

VEHICLE SPEED SENSORS AND TORQUE CONVERTER TURBINE SPEED SENSOR

Automatic Transmission

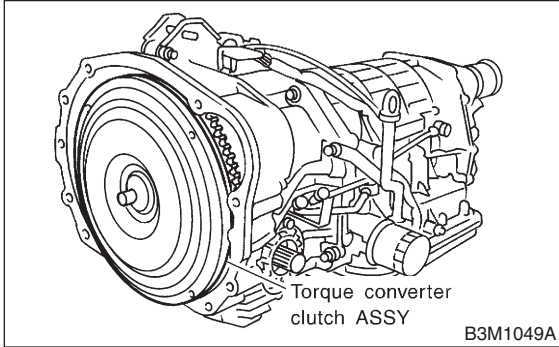
6. Vehicle Speed Sensors and Torque Converter Turbine Speed Sensor

SS10586

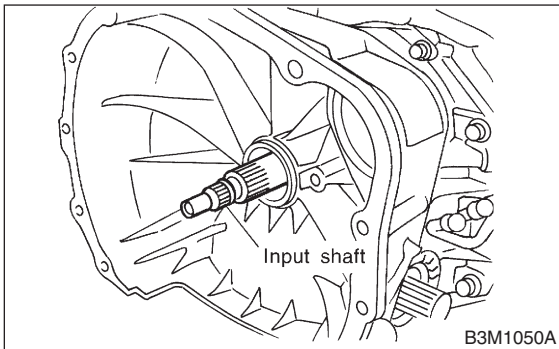
A: REMOVAL

SS10586A18

1) Extract the torque converter clutch assembly. <Ref. to AT-30 REMOVAL, Torque Converter Clutch Assembly.>



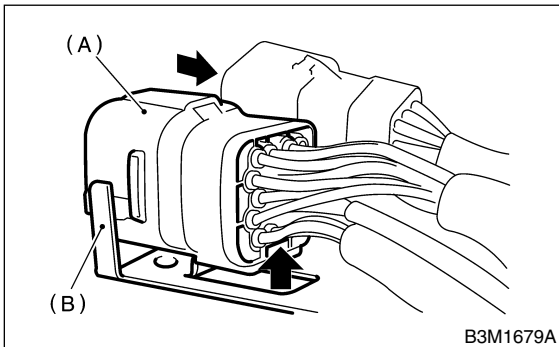
2) Remove the input shaft.



3) Disconnect transmission harness connector from stay.

NOTE:

Lift-up lever behind connector and disconnect it from stay.



(A) Transmission harness

(B) Stay

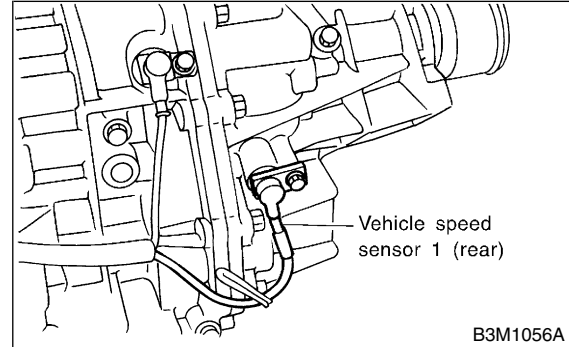
4) Disconnect inhibitor switch connector from stay.
5) Disconnect the air breather hose. <Ref. to AT-23 REMOVAL, Air Breather Hose.>

6) Remove the oil cooler pipes. <Ref. to AT-25 REMOVAL, Oil Cooler Pipes.>

7) Remove the oil charger pipe. <Ref. to AT-24 REMOVAL, Oil Charger Pipe.>

8) Remove torque converter clutch case assembly. <Ref. to AT-45 REMOVAL, Torque Converter Clutch Case.>

9) Remove vehicle speed sensor 1 (rear).



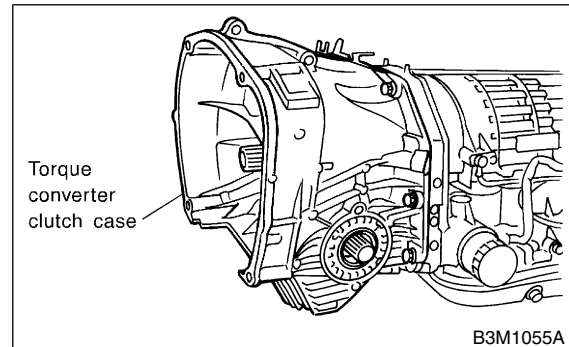
10) Separate torque converter clutch case and transmission case sections.

