

MANUAL TRANSMISSION ASSEMBLY

MANUAL TRANSMISSION AND DIFFERENTIAL

6. Manual Transmission Assembly

A: REMOVAL

1) Set the vehicle on a lift, and then open the front hood and support it with hood stay.

NOTE:

Set the hood stay to its specified hole.

2) Remove the front wheel.

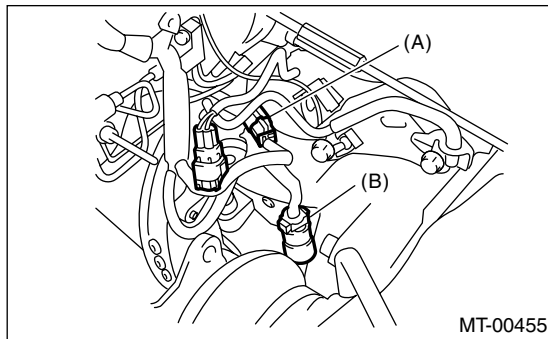
3) Disconnect the ground cable from battery.

4) Remove the intercooler assembly. <Ref. to IN(H4DOTC)-10, REMOVAL, Intercooler.>

5) Lift-up the vehicle, and then remove the under cover.

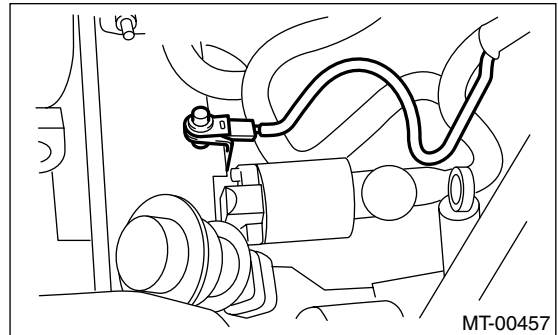
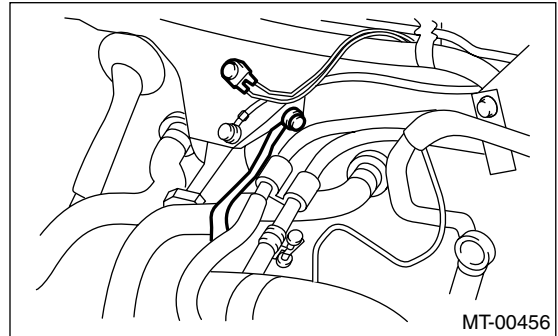
6) Remove the steering universal joint. <Ref. to PS-18, REMOVAL, Universal Joint.>

7) Lower the vehicle and disconnect the connector located on upper side of transmission.



- (A) Transmission connector
- (B) Vehicle speed sensor connector

8) Disconnect the ground cable at upper side of transmission case and body.

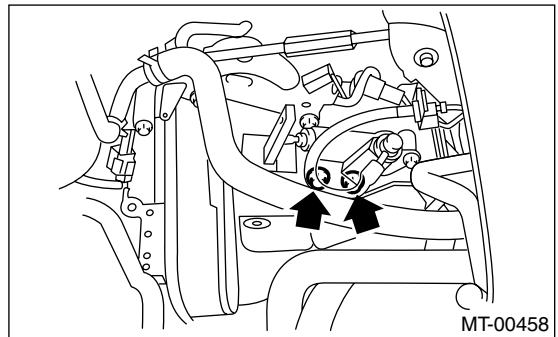


9) Remove the starter assembly. <Ref. to SC(H4SO)-7, REMOVAL, Starter.>

10) Remove the clutch operating cylinder.

NOTE:

Hang the removed operating cylinder with a wire, etc.



11) Remove the clutch release shaft.

(1) Remove the plug with hexagon wrench.

(2) Install a 6 mm (0.24 in) bolt to the release shaft, then pull out the release shaft.

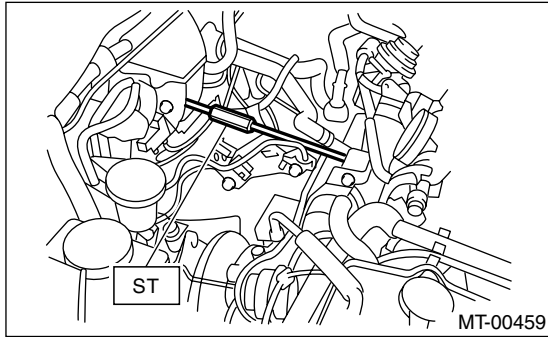
(3) Lift up the release fork, and then remove it from the release bearing claw. Pull it to the engine side and set it free.

