

18. Rocker Cover

A: REMOVAL

1. ROCKER COVER RH

NOTE:

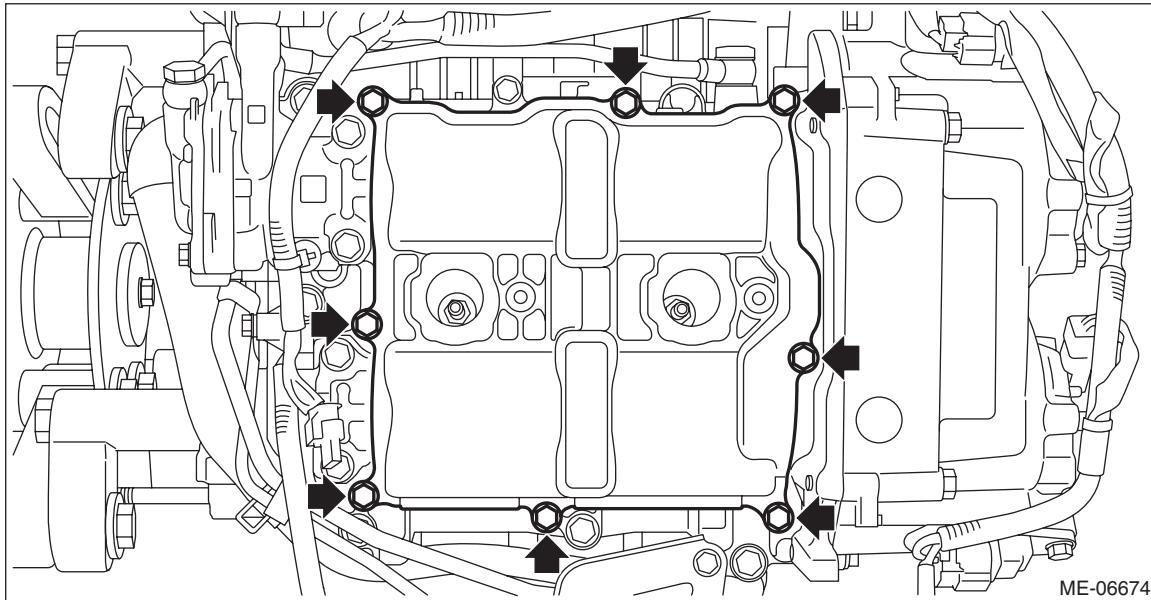
When replacing a single part, perform the work with the engine assembly installed to body.

1) When working on the vehicle

NOTE:

When working on the vehicle, perform the following steps also.

- (1) Remove the air cleaner case. <Ref. to IN(w/o STI)-9, REMOVAL, Air Cleaner Case.>
- 2) Remove the #1 ignition coil and the #3 ignition coil. <Ref. to IG(w/o STI)-11, REMOVAL, Ignition Coil.>
- 3) Remove the rocker cover RH.



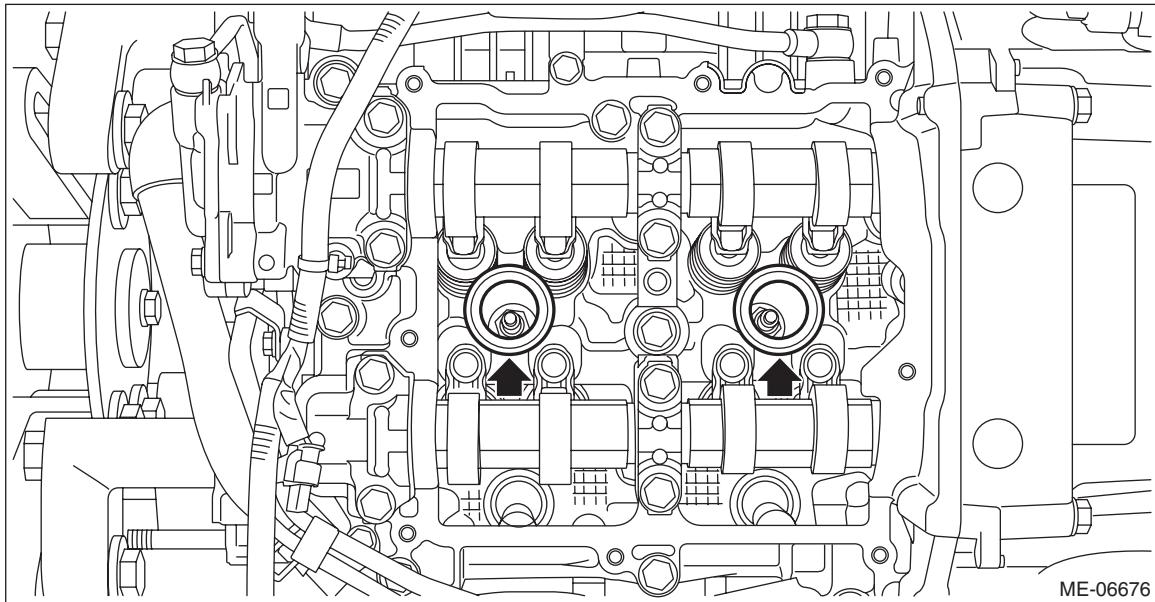
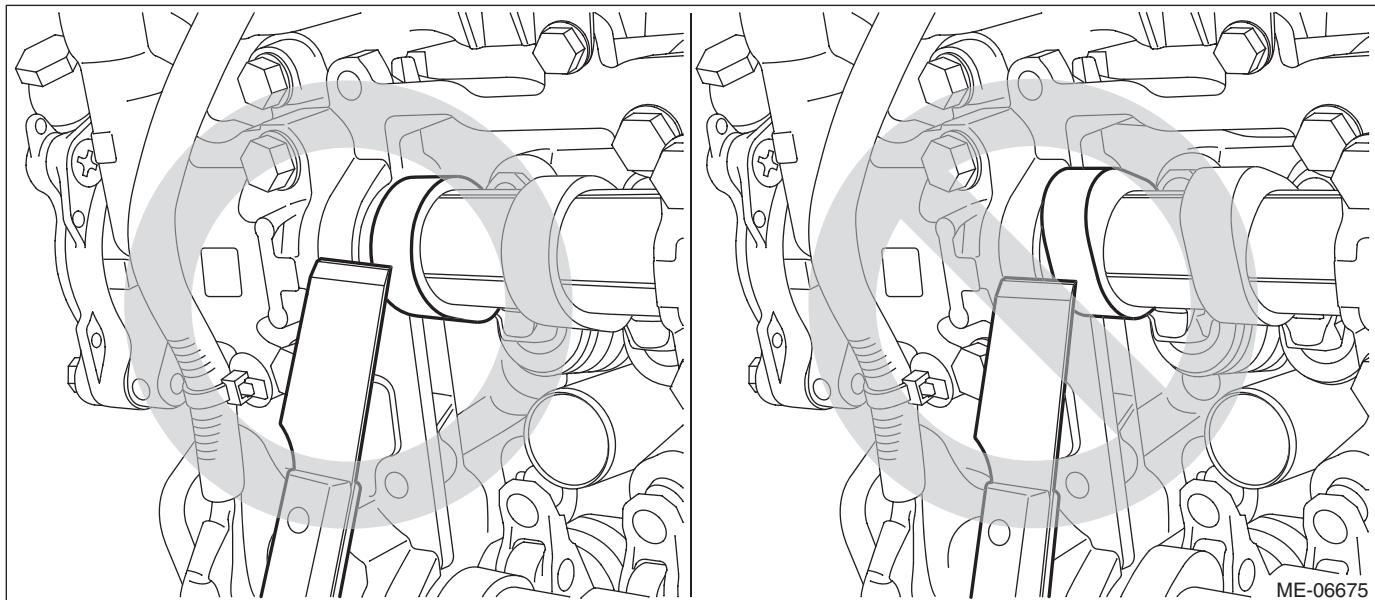
Rocker Cover

MECHANICAL

4) Remove the rocker cover gasket RH, #1 spark plug pipe gasket and #3 spark plug pipe gasket, and remove the liquid gasket.

CAUTION:

- When removing the liquid gasket from engine unit using scraper, use special care not to damage the cam lobe of camshaft RH.
- If the cam lobe of camshaft RH interferes, turn the crankshaft to the position where the scraper does not touch.



Rocker Cover

MECHANICAL

2. ROCKER COVER LH

NOTE:

When replacing a single part, perform the work with the engine assembly installed to body.

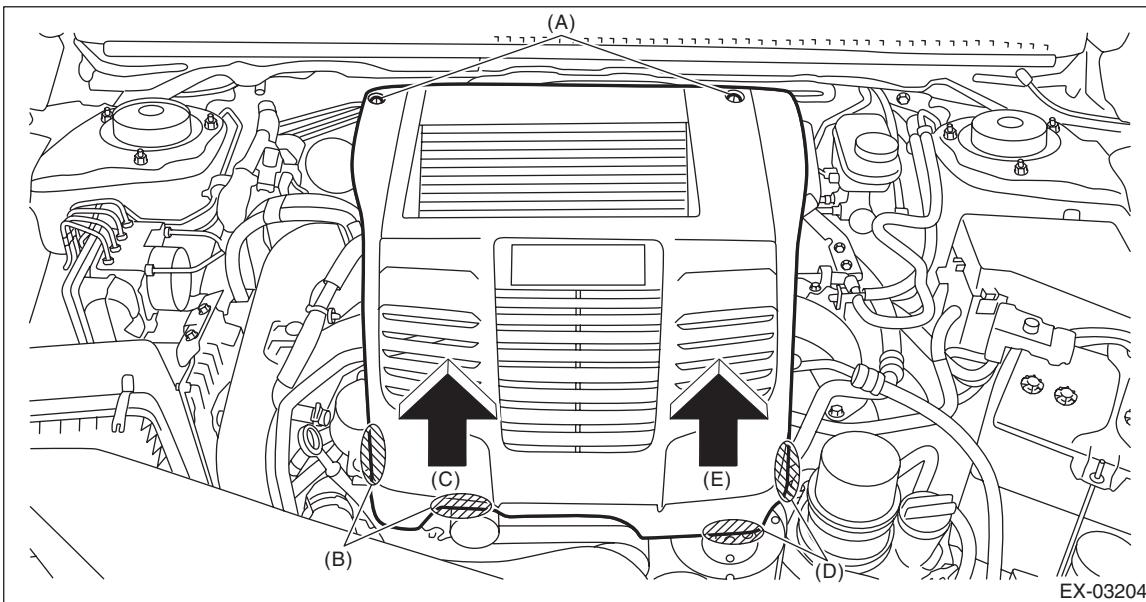
1) When working on the vehicle

NOTE:

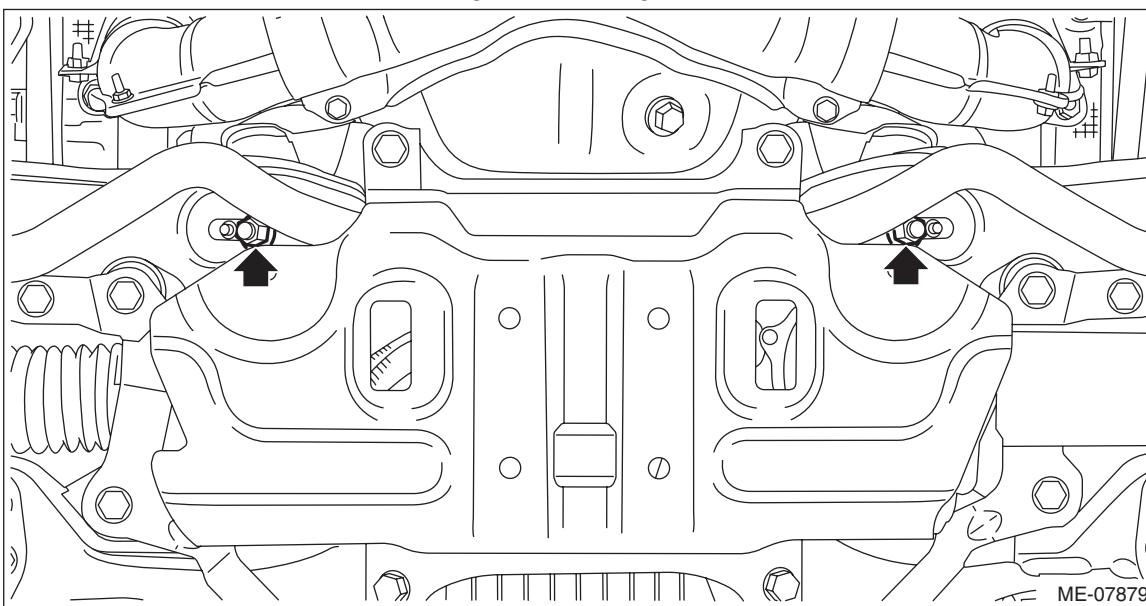
When working on the vehicle, perform the following steps also.

