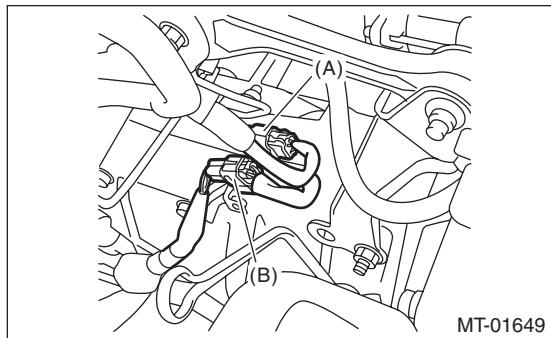


3. Manual Transmission Assembly

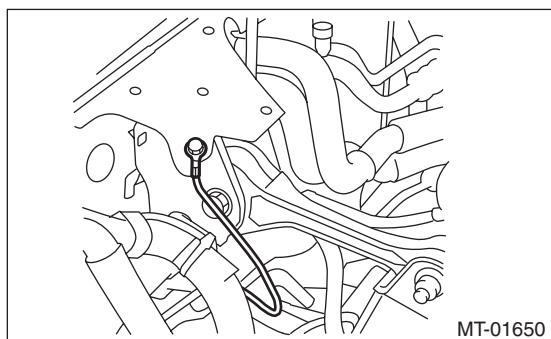
A: REMOVAL

- 1) Set the vehicle on a lift.
- 2) Open the front hood.
- 3) Disconnect the ground cable from battery.
- 4) Drain transmission gear oil completely. <Ref. to 5MT-22, REPLACEMENT, Transmission Gear Oil.>
- 5) Remove the intercooler. <Ref. to IN(w/o STI)-12, REMOVAL, Intercooler.>
- 6) Disconnect the following connector.

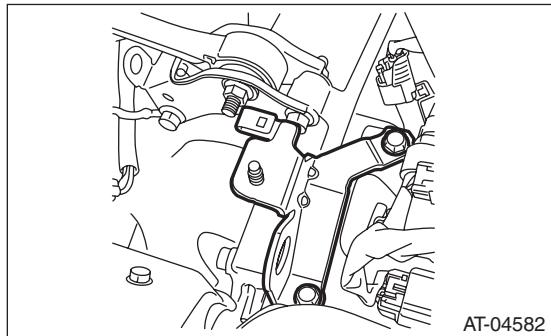


(A) Neutral position switch and back-up light switch connector
 (B) Rear oxygen sensor connector

- 7) Disconnect the transmission radio ground terminal.

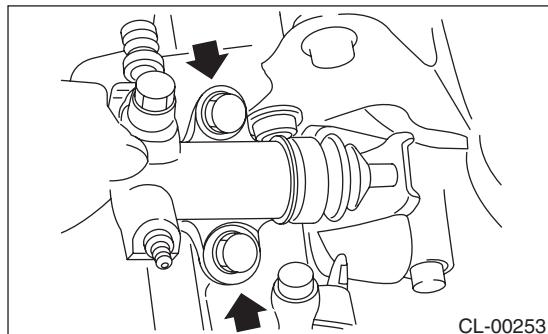


- 8) Remove the engine hanger.

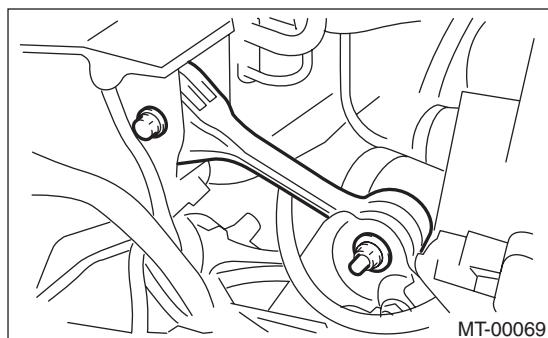


- 9) Remove the starter. <Ref. to SC(w/o STI)-2, General Description.>

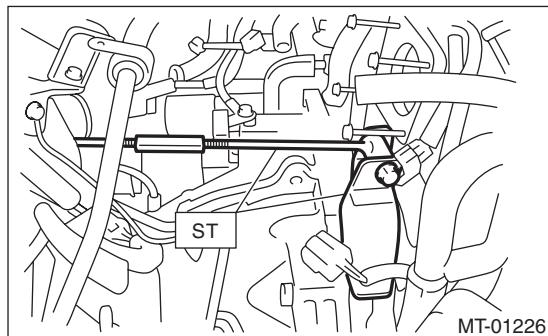
- 10) Remove the operating cylinder from the transmission, and suspend on a wire.



