

5. Battery Cable Assembly

A: REMOVAL

1. BATTERY CABLE ASSY

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

NOTE:

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

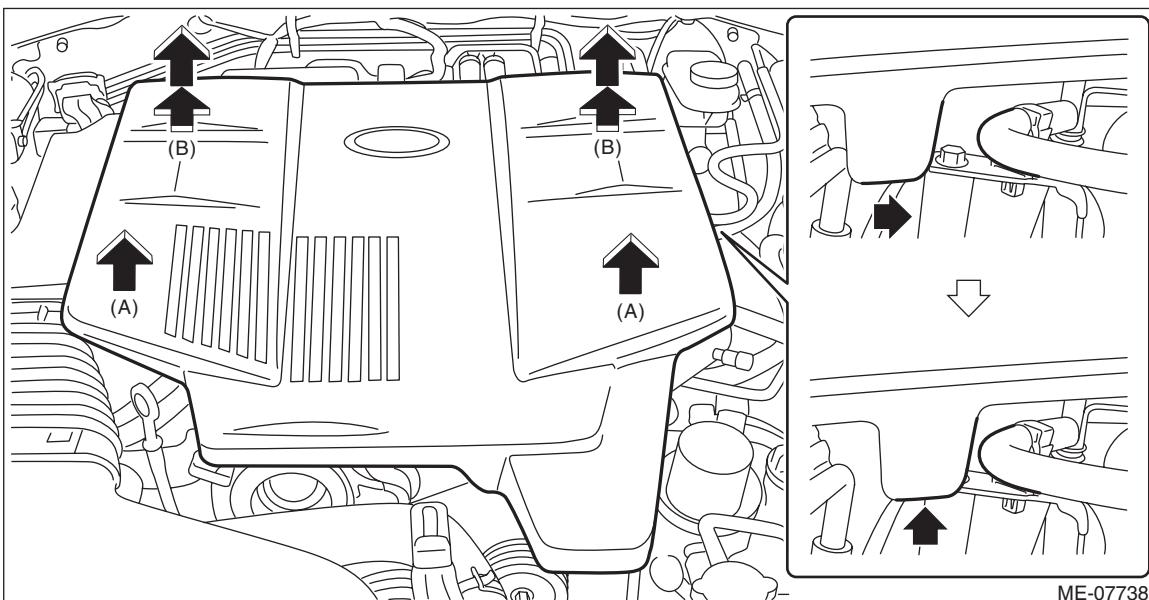
2) Remove the collector cover.

(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:

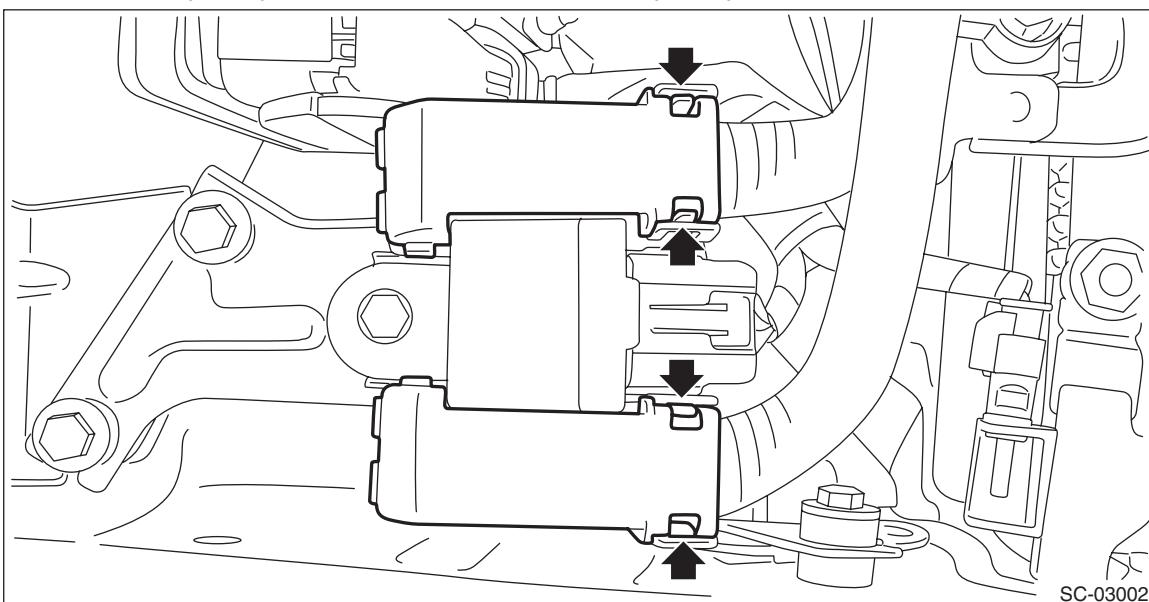
Be careful not to contact the fuel delivery tube when moving the collector cover rearward.