- (1) Remove the striker - front hood. <Ref. to EB-11, DISASSEMBLY, Front Hood.>
- (2) Fully open the front hood. <Ref. to NT-20, FRONT HOOD DAMPER STAY, NOTE, Note.>
- (3) Remove the collector cover.

1. Remove the clips (A).
2. Hold the shaded area (B) by hand and carefully pull the RH side (C) upward.
3. Hold the shaded area (D) by hand and carefully pull the LH side (E) upward.

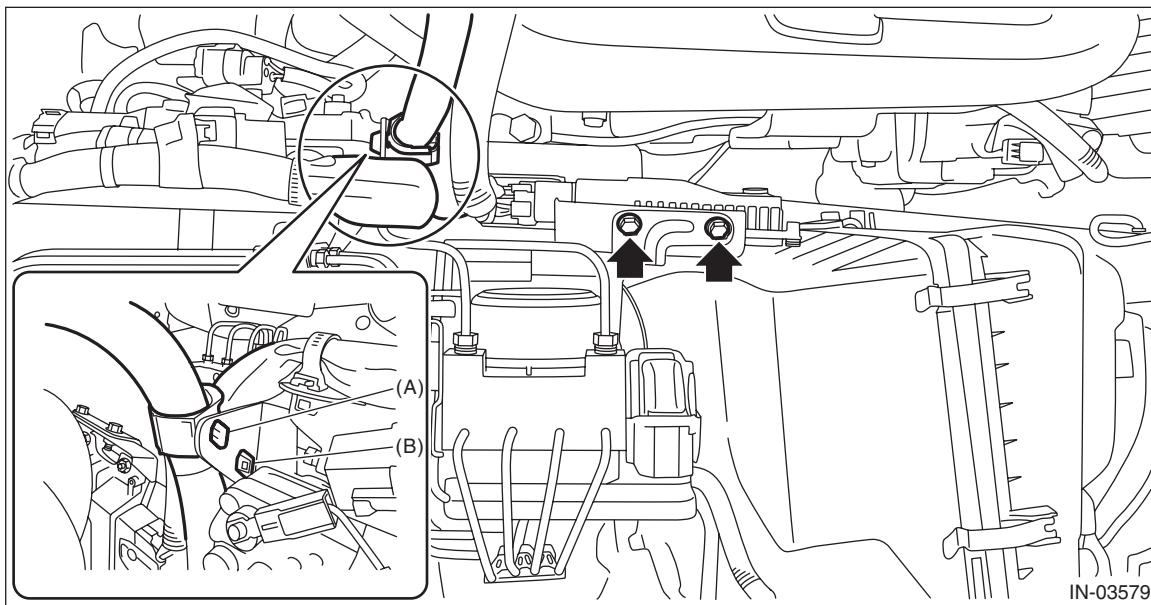


- (4) Remove the battery. <Ref. to SC(w/o STI)-50, REMOVAL, Battery.>
- (5) Remove the air intake duct. <Ref. to IN(w/o STI)-22, REMOVAL, Air Intake Duct.>
- (6) Remove the center exhaust pipe. <Ref. to EX(w/o STI)-35, REMOVAL, Center Exhaust Pipe.>
- (7) Remove the nuts which secure the engine mounting to the front crossmember.



- (8) Lower the vehicle.

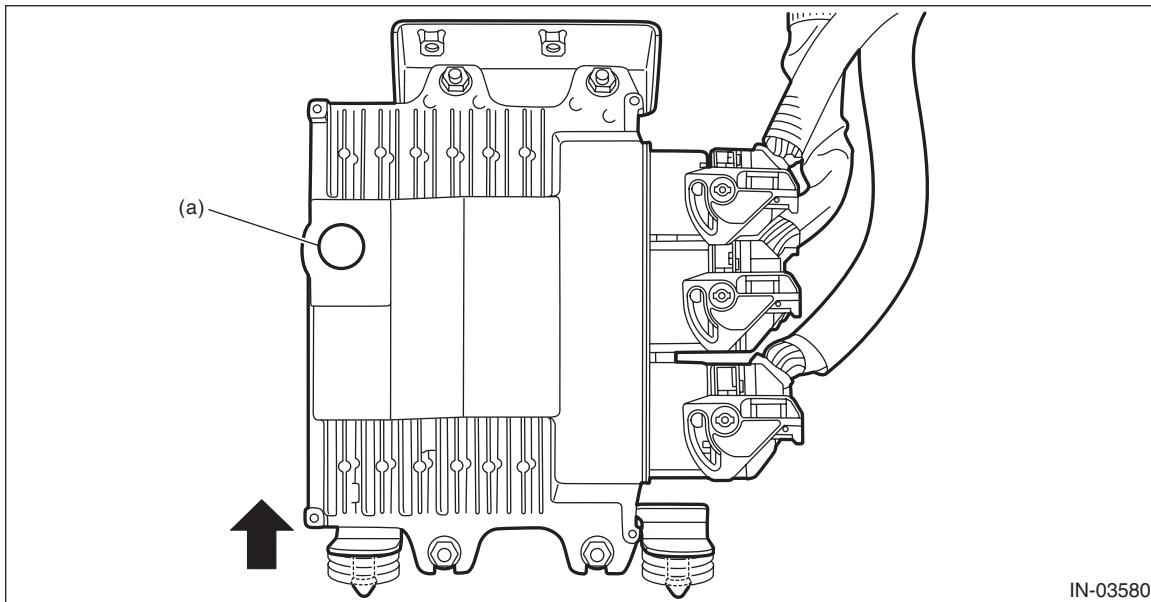
(9) Remove the clips (A) and (B) which secure the engine harness and bulkhead harness to the bracket, and remove the bolt which secures the engine control module (ECM) to the bracket.



(10) Pull out the engine control module (ECM) from the bracket, and move it to a location that does not interfere with operation.

NOTE:

When performing the pulling out operation, pay attention not to apply excessive load to the breather filter portion (a) in order to avoid the damage.