- 11) Remove the pitching stopper.



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



- 13) Lift up the vehicle.
- 14) Remove the center exhaust pipe. <Ref. to EX(w/o STI)-2, General Description.>
- 15) Remove the rear exhaust pipe and muffler. <Ref. to EX(w/o STI)-2, General Description.>

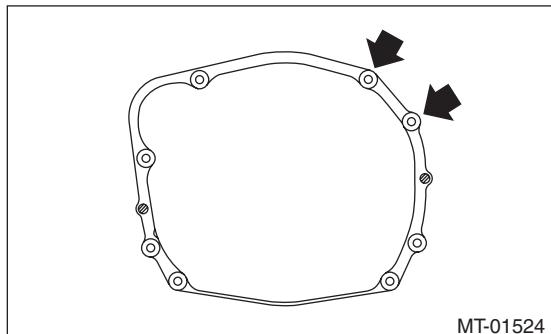
CAUTION:

When removing the exhaust pipes, make sure that each exhaust pipe does not drop off.

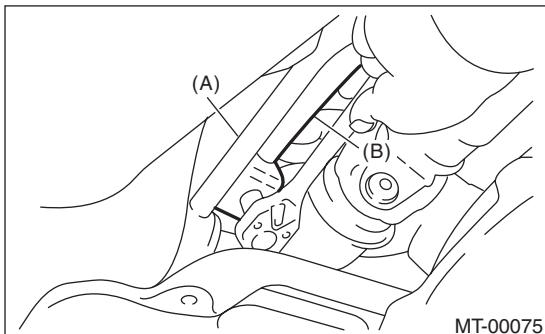
Manual Transmission Assembly

MANUAL TRANSMISSION AND DIFFERENTIAL

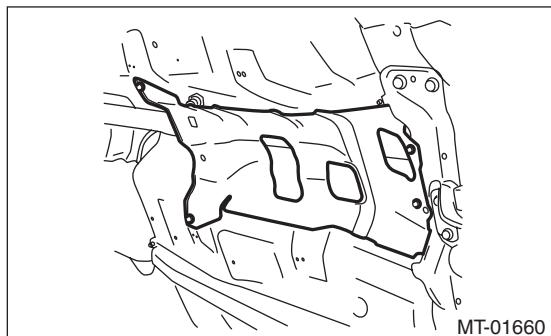
16) Remove the bolts which hold upper side of transmission to engine.



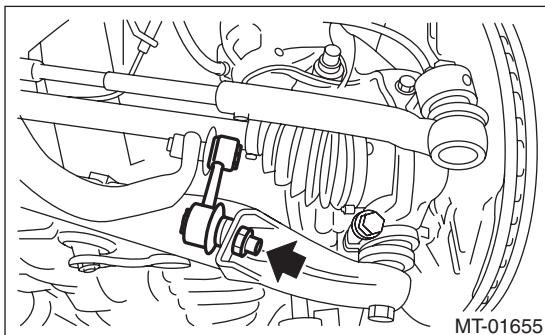
(2) Disconnect the gear shift rod from the transmission.



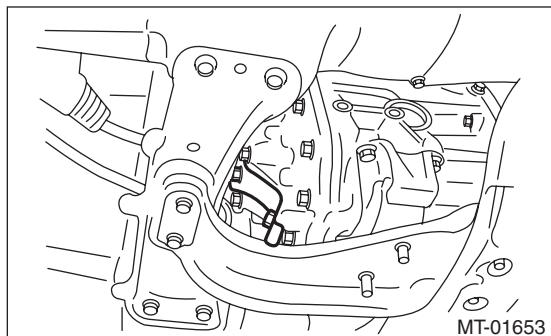
17) Remove the heat shield cover.



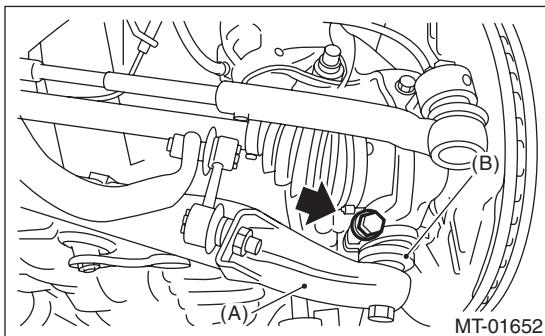
21) Disconnect the stabilizer link from the front arm.



