

7. Radiator

A: REMOVAL

CAUTION:

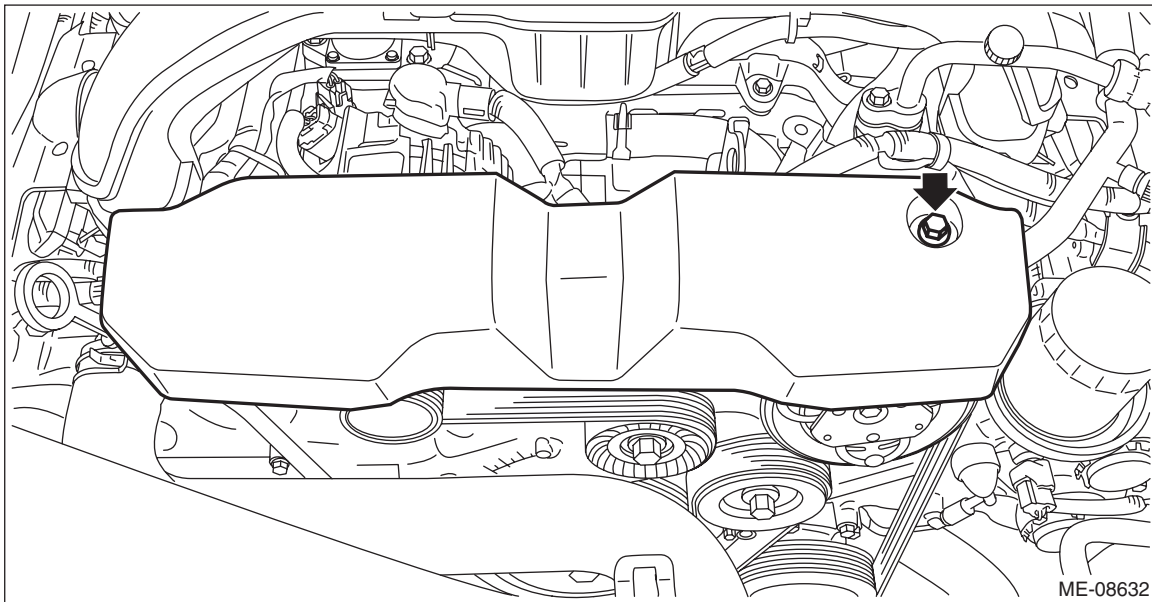
The radiator is pressurized when the engine and radiator are hot. Wait until engine and radiator cool down before working on the radiator.

1) Disconnect the ground cable from battery. <Ref. to NT-5, BATTERY, NOTE, Note.>

NOTE:

For the 12 volt engine restart battery of HEV model, disconnect the ground terminal from 12V engine restart battery sensor.

2) Remove the V-belt covers. (Gasoline engine model)



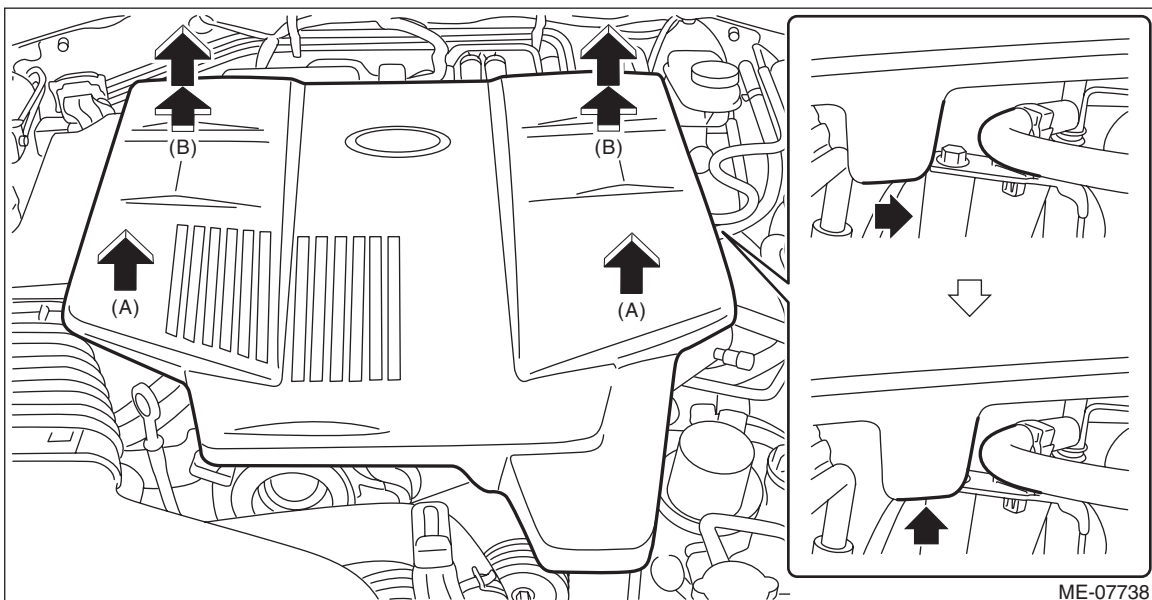
3) Remove the collector cover. (HEV model)

(1) Carefully pull up the front of collector cover at two positions (A).

(2) Carefully pull up the rear of collector cover at two positions (B) while moving it backward.

NOTE:

Be careful not to contact the fuel delivery tube when moving the collector cover rearward.

