

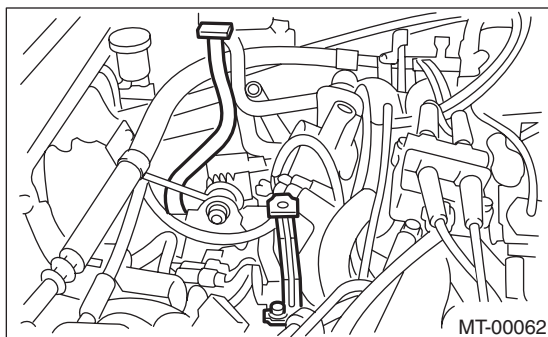
Manual Transmission Assembly

MANUAL TRANSMISSION AND DIFFERENTIAL

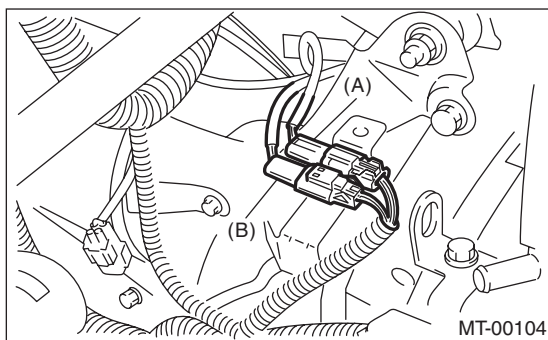
3. Manual Transmission Assembly

A: REMOVAL

- 1) Open the front hood fully, and support with stay.
- 2) Disconnect the ground cable from the battery.
- 3) Drain transmission gear oil completely.
- 4) Remove the air intake chamber and air cleaner case. (Non-turbo model) <Ref. to IN(H4SO)-7, REMOVAL, Air Intake Chamber.> <Ref. to IN(H4SO)-5, REMOVAL, Air Cleaner Case.>
- 5) Remove the air intake chamber stay. (Non-turbo model)

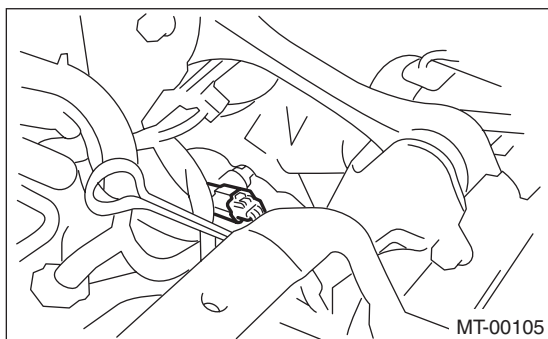


- 6) Remove the intercooler. (Turbo model) <Ref. to IN(H4DOTC)-12, REMOVAL, Intercooler.>
- 7) Disconnect the connector back-up light switch and neutral position switch.
 - Non-turbo model

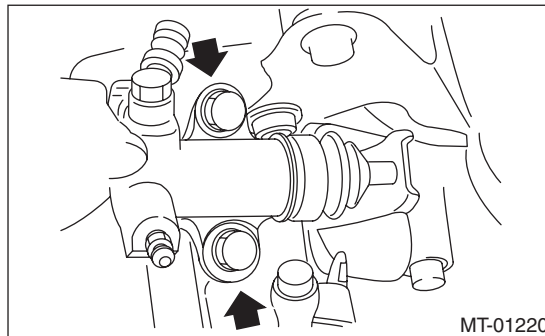


- (A) Neutral position switch connector (Brown)
(B) Back-up light switch connector (Gray)

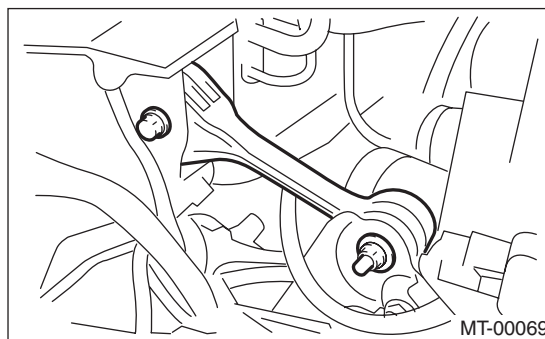
- Turbo model



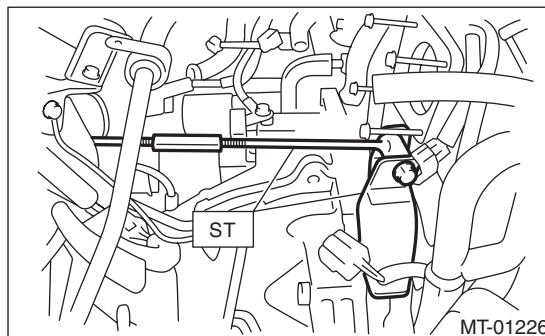
- 8) Remove the starter. <Ref. to SC(H4SO)-6, REMOVAL, Starter.>
- 9) Remove the operating cylinder from the transmission.