18) Remove the hangar bracket from the transmission.



22) Remove the bolt securing the ball joint of the front arm to the housing, then separate the front arms and the housing.



19) Remove the propeller shaft. <Ref. to DS-11, REMOVAL, Propeller Shaft.>

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

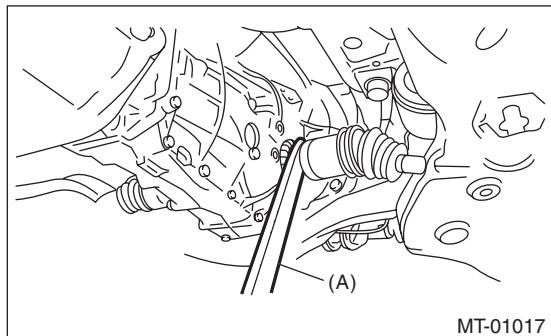
(1) Disconnect the stay from the transmission.

(A) Front arm
(B) Ball joint

Manual Transmission Assembly

MANUAL TRANSMISSION AND DIFFERENTIAL

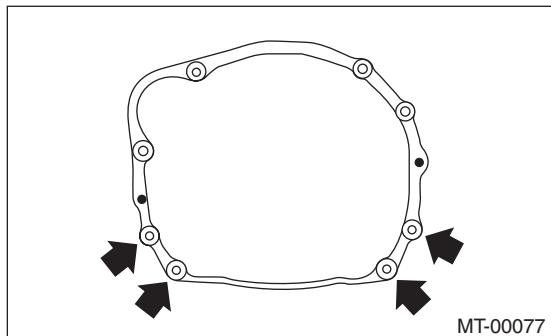
23) Using a crowbar, remove the left and right front drive shaft from the transmission.



MT-01017

(A) Crowbar

24) Remove the bolts and nuts which hold lower side of transmission to engine.

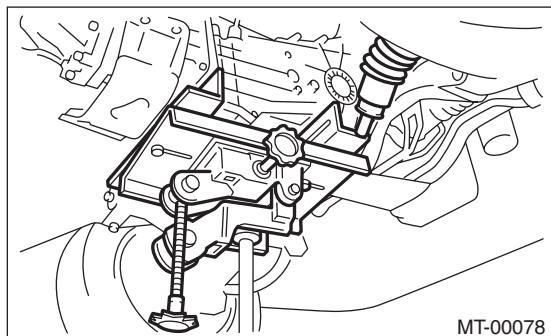


MT-00077

25) Place the transmission jack under the transmission.

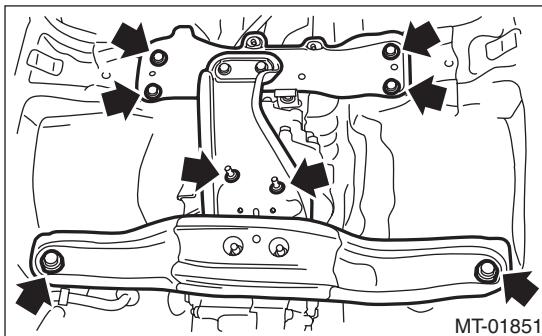
CAUTION:

Always support the transmission case with a transmission jack.



MT-00078

26) Remove the front crossmember and rear cross-member from the vehicle.



MT-01851

27) While lowering the transmission jack, tighten the turnbuckle of the ST, and incline the engine unit rearward.

28) Remove the transmission.

NOTE:

Move the transmission jack towards the rear until the main shaft is withdrawn from the clutch disc.

29) Separate the transmission assembly from the transmission cushion rubber.

Manual Transmission Assembly

MANUAL TRANSMISSION AND DIFFERENTIAL

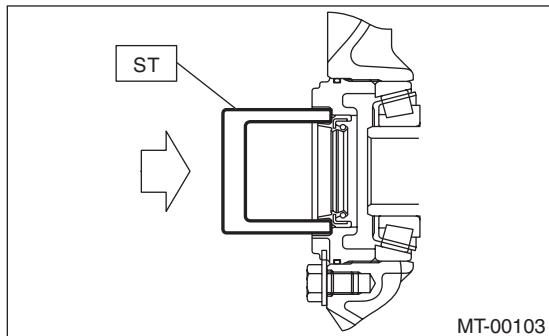
B: INSTALLATION

1) 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 removing the front drive shaft.