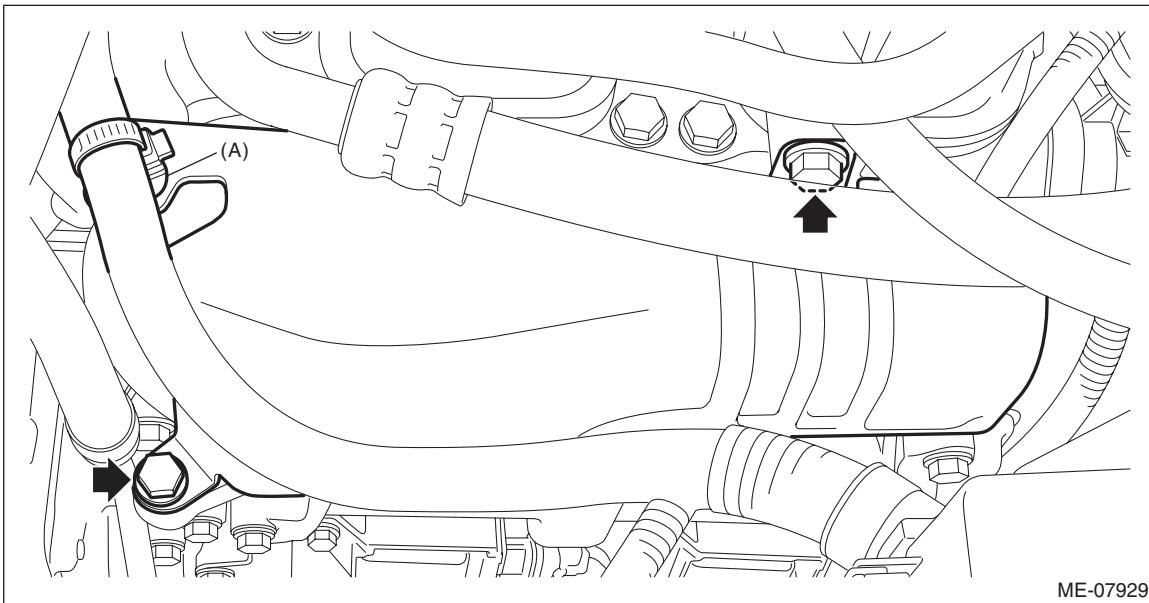


(11) Remove the intercooler. <Ref. to IN(w/o STI)-38, REMOVAL, Intercooler.>

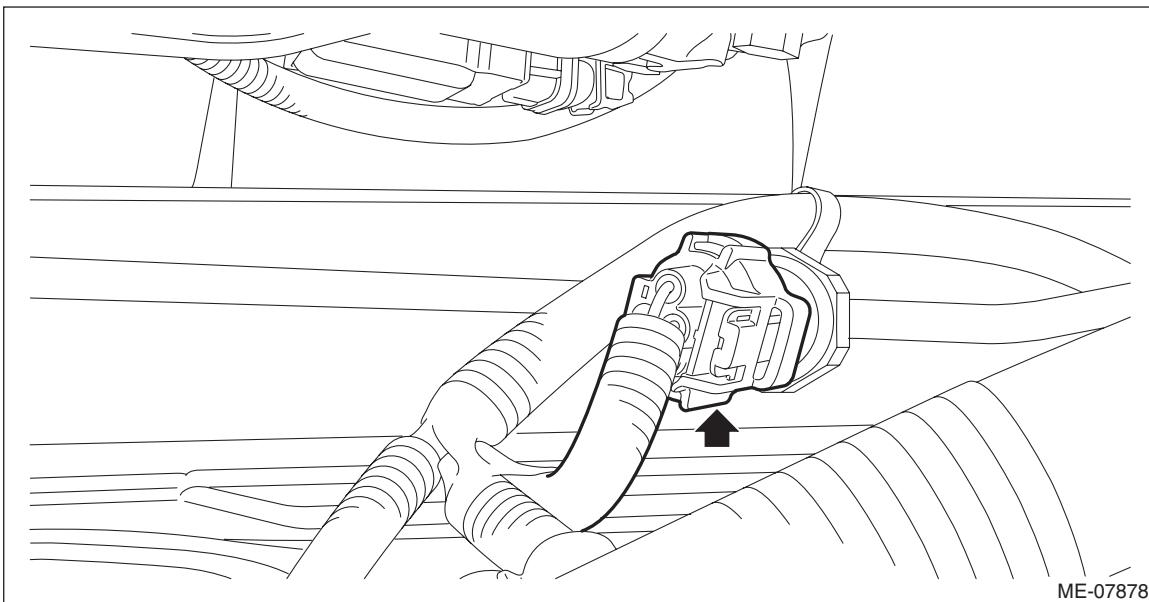
Rocker Cover

MECHANICAL

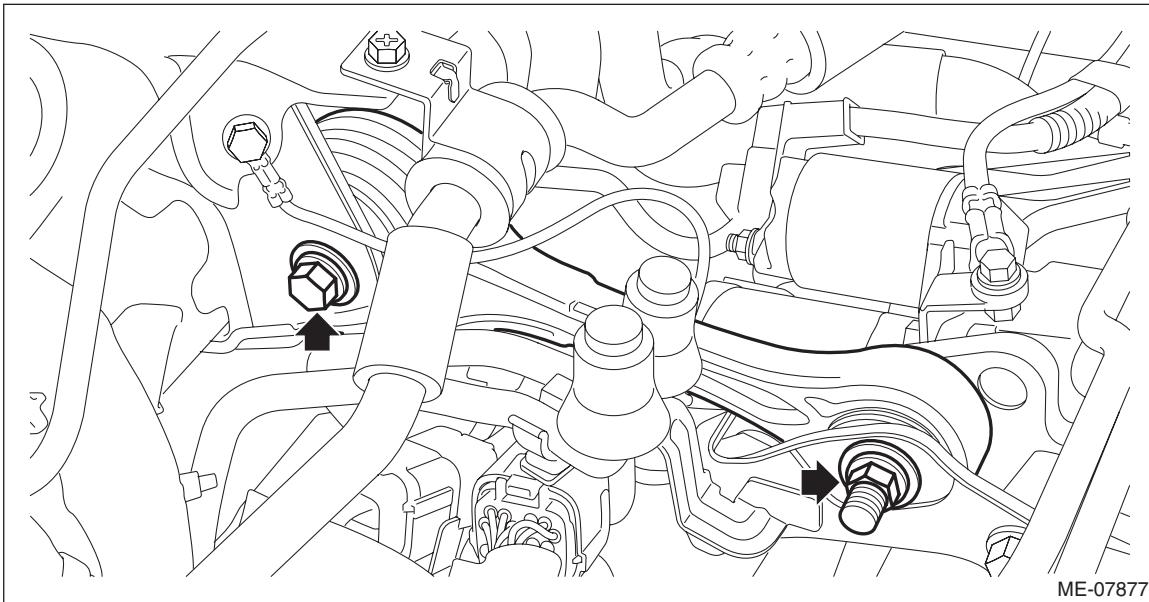
(12) Remove the clip (A) securing the generator cord to the fuel pipe protector, and remove the fuel pipe protector from the high-pressure fuel pump case and intake manifold.



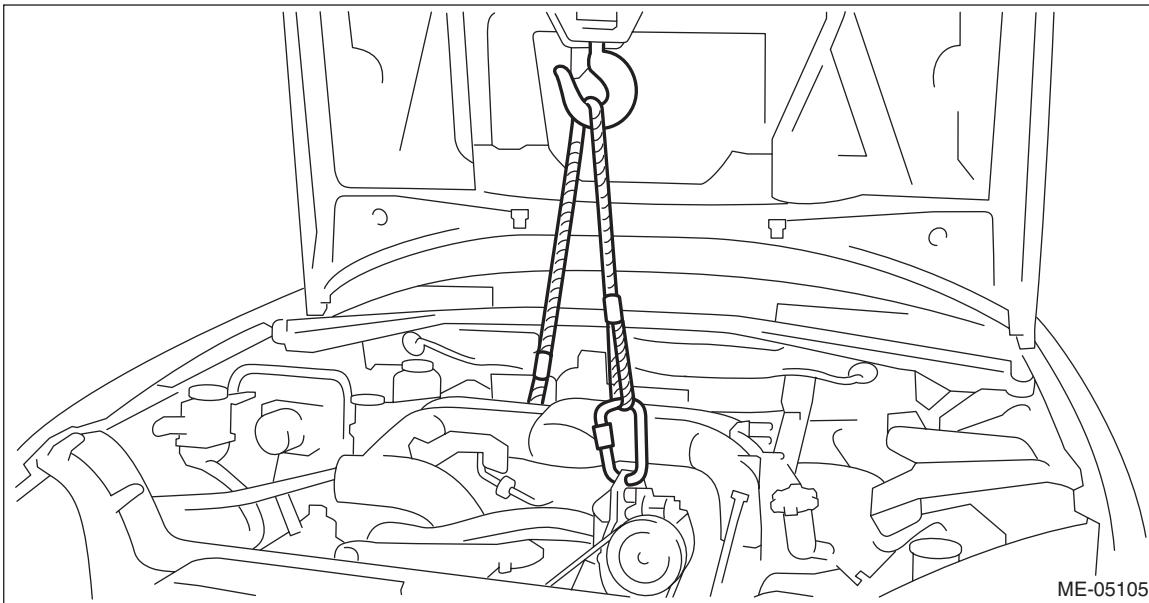
(13) Disconnect the connector from pressure switch (triple pressure switch).



(14) Remove the pitching stopper.



(15) Support the engine with a lifting device and wire ropes.



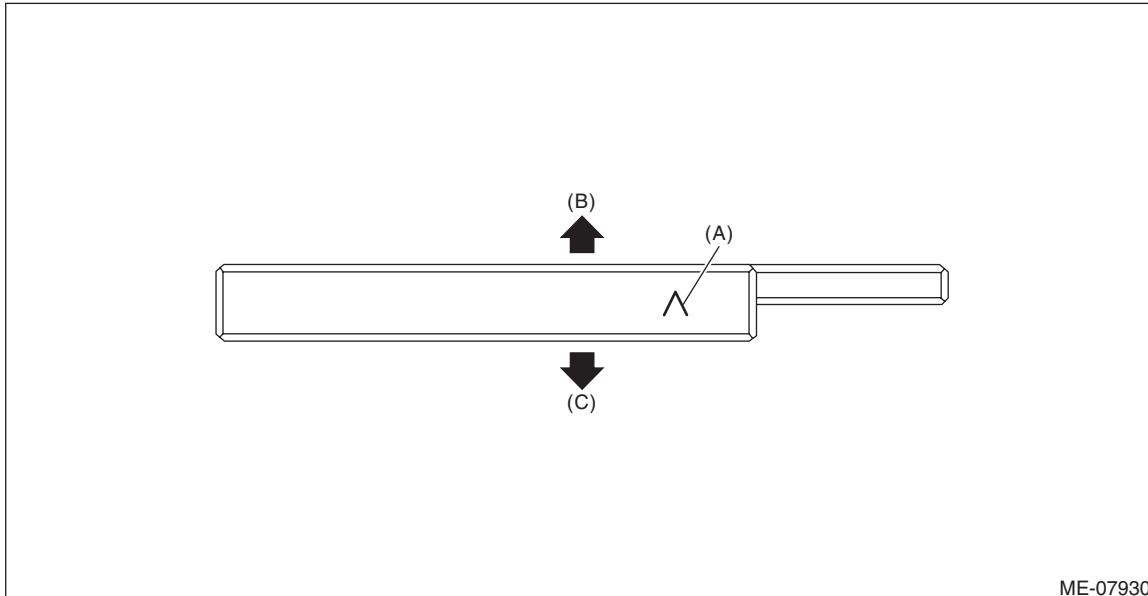
Rocker Cover

MECHANICAL

(16) While gradually lifting up the engine, set the ST between the engine mount LH and crossmember, and then slowly lower the engine.

CAUTION:

- When lifting up the engine, pay attention to the clearance of each part and be careful not to lift the engine too much, in order to prevent damaging the vehicle.
- To avoid the damage, be sure to set the ST as shown in the figure.