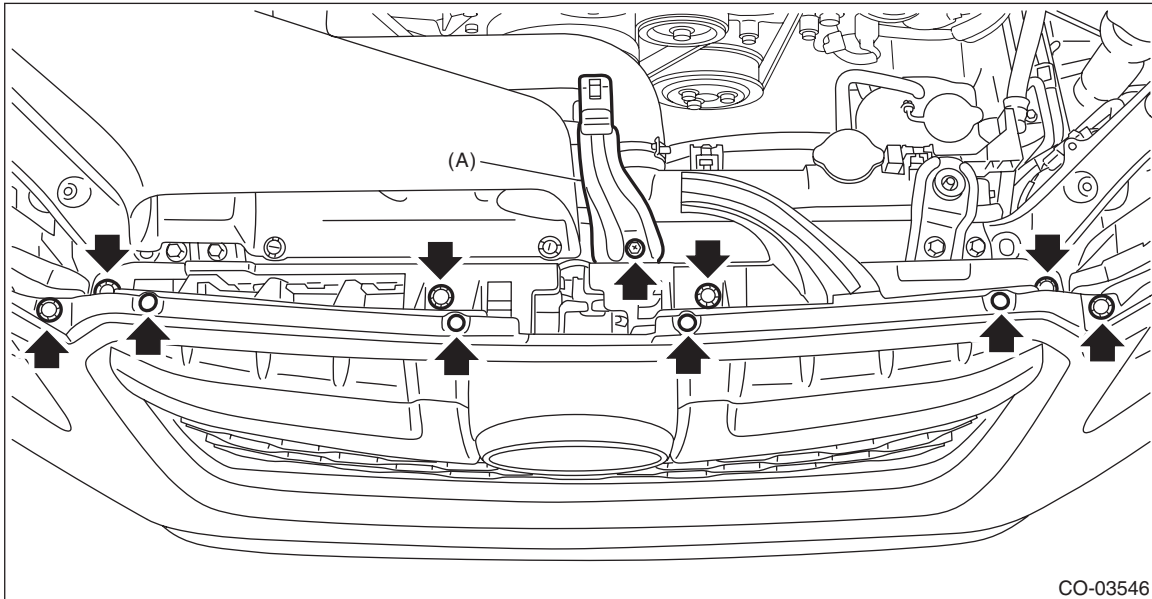


4) Remove the grille bracket.

NOTE:

Remove the ten clips.

5) Remove the bolts, and remove the bracket - plate (A).

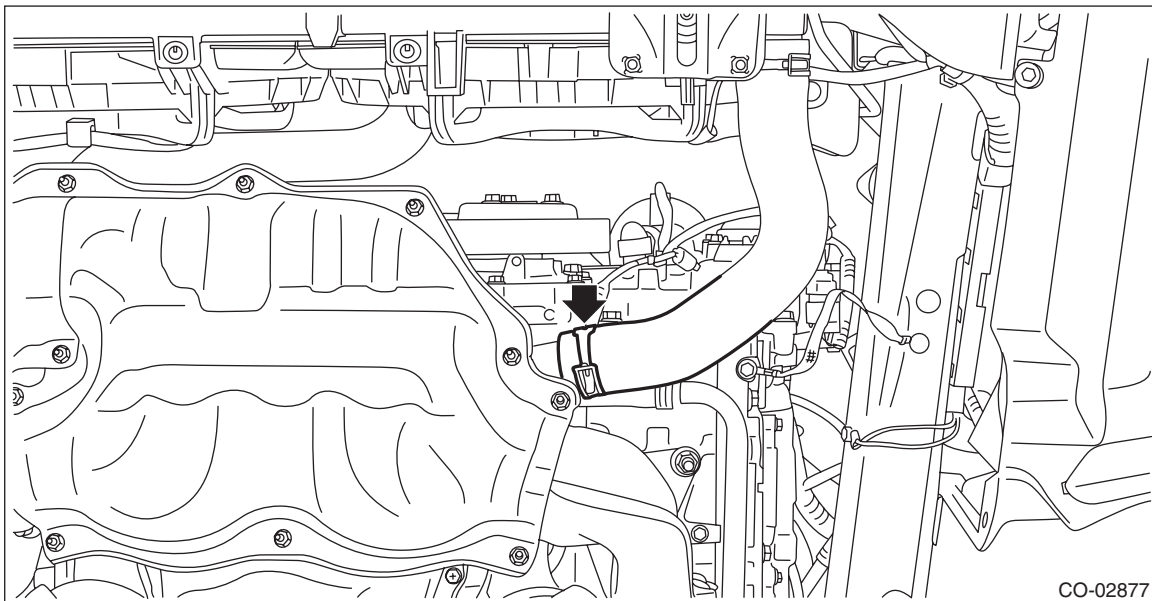


6) Lift up the vehicle.

7) Remove the under cover. <Ref. to EI-32, REMOVAL, Front Under Cover.>

8) Drain engine coolant. <Ref. to CO(H4DO(w/o HEV))-16, DRAINING OF ENGINE COOLANT, REPLACEMENT, Engine Coolant.>

9) Disconnect the radiator outlet hose from thermostat cover.



10) Lower the vehicle.

11) Remove the air intake duct. <Ref. to IN(H4DO(w/o HEV))-13, REMOVAL, Air Intake Duct.> <Ref. to IN(H4DO(HEV))-15, REMOVAL, Air Intake Duct.>

