

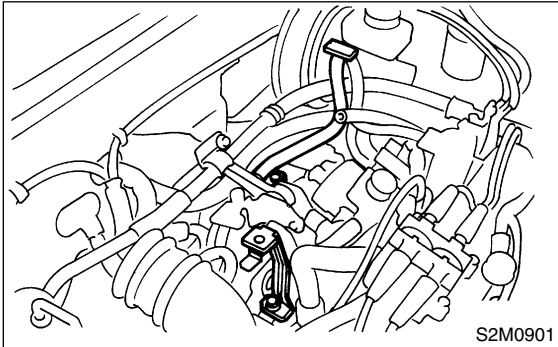
9. Automatic Transmission Assembly

S502207

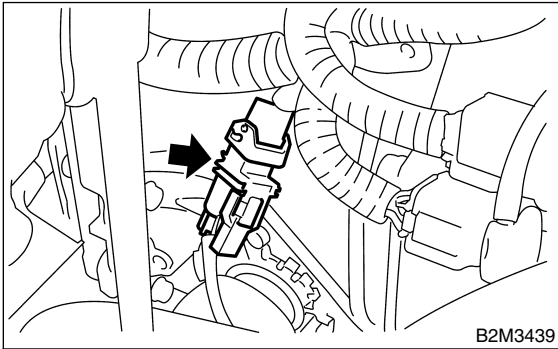
A: REMOVAL

S502207A18

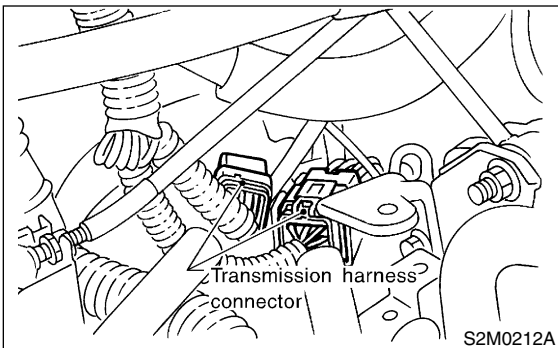
- 1) Open front hood fully, and support with stay.
- 2) Disconnect battery ground terminal.
- 3) Remove air intake duct <Ref. to IN-5 REMOVAL, Air Intake Duct.> and air cleaner case. <Ref. to IN-4 REMOVAL, Air Cleaner Case.>
- 4) Remove air cleaner case stay.



- 5) Disconnect the following connectors.
 - (1) Front oxygen sensor connector

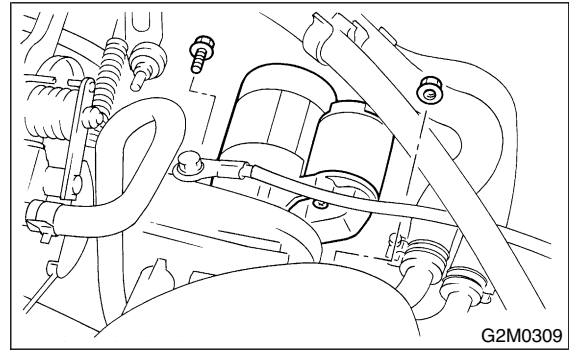


- (2) Transmission harness connector

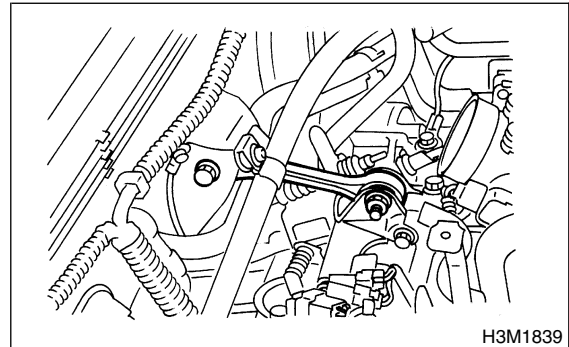


- (3) Transmission ground terminal
- 6) Remove starter.
 - (1) Disconnect connectors and terminal from starter.
 - (2) Remove bolt which installs upper side of starter.

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



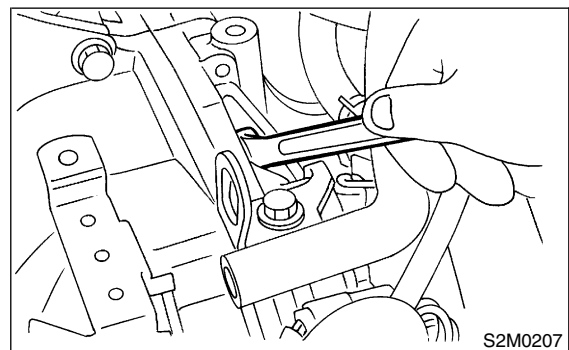
- 7) Remove pitching stopper.



- 8) Separate torque converter from drive plate.
 - (1) Remove service hole plug.
 - (2) Remove bolts which hold torque converter to drive plate.
 - (3) While rotating the engine, remove other bolts using ST.
- 2200 cc vehicles:
ST 499977300 CRANK PULLEY WRENCH
- 2500 cc vehicles:
ST 499977100 CRANK PULLEY WRENCH

CAUTION:

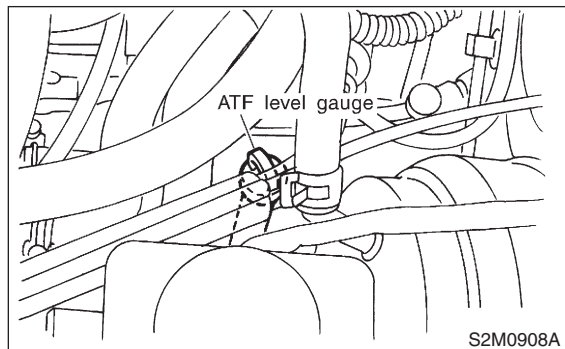
Be careful not to drop bolts into torque converter housing.