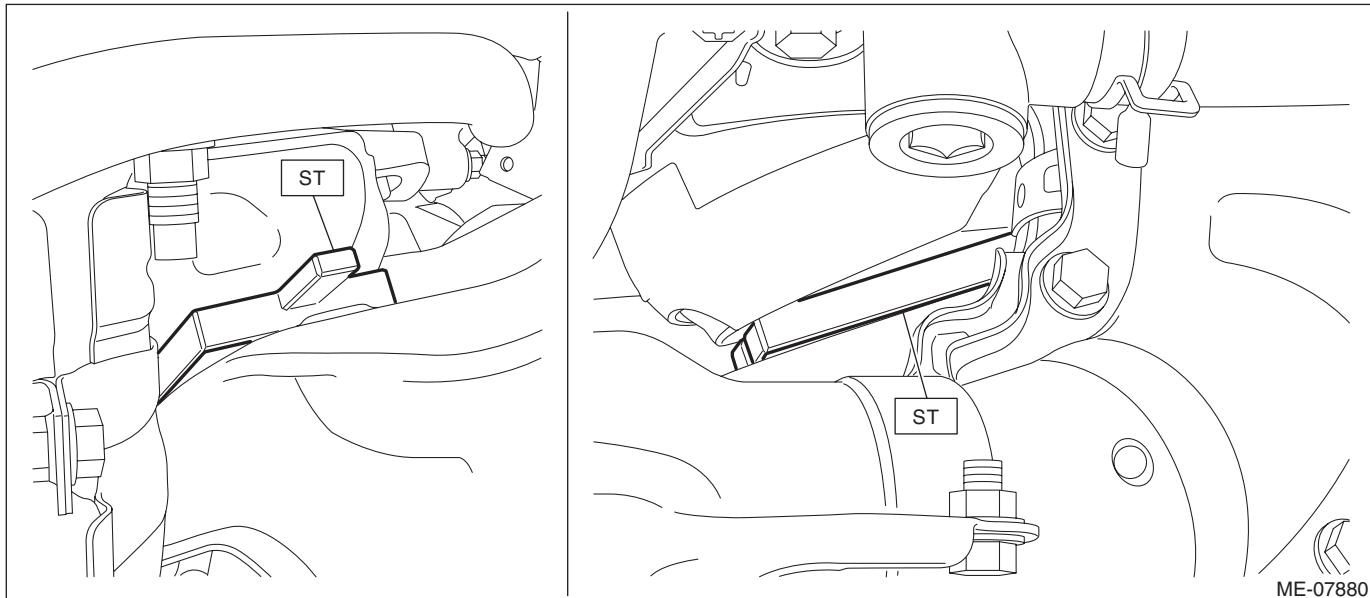
(A) Direction mark

(B) Engine mounting side

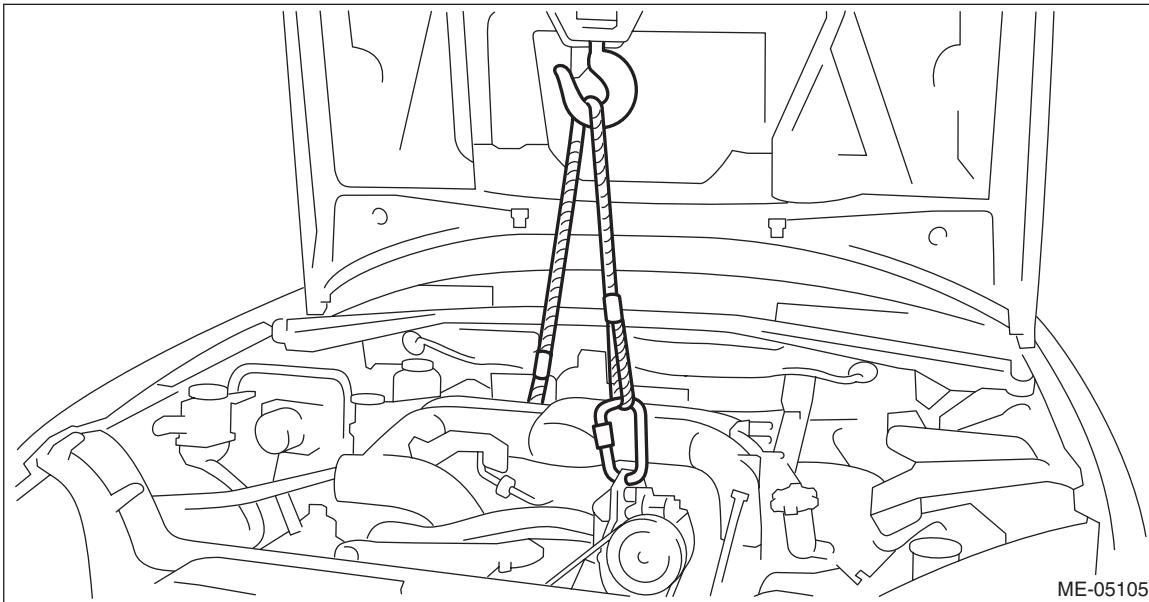
(C) Crossmember side

- After lowering the engine, check that the ST does not come off even if the engine is bounced.

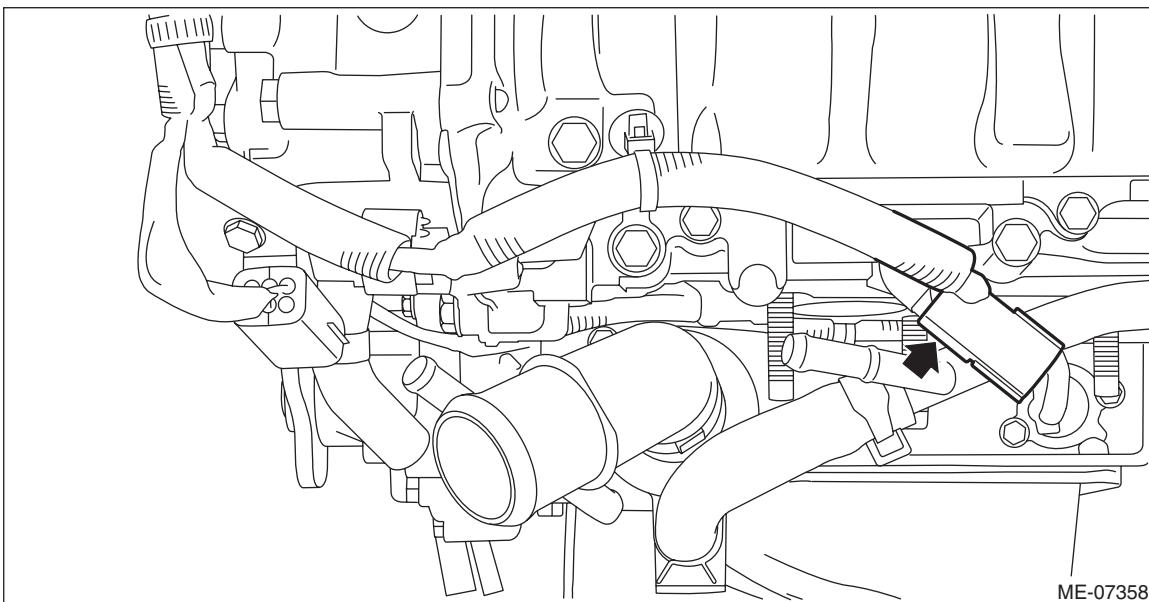
ST 18632AA030 STAND ASSY



(17) Remove the lifting device and wire ropes.



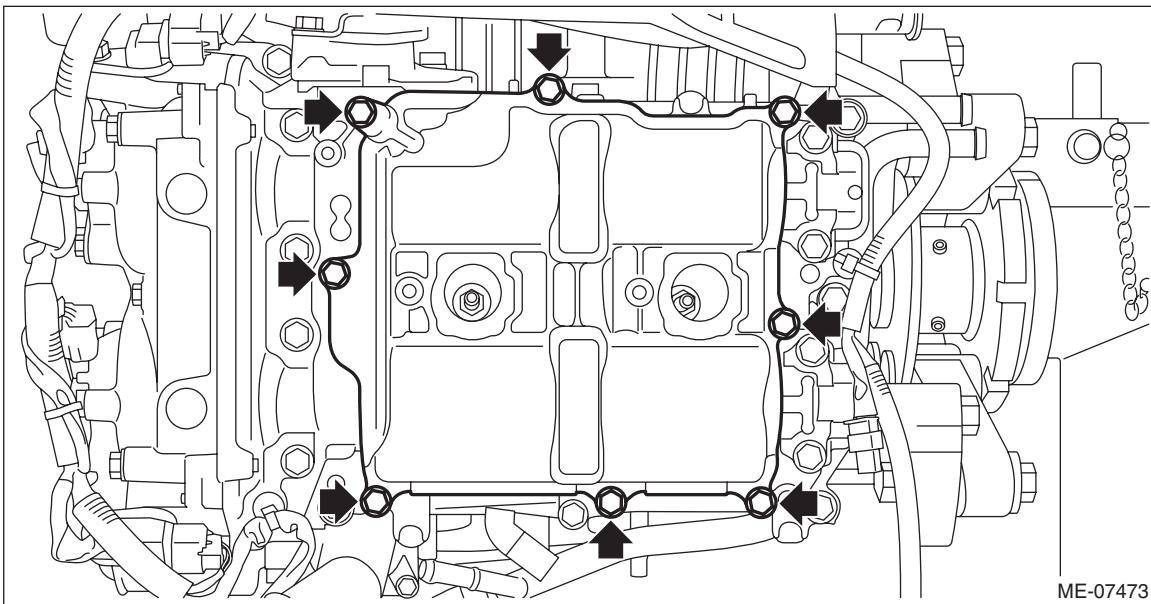
- 2) Remove the side engine oil cooler pipe assembly. <Ref. to LU(w/o STI)-39, SIDE ENGINE OIL COOLER PIPE, REMOVAL, Engine Oil Cooler Pipe.>
- 3) Remove the #2 ignition coil and the #4 ignition coil. <Ref. to IG(w/o STI)-11, REMOVAL, Ignition Coil.>
- 4) Remove the connector from the water pipe LH.



Rocker Cover

MECHANICAL

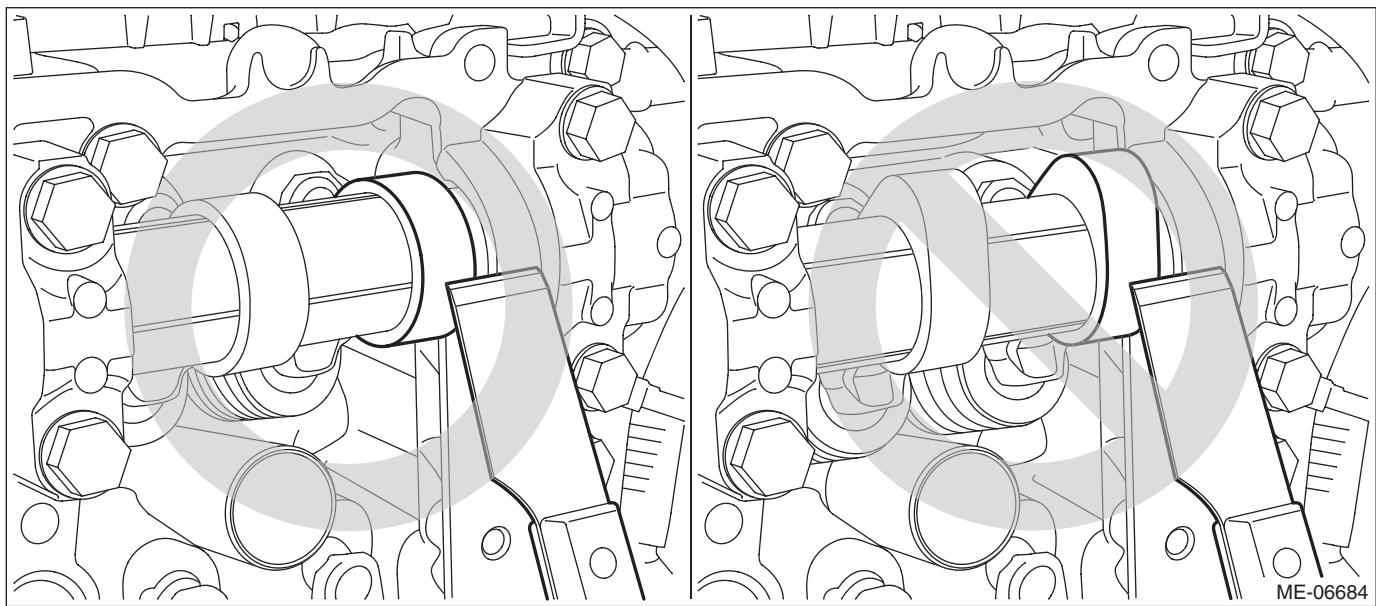
5) Remove the rocker cover LH.

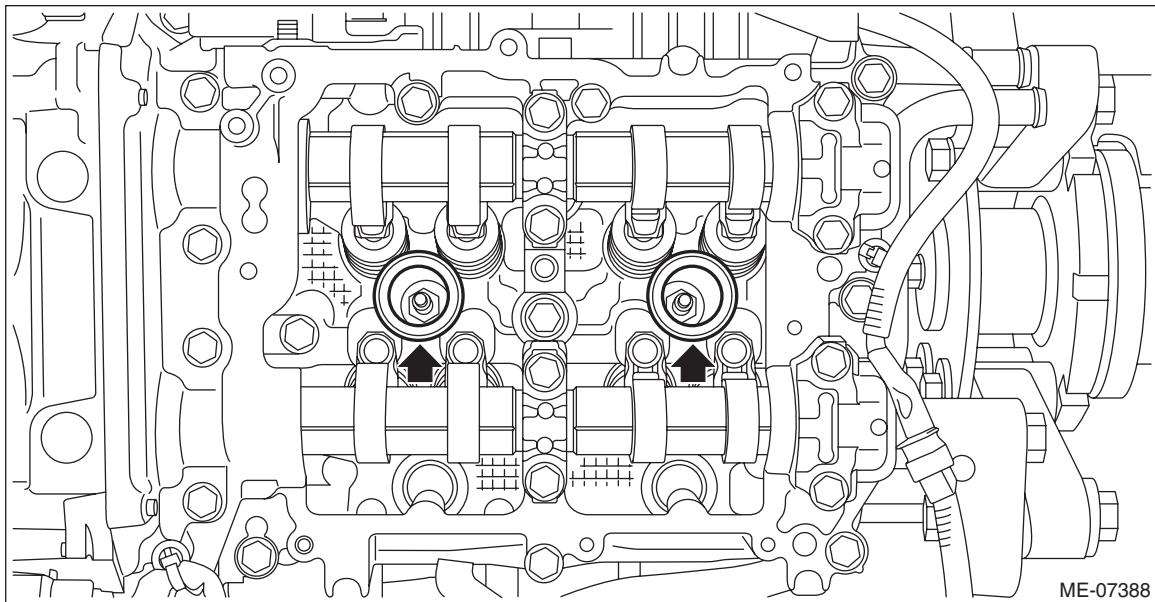


6) Remove the rocker cover gasket LH, #2 spark plug pipe gasket and #4 spark plug pipe gasket, and remove the liquid gasket.