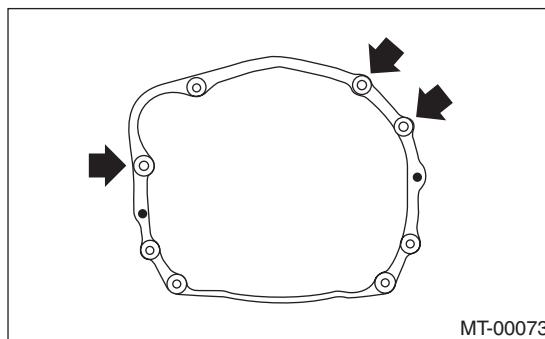
- 10) Remove the pitching stopper.



- 11) Set the ST.
ST 41099AC000 ENGINE SUPPORT ASSY



- 12) Remove the bolts which hold upper side of transmission to engine.



- 13) Lift-up the vehicle.

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14) Remove the front and center exhaust pipes. (Non-turbo model) <Ref. to EX(H4SO)-4, REMOVAL, Front Exhaust Pipe.>

15) Remove the center exhaust pipe. (Turbo model) <Ref. to EX(H4DOTC)-8, REMOVAL, Center Exhaust Pipe.>

16) Remove the rear exhaust pipe and muffler.

CAUTION:

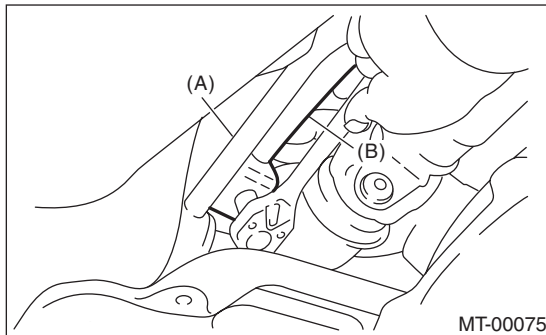
When removing the exhaust pipes, be careful each exhaust pipe does not drop out.

17) Remove the heat shield cover. (If equipped)

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

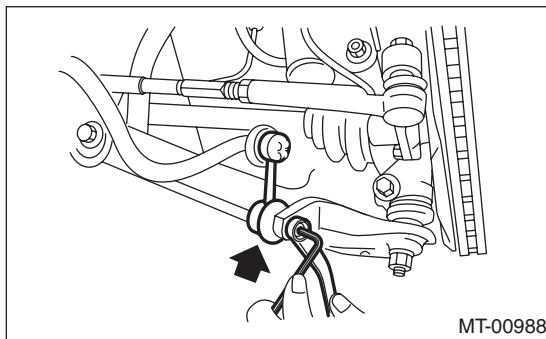
19) Remove the gear shift rod and the stay from the transmission.

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



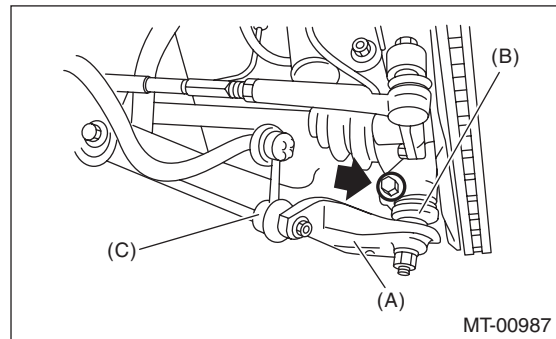
- (A) Stay
(B) Rod

20) Remove the stabilizer link from the front arm.



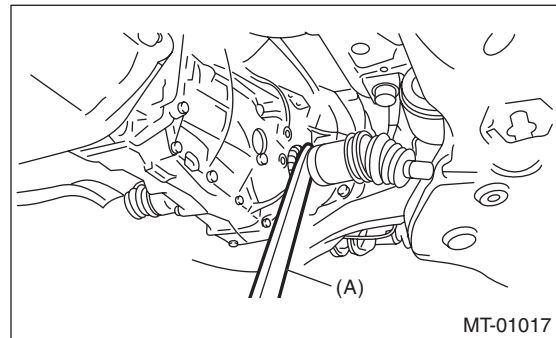
MT-00988

21) Remove the bolt securing the ball joint of the front arm to housing.



