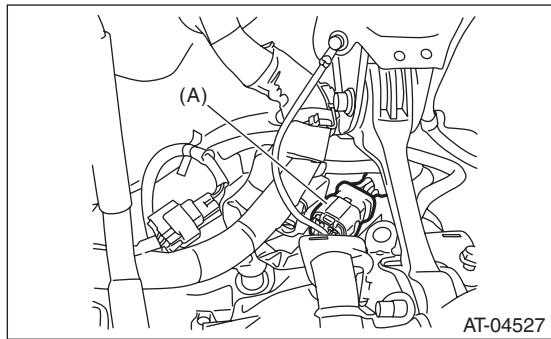


### 14. Front Vehicle Speed Sensor

#### A: REMOVAL

- 1) Set the vehicle on a lift.
- 2) Disconnect the ground cable from battery.
- 3) Remove the air intake chamber. <Ref. to IN(H4SO)-7, REMOVAL, Air Intake Chamber.>
- 4) Disconnect the transmission harness connector.



(A) Transmission harness connectors

- 5) Remove the pitching stopper. <Ref. to 4AT-41, REMOVAL, Transmission Mounting System.>
- 6) Remove the transmission harness connector from stay.
- 7) Lift up the vehicle.
- 8) Clean the transmission exterior.
- 9) Remove the drain plug (ATF) to drain ATF.

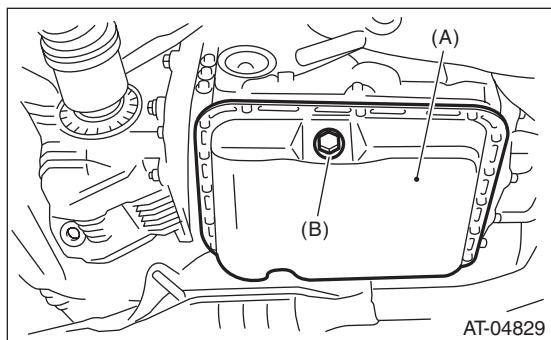
#### CAUTION:

**Directly after the vehicle has been running or the engine has been long idle running, the ATF is hot. Be careful not to burn yourself.**

- 10) Perform replacement with a new gasket, and tighten the drain plug (ATF).

#### Tightening torque:

**25 N·m (2.5 kgf·m, 18.4 ft-lb)**



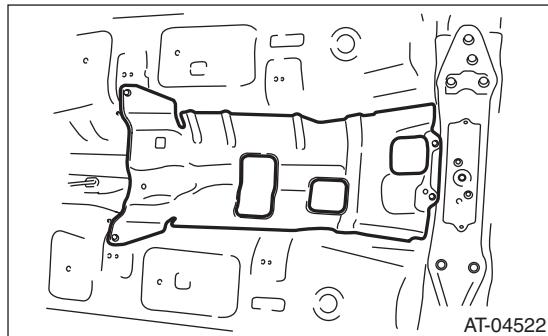
(A) Oil pan

(B) Drain plug (ATF)

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

<Ref. to EX(H4SO)-6, REMOVAL, Front Exhaust Pipe.> <Ref. to EX(H4SO)-9, REMOVAL, Center Exhaust Pipe.> <Ref. to EX(H4SO)-10, REMOVAL, Rear Exhaust Pipe.> <Ref. to EX(H4SO)-12, REMOVAL, Muffler.>

- 12) Remove the heat shield cover.



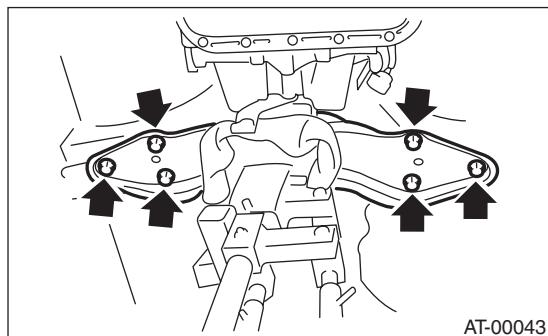
- 13) Remove the propeller shaft. <Ref. to DS-10, REMOVAL, Propeller Shaft.>

- 14) Place the transmission jack under the transmission.

#### NOTE:

Make sure that the support plate of transmission jack does not touch the cross.

- 15) Remove the transmission rear crossmember bolt.



