATF.

Tightening torque:
25 N·m (2.5 kgf-m, 18.1 ft-lb)



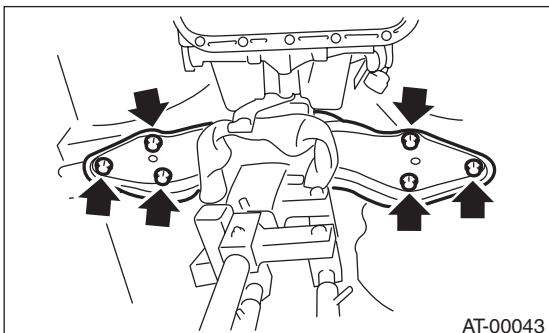
(A) Oil pan
(B) Drain plug
(C) Differential oil drain plug

- 10) Remove the front, center, rear exhaust pipes and the muffler.
<Ref. to EX(H4SO)-5, REMOVAL, Front Exhaust Pipe., <Ref. to EX(H4SO)-9, REMOVAL, Rear Exhaust Pipe., <Ref. to EX(H4SO)-10, REMOVAL, Muffler. >
- 11) Remove the center and rear exhaust pipes and the muffler. (Turbo model) <Ref. to EX(H4DOTC)-8, REMOVAL, Center Exhaust Pipe., <Ref. to EX(H4DOTC)-13, REMOVAL, Rear Exhaust Pipe., <Ref. to EX(H4DOTC)-14, REMOVAL, Muffler. >
- 12) Remove the shield cover. (if equipped)
- 13) Remove the propeller shaft. <Ref. to DS-14, REMOVAL, Propeller Shaft. >
- 14) Place the transmission jack under crossmember.

NOTE:

Place a cloth or other cushioning material between the crossmember and transmission.

- 15) Remove the transmission rear crossmember bolts.



16) Lower the AT jack.

NOTE:

Do not separate the AT jack and transmission.

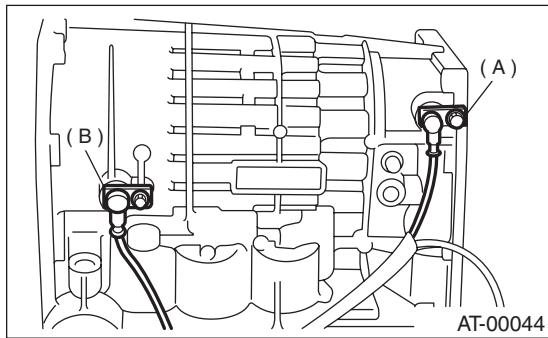
17) Remove the oil cooler outlet pipe.

CAUTION:

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

18) Remove front and rear vehicle speed sensors and the torque converter turbine speed sensor.

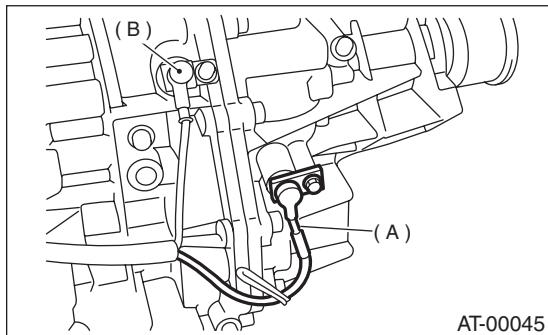
• **Front vehicle speed sensor and torque converter turbine speed sensor**



(A) Front vehicle speed sensor

(B) Torque converter turbine speed sensor

• **Rear vehicle speed sensor**

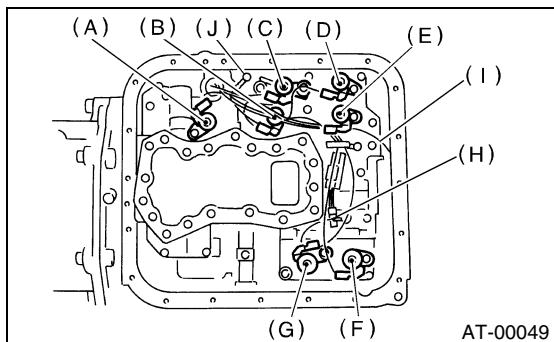


(A) Rear vehicle speed sensor

(B) Front vehicle speed sensor

19) Remove the oil pan.

20) Disconnect the duty solenoid connectors and remove the ATF temperature sensor. Remove the connectors from clip and disconnect the connectors.



(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

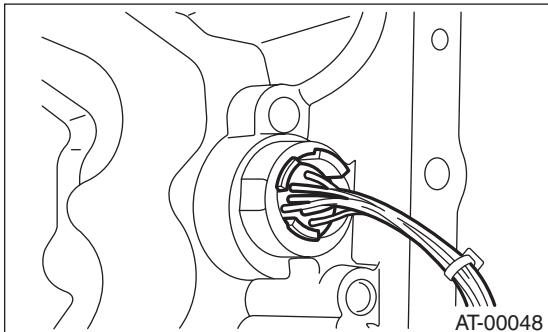
21) Remove the harness assembly.