9) Remove ATF level gauge.

CAUTION:

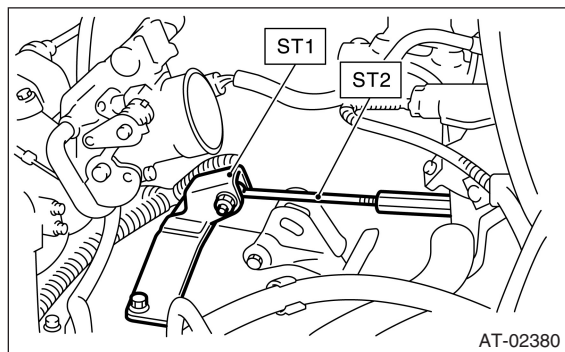
Plug opening to prevent entry of foreign particles into transmission fluid.



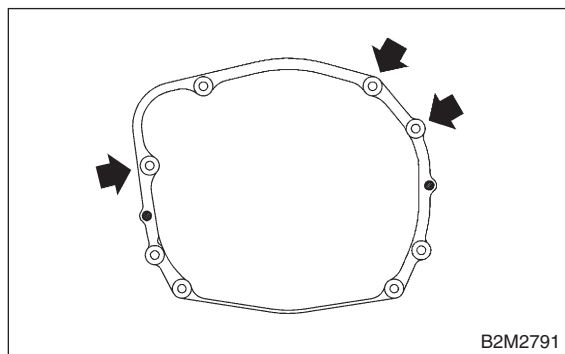
10) Set ST.

ST1 41099AA010 ENGINE SUPPORT BRACKET

ST2 41099AA020 ENGINE SUPPORT



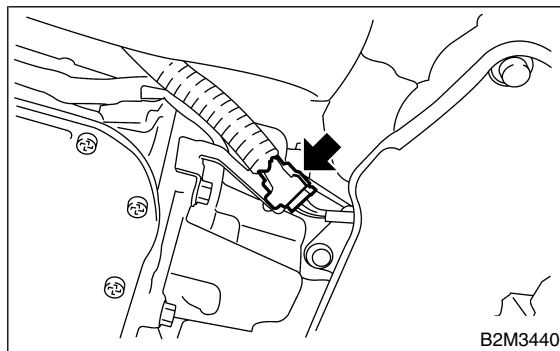
11) Remove bolt which holds right upper side of transmission to engine.



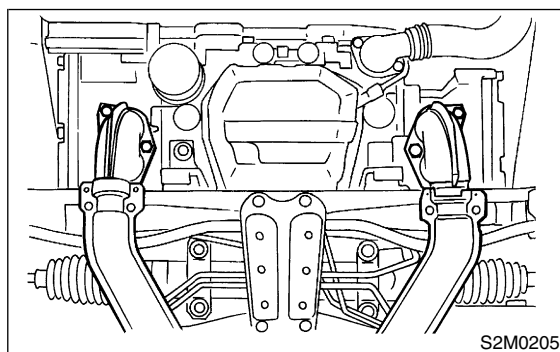
12) Remove exhaust system.

(1) Lift-up the vehicle.

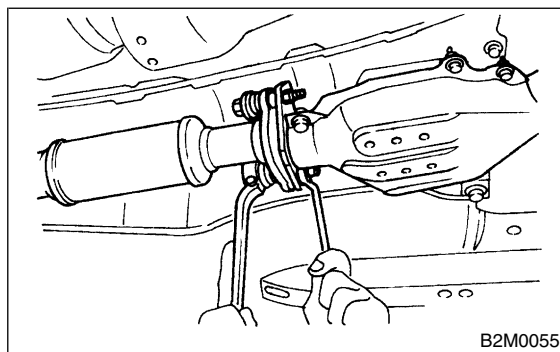
(2) Disconnect connector from rear oxygen sensor.



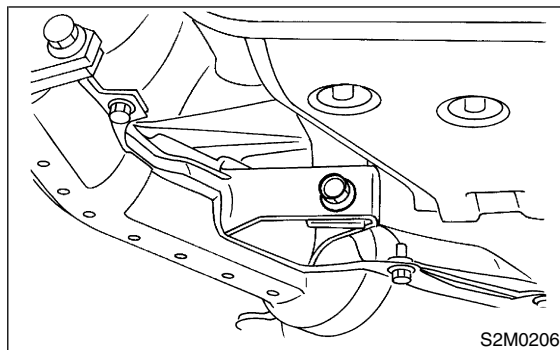
(3) Remove nuts which install front exhaust pipe onto engine.



(4) Separate center exhaust pipe from rear exhaust pipe.



(5) Remove bolt which installs center exhaust pipe to hanger bracket.



(6) Take off front and center exhaust pipes.

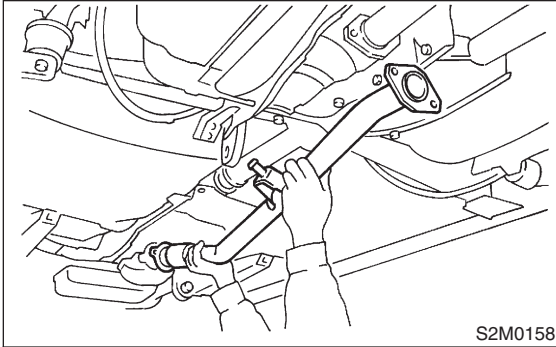
AUTOMATIC TRANSMISSION ASSEMBLY

Automatic Transmission

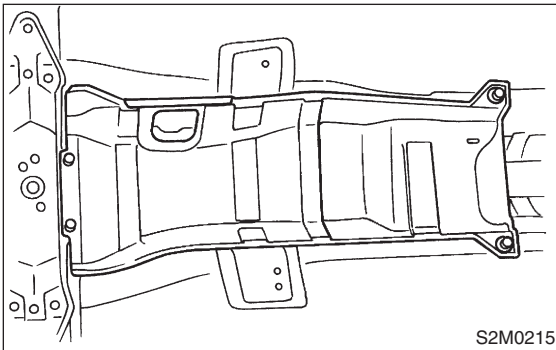
(7) Remove rear exhaust pipe.

