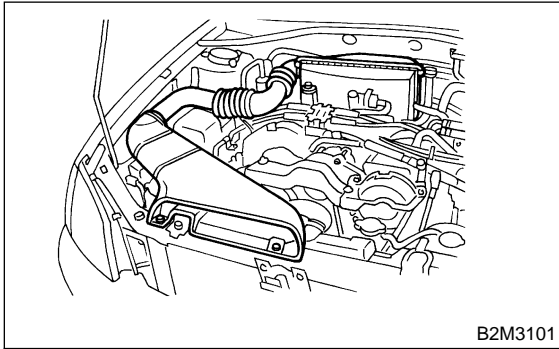


- 21) Install air intake duct and cleaner case.  
 <Ref. to 2-7 [W1A0].>



- 22) Install under cover.  
 23) Install battery in the vehicle, and connect cables.  
 24) Fill coolant.  
 <Ref. to 2-5 [W9B0].>  
 25) Check ATF level and correct if necessary. (AT model)  
 <Ref. to 3-2 [W1B1].>  
 26) Charge A/C system with refrigerant.  
 <Ref. to 4-7 [W700].>  
 27) Remove front hood stay, and close front hood.  
 28) Take off the vehicle from lift arms.

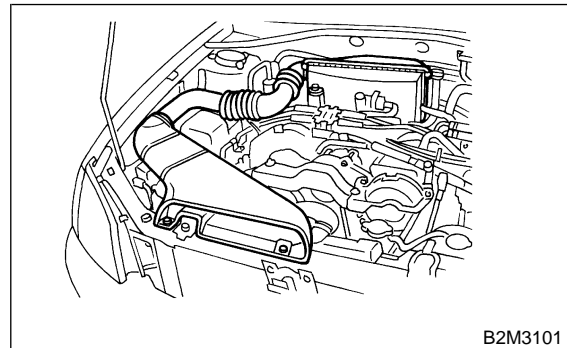
## 2. Transmission

### A: GENERAL PRECAUTION

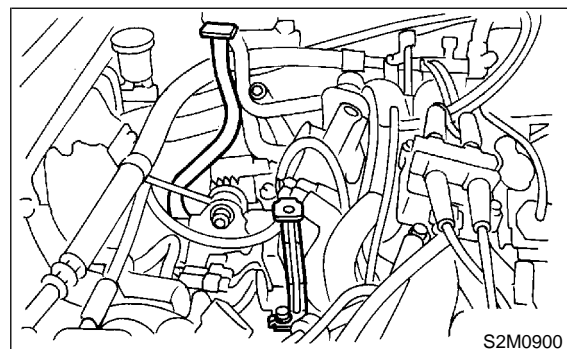
- 1) Remove or install transmission in an area where chain hoists, lifting devices, etc. are available for ready use.
- 2) Be sure not to damage coated surfaces of body panels with tools or stain seats and windows with coolant or oil. Place a cover over fenders, as required, for protection.
- 3) Prior to starting work, prepare the following: Service tools, clean cloth, containers to catch coolant and oil, wire ropes, chain hoist, transmission jacks, etc.
- 4) Lift-up or lower the vehicle when necessary. Make sure to support the correct positions. <Ref. to 1-3 [G7B0].>

### B: REMOVAL

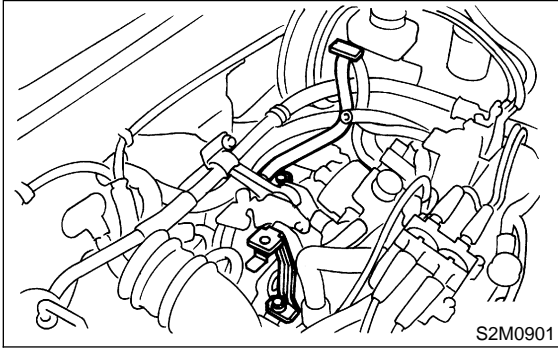
- 1) Open front hood fully, and support with stay.
- 2) Disconnect battery ground terminal.
- 3) Remove air intake duct and cleaner case.  
 <Ref. to 2-7 [W1A0].>



- 4) Remove air cleaner case stay.
- **MT model**

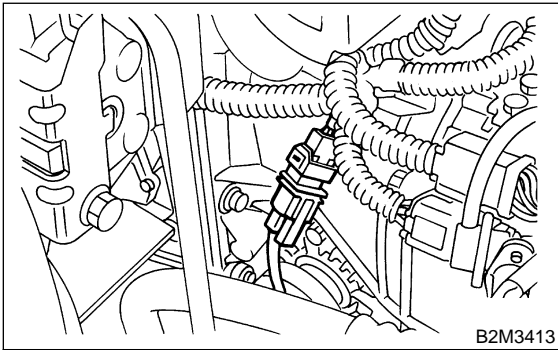


● AT model

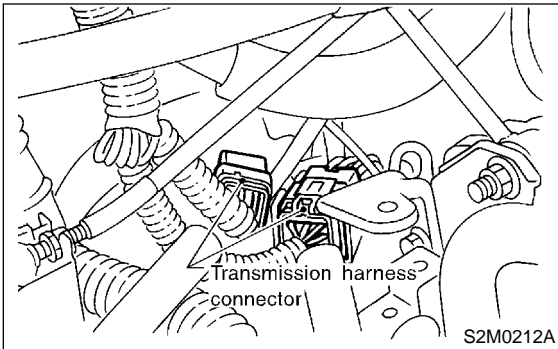


5) Disconnect the following connectors.

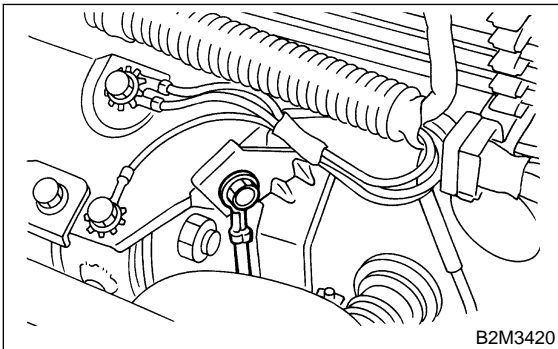
(1) Front oxygen sensor connector



(2) Transmission harness connector (AT model)