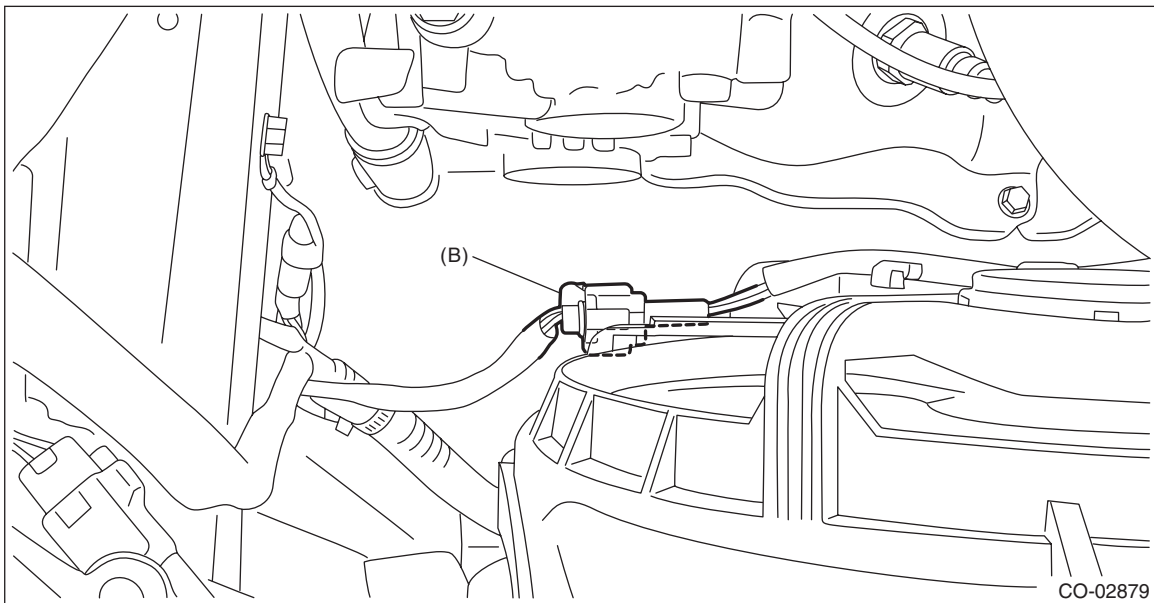
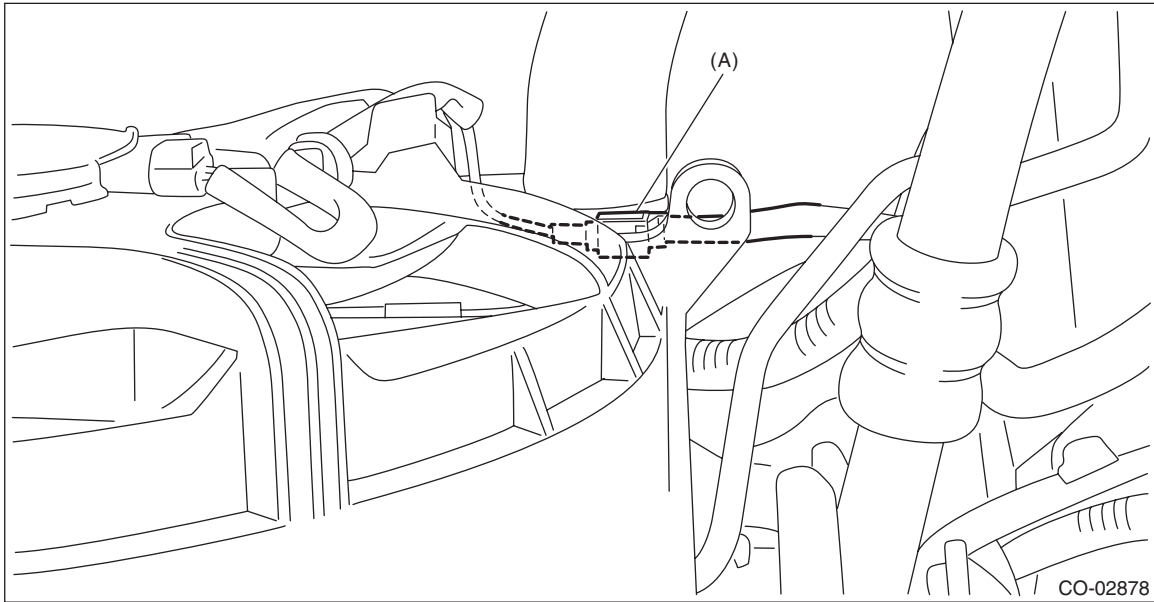
12) Remove the air intake boot No. 1. (HEV model) <Ref. to IN(H4DO(HEV))-10, AIR INTAKE BOOT NO. 1, REMOVAL, Air Intake Boot.>

13) Remove the reservoir tank. <Ref. to CO(H4DO(w/o HEV))-97, REMOVAL, Reservoir Tank.>