CAUTION:

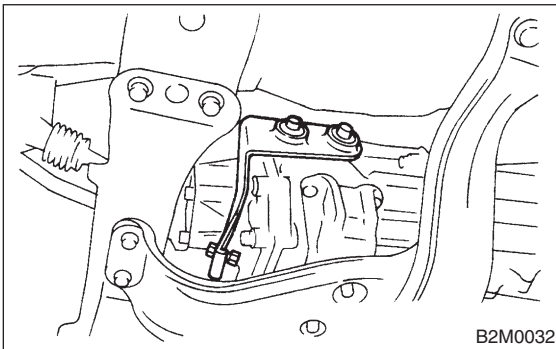
When removing exhaust pipes, be careful each exhaust pipe does not drop out.



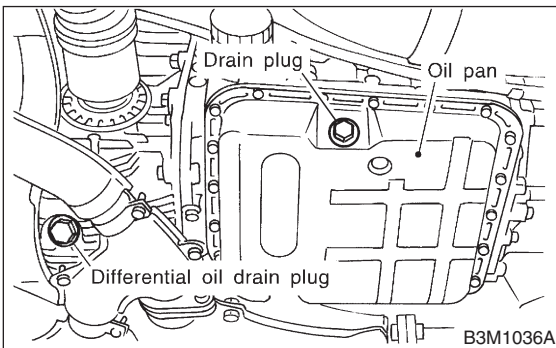
(8) Remove heat shield cover of rear exhaust pipe.



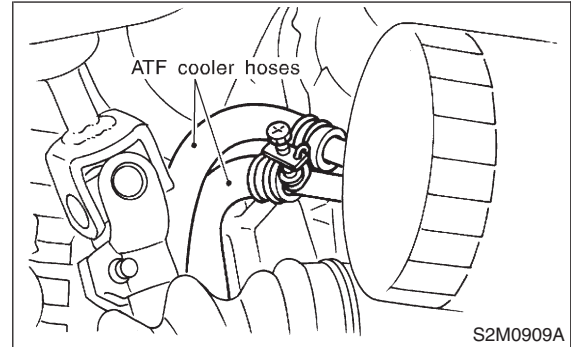
(9) Remove hanger bracket from right side of transmission.



13) Drain ATF to remove ATF drain plug.



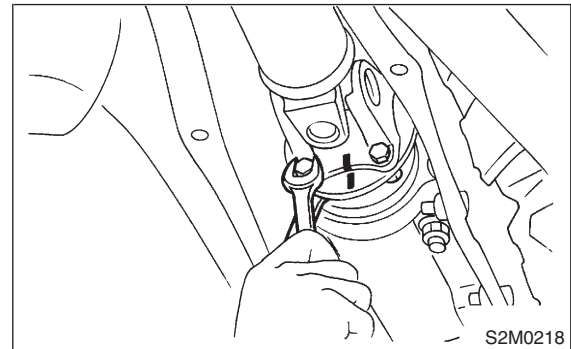
14) Disconnect ATF cooler hoses from pipes of transmission side, and remove ATF level gauge guide.



15) Remove propeller shaft.

(1) Remove front cover of rear differential mount.

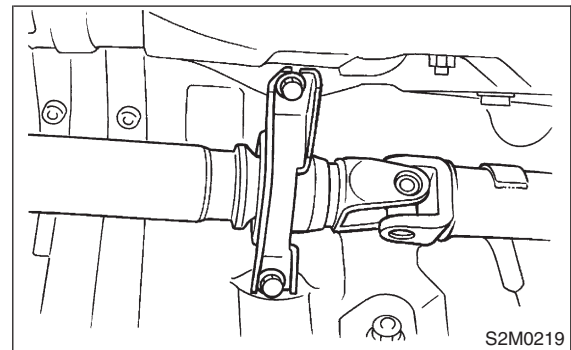
(2) Separate propeller shaft from rear differential.



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

CAUTION:

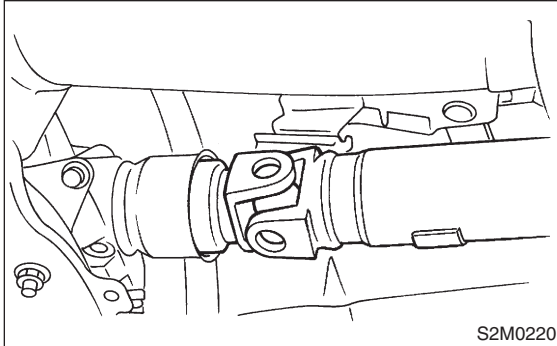
Be careful not to drop propeller shaft.



(4) Remove propeller shaft from transmission.

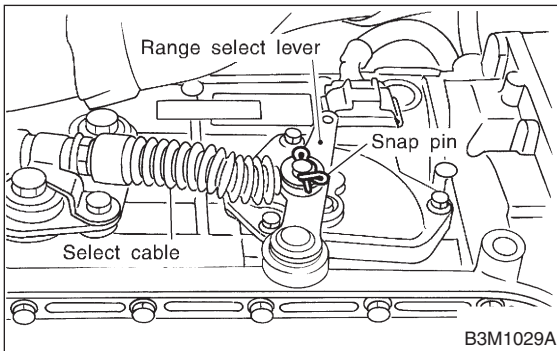
CAUTION:

- 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.