CAUTION:

- When removing the liquid gasket from engine unit using scraper, use special care not to damage the cam lobe of camshaft LH.
- If the cam lobe of camshaft LH interferes, turn the crankshaft to the position where the scraper does not touch.





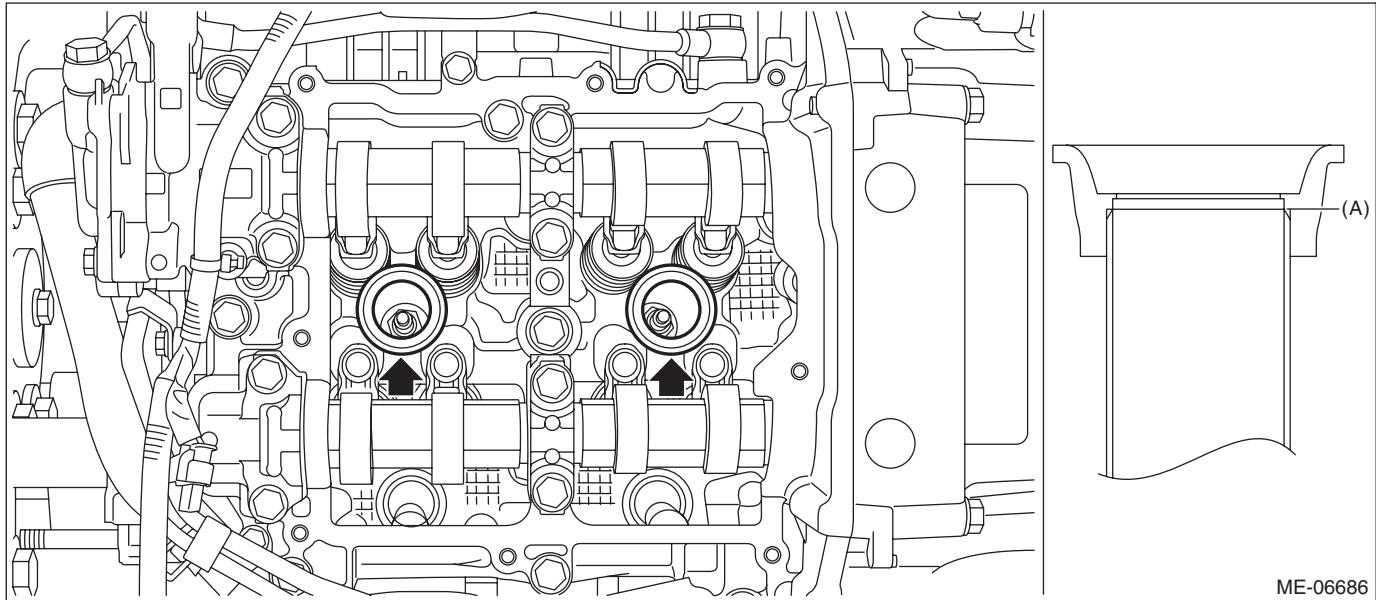
B: INSTALLATION

1. ROCKER COVER RH

- 1) Install the #1 spark plug pipe gasket and #3 spark plug pipe gasket to the #1 spark plug pipe and #3 spark plug pipe.

NOTE:

- Use a new #1 spark plug pipe gasket and #3 spark plug pipe gasket.
- Apply a light coat of engine oil to the #1 spark plug pipe gasket and #3 spark plug pipe gasket, and insert them onto the spark plug pipe edge (A).



- 2) Install the rocker cover gasket RH to the rocker cover RH.

NOTE:

Use a new rocker cover gasket RH.

Rocker Cover

MECHANICAL

3) Apply liquid gasket to the mating surface of rocker cover RH as shown in the figure.

NOTE:

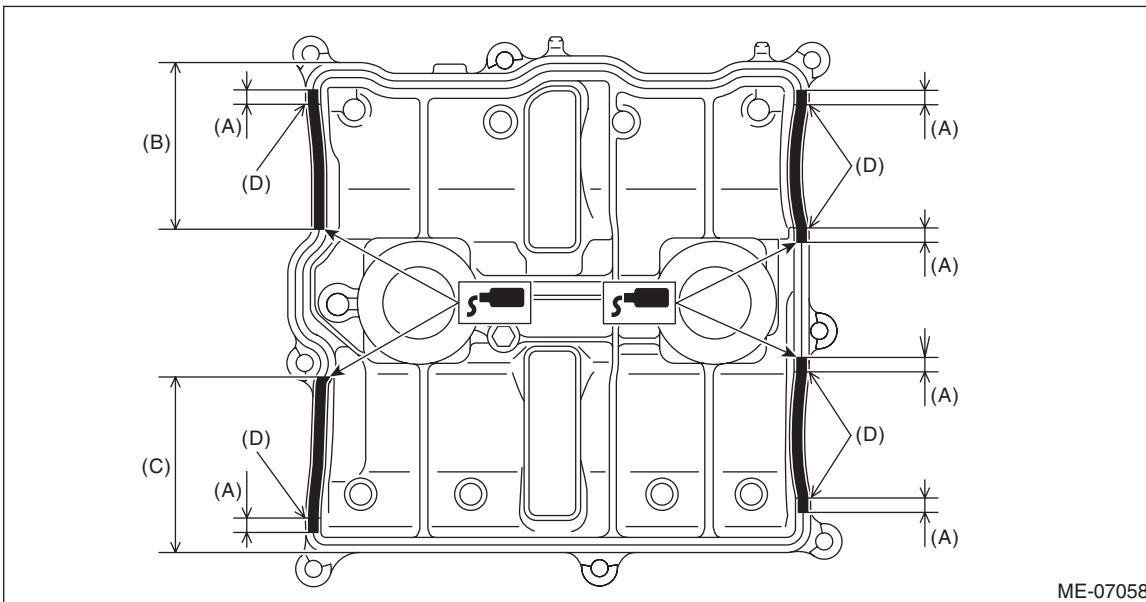
- Before applying liquid gasket, degrease the old liquid gasket seal surface of the engine.
- Be careful not to allow liquid gasket to be squeezed out from rocker cover RH.
- Install within 5 min. after applying liquid gasket.

Liquid gasket:

THREE BOND 1217G (Part No. K0877Y0100) or equivalent

Liquid gasket applying diameter:

3 ± 1 mm (0.1181 \pm 0.0394 in)



(A) 10 mm (0.394 in) or more

(C) 70.7 mm (2.783 in) or more

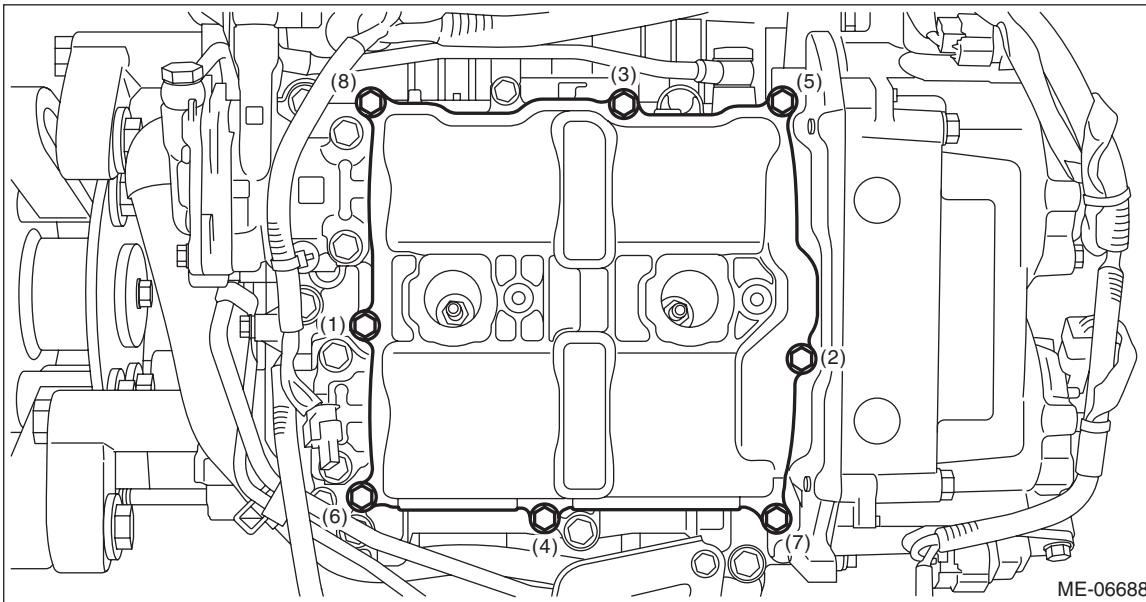
(D) Arch starting point

(B) 68 mm (2.677 in) or more

4) Set the rocker cover RH, and tighten the bolts in numerical order as shown in the figure.