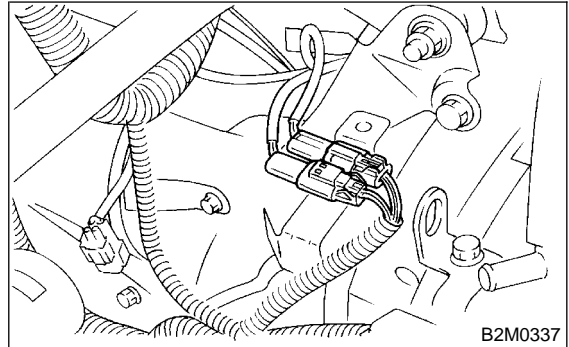


(3) Transmission ground terminal

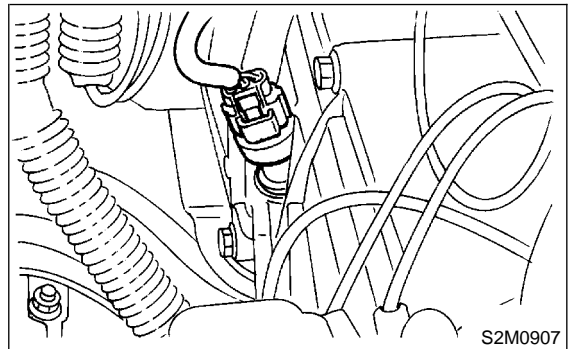


(4) Neutral position switch connector (MT model)

(5) Back-up light switch connector (MT model)



(6) Vehicle speed sensor (MT model)

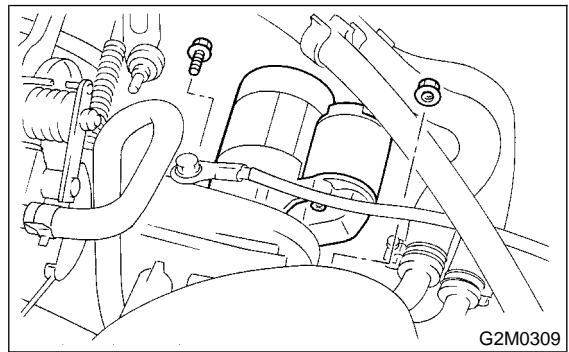


6) Remove starter.

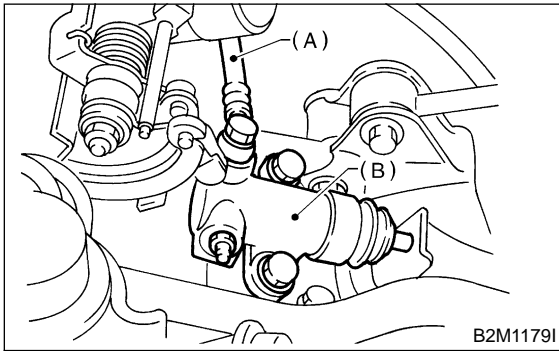
(1) Disconnect connectors and terminal from starter.

(2) Remove bolt which installs upper side of starter.

(3) Remove nut which installs lower side of starter, and remove starter from transmission.

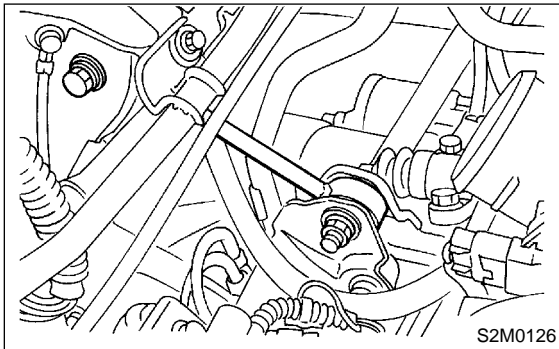


7) Remove operating cylinder from transmission.  
(MT model)



- (A) Clutch hose
- (B) Operating cylinder

8) Remove pitching stopper.

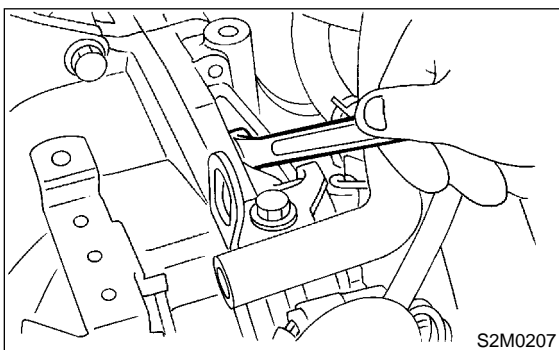


9) Separate torque converter clutch from drive plate. (AT model)

- (1) Remove service hole plug.
- (2) Remove bolts which hold torque converter clutch to drive plate.
- (3) While rotating the engine, remove other bolts using ST.

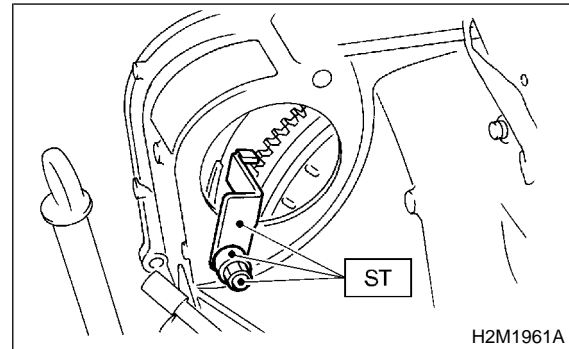
**CAUTION:**  
Be careful not to drop bolts into torque converter clutch housing.

ST 499977000 CRANK PULLEY WRENCH



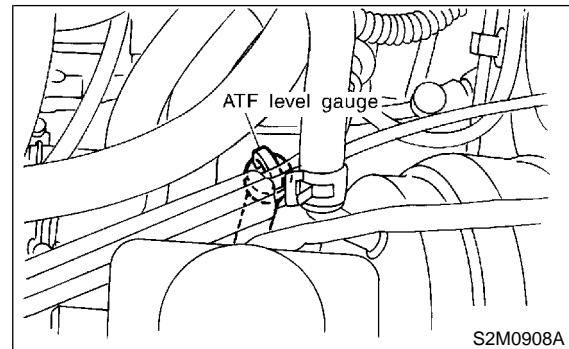
10) Install ST to torque converter clutch case. (AT model)

ST 498277200 STOPPER SET



11) Remove ATF level gauge. (AT model)

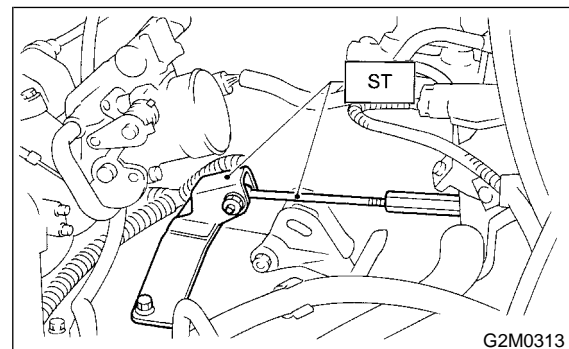
**CAUTION:**  
Plug opening to prevent entry of foreign particles into transmission fluid.