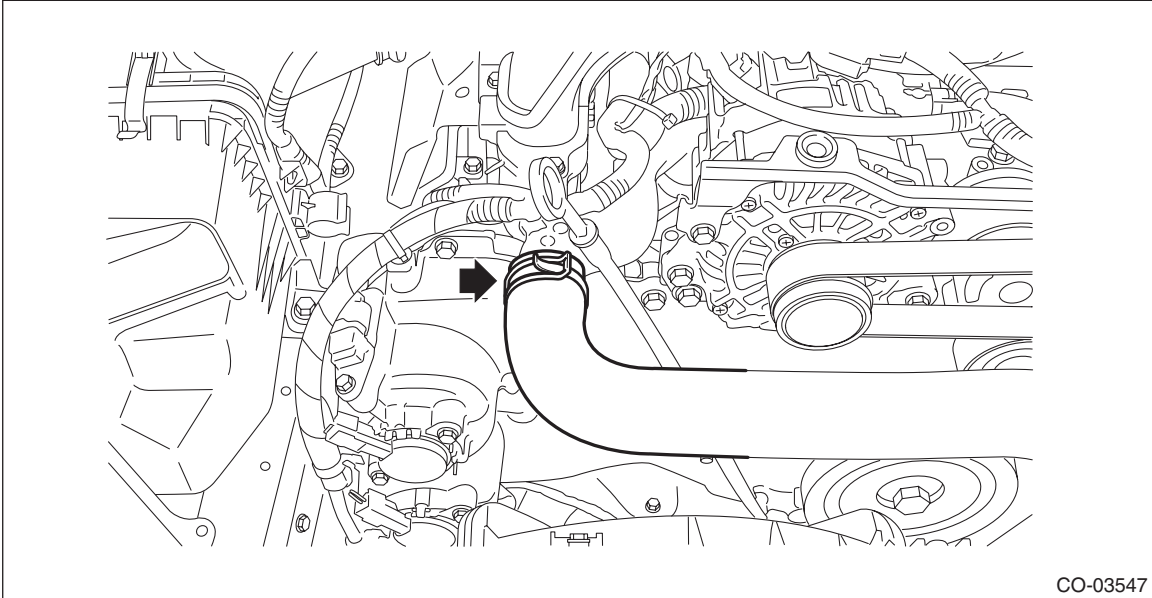
Radiator

COOLING

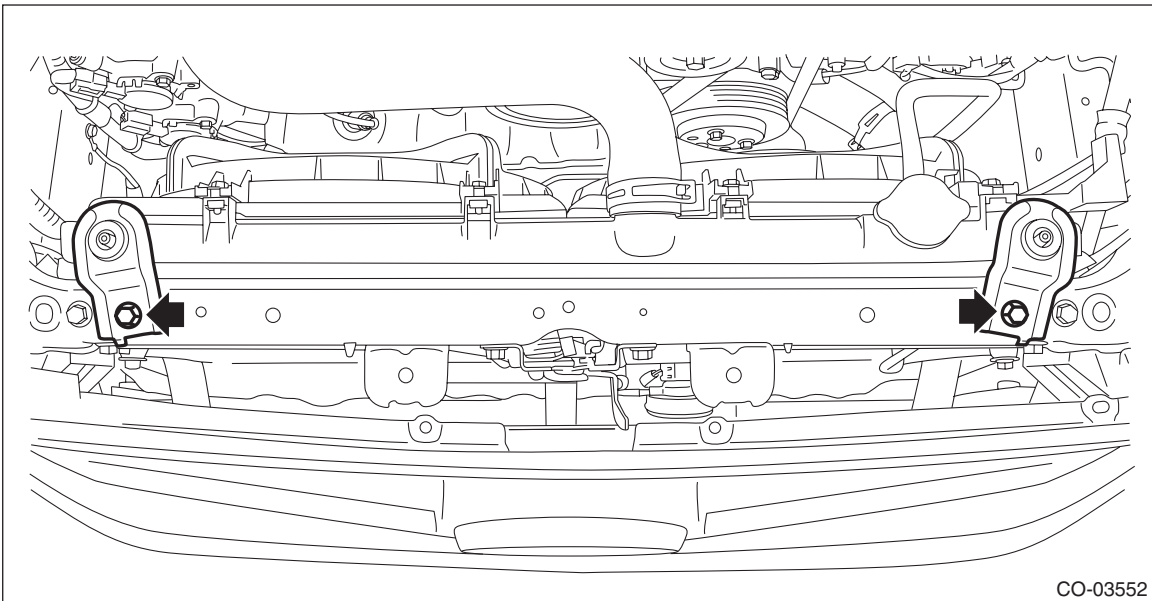
14) Disconnect the connector (A) from the main fan motor assembly and the connector (B) from the sub fan motor assembly.



- 15) Disconnect the radiator inlet hose from the water pipe assembly.



- 16) Remove the radiator upper brackets.

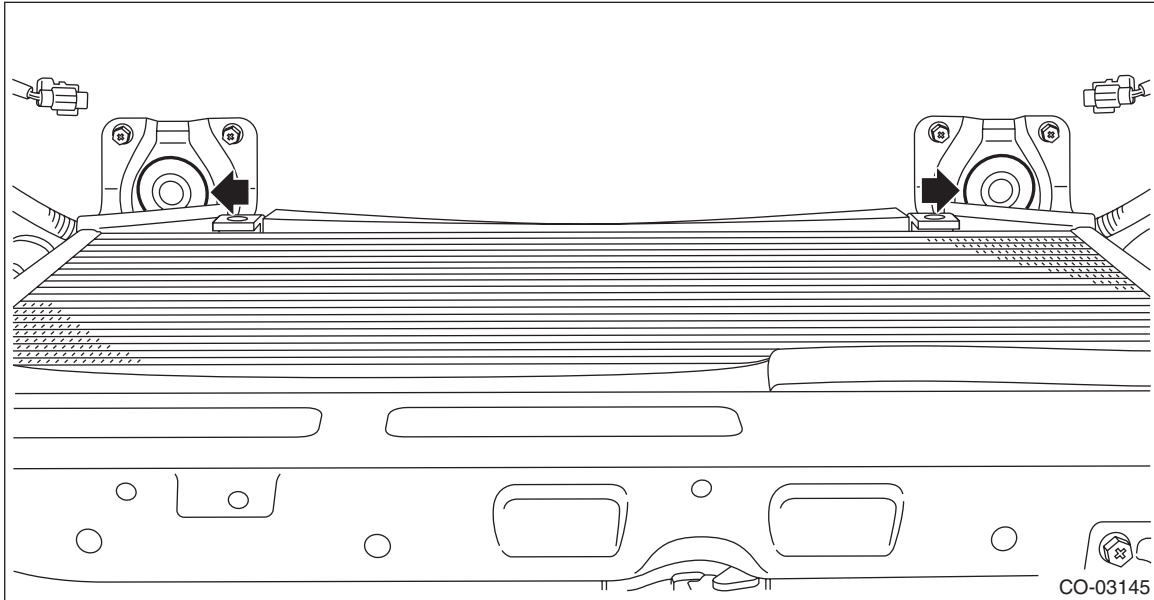


- 17) Remove the radiator from vehicle.