3) Remove the air intake duct. <Ref. to IN(H4DO(HEV))-15, REMOVAL, Air Intake Duct.>

4) Remove the intake duct. <Ref. to IN(H4DO(HEV))-16, REMOVAL, Intake Duct.>

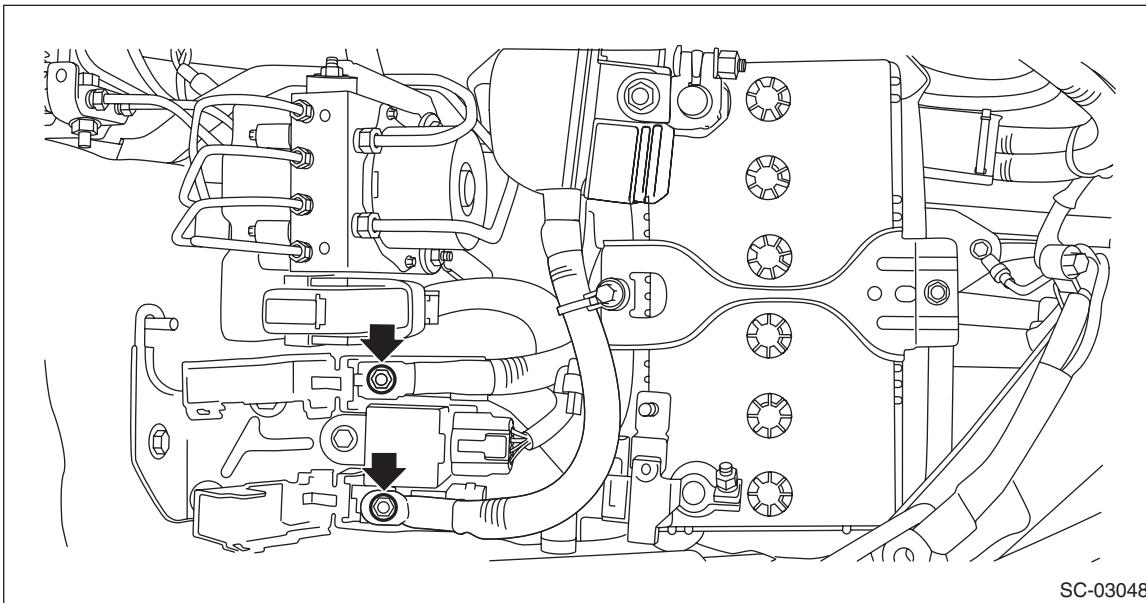
5) Open the 12V battery relay cover RH and the 12V battery relay cover LH.