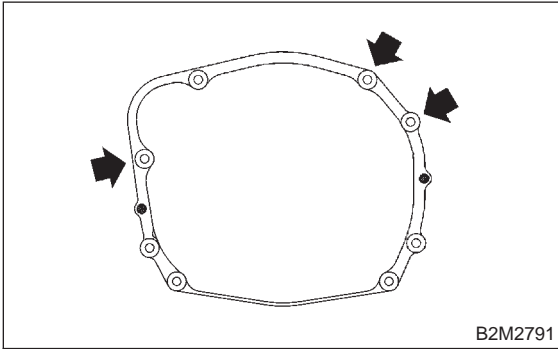
12) Set ST.

**NOTE:**  
Also is available Part No. 927670000.

ST 41099AA020 ENGINE SUPPORT ASSY



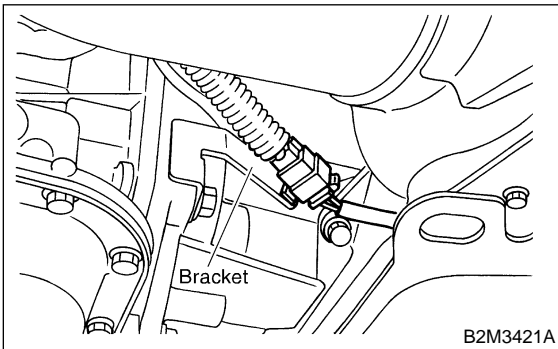
13) Remove bolt which holds right upper side of transmission to engine.



B2M2791

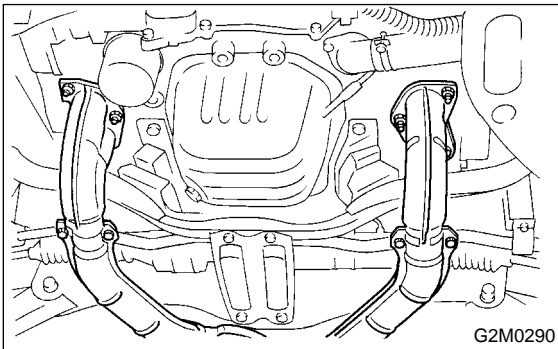
14) Remove under cover.

15) Remove rear oxygen sensor connector from bracket.



B2M3421A

16) Remove front and center exhaust pipes.  
<Ref. to 2-9 [W1A0].>



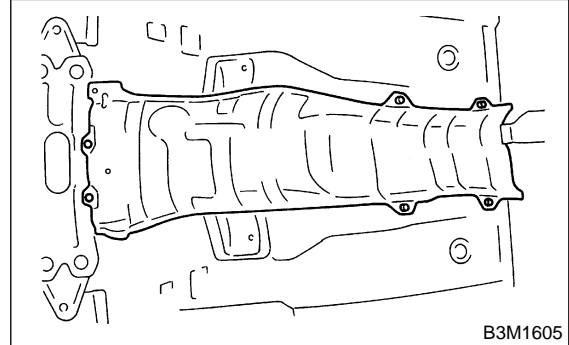
G2M0290

17) Remove rear exhaust pipe and muffler.  
<Ref. to 2-9 [W2A0].>

**CAUTION:**

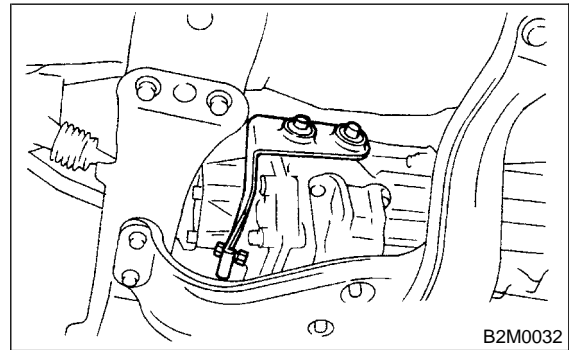
**When removing exhaust pipes, be careful each exhaust pipe does not drop out.**

18) Remove heat shield cover.



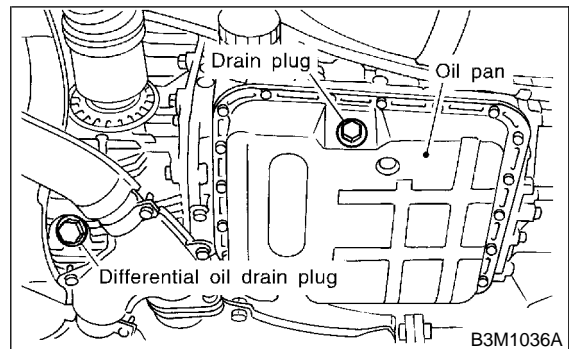
B3M1605

19) Remove hanger bracket from right side of transmission.



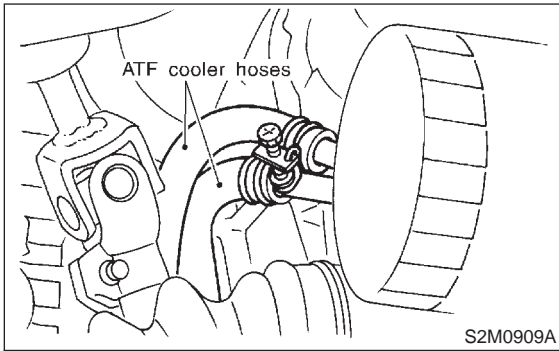
B2M0032

20) Drain ATF to remove ATF drain plug. (AT model)



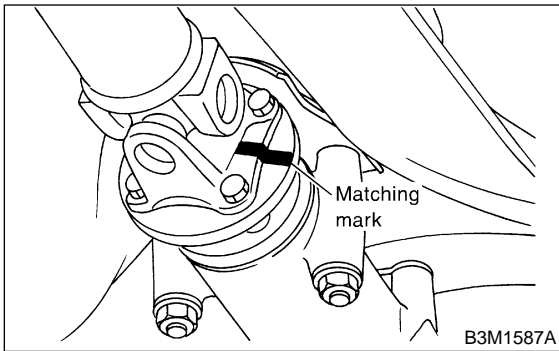
B3M1036A

21) Disconnect ATF cooler hoses from pipes of transmission side, and remove ATF level gauge guide. (AT model)



22) Remove propeller shaft.