Radiator

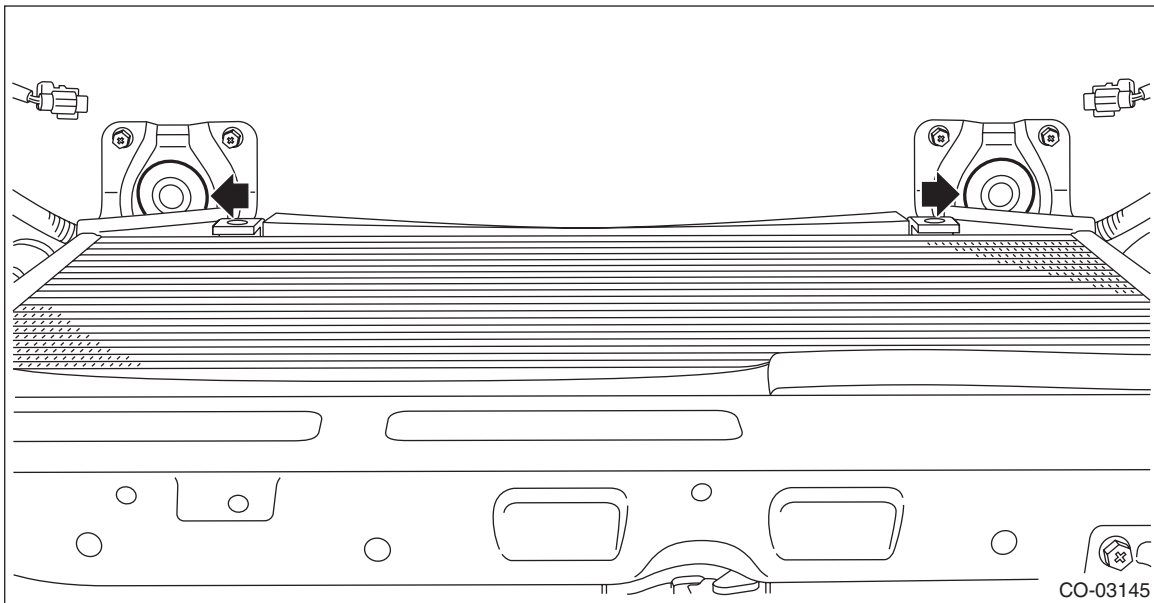
COOLING

18) Remove the radiator lower cushion from the radiator lower bracket.



B: INSTALLATION

1) Attach the radiator lower cushion to the radiator lower bracket.



2) Install the radiator to vehicle.

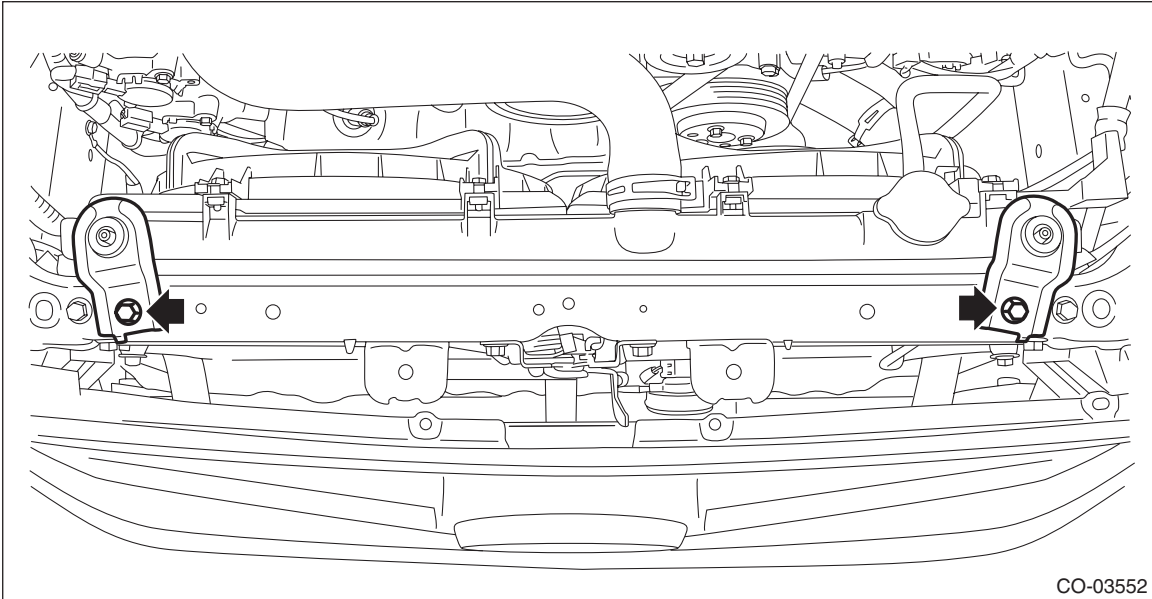
NOTE:

Make pins on the lower side of radiator be fitted into the radiator lower cushions.

3) Install the radiator upper brackets.

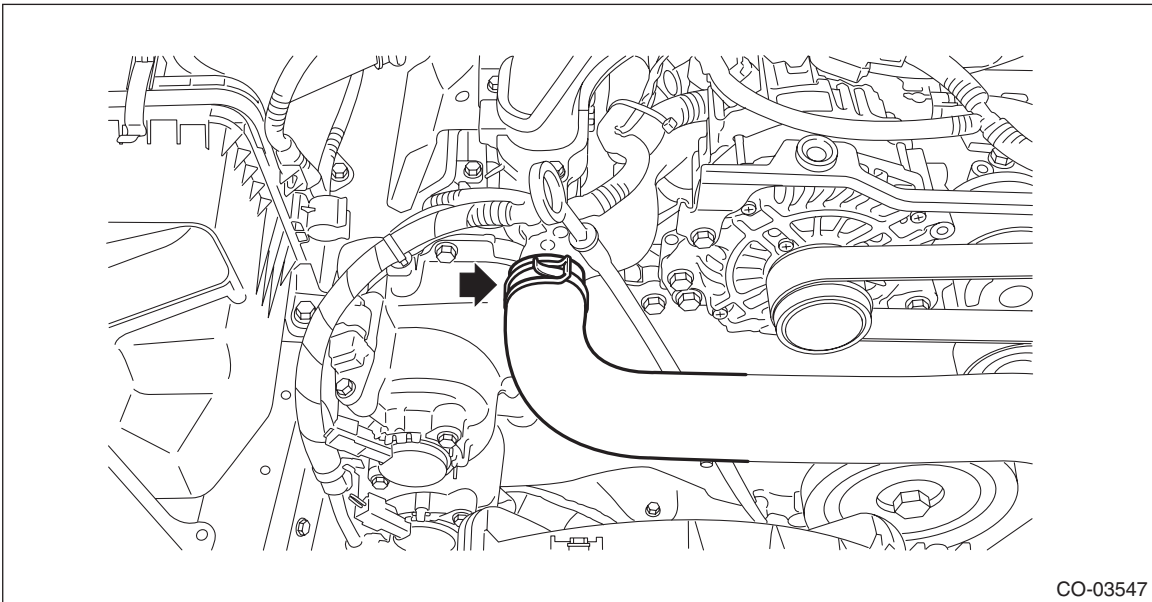
Tightening torque:

12 N·m (1.2 kgf-m, 8.9 ft-lb)



CO-03552

4) Connect the radiator inlet hose to the water pipe assembly.

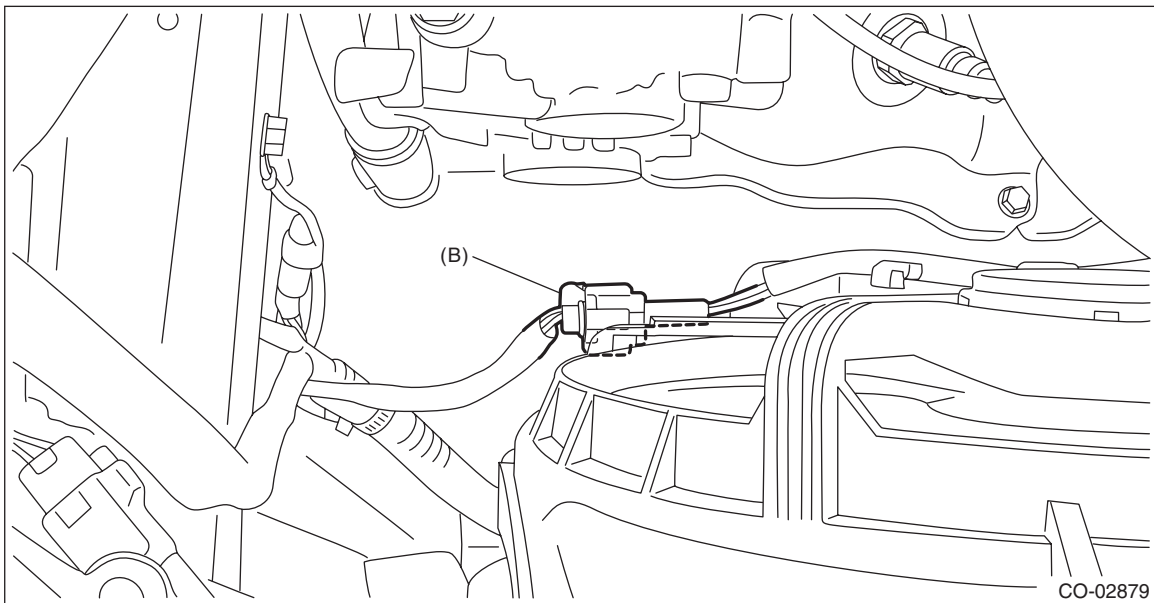
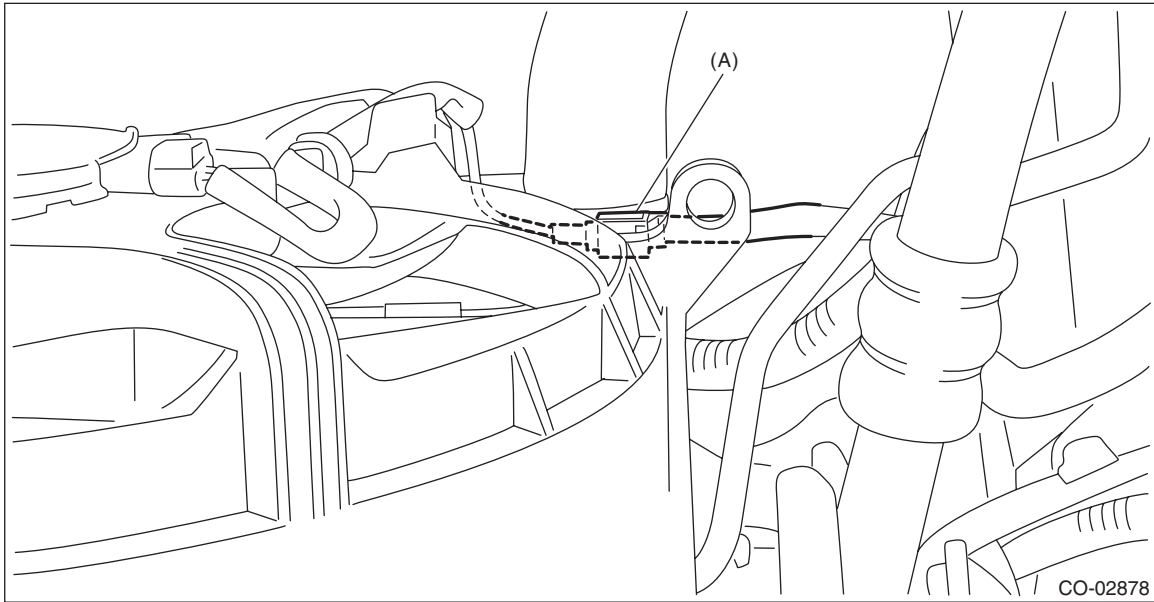


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5) Connect the connector (A) to the main fan motor assembly and the connector (B) to the sub fan motor assembly.