Tightening torque:

6.4 N·m (0.7 kgf·m, 4.7 ft-lb)



5) Install the #1 ignition coil and the #3 ignition coil. <Ref. to IG(w/o STI)-11, INSTALLATION, Ignition Coil.>

6) When working on the vehicle

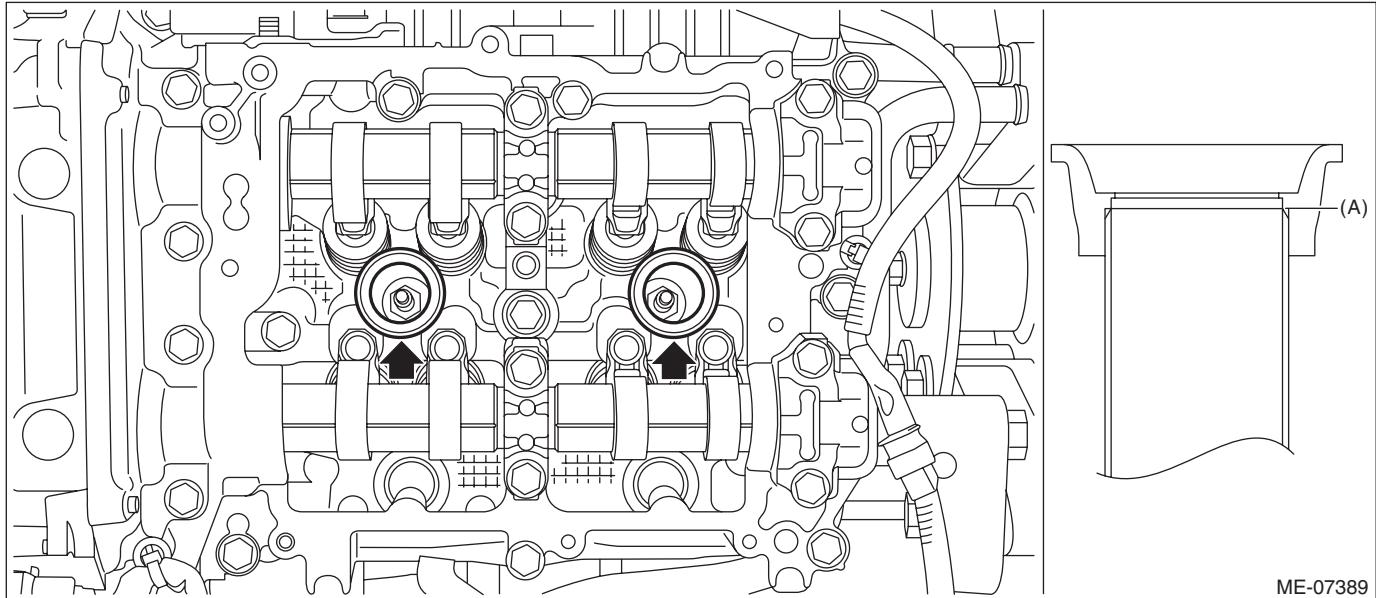
(1) Install the air cleaner case. <Ref. to IN(w/o STI)-12, INSTALLATION, Air Cleaner Case.>

2. ROCKER COVER LH

1) Install the #2 spark plug pipe gasket and #4 spark plug pipe gasket to the #2 spark plug pipe and #4 spark plug pipe.

NOTE:

- Use a new #2 spark plug pipe gasket and #4 spark plug pipe gasket.
- Apply a light coat of engine oil to the #2 spark plug pipe gasket and #4 spark plug pipe gasket, and insert them onto the spark plug pipe edge (A).



2) Install the rocker cover gasket LH to the rocker cover LH.

NOTE:

Use a new rocker cover gasket LH.

Rocker Cover

MECHANICAL

3) Apply liquid gasket to the mating surface of rocker cover LH as shown in the figure.

NOTE:

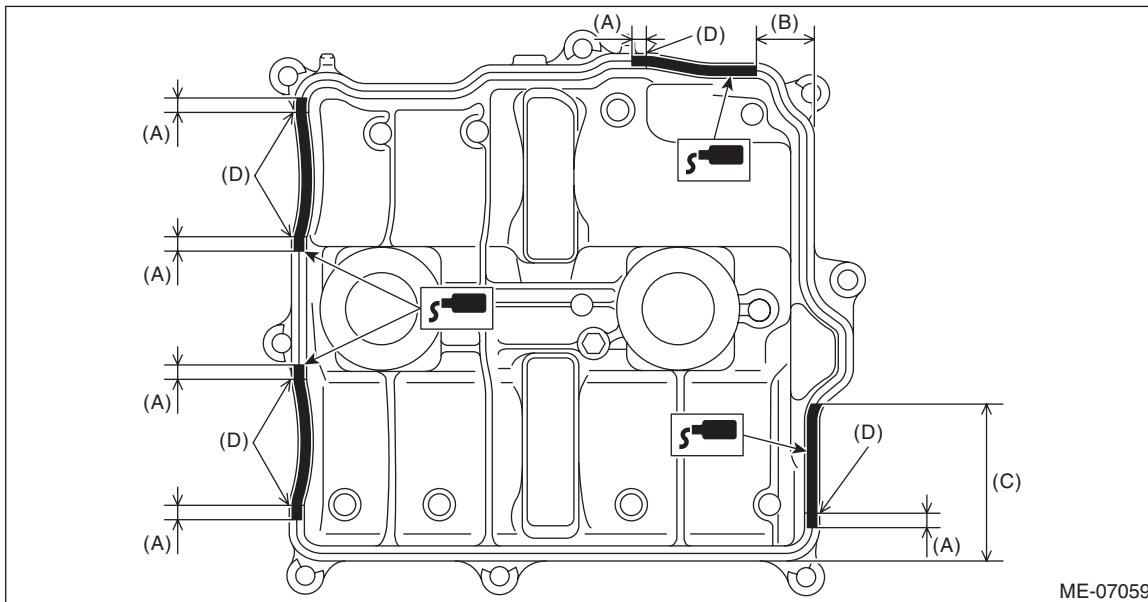
- Before applying liquid gasket, degrease the old liquid gasket seal surface of the engine.
- Be careful not to allow liquid gasket to be squeezed out from rocker cover LH.
- Install within 5 min. after applying liquid gasket.

Liquid gasket:

THREE BOND 1217G (Part No. K0877Y0100) or equivalent

Liquid gasket applying diameter:

3 ± 1 mm (0.1181 \pm 0.0394 in)



(A) 10 mm (0.394 in) or more

(C) 63 mm (2.480 in) or more

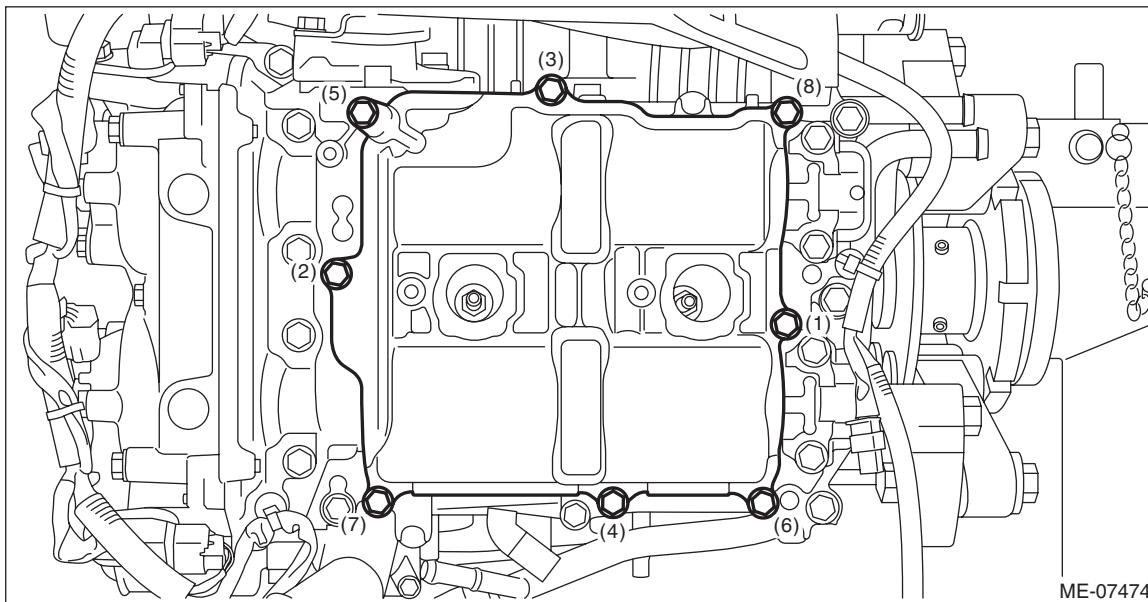
(D) Arch starting point

(B) 18.8 mm (0.7402 in) or more

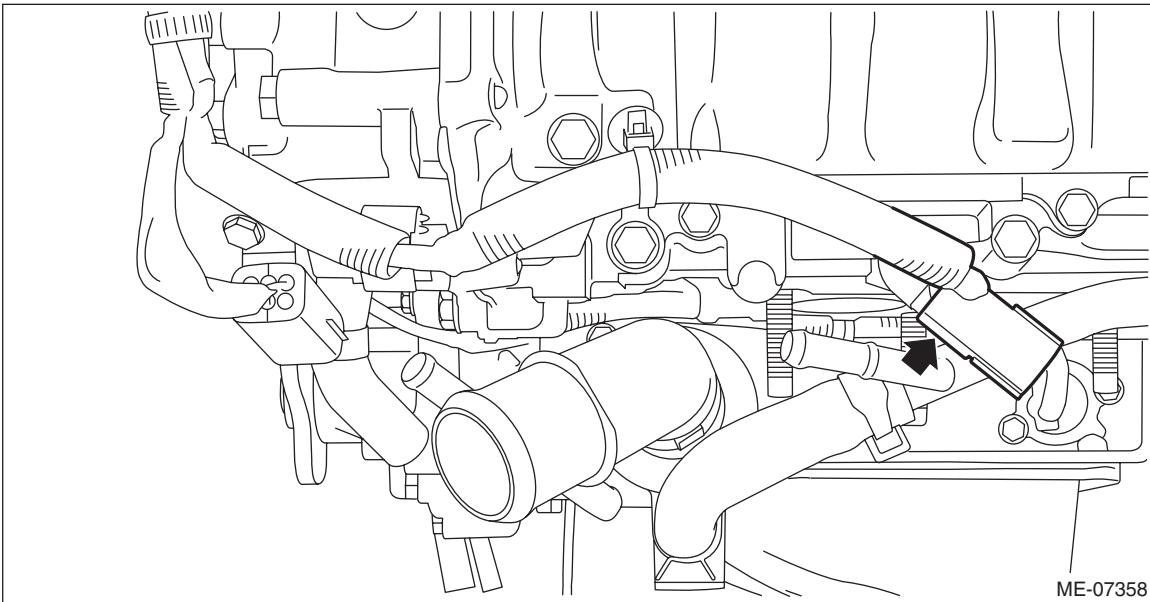
4) Set the rocker cover LH, and tighten the bolts in numerical order as shown in the figure.

Tightening torque:

6.4 N·m (0.7 kgf·m, 4.7 ft-lb)

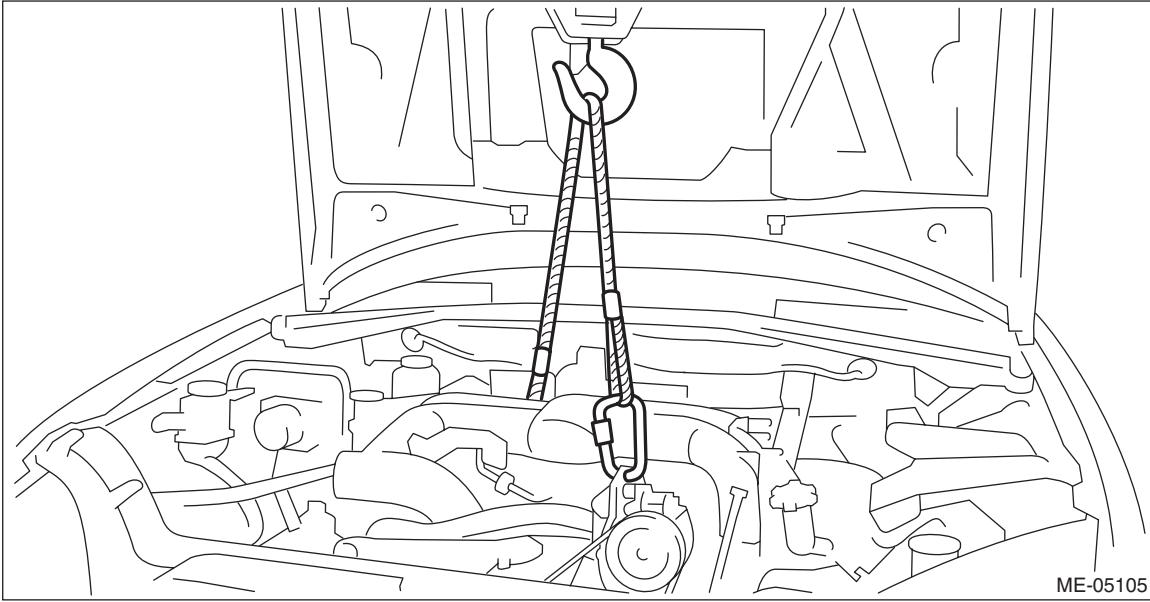


5) Connect the connector to the water pipe LH.