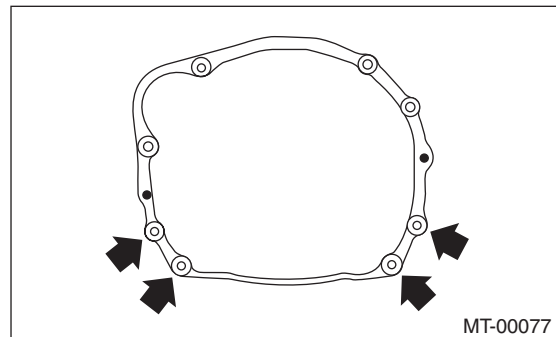
- (A) Front arm
(B) Ball joint
(C) Stabilizer link

22) Using the lever, remove the left and right front drive shaft from the transmission.



- (A) Lever

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



MT-00077

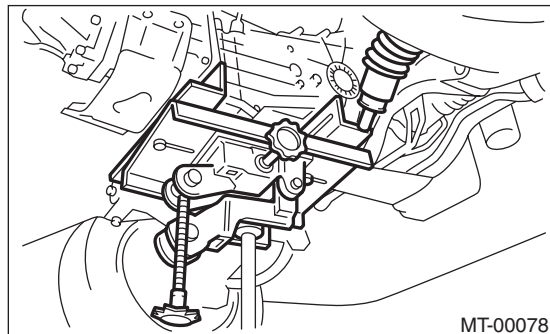
Manual Transmission Assembly

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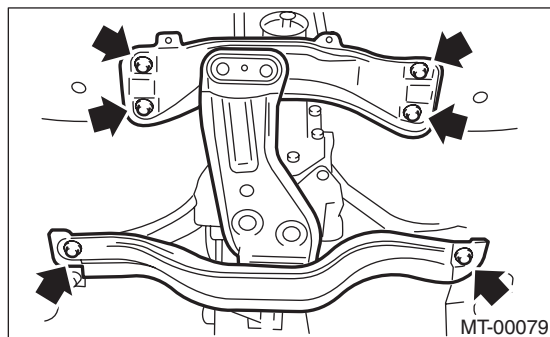
24) Place the transmission jack under the transmission.

CAUTION:

Always support the transmission case with a transmission jack.



25) Remove the transmission rear crossmember from the vehicle.



26) Remove the transmission.

NOTE:

1. Move the transmission jack towards the rear until the main shaft is withdrawn from the clutch disc.
2. Tighten the turnbuckle of the ST while lowering the transmission jack, to tilt the engine assembly towards the back.

27) Separate the transmission assembly from the rear cushion rubber.

B: INSTALLATION

1) Install the rear cushion rubber to the transmission assembly.

Tightening torque:

35 N·m (3.6 kgf-m, 26 ft-lb)

2) Install the transmission onto the engine.

(1) Lift-up the transmission gradually using a transmission jack.

(2) Loosen the turnbuckle of ST to return the engine to its original position.

(3) Engage at the spline section.

NOTE:

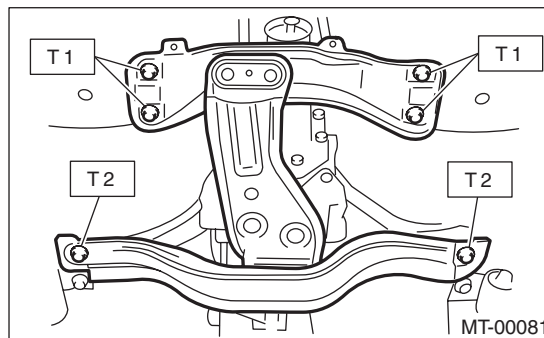
Be careful not to hit the main shaft against the clutch housing cover.

3) Install the transmission rear crossmember.

Tightening torque:

T1: 75 N·m (7.6 kgf-m, 55 ft-lb)

T2: 140 N·m (14.3 kgf-m, 103 ft-lb)

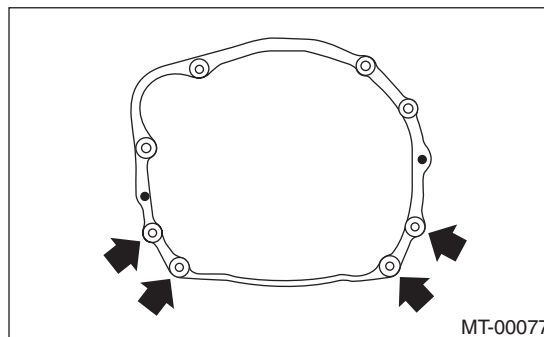


4) Take out the transmission jack.