CAUTION:

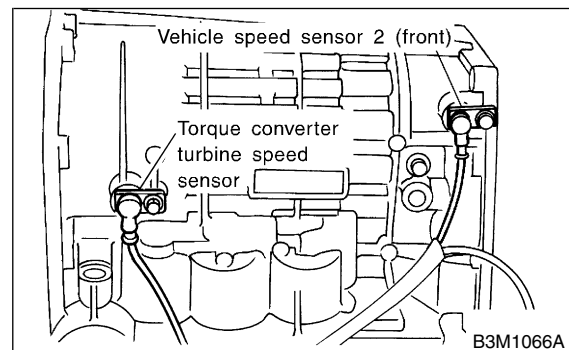
- Be careful not to damage the oil seal and bushing inside the torque converter clutch case with the oil pump cover.
- Be careful not to lose the rubber seal.

NOTE:

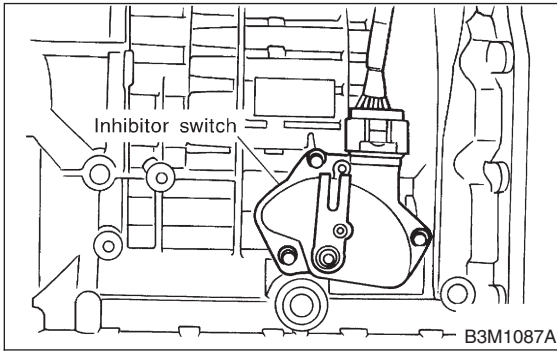
Separate these cases while tapping lightly on the housing.



11) Remove vehicle speed sensor 2 (front) and torque converter turbine speed sensor.



12) Remove the inhibitor switch.



13) Prepare a block of wood. Turn over the transmission case and make it secure with the block of wood.

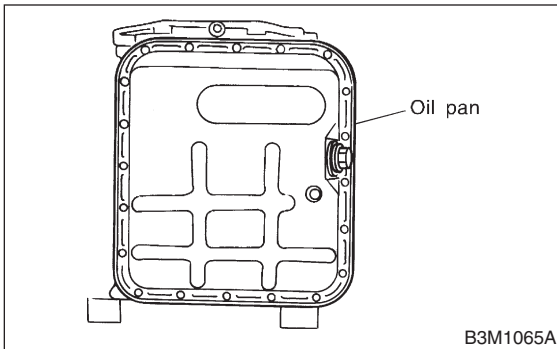
NOTE:

Turn over in the direction the inhibitor switch was installed.

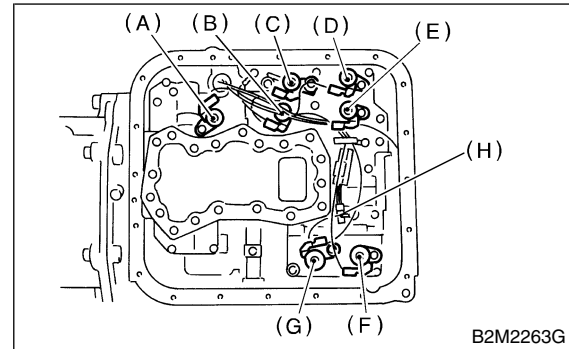
14) Remove the oil pan.

NOTE:

Use a scraper to remove oil pan.

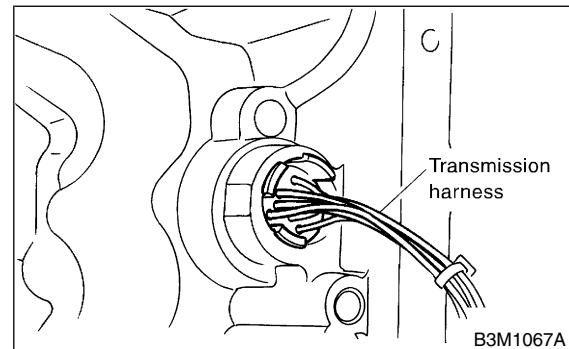


15) Disconnect the harness connectors for the solenoids, duty solenoids, ATF temperature sensor and the ground cord.