2) Tap the transmission hanger in the rear side of transmission with a rubber hammer to bend it until it is in close contact with the transmission case.

CAUTION:

Do not apply excessive load or impact to the transmission case.

3) Install the transmission cushion rubber to the transmission, and tighten the bolt (A).
4) Install the transmission cushion rubber to the center crossmember, and tighten the nut (B).

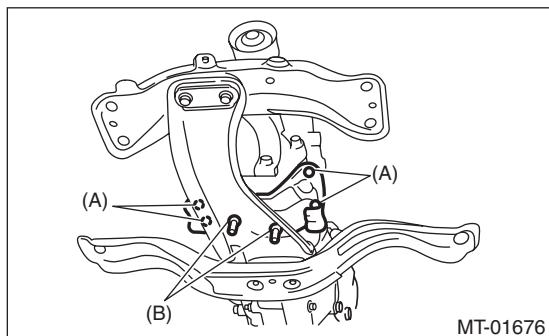
Tightening torque:

Bolt (A)

35 N·m (3.6 kgf-m, 25.8 ft-lb)

Nut (B)

35 N·m (3.6 kgf-m, 25.8 ft-lb)



5) Install the transmission onto the engine.

- (1) Lift up the transmission gradually using a transmission jack.
- (2) Engage at the spline section.

NOTE:

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

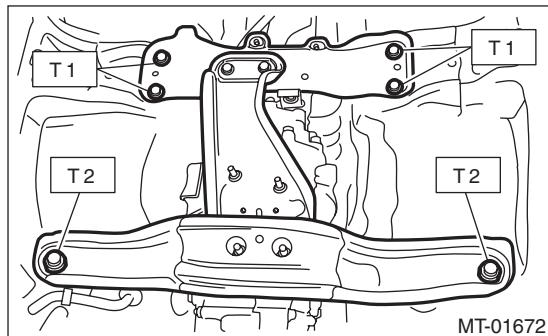
6) While raising the transmission jack, loosen the turnbuckle of the ST, and set the engine unit to the original position.

7) Install the front crossmember and rear crossmember.

Tightening torque:

T1: 70 N·m (7.1 kgf-m, 51.6 ft-lb)

T2: 140 N·m (14.3 kgf-m, 103.3 ft-lb)

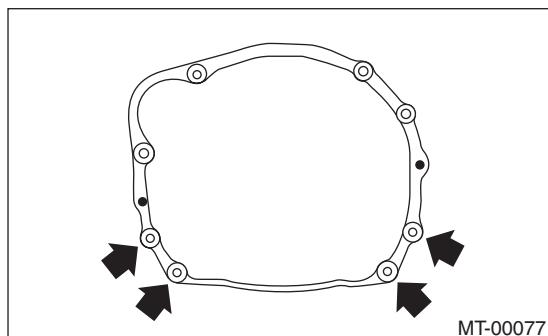


8) Take out the transmission jack.

9) Tighten the bolts and nuts which hold the lower side of transmission to the engine.

Tightening torque:

50 N·m (5.1 kgf-m, 36.9 ft-lb)



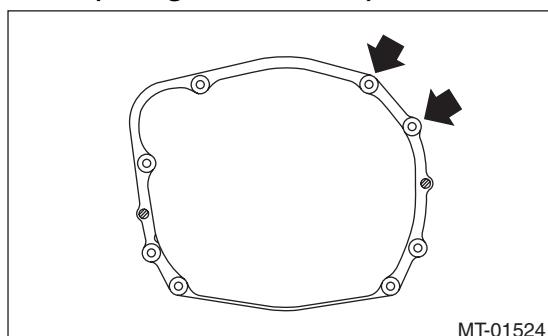
10) Connect the transmission to the engine.

(1) Install the starter. <Ref. to SC(w/o STI)-2, General Description.>

(2) Tighten the bolts which hold the upper side of the transmission to the engine.

Tightening torque:

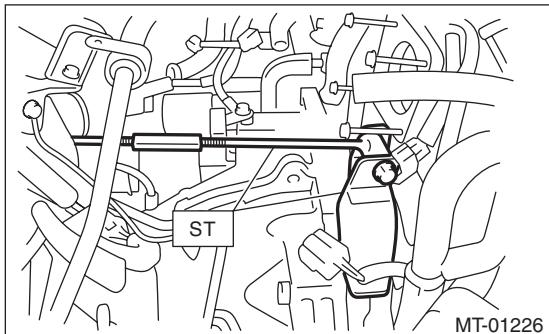
50 N·m (5.1 kgf-m, 36.9 ft-lb)



Manual Transmission Assembly

MANUAL TRANSMISSION AND DIFFERENTIAL

11) Remove the ST.