- 16) Lower the transmission jack.

#### NOTE:

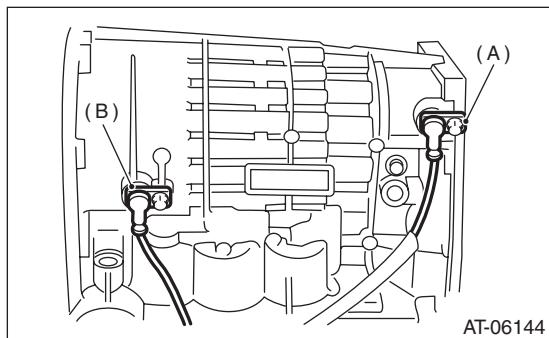
Do not separate the transmission jack and transmission.

- 17) Remove the ATF inlet and outlet pipes.

#### CAUTION:

**When removing the outlet pipe, be careful not to lose the ball and spring used together with the retaining screw.**

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



AT-06144

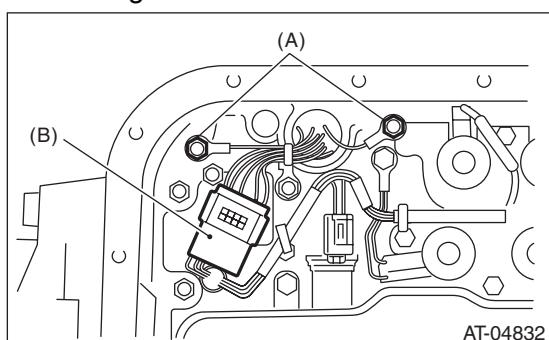
(A) Front vehicle speed sensor  
 (B) Torque converter turbine speed sensor

19) Remove the oil pan.

**CAUTION:**

**Be careful not to allow foreign matter such as dust or dirt to enter the oil pan.**

20) Disconnect the control valve connector and transmission ground terminal.



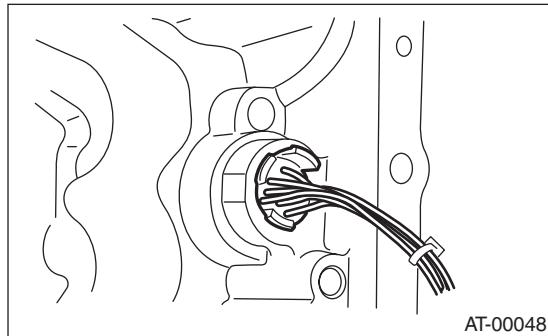
AT-04832

(A) Transmission ground terminal  
 (B) Control valve connector

21) Remove the transmission harness assembly.

## B: INSTALLATION

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

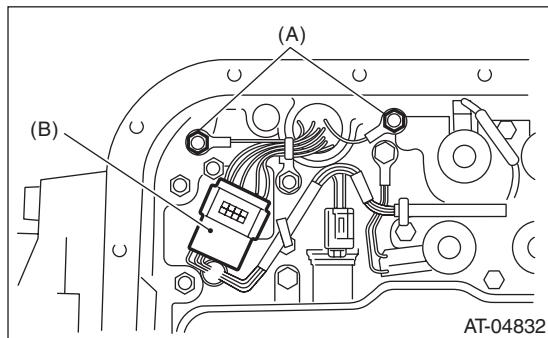


AT-00048

2) Connect the control valve connector and transmission ground.