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

Tightening torque:

50 N·m (5.1 kgf-m, 36.9 ft-lb)



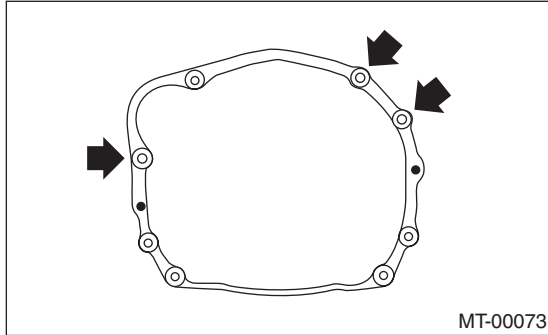
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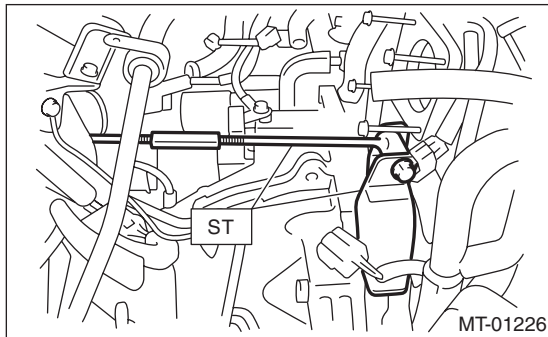
- 6) Connect the transmission to the engine.
(1) Install the starter.
<Ref. to SC(H4SO)-6, INSTALLATION, Starter.>
(2) Tighten the bolts which hold the upper side of the transmission to the engine.

Tightening torque:

50 N·m (5.1 kgf-m, 36.9 ft-lb)



- 7) Remove the ST.

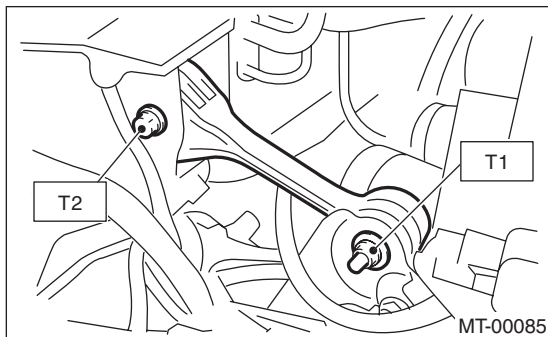


- 8) Install the pitching stopper.

Tightening torque:

T1: 50 N·m (5.1 kgf-m, 37 ft-lb)

T2: 58 N·m (5.9 kgf-m, 43 ft-lb)



- 9) Lift-up the vehicle.

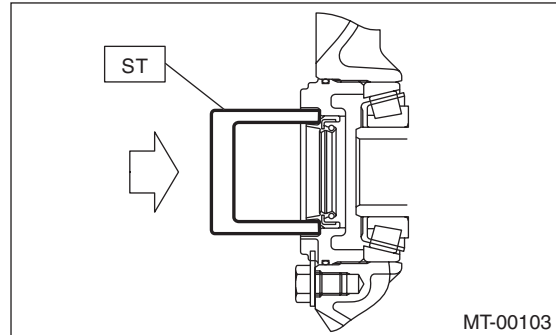
- 10) Install the front drive shaft into the transmission.

- 11) Replace the differential side retainer oil seal.
<Ref. to 5MT-32, REPLACEMENT, Differential Side Retainer Oil Seal.>

ST 18675AA000 DIFFERENTIAL SIDE OIL SEAL INSTALLER

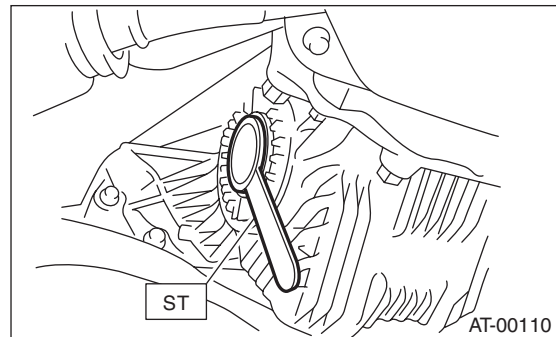
NOTE:

Be sure to replace the differential side retainer oil seal after the removing the front drive shaft.



- 12) Install the front drive shaft into the transmission.