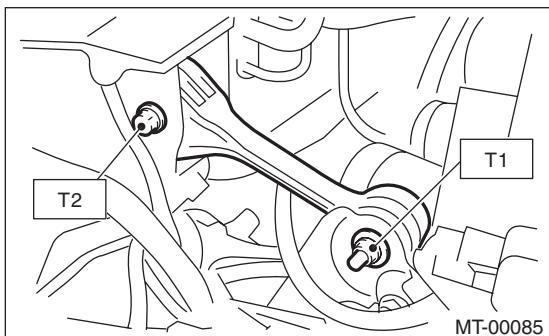


12) Install the pitching stopper.

Tightening torque:

T1: 50 N·m (5.1 kgf-m, 36.9 ft-lb)

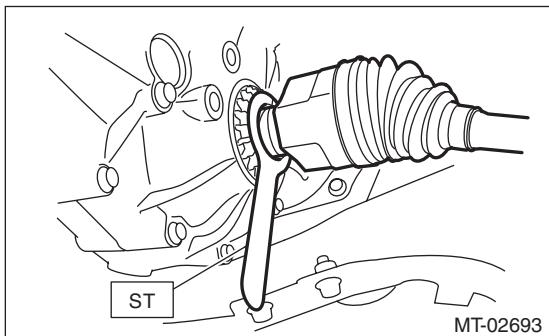
T2: 58 N·m (5.9 kgf-m, 42.8 ft-lb)



13) Lift up the vehicle.

14) Install the front drive shaft into the transmission.

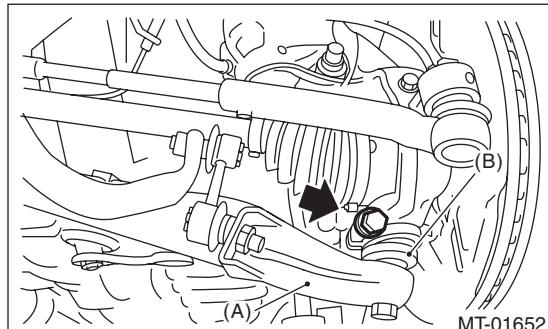
ST 28399SA010 OIL SEAL PROTECTOR



15) Insert the front arm ball joint into the housing lower part, and tighten the mounting bolt.

Tightening torque:

50 N·m (5.1 kgf-m, 36.9 ft-lb)



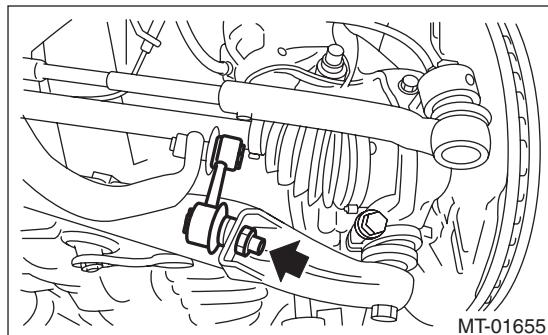
(A) Front arm

(B) Ball joint

16) Attach the stabilizer link to the front arm.

Tightening torque:

30 N·m (3.1 kgf-m, 22.1 ft-lb)

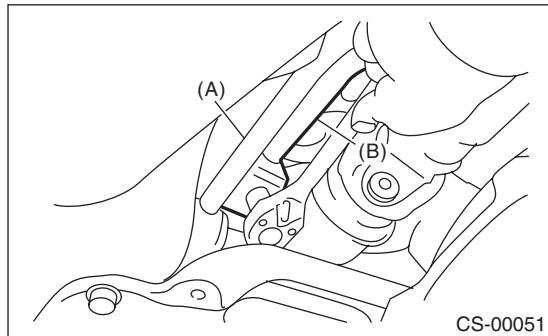


17) Attach the gear shift rod and stay.

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

Tightening torque:

12 N·m (1.2 kgf-m, 8.9 ft-lb)



(A) Stay

(B) Gear shift rod

(2) Install the stay to the transmission bracket.