- (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

16) Remove transmission harness.

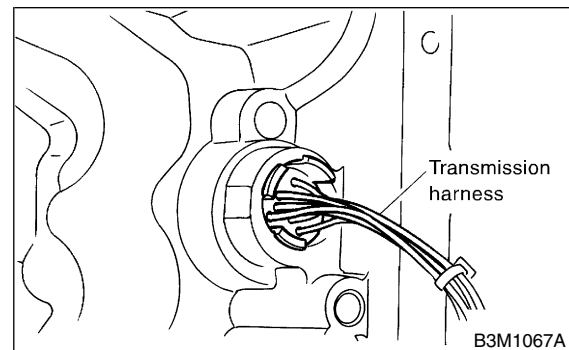


B: INSTALLATION SS10586A11

1) Install and route the transmission harness.

CAUTION:

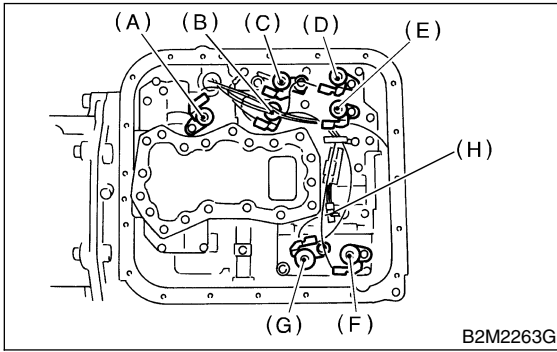
Be careful not to damage the harness.



VEHICLE SPEED SENSORS AND TORQUE CONVERTER TURBINE SPEED SENSOR

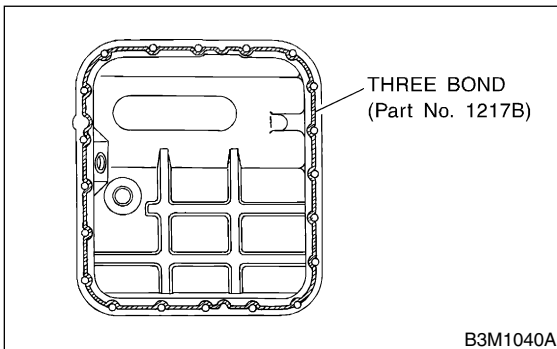
Automatic Transmission

2) Connect all 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

3) Apply proper amount of liquid gasket (THREE BOND Part No. 1217B) to the entire oil pan mating surface.



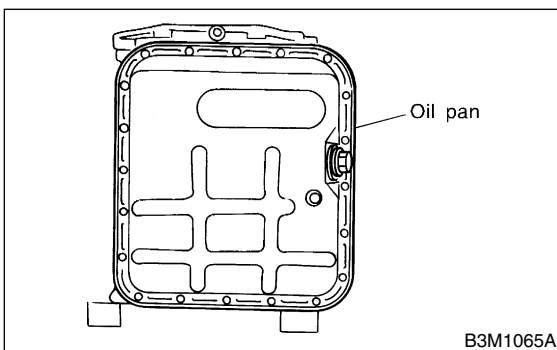
4) Install the oil pan to the transmission case assembly, and secure with 20 bolts.

NOTE:

Tighten the bolts evenly.

Tightening torque:

4.9 N-m (0.50 kgf-m, 3.6 ft-lb)

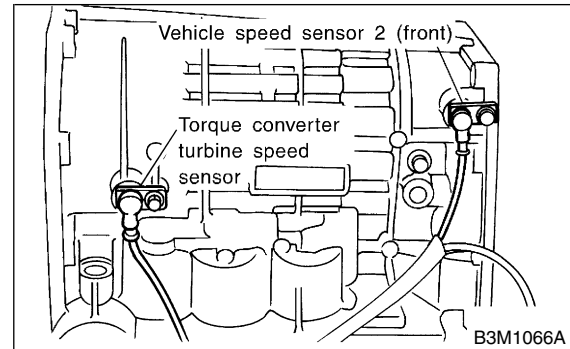


5) Turn over the transmission case to its original position.