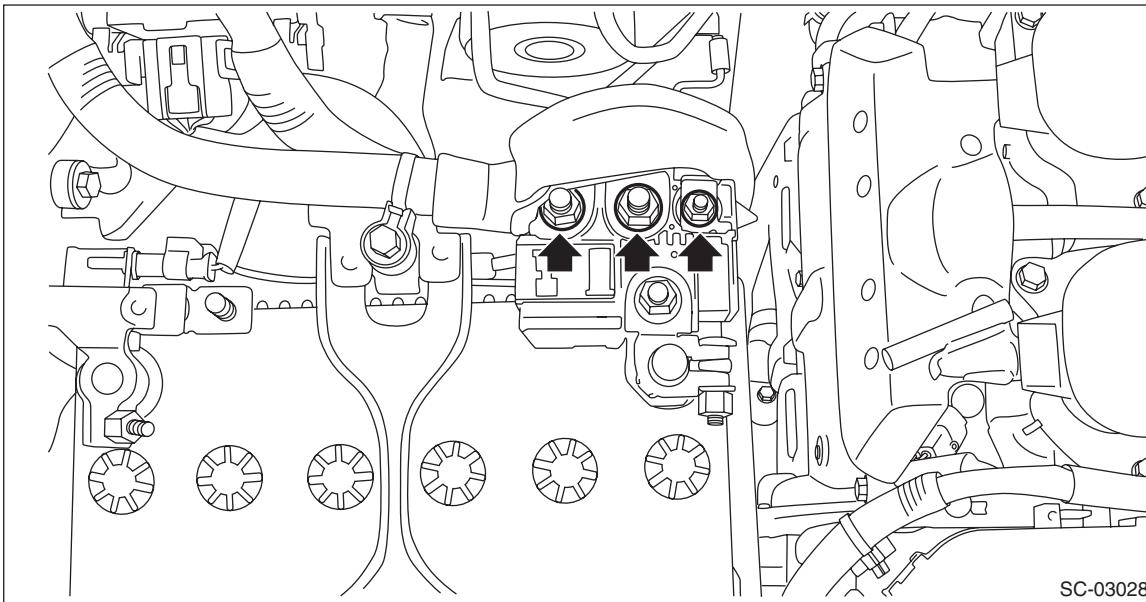
Battery Cable Assembly

STARTING/CHARGING SYSTEMS

6) Remove the nuts fastening the battery cable assembly from the 12V battery relay terminal, and remove the battery cable assembly.



7) Remove the nuts fastening the battery cable assembly to the slow blow fuse (12 volt engine restart battery), and remove the battery cable assembly.

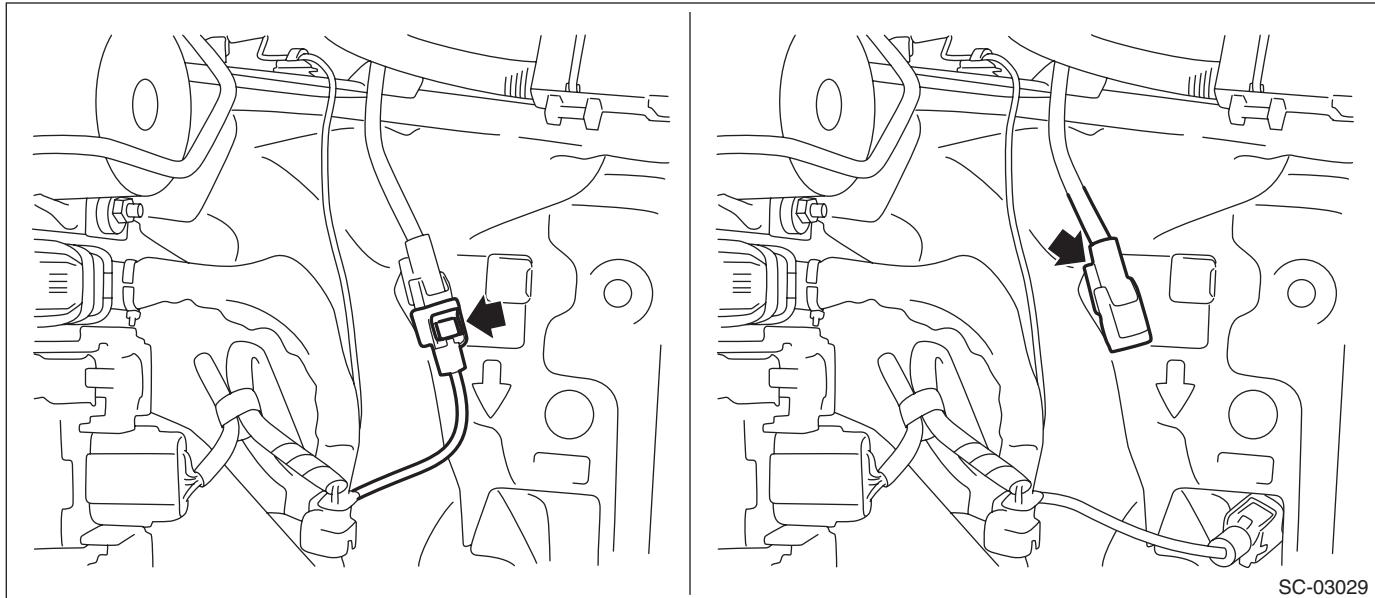


8) Remove the 12 volt engine restart battery. <Ref. to SC(H4DO(HEV))-40, 12 VOLT ENGINE RESTART BATTERY, REMOVAL, Battery.>