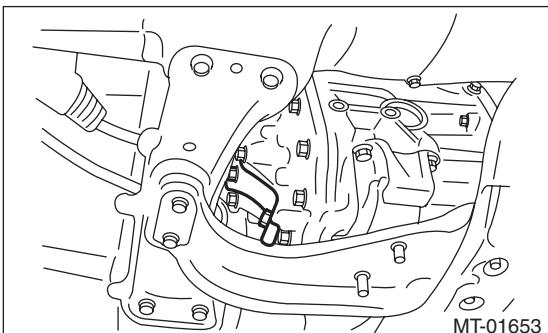
Tightening torque:

18 N·m (1.8 kgf-m, 13.3 ft-lb)

Manual Transmission Assembly

MANUAL TRANSMISSION AND DIFFERENTIAL

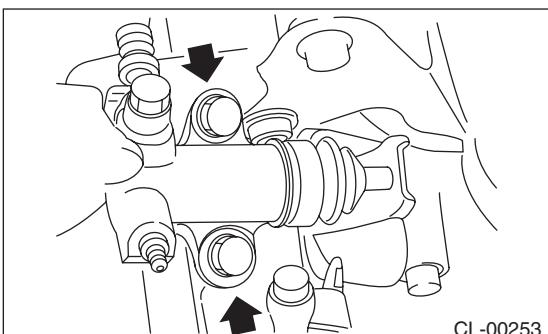
- 18) Install the propeller shaft. <Ref. to DS-12, INSTALLATION, Propeller Shaft.>
- 19) Install the heat shield cover. <Ref. to EI-74, INSTALLATION, Heat Shield Cover.>
- 20) Install the hanger bracket to the transmission.



- 21) Install the rear exhaust pipe and muffler. <Ref. to EX(w/o STI)-2, General Description.>
- 22) Install the center exhaust pipe. <Ref. to EX(w/o STI)-2, General Description.>
- 23) Install the under cover. <Ref. to EI-28, INSTALLATION, Front Under Cover.>
- 24) Install the operating cylinder.

Tightening torque:

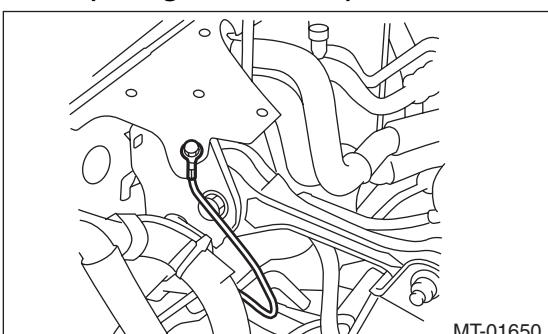
37 N·m (3.8 kgf-m, 27.3 ft-lb)



- 25) Install the transmission radio ground terminal.

Tightening torque:

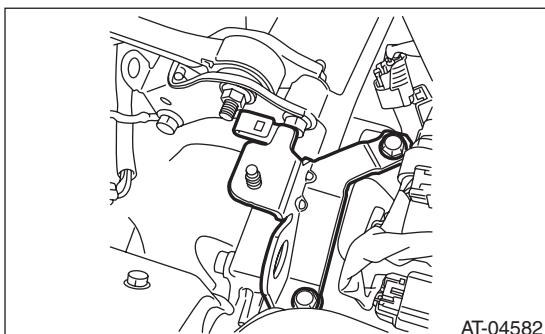
13 N·m (1.3 kgf-m, 9.6 ft-lb)



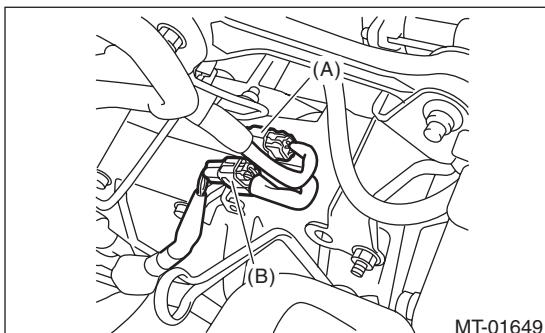
- 26) Install the engine hanger.

Tightening torque:

16 N·m (1.6 kgf-m, 11.8 ft-lb)



- 27) Connect the following connectors.



(A) Neutral position switch and back-up light switch connector

(B) Rear oxygen sensor connector

- 28) Install the intercooler. <Ref. to IN(w/o STI)-12, INSTALLATION, Intercooler.>

- 29) Connect the battery ground terminal.

- 30) Remove the lift arm from vehicle.