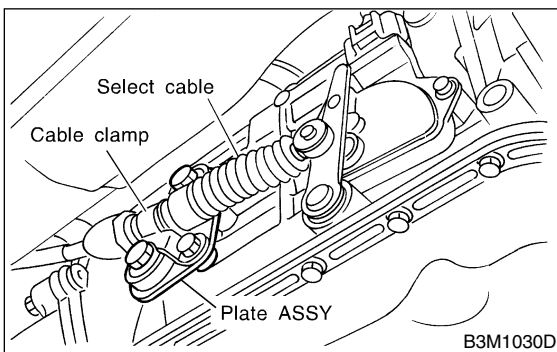


16) Remove shift selector cable.

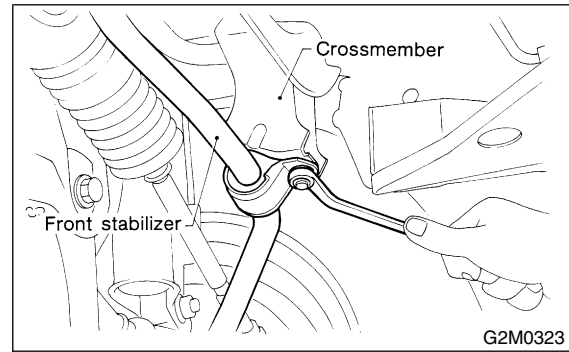
(1) Remove snap pin from range select lever.



(2) Remove select cable from plate assembly.

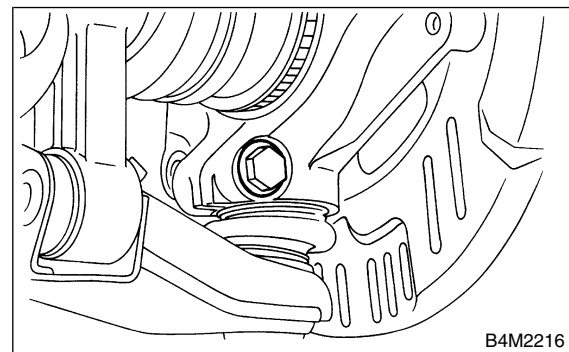


17) Remove bolts which install stabilizer clamps onto crossmember.



18) Remove front drive shafts from transmission.

(1) Remove transverse link from housing.

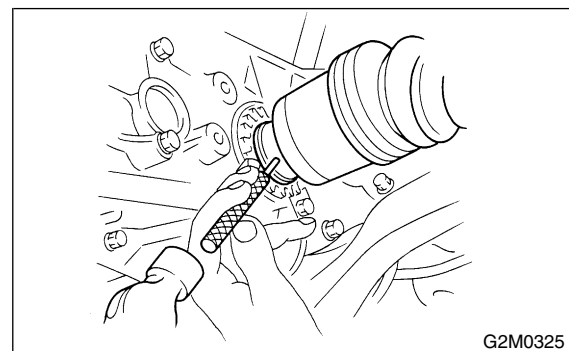


(2) Lower transverse link.

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

CAUTION:

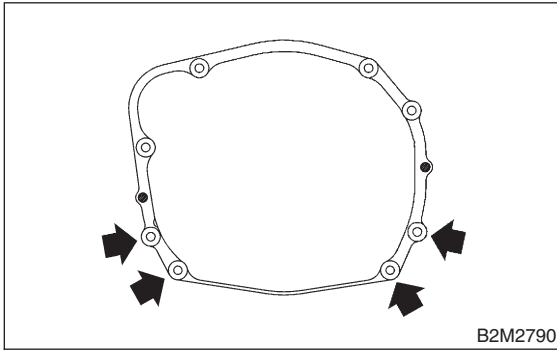
Discard removing spring pin. Replace with a new one.



AUTOMATIC TRANSMISSION ASSEMBLY

Automatic Transmission

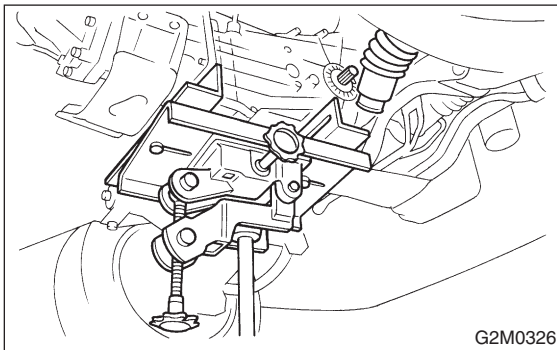
19) Remove nuts which hold lower side of transmission to engine.



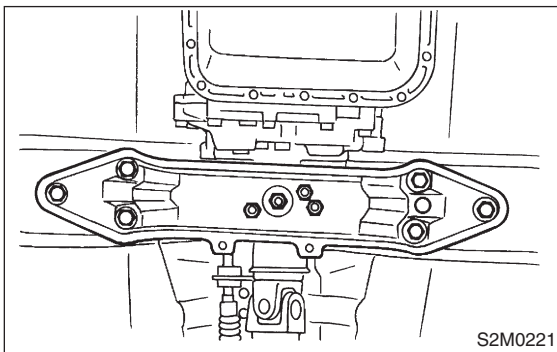
20) Place transmission jack under transmission.

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.



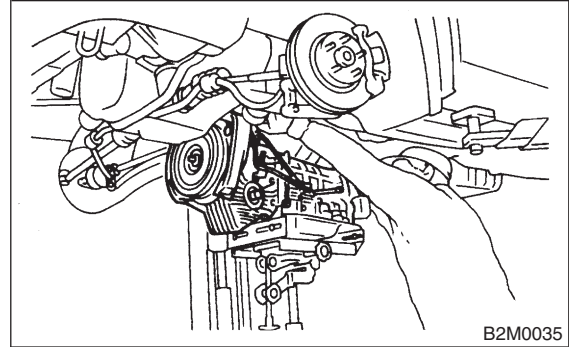
21) Remove transmission rear crossmember.



22) Remove transmission.