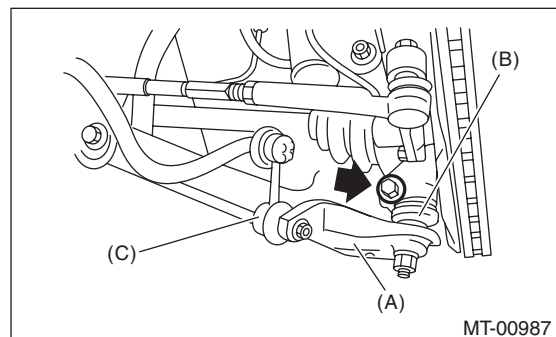
ST 28399SA010 FRONT DRIVE SHAFT OIL SEAL PROTECTOR



- 13) Install the ball joint of the lower arm.

Tightening torque:

49 N·m (5.0 kgf-m, 36 ft-lb)



- (A) Front arm
- (B) Ball joint
- (C) Stabilizer link

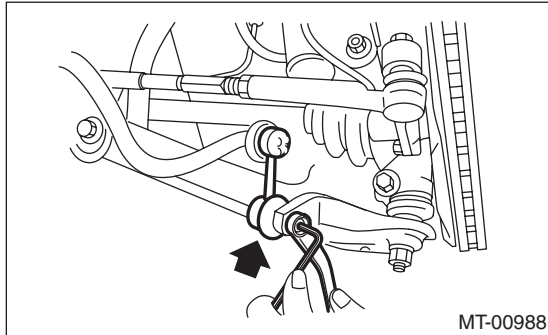
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14) Attach the stabilizer link to the front arm.

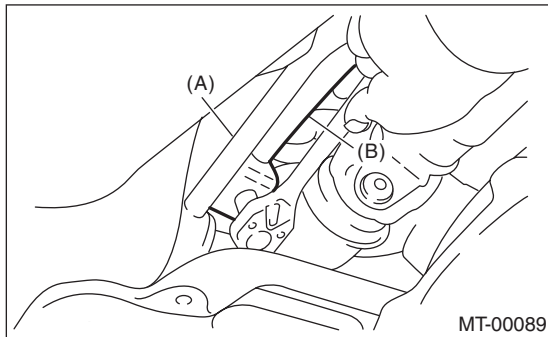
Tightening torque:

45 N·m (4.6 kgf·m, 33.2 ft·lb)



15) Attach the gear shift rod and stay.

(1) Attach the gear shift rod to the transmission.



(A) Stay

(B) Rod

(2) Attach the stay to the transmission.

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

17) Install the heat shield cover. (If equipped)

18) Install the rear exhaust pipe and muffler.

19) Install the front exhaust pipe and the center exhaust pipe. (Non-turbo model)

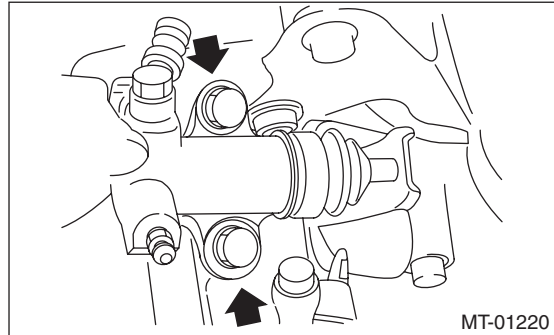
<Ref. to EX(H4SO)-5, INSTALLATION, Front Exhaust Pipe.>

20) Install the center exhaust pipe. (Turbo model) <Ref. to EX(H4DOTC)-9, INSTALLATION, Center Exhaust Pipe.>

21) Install the operating cylinder.

Tightening torque:

37 N·m (3.8 kgf·m, 27.5 ft·lb)



22) Connect the following connectors.

(1) Transmission ground cable

Tightening torque:

13 N·m (1.3 kgf·m, 9.4 ft·lb)

(2) Neutral position switch connector

(3) Back-up light switch connector

23) Fill transmission gear oil through the transmission level gauge hole.

24) Install the air intake chamber stay. (Non-turbo model)

Tightening torque:

16 N·m (1.6 kgf·m, 11.6 ft·lb)

25) Install the air intake chamber and air cleaner case. (Non-turbo model) <Ref. to IN(H4SO)-6, INSTALLATION, Air Cleaner Case.> <Ref. to IN(H4SO)-7, INSTALLATION, Air Intake Chamber.>

26) Install the intercooler. (Turbo model) <Ref. to IN(H4DOTC)-12, INSTALLATION, Intercooler.>

27) Connect the ground cable to battery.

28) Take off the vehicle from lift arms.