

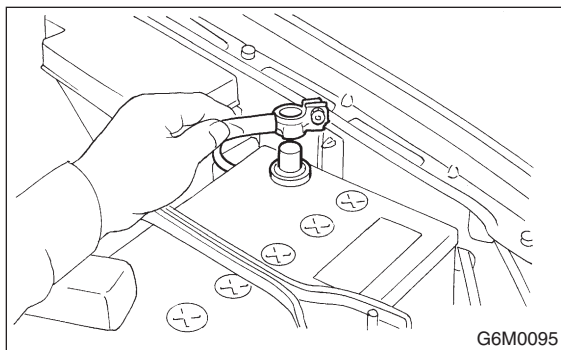
## 12. Vehicle Speed Sensor 1, 2, Torque Converter Turbine Speed Sensor and Harness Assembly

S502563

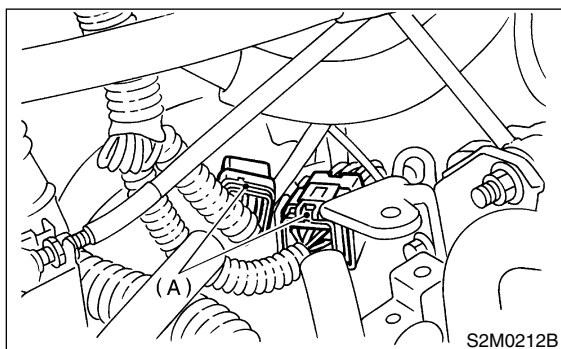
### A: REMOVAL

S502563A18

- 1) Disconnect battery ground cable.



- 2) Disconnect transmission connector.



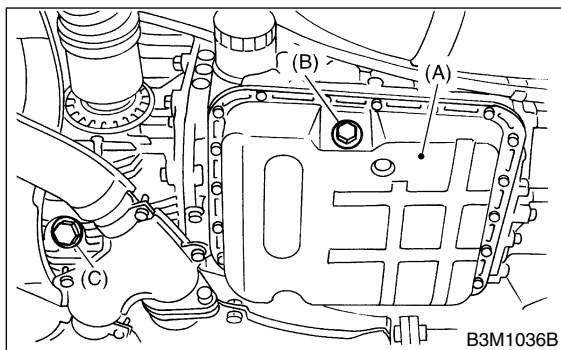
- 3) Remove the transmission connector from stay.
- 4) Lift-up the vehicle.
- 5) Clean transmission exterior.
- 6) Drain ATF completely.

#### NOTE:

Tighten ATF drain plug after draining ATF.

#### Tightening torque:

**25 N·m (2.5 kgf-m, 18.1 ft-lb)**

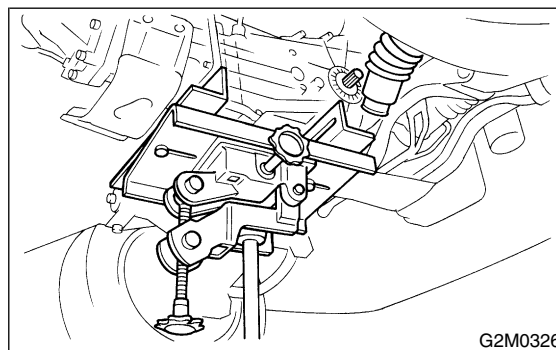


- (D) Oil pan
- (E) Drain plug
- (F) Differential oil drain plug

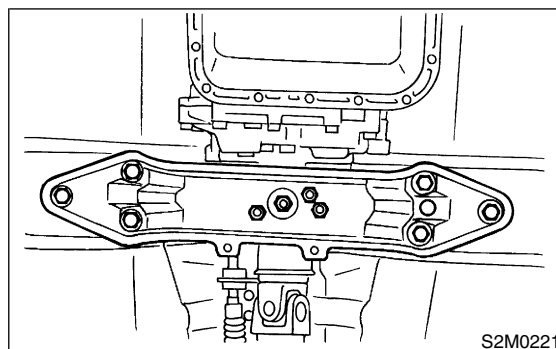
- 7) Remove the propeller shaft. <Ref. to DS-13 REMOVAL, Propeller Shaft.>
- 8) Remove the shield cover.
- 9) Place transmission jack under transmission.

#### CAUTION:

- Always support transmission case with a transmission jack.
- On AT vehicle, make sure that the support plates of transmission jack don't touch the oil pan.



- 10) Remove the transmission rear crossmember bolts.



- 11) Lower the AT jack.

#### NOTE:

Do not separate the AT jack and transmission.

- 12) Remove the oil cooler outlet pipe.

#### CAUTION:

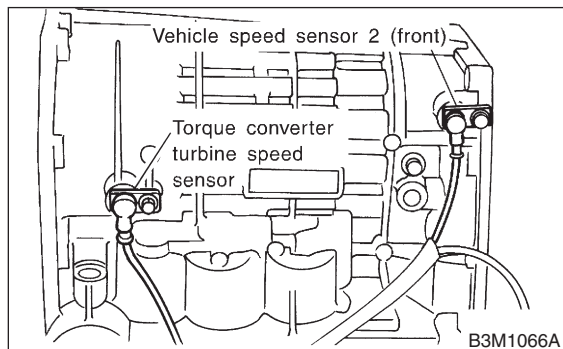
When removing outlet pipe, be careful not to lose balls and springs used with retaining screws.