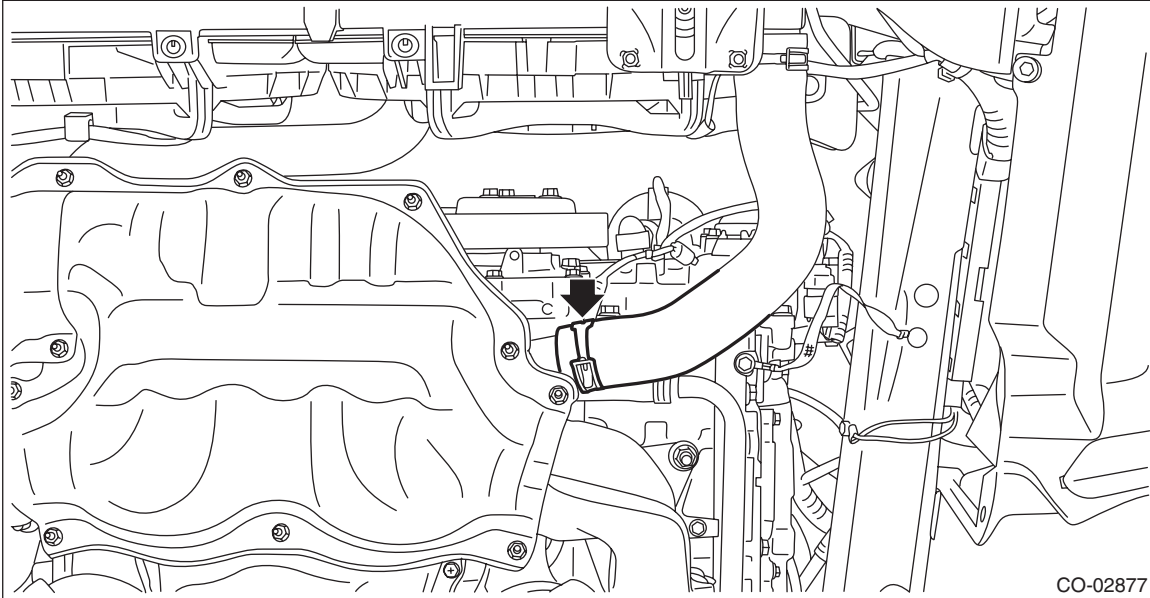
6) Install the reservoir tank. <Ref. to CO(H4DO(w/o HEV))-97, INSTALLATION, Reservoir Tank.>

7) Install the air intake boot No. 1. (HEV model) <Ref. to IN(H4DO(HEV))-13, AIR INTAKE BOOT NO. 1, INSTALLATION, Air Intake Boot.>

8) Install the air intake duct. <Ref. to IN(H4DO(w/o HEV))-13, INSTALLATION, Air Intake Duct.> <Ref. to IN(H4DO(HEV))-15, INSTALLATION, Air Intake Duct.>

9) Lift up the vehicle.

- 10) Connect the radiator outlet hose to thermostat cover.

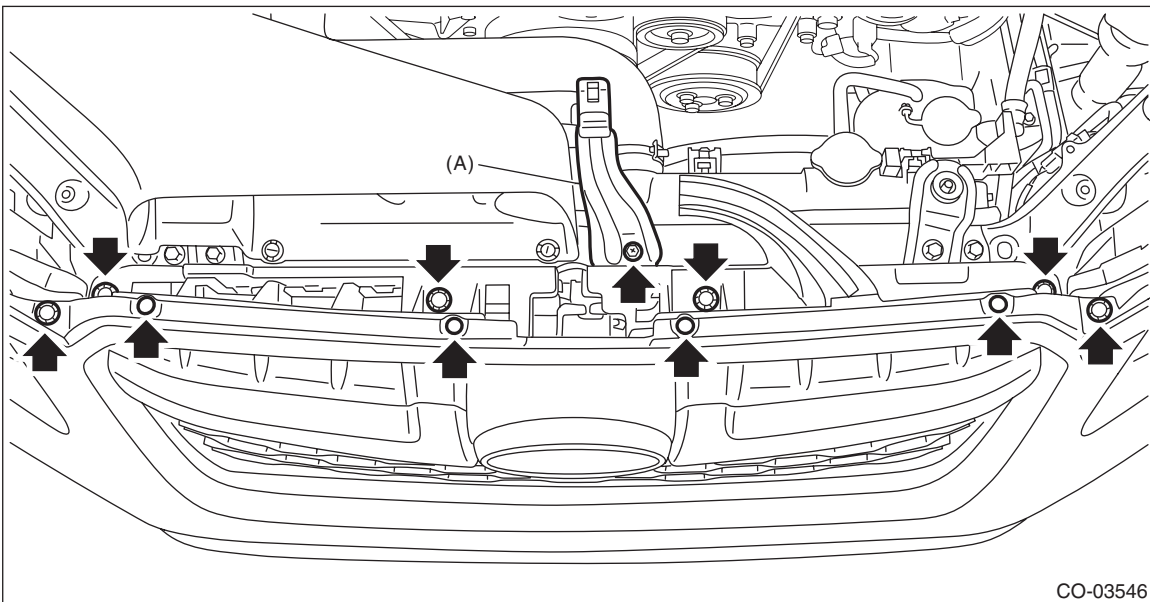


- 11) Install the under cover. <Ref. to EI-32, INSTALLATION, Front Under Cover.>
 12) Lower the vehicle.
 13) Attach the bracket - plate (A).

Tightening torque:

7.5 N·m (0.8 kgf-m, 5.5 ft-lb)

- 14) Attach the grille bracket.