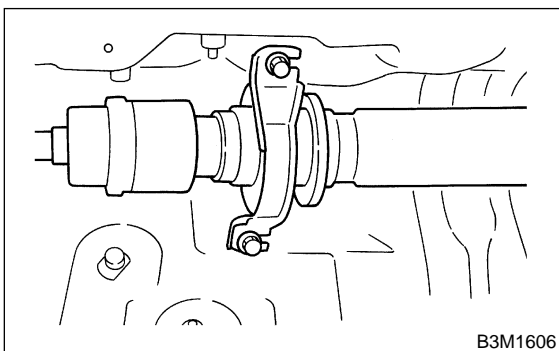
(1) Separate propeller shaft from rear differential.



(2) Remove bolts which hold center bearing onto body.

**CAUTION:**

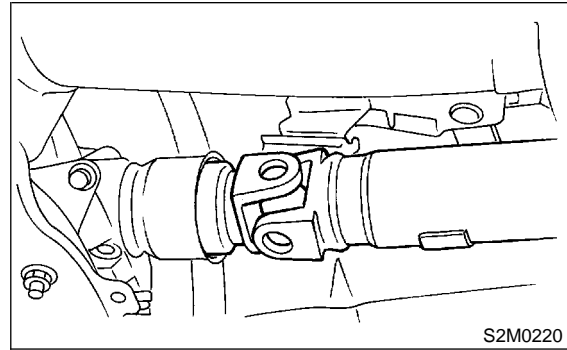
**Be careful not to drop propeller shaft.**



(3) Remove propeller shaft from transmission.

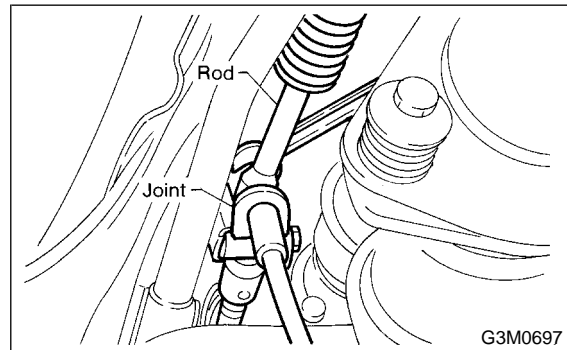
**CAUTION:**

- Be sure to use an empty container to catch oil flowing out when removing propeller shaft.
- Be sure not to damage oil seals and the frictional surface of sleeve yoke.
- Be sure to plug the opening in transmission after removal of propeller shaft.



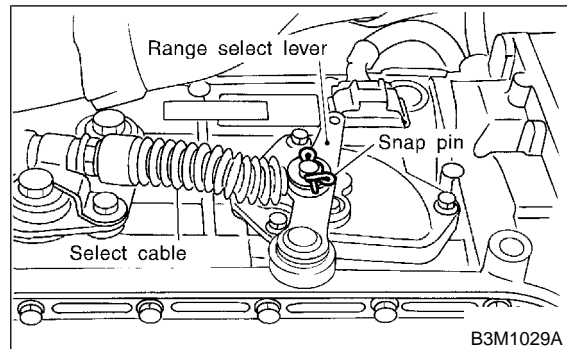
23) Remove gear shift rod and stay from transmission. (MT model)

- (1) Remove spring.
- (2) Disconnect stay from transmission.
- (3) Disconnect rod from transmission.

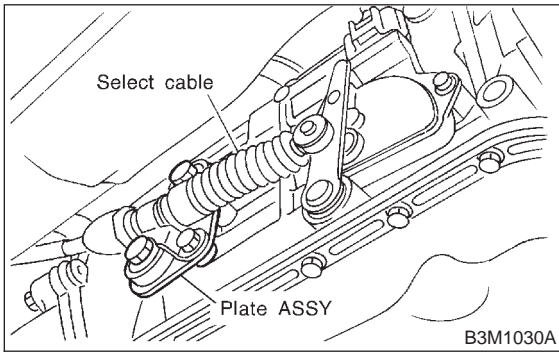


24) Remove shift selector cable. (AT model)

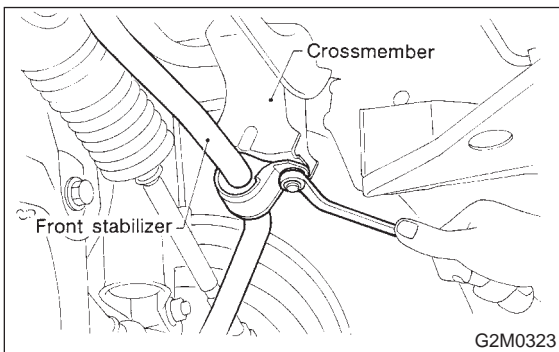
- (1) Remove snap pin from range select lever.



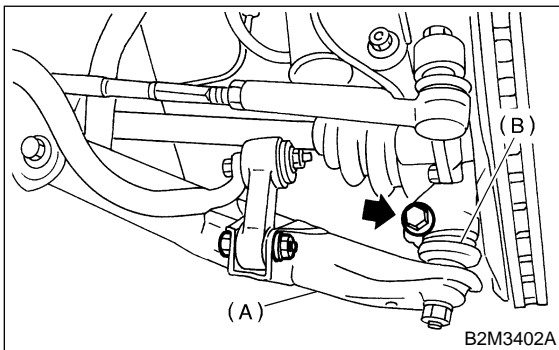
(2) Remove plate assembly from transmission case.



25) Remove bolts which install stabilizer clamps onto crossmember.



26) Remove front drive shafts from transmission.  
(1) Remove transverse link from housing.

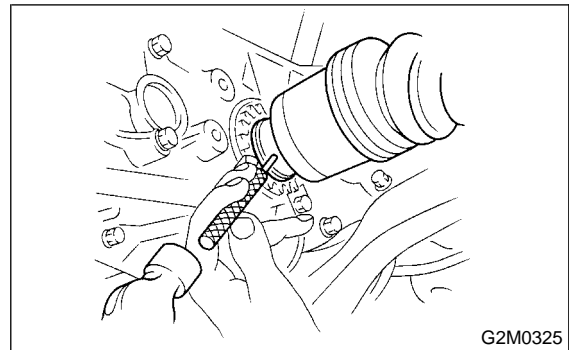


- (A) Transverse link
- (B) Ball joint

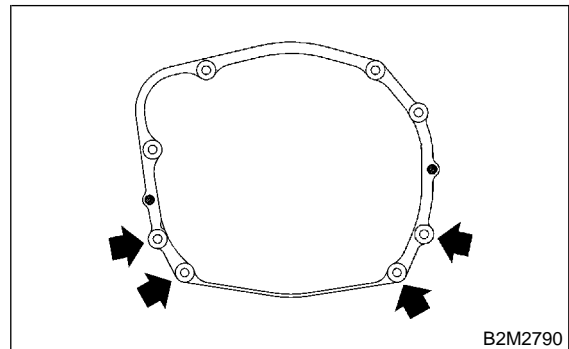
(2) Lower transverse link.