12) Remove the pitching stopper, and then remove the pitching stopper bracket.

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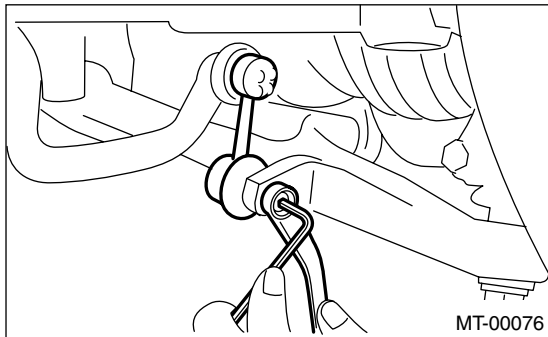
- 13) Set the ST.
ST 41099AA000 ENGINE SUPPORT



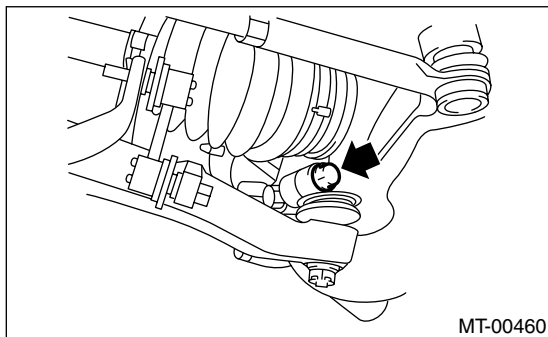
- 14) Remove the center and rear exhaust pipe and muffler. <Ref. to EX(H4DOTC)-8, REMOVAL, Center Exhaust Pipe.>, <Ref. to EX(H4DOTC)-13, REMOVAL, Rear Exhaust Pipe.>, <Ref. to EX(H4DOTC)-12, REMOVAL, Joint Pipe.>

- 15) Remove the propeller shaft. <Ref. to DS-14, REMOVAL, Propeller Shaft.>

- 16) Remove the front stabilizer bolt.



- 17) Remove the ball joint of transverse link from housing.

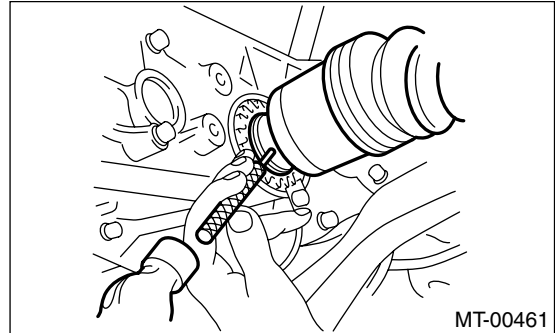


- 18) Using the ST, remove the spring pin of front drive shaft.

- ST 398791700 REMOVER

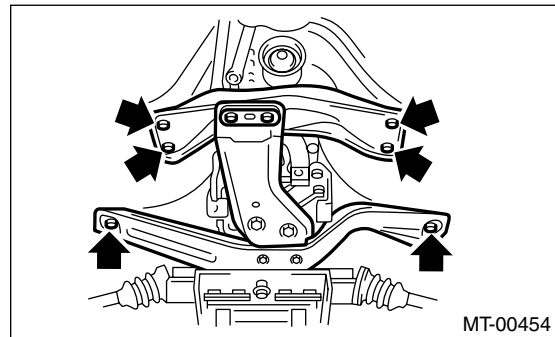
NOTE:

Do not reuse the spring pin.



- 19) Remove the front drive shaft.

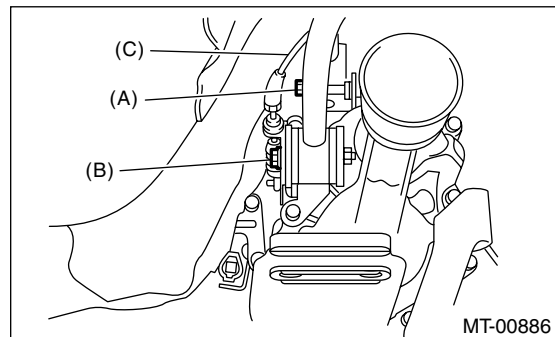
- 20) Set the transmission jack under the transmission, then remove the front crossmember and rear crossmember.