FRONT VEHICLE SPEED SENSOR

AUTOMATIC TRANSMISSION

B: INSTALLATION

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

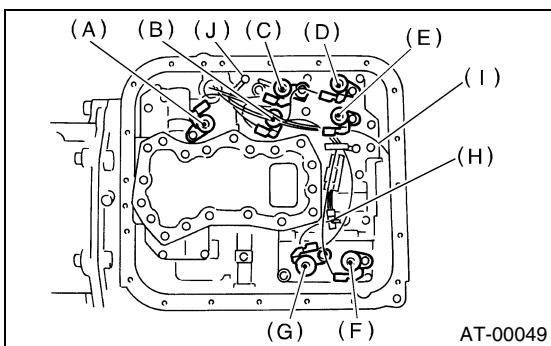


- 2) Connect the harness connectors.

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

Tightening torque: (Transmission ground terminal and ATF temperature sensor)

8 N·m (0.8 kgf·m, 5.8 ft-lb)

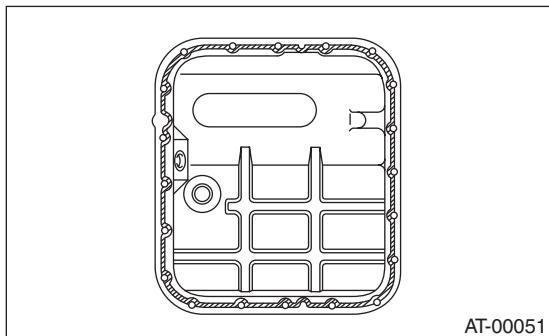


- (A) Lock-up duty solenoid (blue)
- (B) Low clutch timing solenoid (gray)
- (C) Line pressure duty solenoid (red)
- (D) Shift solenoid 2 (yellow)
- (E) Shift solenoid 1 (green)
- (F) 2-4 brake timing solenoid (black)
- (G) 2-4 brake duty solenoid (red)
- (H) ATF temperature sensor
- (I) Transfer duty solenoid (brown)
- (J) Transmission ground

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

Liquid gasket:

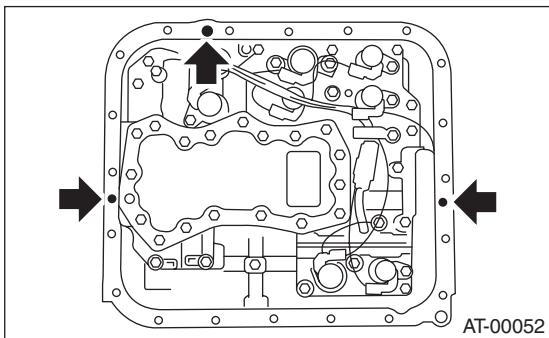
ThreeBond 1217B (Part No. K0877YA020)



- 4) Apply a plenty amount of liquid gasket to three holes other than screw holes on transmission case.

Liquid gasket:

ThreeBond 1217B (Part No. K0877YA020)



- 5) Install the oil pan.

Tightening torque:

5 N·m (0.5 kgf·m, 3.6 ft-lb)

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

Tightening torque:

7 N·m (0.7 kgf·m, 5.1 ft-lb)

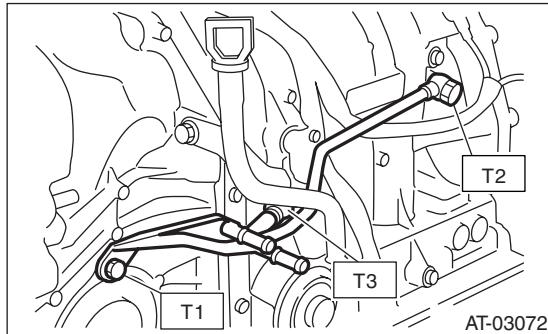
7) Install a new aluminum washer and oil cooler outlet pipe.

Tightening torque:

T1: 25 N·m (2.5 kgf-m, 18.1 ft-lb)

T2: 40 N·m (4.1 kgf-m, 30 ft-lb)

T3: 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. (if equipped)

11) Install the front, center, rear exhaust pipes and the muffler. (Non-turbo model)

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

12) Install the center and rear exhaust pipes and the muffler. (Turbo model) <Ref. to EX(H4DOTC)-14, INSTALLATION, Muffler., <Ref. to EX(H4DOTC)-13, INSTALLATION, Rear Exhaust Pipe., <Ref. to EX(H4DOTC)-9, INSTALLATION, Center Exhaust Pipe.>

13) Lower the vehicle.

14) Install the transmission connector to the stay.

15) Install the air cleaner case. (Non-turbo model)
<Ref. to IN(H4SO)-6, INSTALLATION, Air Cleaner Case.>

16) Install the intercooler. (Turbo model) <Ref. to IN(H4DOTC)-12, INSTALLATION, Intercooler.>