CAUTION:

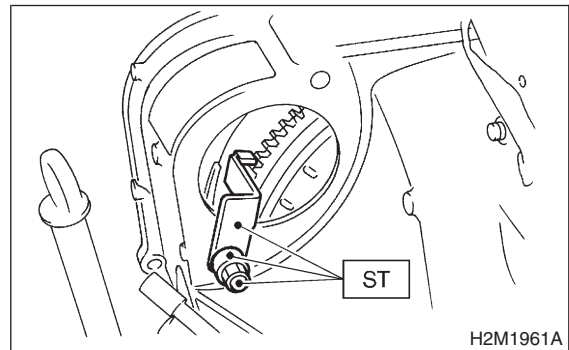
Move transmission and torque converter as a unit away from engine.



B: INSTALLATION

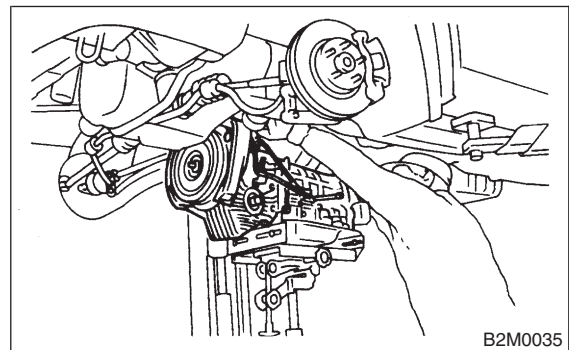
S502207A11

1) Install ST to torque converter clutch case.
ST 498277200 STOPPER SET



2) Install transmission to engine.

(1) Gradually raise transmission with transmission jack.



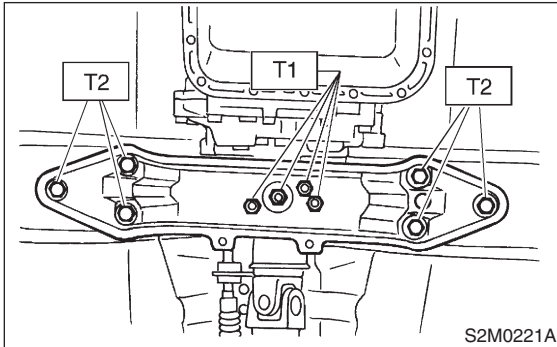
(2) Engage them at splines.

3) Install transmission rear crossmember.

Tightening torque:

T1: 34 N·m (3.5 kgf-m, 25.3 ft-lb)

T2: 69 N·m (7.0 kgf-m, 51 ft-lb)

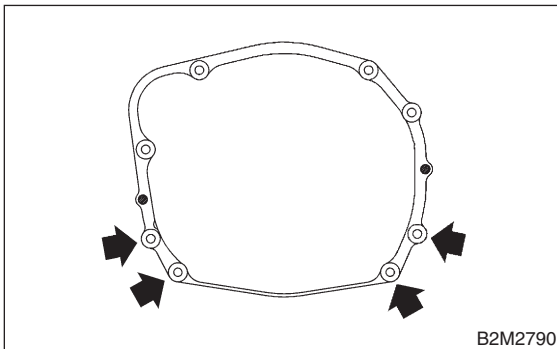


4) Take off transmission jack.

5) Tighten nuts which hold lower side of transmission to engine.

Tightening torque:

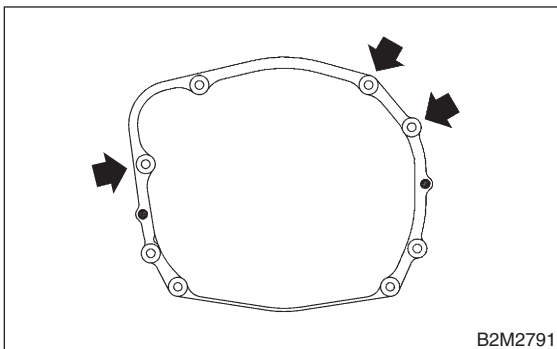
50 N·m (5.1 kgf-m, 36.9 ft-lb)



6) Tighten bolt which holds right upper side of transmission to engine.

Tightening torque:

50 N·m (5.1 kgf-m, 36.9 ft-lb)



7) Install torque converter to drive plate.

(1) Tighten bolts which hold torque converter to drive plate.

(2) Tighten other bolts while rotating the engine by using ST.

2200 cc vehicles:

ST 499977300 CRANK PULLEY WRENCH

2500 cc vehicles:

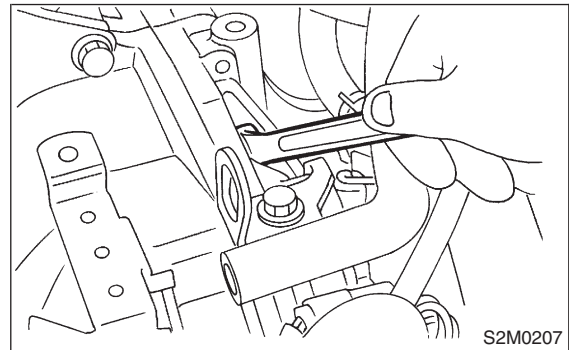
ST 499977100 CRANK PULLEY WRENCH

CAUTION:

Be careful not to drop bolts into torque converter housing.

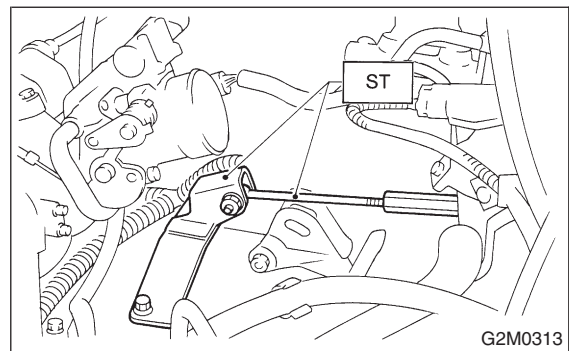
Tightening torque:

25 N·m (2.5 kgf-m, 18.1 ft-lb)



(3) Clog plug onto service hole.