- 21) Move the transmission to right side, then remove the joint COMPL, stay bolt and reverse check cable.

NOTE:

If the transmission is not moved, the joint COMPL and stay bolt will contact body and damage may occur.



- (A) Joint COMPL bolt
- (B) Stay bolt
- (C) Reverse check cable

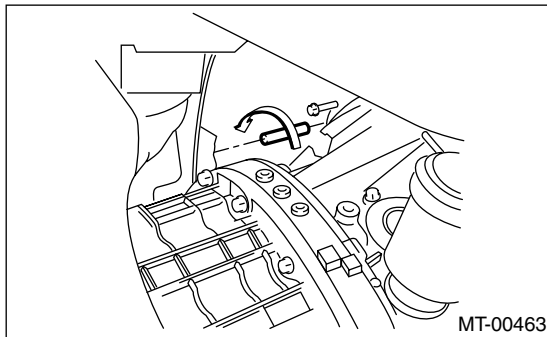
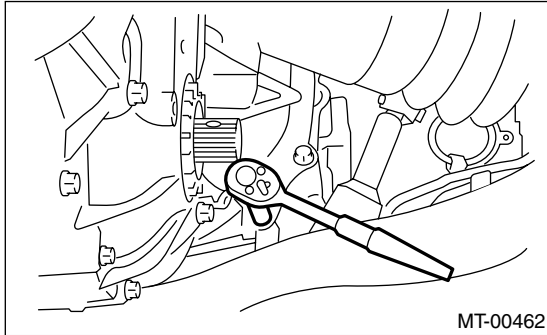
MANUAL TRANSMISSION ASSEMBLY

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22) Remove the fixing bolt of engine and transmission, then remove the transmission from vehicle.

NOTE:

- Rotate the ST (ENGINE SUPPORT ASSY) counterclockwise (to shorten the ST) and lower the rear side of engine to facilitate removal.
- Take care not to contact the transmission with body when pulling backward to remove.
- Remove the clutch pipe and breather pipe carefully which may interfere each other.



B: INSTALLATION

1) Set the release fork, release bearing and release shaft to transmission. <Ref. to CL-16, INSTALLATION, Release Bearing and Lever.>

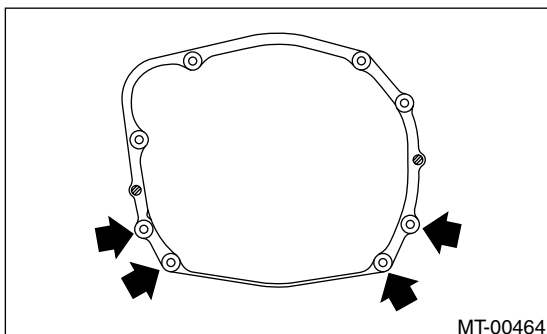
2) Install the transmission.

NOTE:

- Make sure the main shaft spline part is inserted completely.
- Make sure the rear side of engine is lowered.

Tightening torque:

50 N·m (5.1 kgf-m, 36.9 ft-lb)

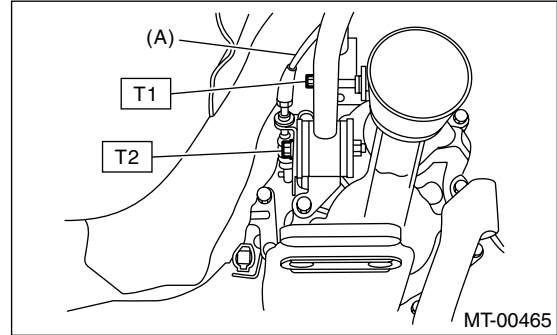


3) Move the transmission to the right side, then install the joint COMPL bolt, stay bolt and reverse check cable.

Tightening torque:

T1: 11.8 N·m (1.2 kgf-m, 8.7 ft-lb)

T2: 32 N·m (3.3 kgf-m, 23.6 ft-lb)



(A) Reverse check cable

4) Install the front crossmember and rear crossmember.