6) Install the #2 ignition coil and the #4 ignition coil. <Ref. to IG(w/o STI)-11, INSTALLATION, Ignition Coil.>
7) Install the side engine oil cooler pipe assembly. <Ref. to LU(w/o STI)-41, SIDE ENGINE OIL COOLER PIPE, INSTALLATION, Engine Oil Cooler Pipe.>
8) When working on the vehicle

(1) Support the engine with a lifting device and wire ropes.



Rocker Cover

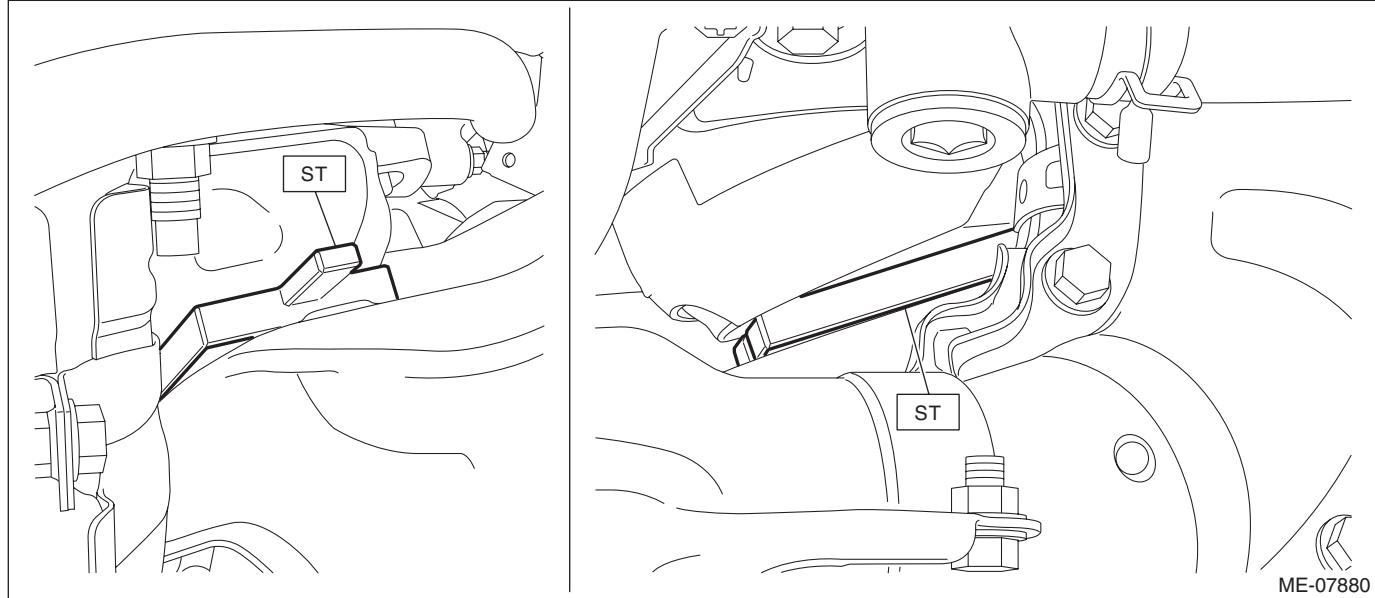
MECHANICAL

(2) Lift the engine a little, and remove the ST.

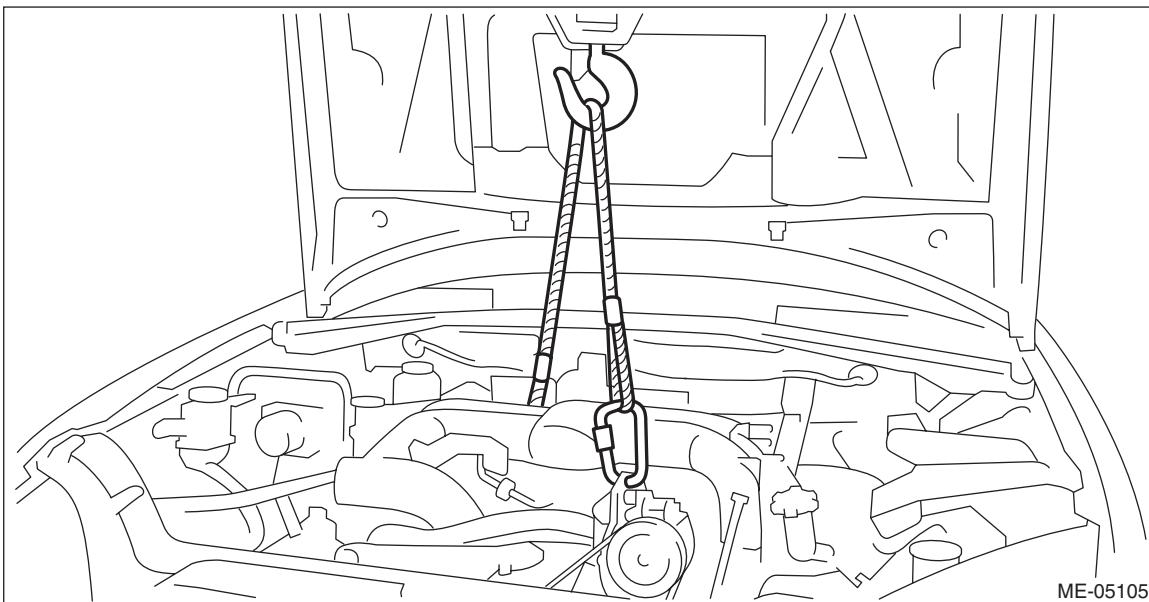
CAUTION:

When lifting up the engine, pay attention to the clearance of each part and be careful not to lift the engine too much, in order to prevent damaging the vehicle.

ST 18632AA030 STAND ASSY



(3) Lower the engine and remove the lifting device and wire ropes.

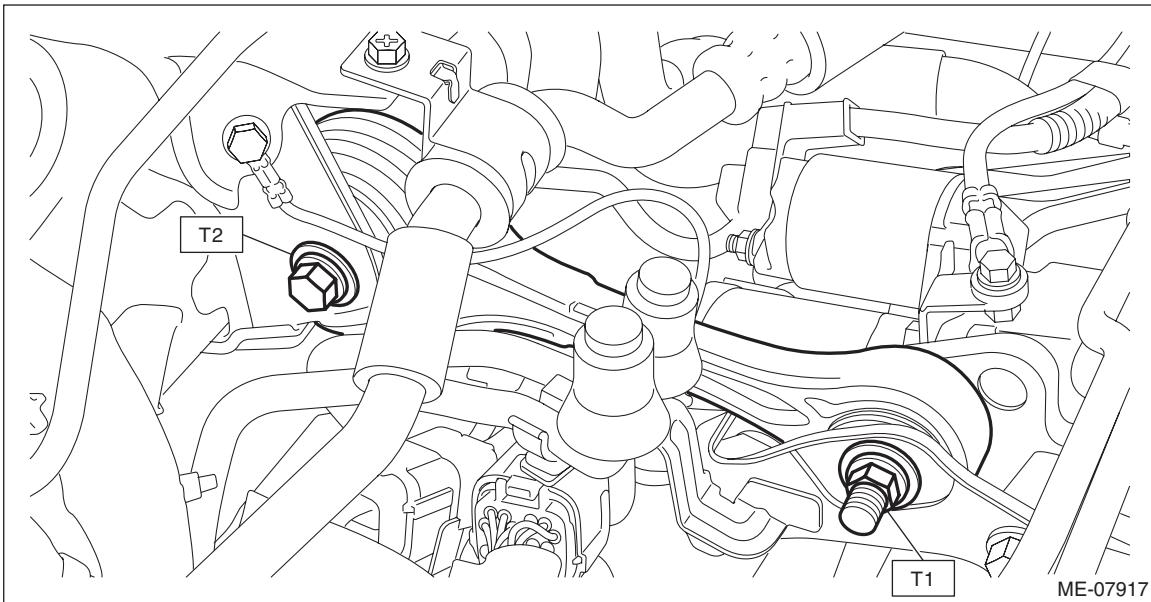


(4) Install the pitching stopper.

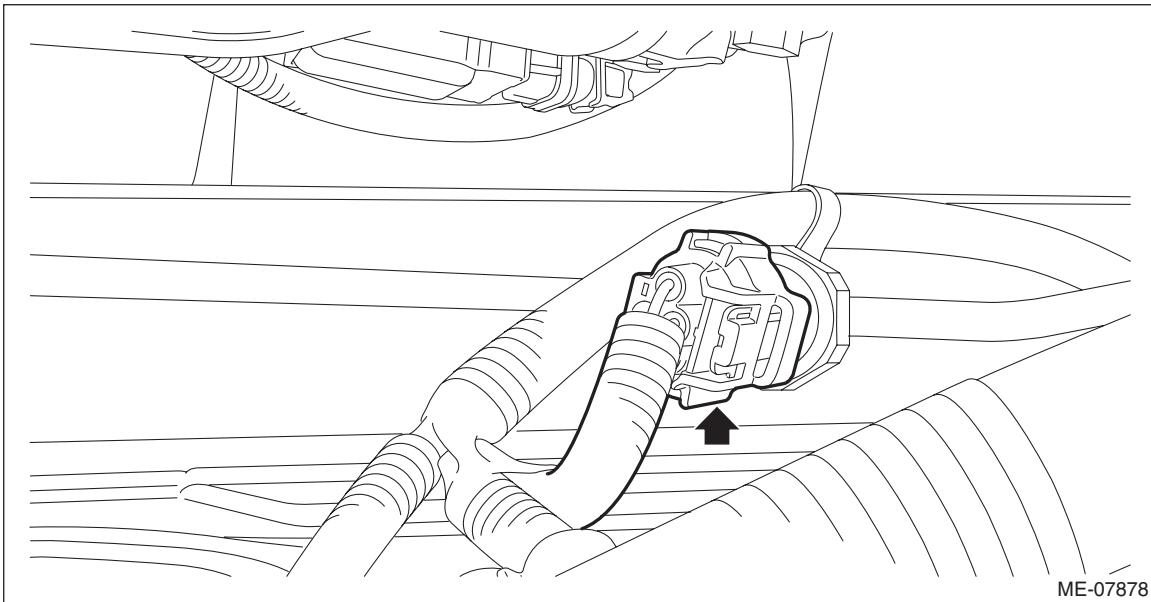
Tightening torque:

T1: 50 N·m (5.1 kgf-m, 36.9 ft-lb)

T2: 58 N·m (5.9 kgf-m, 42.8 ft-lb)



(5) Connect the connector to the pressure switch (triple pressure switch).