8) Remove special tools.

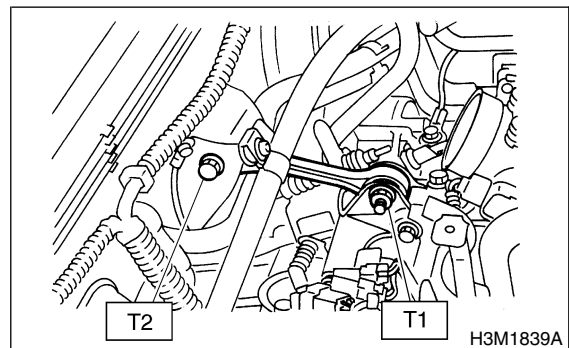


9) Install pitching stopper.

Tightening torque:

T1: 49 N·m (5.0 kgf-m, 36.2 ft-lb)

T2: 57 N·m (5.8 kgf-m, 42 ft-lb)



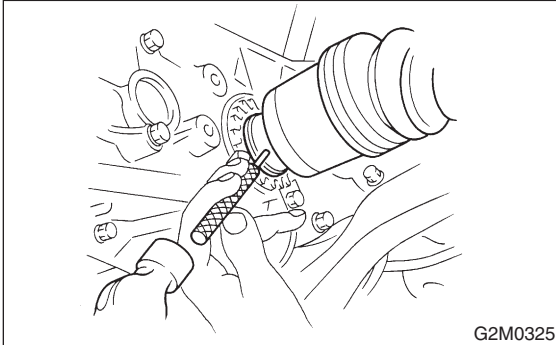
AUTOMATIC TRANSMISSION ASSEMBLY

Automatic Transmission

- 10) 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:

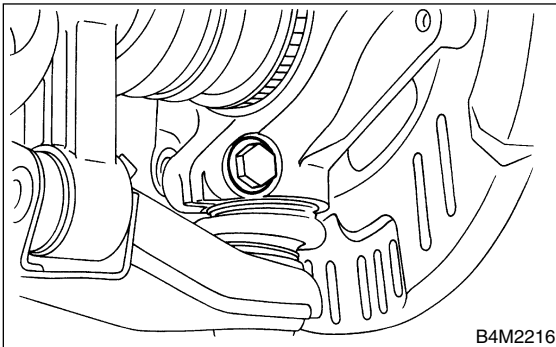
Always use a new spring pin.



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

Tightening torque:

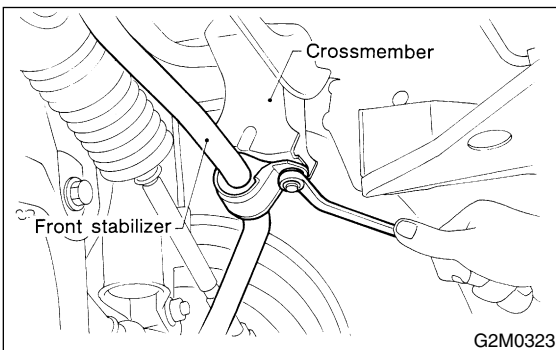
49 N·m (5.0 kgf-m, 36 ft-lb)



- 11) Install stabilizer clamps onto front crossmember.

Tightening torque:

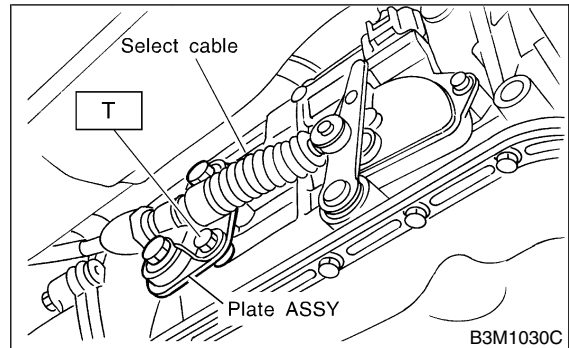
25 N·m (2.5 kgf-m, 18.1 ft-lb)



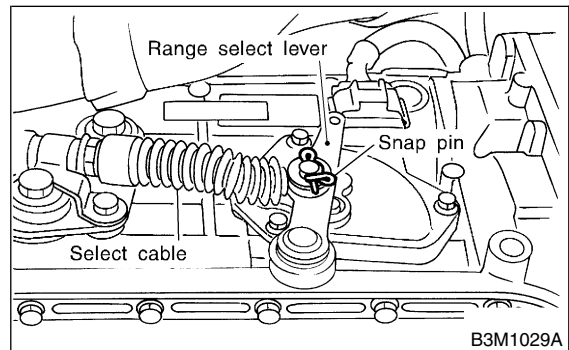
- 12) Install shift selector cable onto selector lever.
 - (1) Install selector cable to range select lever.
 - (2) Install cable clamp to plate assembly.

Tightening torque:

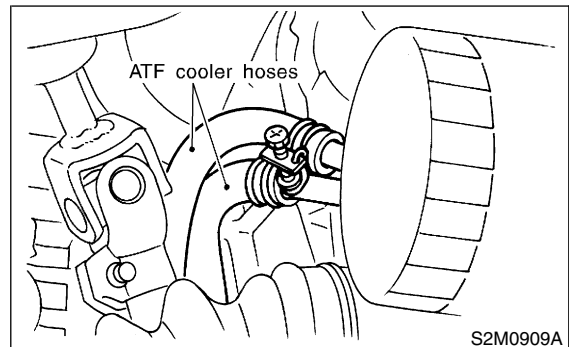
T: 32 N·m (3.3 kgf-m, 24 ft-lb)



- (3) Install snap pin to range select lever.



- 13) Install ATF level gauge guide, and ATF cooler hoses onto pipe.