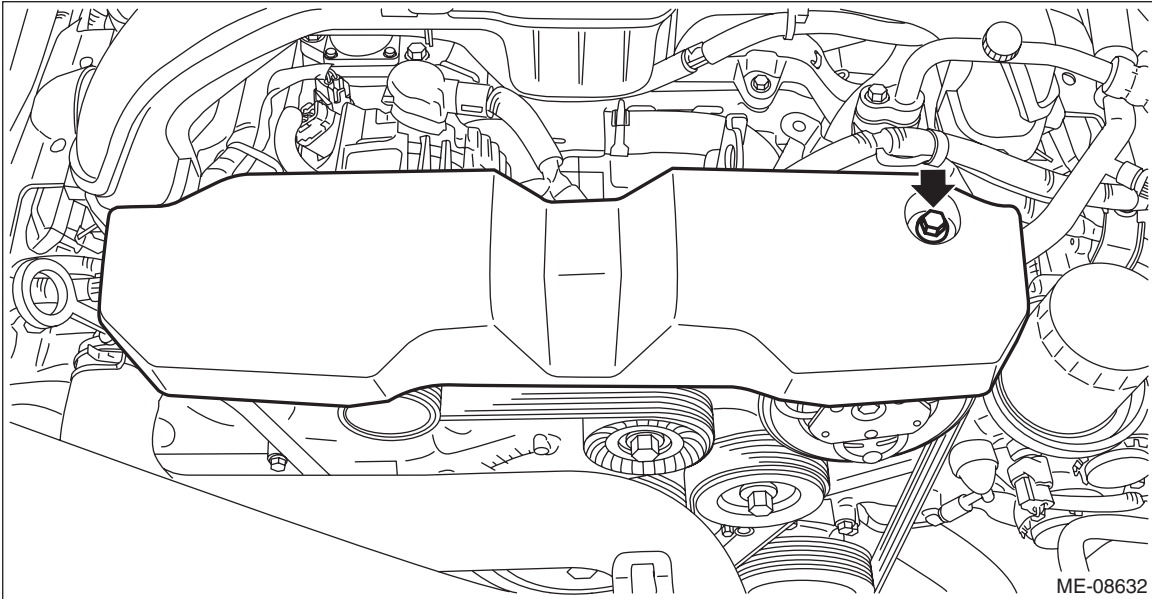
Radiator

COOLING

15) Install the V-belt cover. (Gasoline engine model)

Tightening torque:

6.4 N·m (0.7 kgf-m, 4.7 ft-lb)



16) Install the collector cover. (HEV model)

17) Connect the battery ground terminal. <Ref. to NT-5, BATTERY, NOTE, Note.>

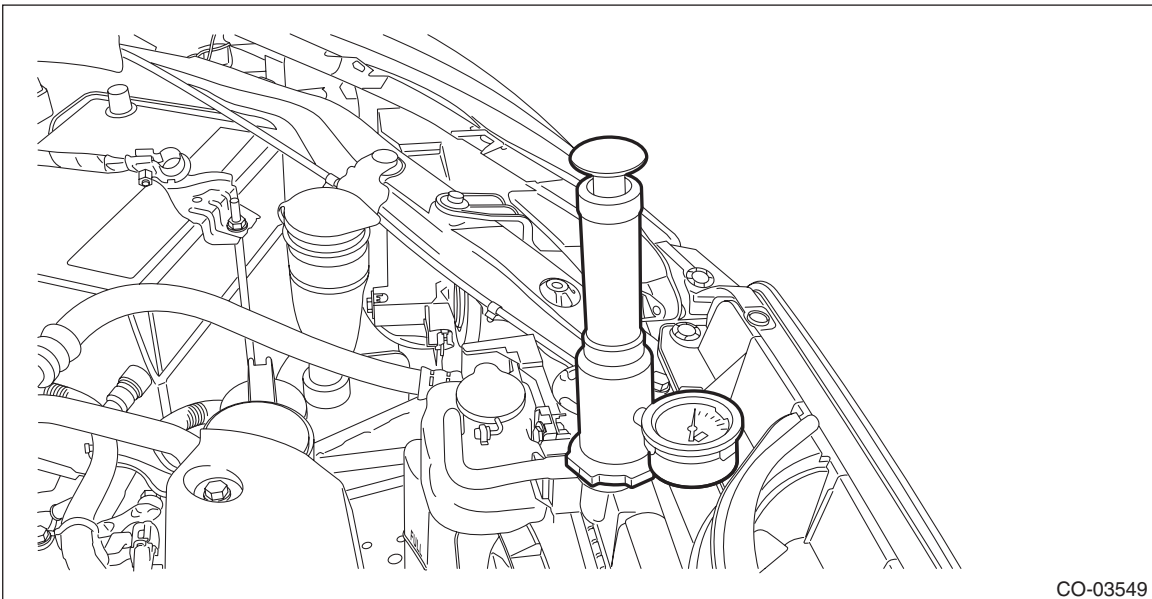
18) Fill engine coolant. <Ref. to CO(H4DO(w/o HEV))-16, FILLING OF ENGINE COOLANT, REPLACEMENT, Engine Coolant.>

C: INSPECTION

1) Check that the radiator does not have deformation, cracks or damage.

2) Check that the hose has no cracks, damage or loose part.

3) Remove the radiator cap, fill the radiator with engine coolant, and then install the radiator cap tester to the filler neck of radiator.



4) Apply a pressure of 157 kPa (1.6 kg/cm², 23 psi) to the radiator, and check the following items.

CAUTION:

- **Engine should be turned off.**
- **Wipe engine coolant from check points in advance.**
- **Be careful not to deform the filler neck of radiator when installing and removing the radiator cap tester.**
- **Be careful of engine coolant from spurting out when removing the radiator cap tester.**
- Leakage from the radiator or its vicinity
- Leakage from the hose or its connections