# VEHICLE SPEED SENSOR 1, 2, TORQUE CONVERTER TURBINE SPEED SENSOR AND HARNESS ASSEMBLY

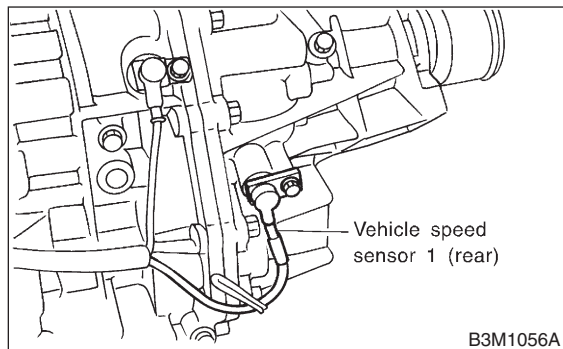
Automatic Transmission

13) Remove vehicle speed sensor 1, 2, and torque converter turbine speed sensor with harness assembly.

## ● Vehicle speed sensor 2 and torque converter turbine speed sensor



## ● Vehicle speed sensor 1

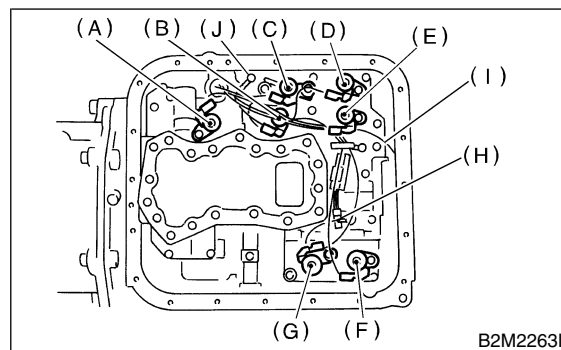


14) Remove oil pan.

NOTE:

Drain oil into a container.

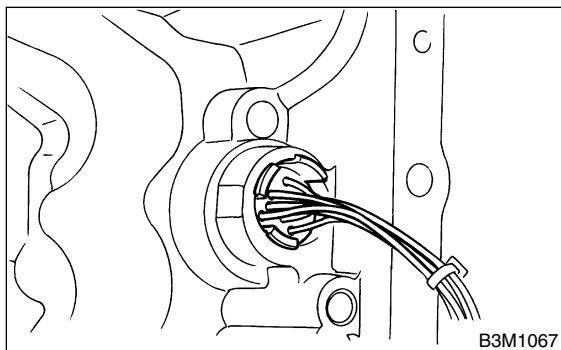
15) Disconnect duty solenoids and ATF temperature sensor connectors. Remove connectors from clip and disconnect connectors at 8 places.



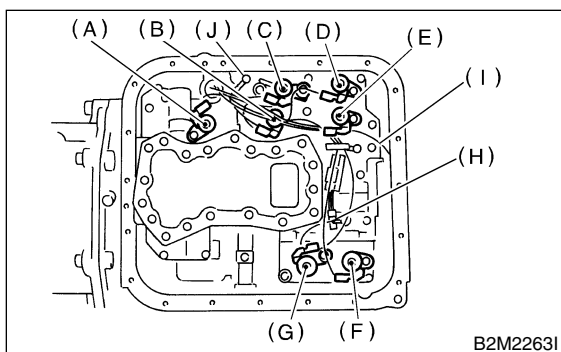
- (A) Lock-up duty solenoid (Blue)
- (B) Low clutch timing solenoid (Gray)
- (C) Lining pressure duty solenoid (Red)
- (D) Shift solenoid 2 (Yellow)
- (E) Shift solenoid 1 (Green)
- (F) 2-4 brake timing solenoid (Black)
- (G) 2-4 brake duty solenoid (Red)
- (H) ATF temperature sensor
- (I) Transfer duty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

## B: INSTALLATION S502563A11

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

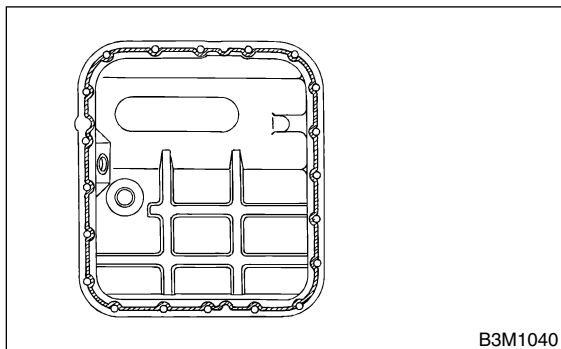


2) Connect harness connectors at 9 places. Connect connectors of same color, and secure connectors to valve body sing clips.



- (A) Lock-up duty solenoid (Blue)
- (B) Low clutch timing solenoid (Gray)
- (C) Lining 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 (THREE BOND Part No. 1217B) to the entire oil pan mating surface.



4) Install the oil pan.

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

5) Install the vehicle speed sensor 1 and 2, 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)**

6) Install oil cooler outlet pipe. <Ref. to AT-25 INSTALLATION, Oil Cooler Pipes.>

7) Install transmission rear crossmember bolts.

**Tightening torque:**  
**69 N·m (7.0 kgf-m, 51 ft-lb)**

8) Install shield cover.

9) Install propeller shaft. <Ref. to DS-14 INSTALLATION, Propeller Shaft.>

10) Install the transmission connector to the stay.