(3) Remove spring pins and separate front drive shafts from each side of the transmission.

**CAUTION:**  
Discard removing spring pin. Replace with a new one.



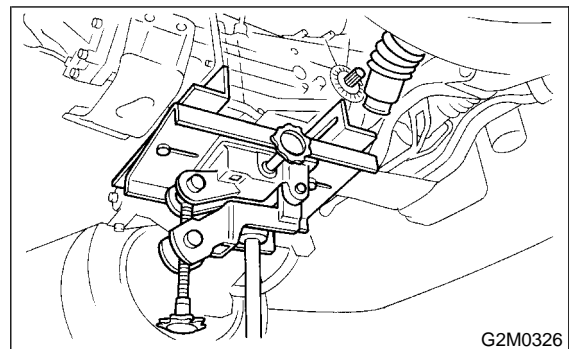
27) Remove nuts which hold lower side of transmission to engine.



28) Place transmission jack under transmission.

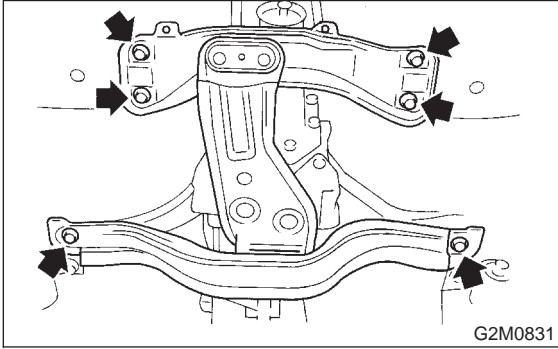
**CAUTION:**

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

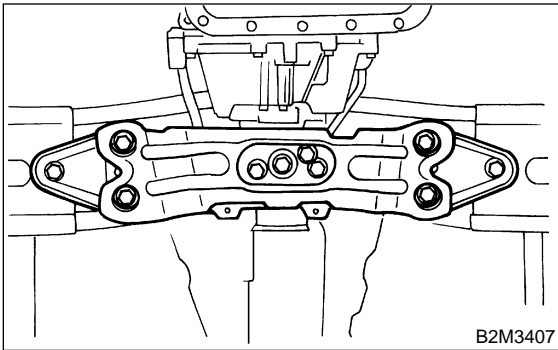


29) Remove transmission rear crossmember from vehicle.

● MT model



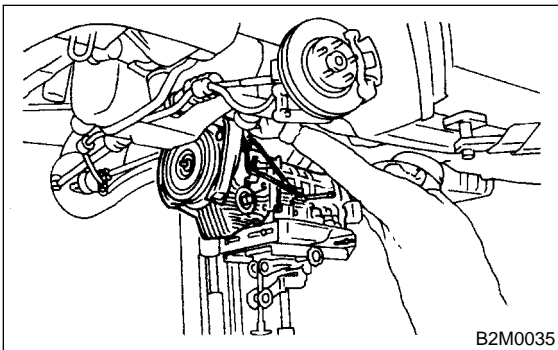
● AT model



30) Remove transmission.

**CAUTION:**

- Move transmission jack toward rear until main shaft is withdrawn from clutch cover. (MT model)
- Move transmission and torque converter as a unit away from engine. (AT model)



31) Separate transmission assembly and rear cushion rubber.

**C: INSTALLATION**

1) Install rear cushion rubber to transmission assembly.

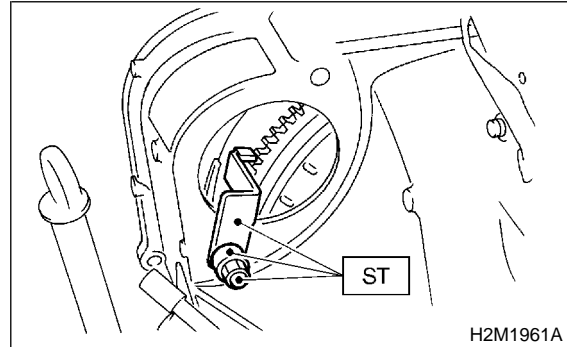
**Tightening torque:**

**MT;  $34 \pm 5$  N·m ( $3.5 \pm 0.5$  kg·m,  $25.3 \pm 3.6$  ft·lb)**

**AT;  $38 \pm 15$  N·m ( $3.9 \pm 1.5$  kg·m,  $28 \pm 11$  ft·lb)**

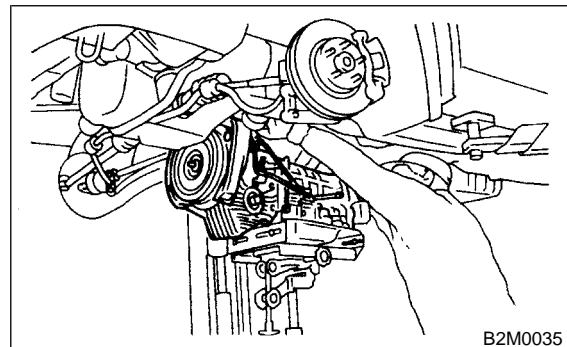
2) Install ST to torque converter clutch case. (AT model)

ST 498277200 STOPPER SET



3) Install transmission onto engine.

(1) Gradually raise transmission with transmission jack.



(2) Engage them at splines.

**CAUTION:**

**Be careful not to strike main shaft against clutch cover. (MT model)**

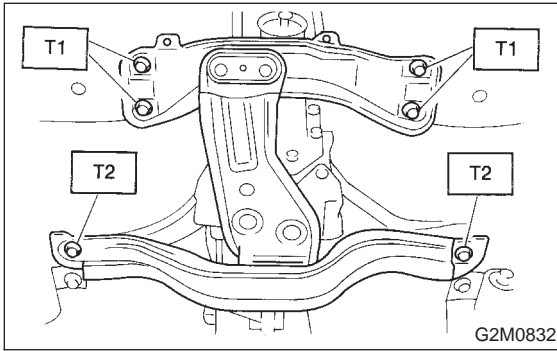
4) Install transmission rear crossmember.