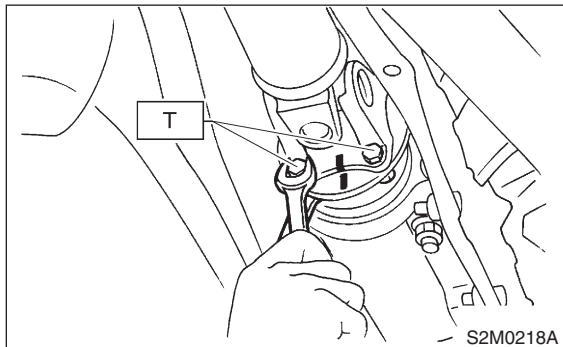


14) Install propeller shaft.

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

Tightening torque:

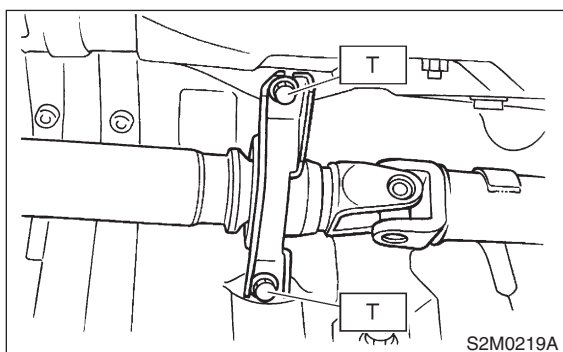
T: 31 N·m (3.2 kgf-m, 23.1 ft-lb)



(3) Install center bearing bracket on body.

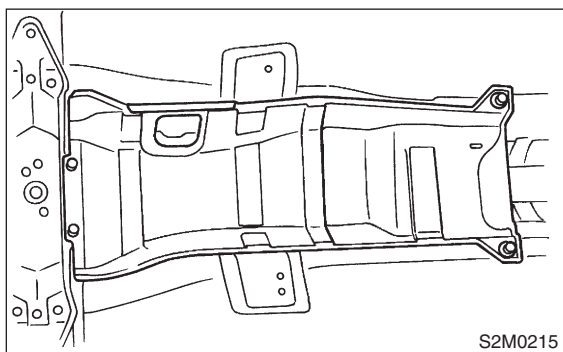
Tightening torque:

T: 52 N·m (5.3 kgf-m, 38.3 ft-lb)



15) Install exhaust system.

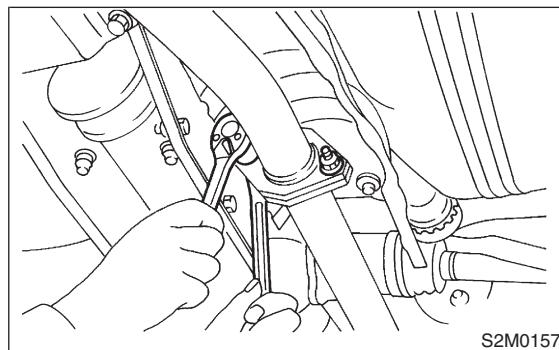
- (1) Install heat shield cover.



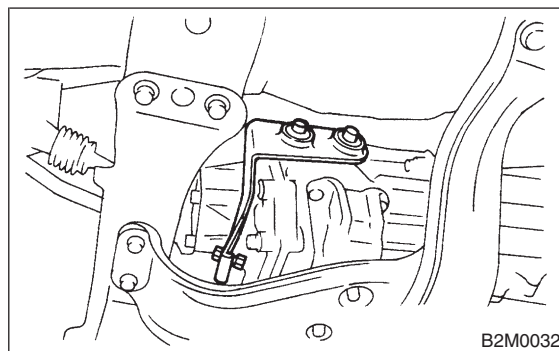
(2) Install rear exhaust pipe to muffler.

Tightening torque:

48 N·m (4.9 kgf-m, 35.4 ft-lb)



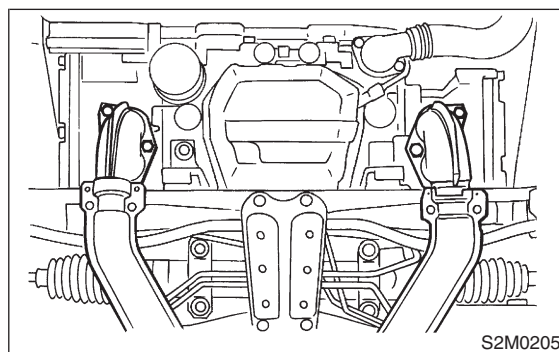
(3) Install hanger bracket on right side of transmission.



(4) Install front exhaust pipe onto engine.

Tightening torque:

30 N·m (3.1 kgf-m, 22.4 ft-lb)



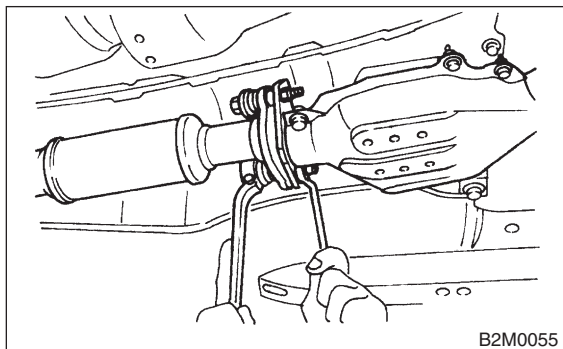
AUTOMATIC TRANSMISSION ASSEMBLY

Automatic Transmission

- (5) Install center exhaust pipe to rear exhaust pipe.