6) Install torque converter turbine speed sensor and vehicle speed sensor 2 (front).

Tightening torque:

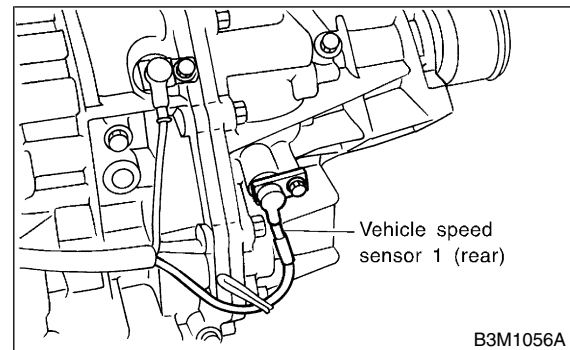
7 N-m (0.7 kgf-m, 5.1 ft-lb)



7) Install the vehicle speed sensor 1 (rear).

Tightening torque:

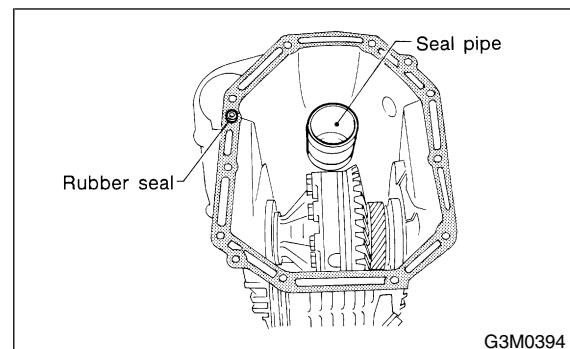
7 N-m (0.7 kgf-m, 5.1 ft-lb)



8) Apply proper amount of liquid gasket (THREE BOND Part No. 1215) to the entire torque converter clutch case mating surface.

NOTE:

Make sure that the rubber seal and seal pipe are fitted in position.



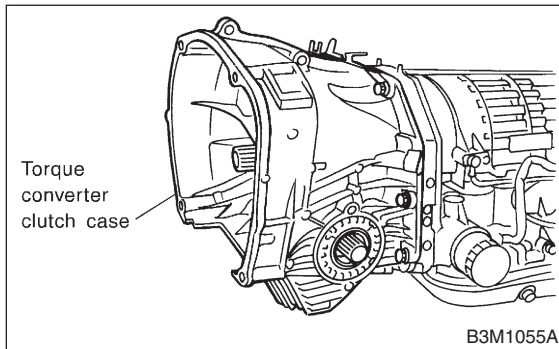
9) Install the torque converter clutch case assembly to the transmission case assembly, and secure with six bolts and four nuts.

CAUTION:

When installing, be careful not to damage the torque converter clutch case bushing and oil seal.

Tightening torque:

41 N·m (4.2 kgf-m, 30.4 ft-lb)



10) Install torque converter clutch case assembly. <Ref. to AT-46 INSTALLATION, Torque Converter Clutch Case.>

11) Install air breather hose. <Ref. to AT-23 INSTALLATION, Air Breather Hose.>

12) Install the oil cooler pipes. <Ref. to AT-25 INSTALLATION, Oil Cooler Pipes.>

13) Install the oil charge pipes. <Ref. to AT-24 INSTALLATION, Oil Charger Pipe.>

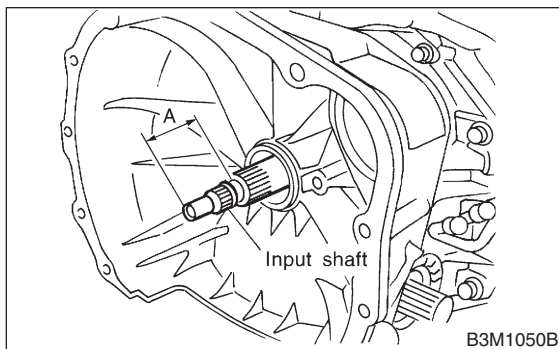
14) Insert the input shaft while turning lightly by hand.

CAUTION:

Be careful not to damage the bushing.

Normal protrusion A:

50 — 55 mm (1.97 — 2.17 in)



15) Install the torque converter clutch assembly. <Ref. to AT-30 INSTALLATION, Torque Converter Clutch Assembly.>