● MT model

**Tightening torque:**

**T1: 69±15 N-m (7.0±1.5 kg-m, 51±11 ft-lb)**

**T2: 137±20 N-m (14±2 kg-m, 101±14 ft-lb)**

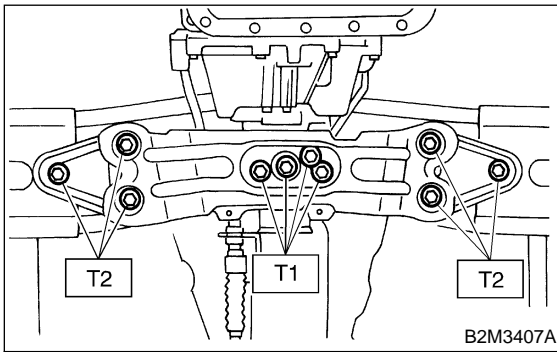


● AT model

**Tightening torque:**

**T1: 34±5 N-m (3.5±0.5 kg-m, 25.3±3.6 ft-lb)**

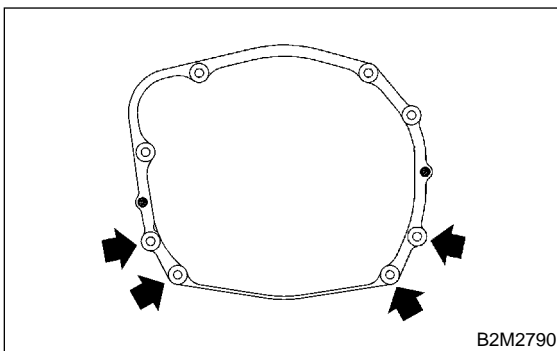
**T2: 69±15 N-m (7.0±1.5 kg-m, 51±11 ft-lb)**



- 5) Take off transmission jack.
- 6) Tighten nuts which hold lower side of transmission to engine.

**Tightening torque:**

**50±4 N-m (5.1±0.4 kg-m, 36.9±2.9 ft-lb)**



- 7) Connect engine and transmission.
  - (1) Remove ST from torque converter clutch case. (AT model)

**NOTE:**

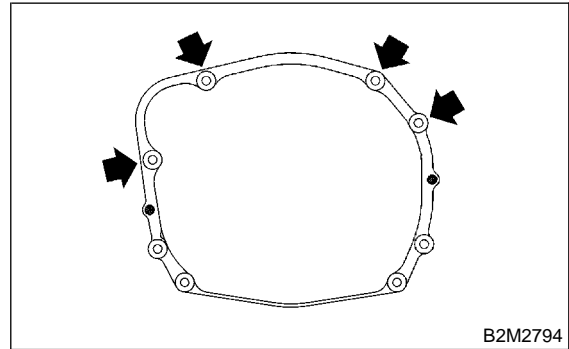
Be careful not to drop the ST into the torque converter clutch case when removing ST.

ST 498277200 STOPPER SET

- (2) Install starter.
  - <Ref. to 6-1 [W1A0].>
- (3) Tighten bolt which holds right upper side of transmission to engine.

**Tightening torque:**

**50±4 N-m (5.1±0.4 kg-m, 36.9±2.9 ft-lb)**



- 8) Install torque converter clutch to drive plate. (AT model)
  - (1) Tighten bolts which hold torque converter clutch to drive plate.
  - (2) Tighten other bolts while rotating the engine by using ST.

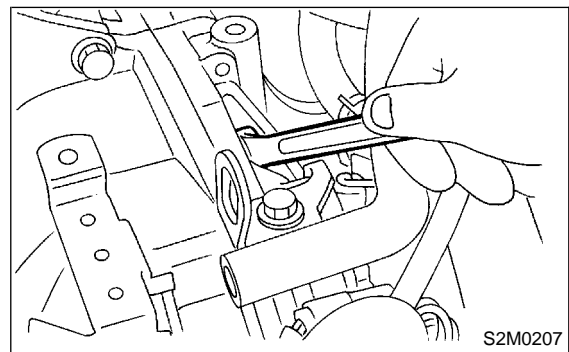
**CAUTION:**

Be careful not to drop bolts into torque converter clutch housing.

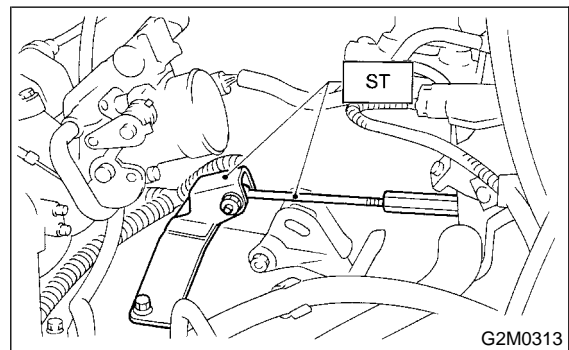
ST 499977000 CRANK PULLEY WRENCH

**Tightening torque:**

**25±2 N-m (2.5±0.2 kg-m, 18.1±1.4 ft-lb)**



- (3) Clog plug onto service hole.
- 9) Remove ST.

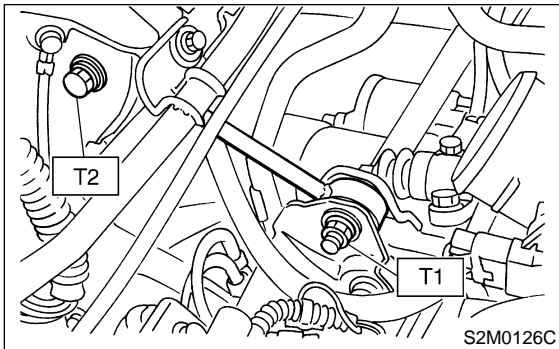




10) Install pitching stopper.

**Tightening torque:**

**T1: 49±5 N·m (5.0±0.5 kg·m, 36.2±3.6 ft·lb)**  
**T2: 57±10 N·m (5.8±1.0 kg·m, 42±7 ft·lb)**

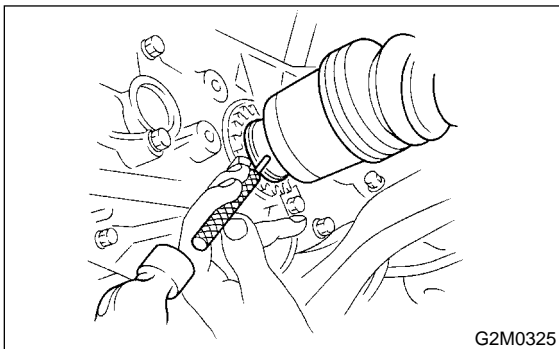


11) Install front drive shafts into transmission.

- (1) Lift-up the vehicle.
- (2) Install front drive shaft into transmission.
- (3) Drive spring pin into chamfered hole of drive shaft.

**CAUTION:**

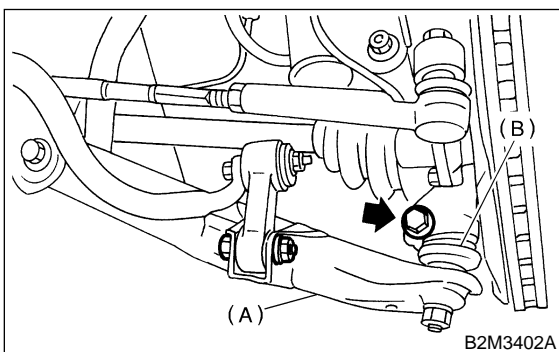
Always use a new spring pin.