Tightening torque:

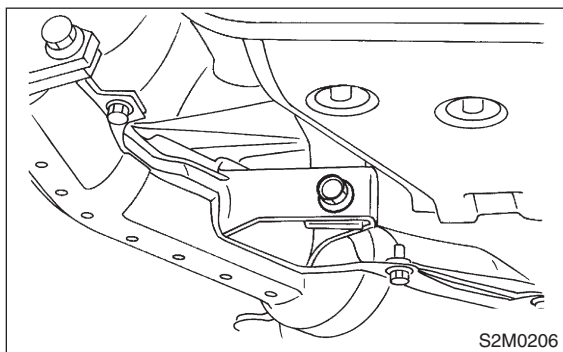
18 N·m (1.8 kgf-m, 13.0 ft-lb)



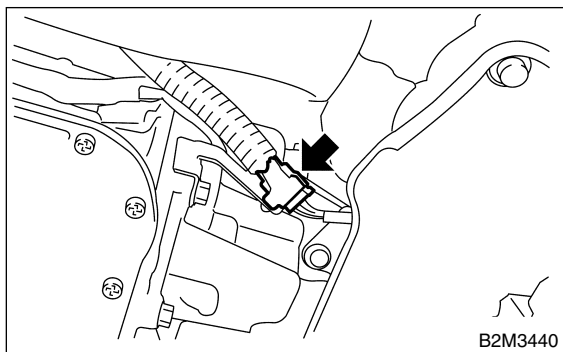
- (6) Tighten bolt which installs center exhaust pipe to hanger bracket.

Tightening torque:

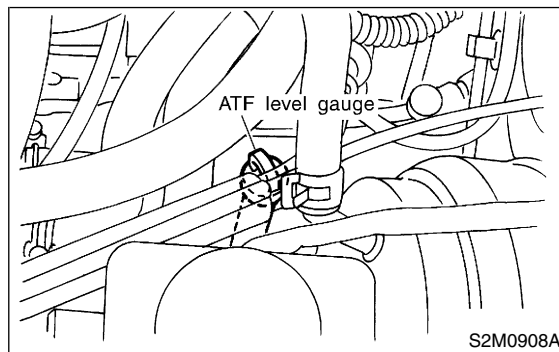
35 N·m (3.6 kgf-m, 26.0 ft-lb)



- (7) Connect connector to rear oxygen sensor.

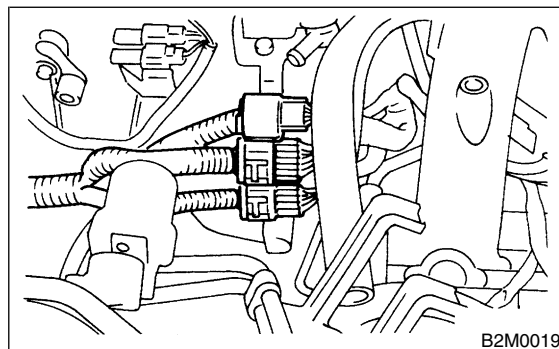


- 16) Install ATF level gauge.



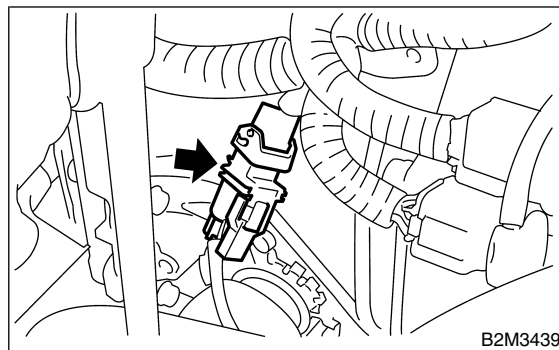
- 17) Connect the following connectors.

- (1) Transmission harness connectors



- (2) Transmission ground terminal

- (3) Front oxygen sensor connector



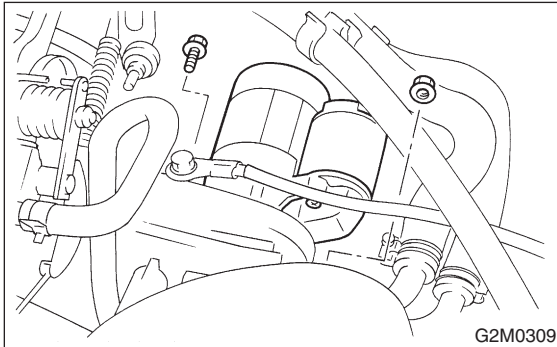
18) Install starter.

<Ref. to AT-11 INSPECTION, Road Test.>

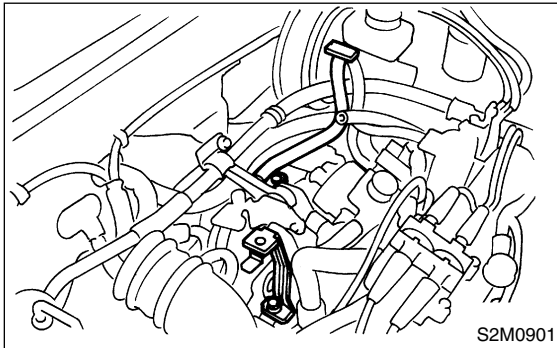
- (1) Install starter onto transmission case, and connect connectors and terminals.
- (2) Tighten bolt and nut which install starter onto transmission.

Tightening torque:

50 N·m (5.1 kgf-m, 36.9 ft-lb)



19) Install air cleaner case stay.



20) Install air intake duct <Ref. to IN-5 INSTALLATION, Air Intake Duct.> and air cleaner case. <Ref. to IN-4 INSTALLATION, Air Cleaner Case.>

21) Connect battery ground terminal.

22) Fill ATF up to the middle of the "COLD" side on level gauge by using the gauge hole.

Recommended fluid:

Dexron IIE or Dexron III type automatic transmission fluid

Fluid capacity:

2200 cc

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

2500 cc

9.3 — 9.6 ℓ (9.8 — 10.1 US qt, 8.2 — 8.4 Imp qt)

23) Check selector lever operation.

<Ref. to AT-5 INSPECTION, General Description.>

24) Take off vehicle from lift arms.

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

26) Check the vehicle on road tester.