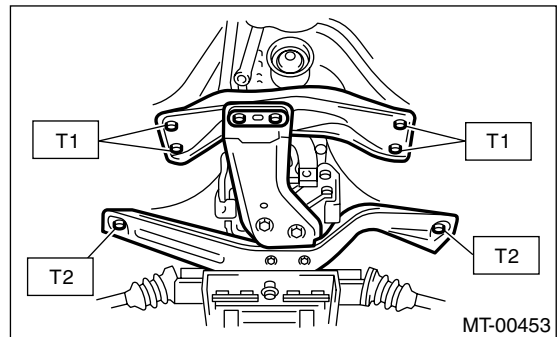
NOTE:

Rotate the ST (ENGINE SUPPORT ASSY) turn buckle clockwise (to make longer the ST) and lift up the rear side of engine to facilitate installation.

Tightening torque:

T1: 70 N·m (7.1 kgf-m, 51.6 ft-lb)

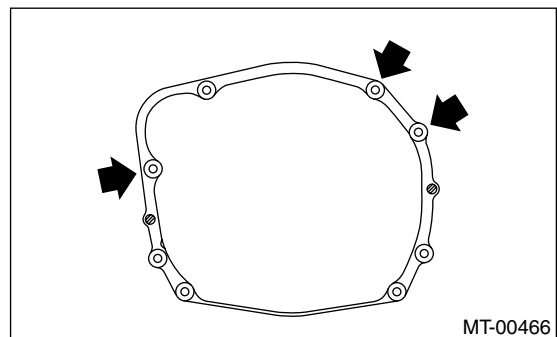
T2: 140 N·m (14.3 kgf-m, 103 ft-lb)



5) Lower the vehicle and install the fixing bolt.

Tightening torque:

50 N·m (5.1 kgf-m, 36.9 ft-lb)



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6) Make sure the release bearing is installed completely.

NOTE:

- Push the release fork to operating cylinder side until you hear a “click” sound. Pull the release fork to engine side. Setting is completed if the release fork does not contact the case.
- Make sure the boot cover is firmly set.



7) Install the pitching stopper bracket.

Tightening torque:

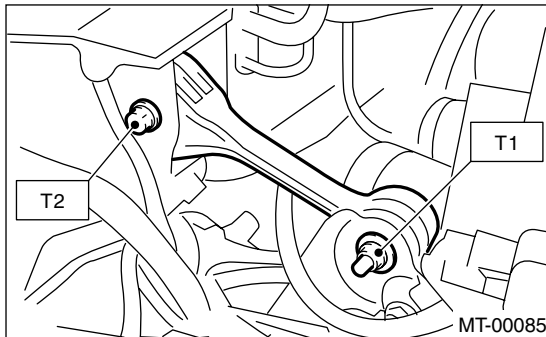
41 N·m (4.2 kgf·m, 30.2 ft·lb)

8) 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)



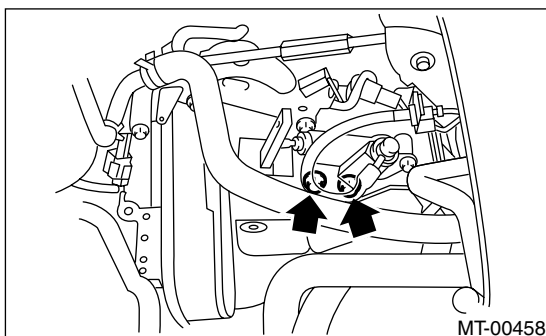
9) Install the clutch operating cylinder.

Tightening torque:

41 N·m (4.2 kgf·m, 30.2 ft·lb)

NOTE:

Check that the clutch hose is routed properly.

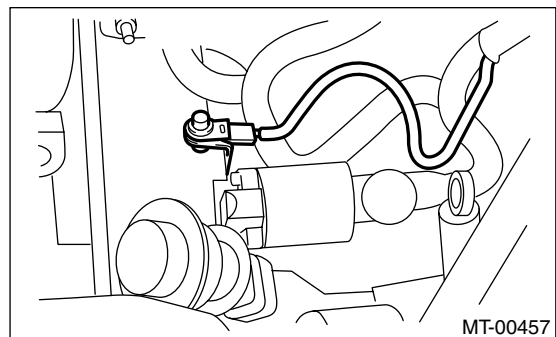
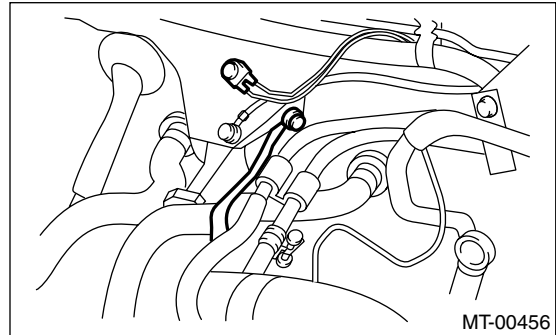


10) Install the starter assembly.