- (4) Install ball joints of lower arm into knuckle arm of housing, and tighten installing bolts.

**Tightening torque:**

**49±10 N·m (5.0±1.0 kg·m, 36±7 ft·lb)**

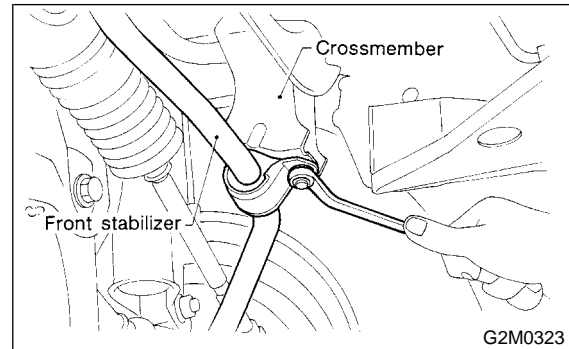


- (A) Transverse link
- (B) Ball joint

12) Install stabilizer clamps onto front crossmember.

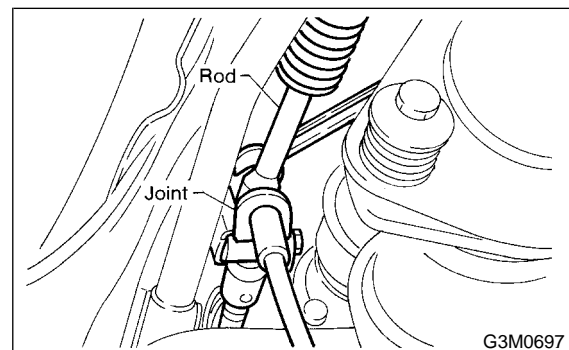
**Tightening torque:**

**25±4 N·m (2.5±0.4 kg·m, 18.1±2.9 ft·lb)**



13) Install gear shift rod and stay. (MT model)

- (1) Install gear shift rod onto transmission.



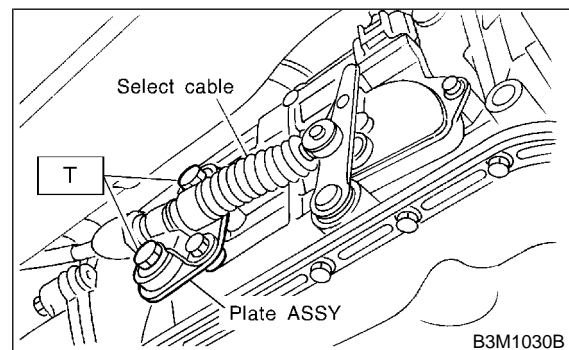
- (2) Install stay onto transmission.
- (3) Install spring.

14) Install shift selector cable onto select lever. (AT model)

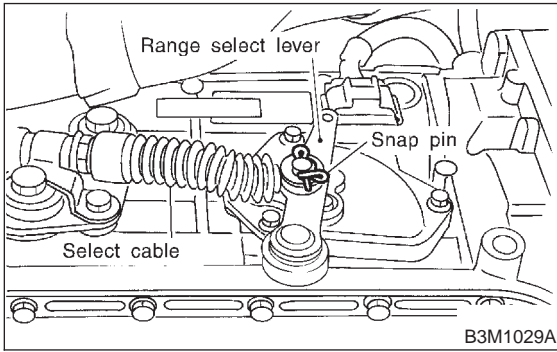
- (1) Install selector cable to range select lever.
- (2) Install plate assembly to transmission.

**Tightening torque:**

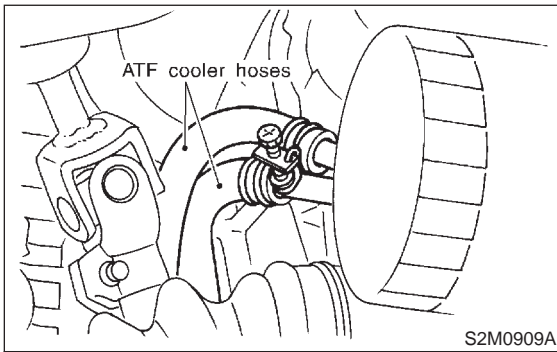
**T: 24.5±2.0 N·m (2.50±0.20 kg·m, 18.1±1.4 ft·lb)**



(3) Install snap pin to range select lever.



15) Install ATF level gauge guide, and connect ATF cooler hoses to pipe. (AT model)

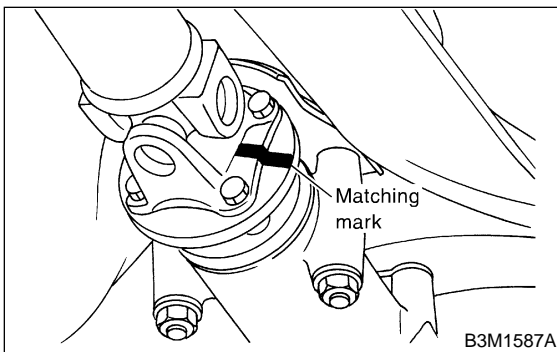


16) Install propeller shaft.

- (1) Install propeller shaft into transmission.
- (2) Tighten bolts which install propeller shaft onto companion flange of rear differential.

**Tightening torque:**

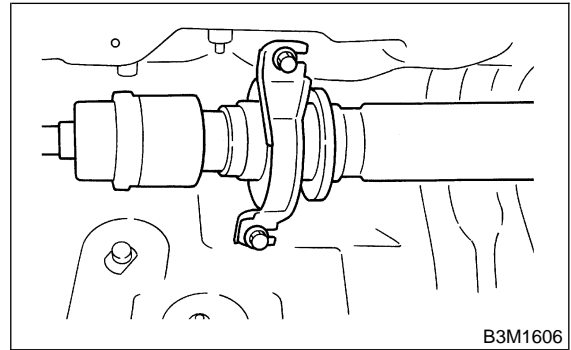
**$31\pm 8$  N-m ( $3.2\pm 0.8$  kg-m,  $23.1\pm 5.8$  ft-lb)**



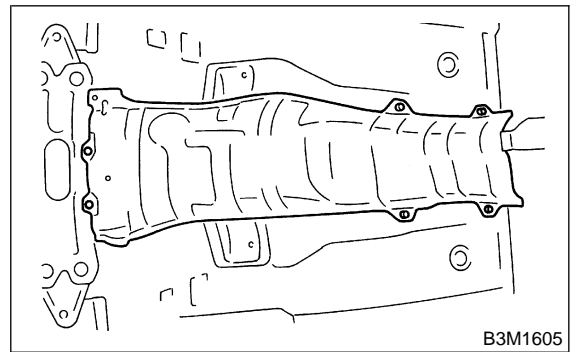
(3) Install center bearing bracket on body.