**Tightening torque:**

**8 N·m (0.8 kgf·m, 5.9 ft-lb)**



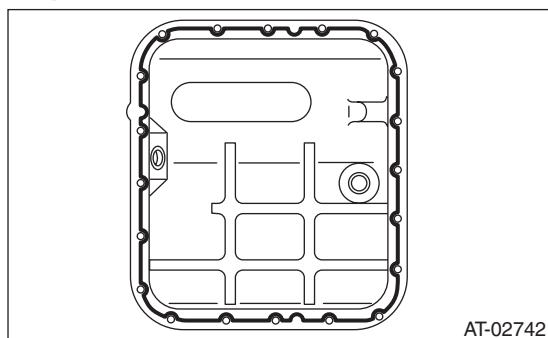
AT-04832

(A) Transmission ground terminal  
 (B) Control valve connector

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

**Liquid gasket:**

**THREE BOND 1217B (Part No. K0877YA020) or equivalent**



AT-02742

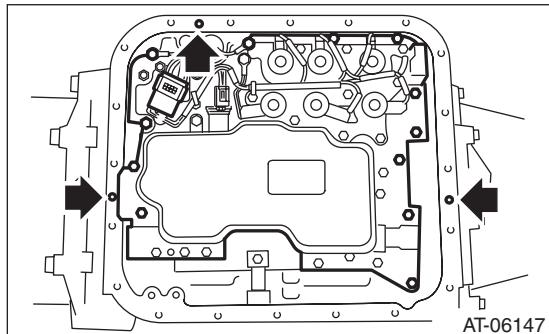
# Front Vehicle Speed Sensor

## AUTOMATIC TRANSMISSION

4) Fill the 3 locations of the transmission case excluding the bolt holes with an ample amount of liquid gasket.

### Liquid gasket:

**THREE BOND 1217B (Part No. K0877YA020)  
or equivalent**



5) Install the oil pan by equally tightening the bolts.

### Tightening torque:

**5 N·m (0.5 kgf-m, 3.7 ft-lb)**

6) Install the front vehicle speed sensor and torque converter turbine speed sensor.

### Tightening torque:

**7 N·m (0.7 kgf-m, 5.2 ft-lb)**

7) Install the ATF inlet and outlet pipes.

### NOTE:

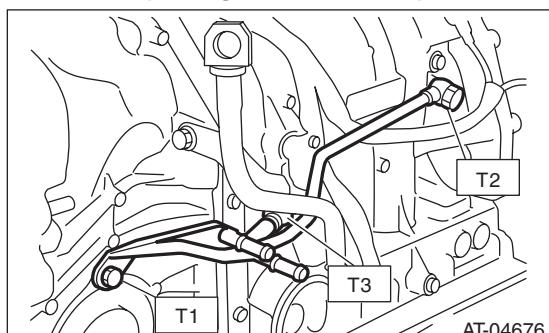
Use a new copper washer.

### Tightening torque:

**T1: 25 N·m (2.5 kgf-m, 18.4 ft-lb)**

**T2: 40 N·m (4.1 kgf-m, 29.5 ft-lb)**

**T3: 45 N·m (4.6 kgf-m, 33.2 ft-lb)**



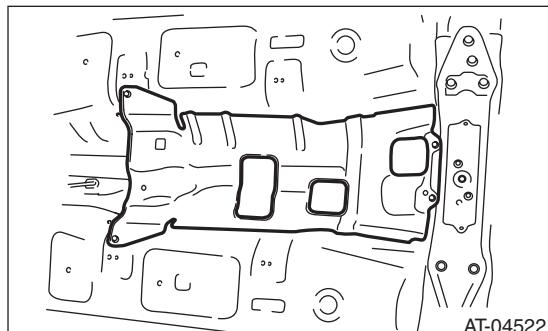
8) Install the transmission rear crossmember bolt.

### Tightening torque:

**70 N·m (7.1 kgf-m, 51.6 ft-lb)**

9) Install the propeller shaft. <Ref. to DS-11, INSTALLATION, Propeller Shaft.>

10) Install the heat shield cover.



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

<Ref. to EX(H4SO)-7, INSTALLATION, Front Exhaust Pipe.> <Ref. to EX(H4SO)-9, INSTALLATION, Center Exhaust Pipe.> <Ref. to EX(H4SO)-10, INSTALLATION, Rear Exhaust Pipe.> <Ref. to EX(H4SO)-12, INSTALLATION, Muffler.>

12) Lower the vehicle.

13) Install the transmission harness connector to the stay.

14) Install the pitching stopper. <Ref. to 4AT-41, INSTALLATION, Transmission Mounting System.>

15) Install the air intake chamber. <Ref. to IN(H4SO)-7, INSTALLATION, Air Intake Chamber.>

16) Fill with the same amount of ATF as drained. <Ref. to 4AT-26, Automatic Transmission Fluid.>

17) Bleed the air of control valve.

<Ref. to 4AT-57, PROCEDURE, Air Bleeding of Control Valve.>

18) Inspect the level of ATF. <Ref. to 4AT-26, INSPECTION, Automatic Transmission Fluid.>

19) Perform learning control promotion. <Ref. to 4AT(diag)-20, Learning Control.>