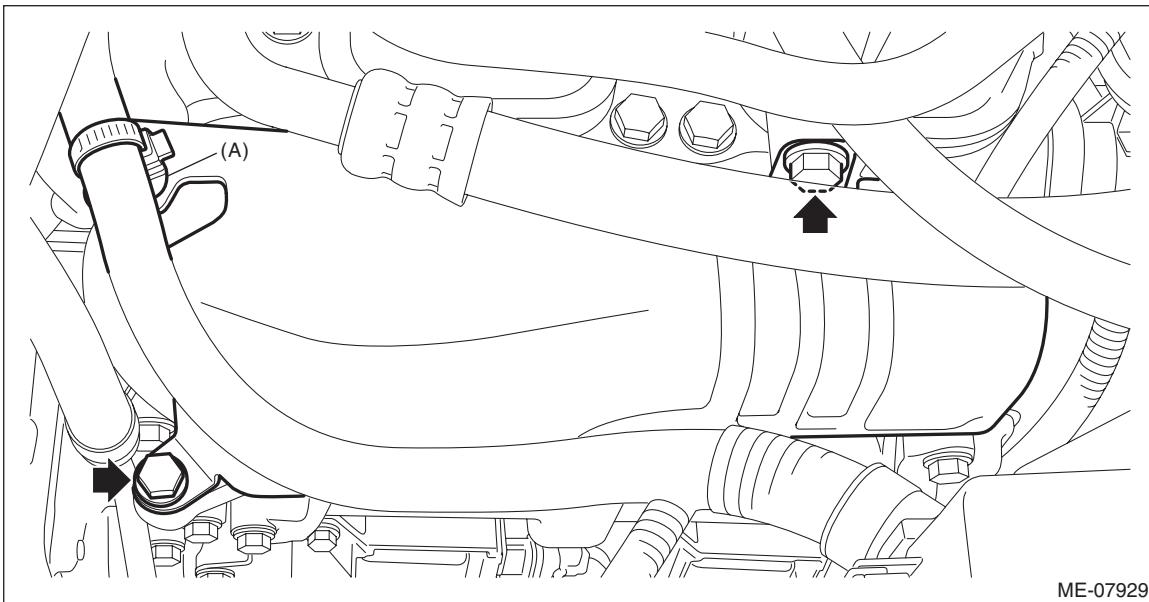
Rocker Cover

MECHANICAL

(6) Install the fuel pipe protector to the high-pressure fuel pump case and intake manifold, and secure the generator cord to the fuel pipe protector using the clip (A).

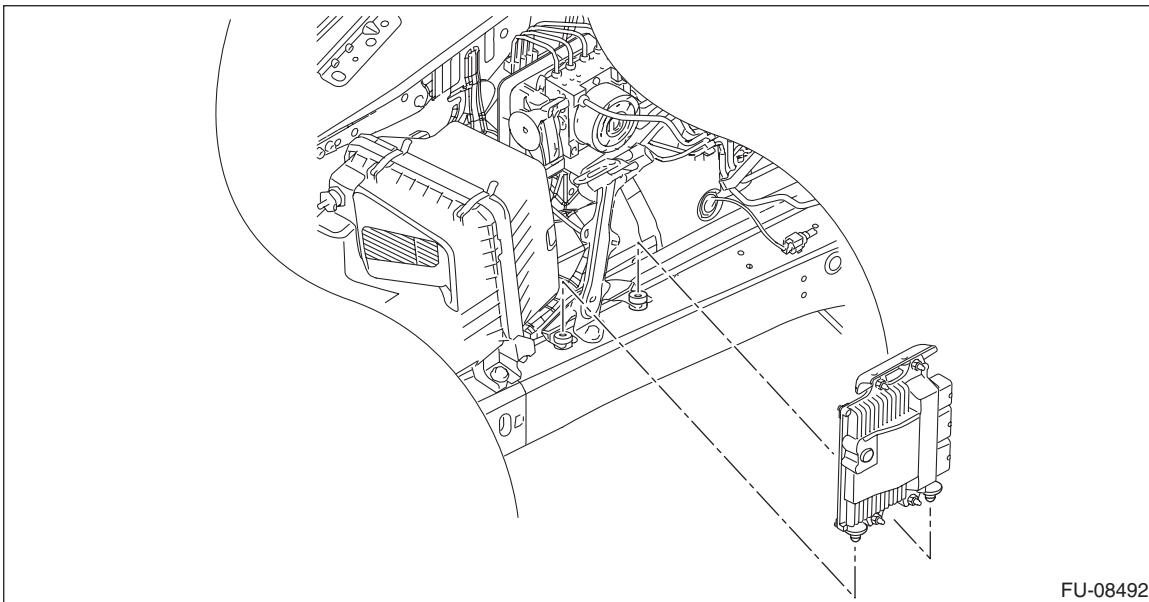
Tightening torque:

19 N·m (1.9 kgf·m, 14.0 ft-lb)



(7) Install the intercooler. <Ref. to IN(w/o STI)-41, INSTALLATION, Intercooler.>

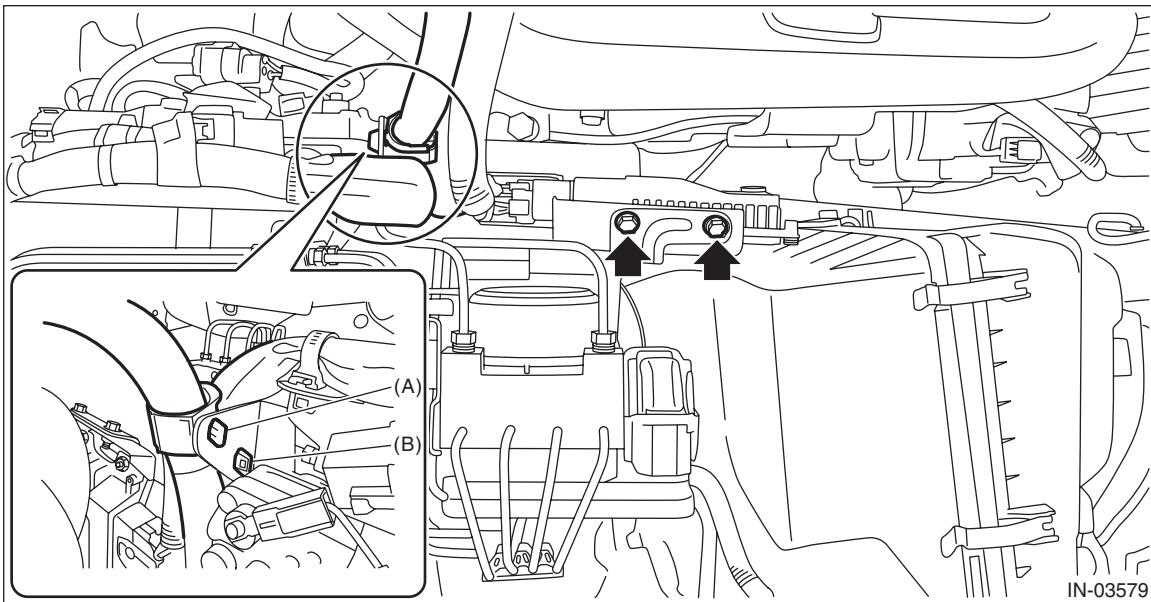
(8) Insert the engine control module (ECM) to the bracket.



(9) Install the bolt which secures the engine control module (ECM) to the bracket, and then secure the engine harness and bulkhead harness to the bracket with clips (A) and (B).

Tightening torque:

7.5 N·m (0.8 kgf·m, 5.5 ft-lb)



(10) Lift up the vehicle.

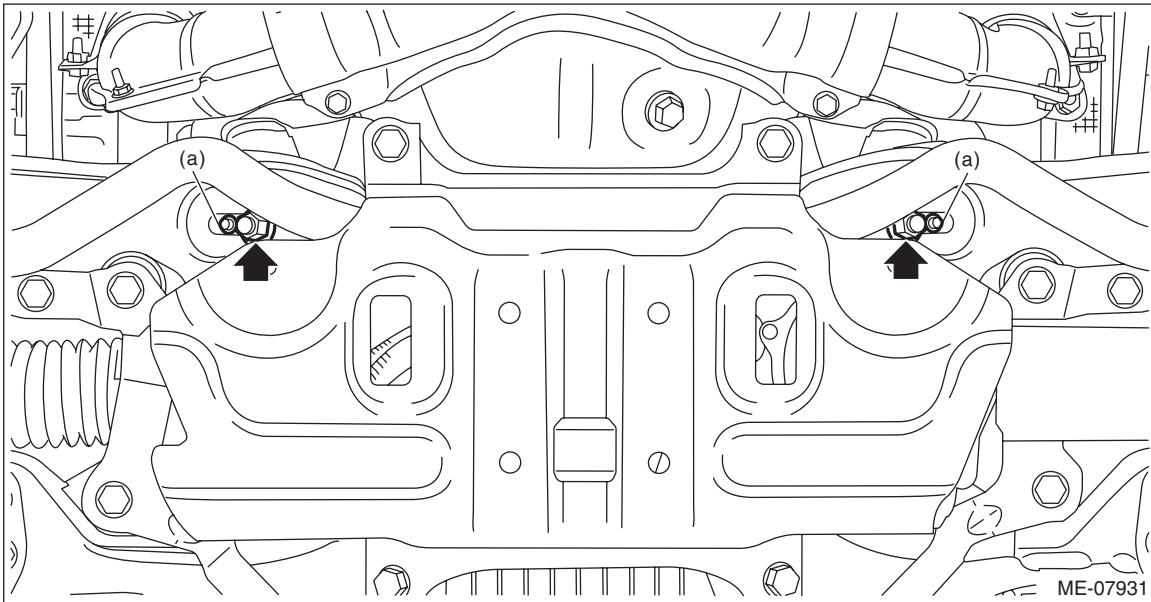
(11) Install the nuts which hold the engine mounting to the crossmember.

NOTE:

- Make sure that locators (a) of the engine mounting are securely inserted.
- Use a new nut.

Tightening torque:

60 N·m (6.1 kgf·m, 44.3 ft-lb)



(12) Install the center exhaust pipe. <Ref. to EX(w/o STI)-41, INSTALLATION, Center Exhaust Pipe.>

(13) Lower the vehicle.

(14) Install the air intake duct. <Ref. to IN(w/o STI)-22, INSTALLATION, Air Intake Duct.>

(15) Install the battery. <Ref. to SC(w/o STI)-50, INSTALLATION, Battery.>

(16) Fill engine coolant. <Ref. to CO(w/o STI)-14, FILLING OF ENGINE COOLANT, REPLACEMENT, Engine Coolant.>

Rocker Cover

MECHANICAL

- (17) Install the collector cover.
- (18) Set the front hood to the normal position. <Ref. to NT-20, FRONT HOOD DAMPER STAY, NOTE, Note.>
- (19) Install the striker - front hood. <Ref. to EB-15, ASSEMBLY, Front Hood.>
- (20) Close the front hood.

C: INSPECTION

Check that the rocker cover does not have deformation, cracks and any other damage.