**Tightening torque:**

**$52\pm 5$  N-m ( $5.3\pm 0.5$  kg-m,  $38.3\pm 3.6$  ft-lb)**

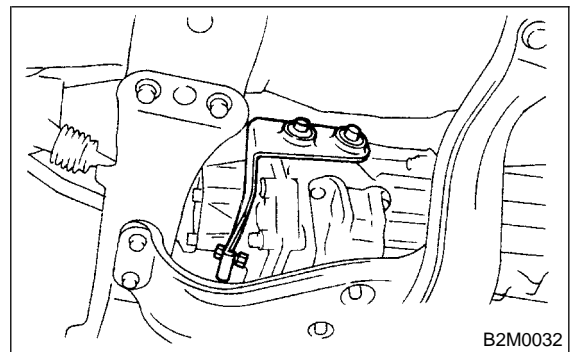


17) Install heat shield cover.

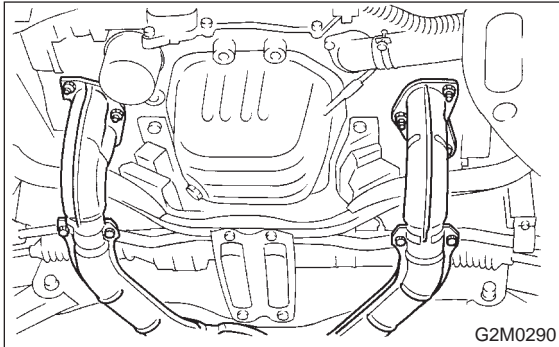


18) Install rear exhaust pipe and muffler.

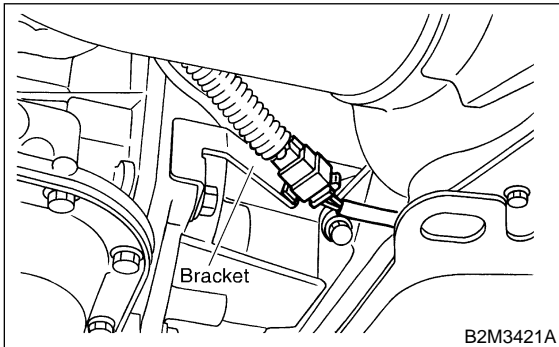
19) Install hanger bracket on right side of transmission.



- 20) Install front exhaust pipe and center exhaust pipe.  
<Ref. to 2-9 [W1B0].>

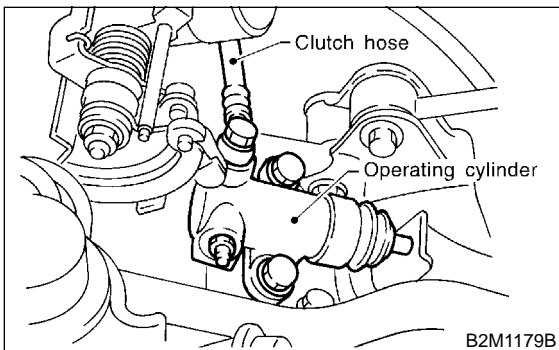


- 21) Connect rear oxygen sensor connector, and install rear oxygen sensor connector to bracket.

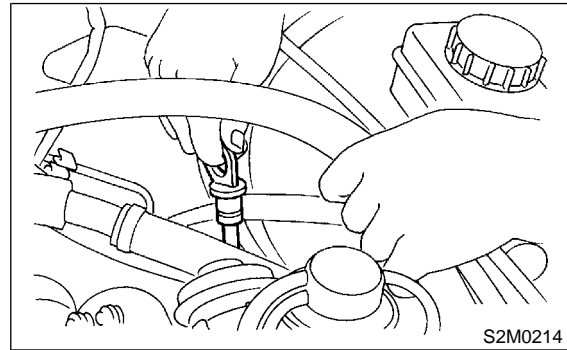


- 22) Install under cover.  
23) Install operating cylinder. (MT model)

**Tightening torque:**  
**37±3 N·m (3.8±0.3 kg·m, 27.5±2.2 ft·lb)**



- 24) Install ATF level gauge. (AT model)



- 25) Connect the following connectors.  
(1) Transmission harness connectors (AT model)  
(2) Transmission ground terminal

**Tightening torque:**

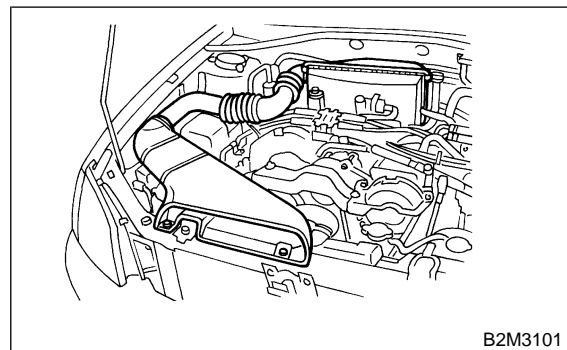
**13±3 N·m (1.3±0.3 kg·m, 9.4±2.2 ft·lb)**

- (3) Oxygen sensor connector  
(4) Vehicle speed sensor connector (MT model)  
(5) Neutral position switch connector (MT model)  
(6) Back-up light switch connector (MT model)  
26) Install air cleaner case stay.

**Tightening torque:**

**16±5 N·m (1.6±0.5 kg·m, 11.6±3.6 ft·lb)**

- 27) Install air cleaner case. <Ref. to 2-7 [W1A0].>



- 28) Connect battery ground cable.  
29) Fill ATF up to the middle of the "COLD" side on level gauge by using the gauge hole. (AT model)

**Recommended fluid:**

**Dexron IIE or Dexron III type automatic transmission fluid**

**Fluid capacity:**

**8.4 — 8.7 ℓ (8.9 — 9.2 US qt, 7.4 — 7.7 Imp qt)**

- 30) Take off vehicle from lift arms.  
31) Check selector lever operation. (AT model)  
<Ref. to 3-2 [T2C0].>

32) Run the vehicle until the ATF temperature rises from 60 to 80°C (140 to 176°F) and check the ATF level of the "HOT" side on level gauge. (AT model)

33) Check the vehicle on the road tester. (AT model)  
<Ref. to 3-2 [W7A0].>