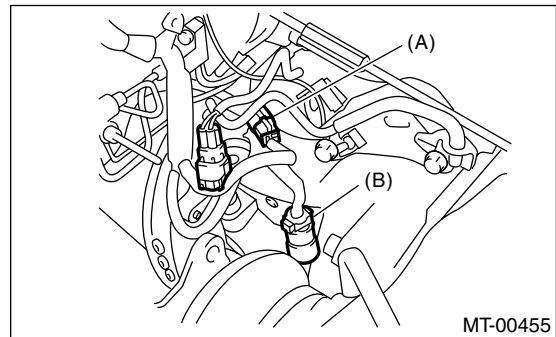
Tightening torque:

50 N·m (5.1 kgf·m, 36.9 ft·lb)

11) Install the transmission and body ground cable.



12) Connect the connector located on the upper side of transmission.



(A) Vehicle speed sensor connector

(B) Transmission connector

13) Lift-up the vehicle, and then install the drive shaft.

14) Using the ST, install the spring pin of front drive shaft.

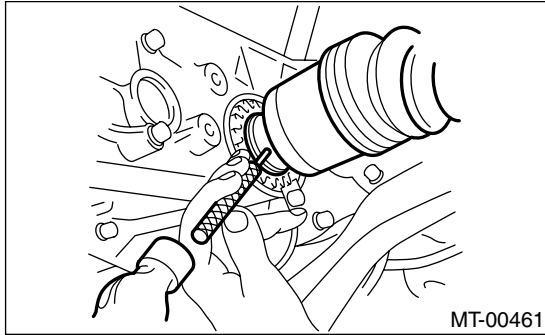
ST 398791700 REMOVER

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NOTE:

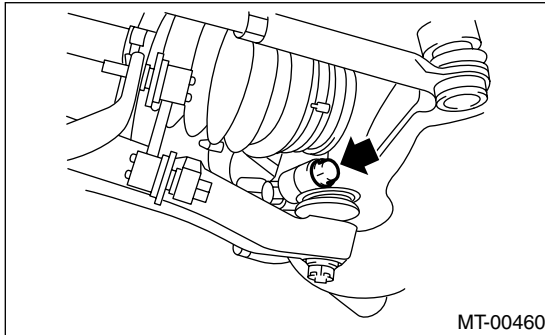
Align each chamfered part of front drive shaft and axle drive shaft spring pin hole, and assemble them. Then insert the spring pin.



15) Install the ball joint of transverse link to housing.

Tightening torque:

50 N·m (5.1 kgf·m, 36.9 ft·lb)



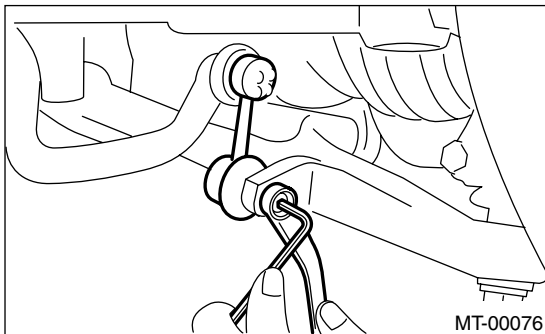
16) Install the stabilizer nut.

Tightening torque:

45 N·m (4.6 kgf·m, 33.2 ft·lb)

NOTE:

Discard the loosened self-locking nut and replace with a new one.



17) Install the propeller shaft. <Ref. to DS-15, INSTALLATION, Propeller Shaft.>

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

19) Install the rear exhaust pipe and muffler. <Ref. to EX(H4DOTC)-13, INSTALLATION, Rear Exhaust Pipe.>, <Ref. to EX(H4DOTC)-12, INSTALLATION, Joint Pipe.>

20) Install the universal joint. <Ref. to PS-18, INSTALLATION, Universal Joint.>

21) Install the under cover.

22) Install the intercooler assembly. <Ref. to IN(H4DOTC)-10, INSTALLATION, Intercooler.>

23) Connect the battery ground cable to battery.