Battery Cable Assembly

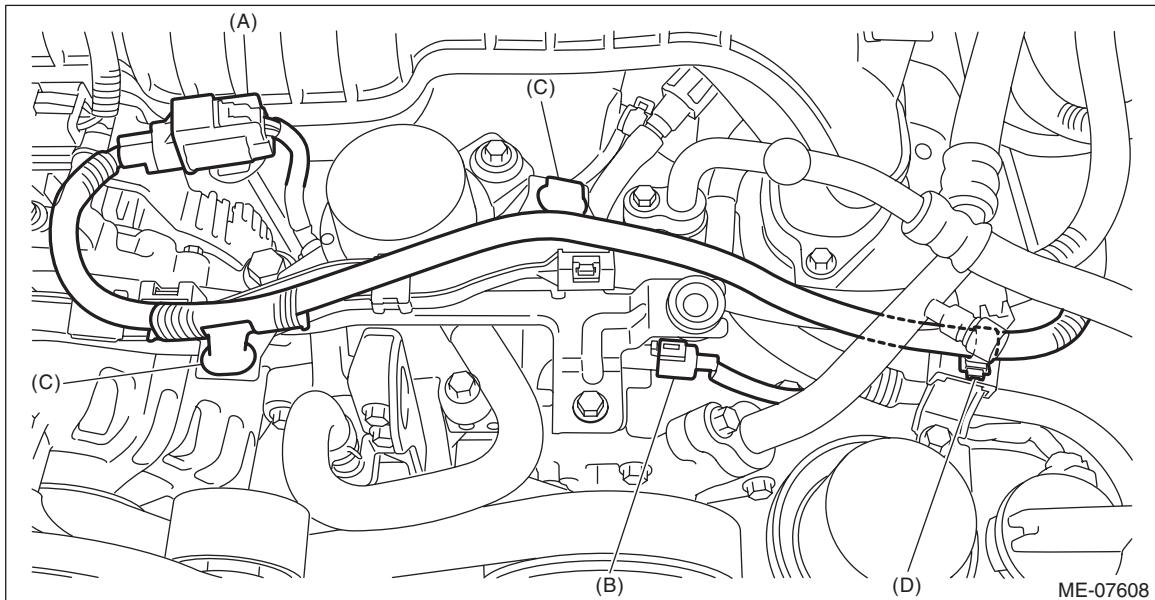
STARTING/CHARGING SYSTEMS

9) Disconnect the battery cable assembly connector from the bulk head wiring harness, and remove the battery cable assembly from the clip.



10) Disconnect the connector (A) from the brake vacuum pump, and disconnect the connector (B) from the A/C compressor.

11) Remove the clip (C) and the clip (D) securing the harness to the battery cable assembly, and move the harness to the left side wheel apron.

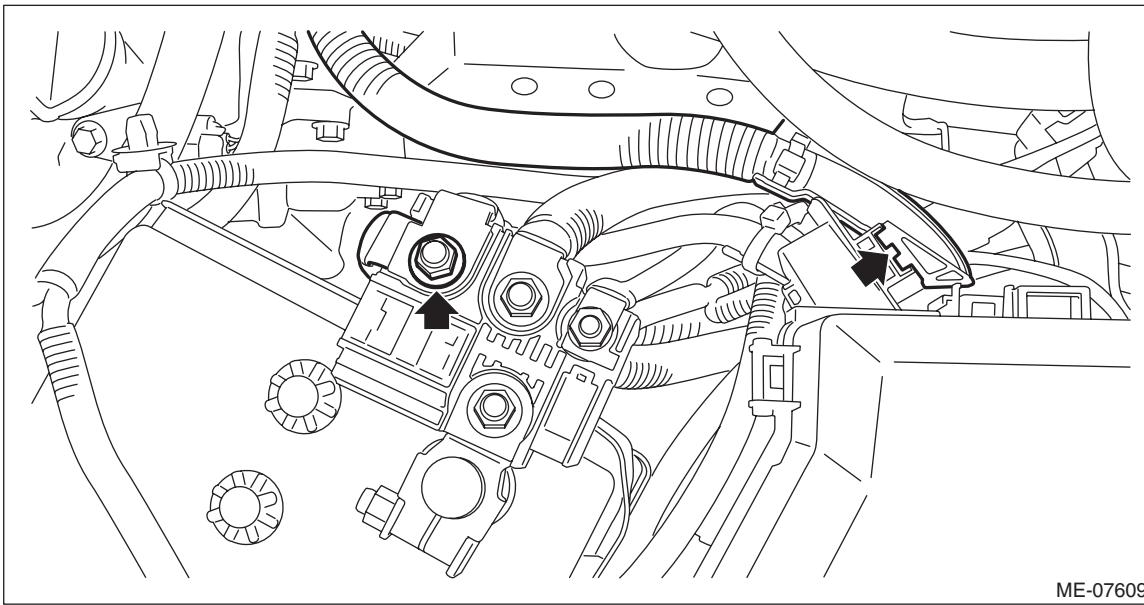


12) Remove the terminal boot from the positive terminal of the 12 volt auxiliary battery.

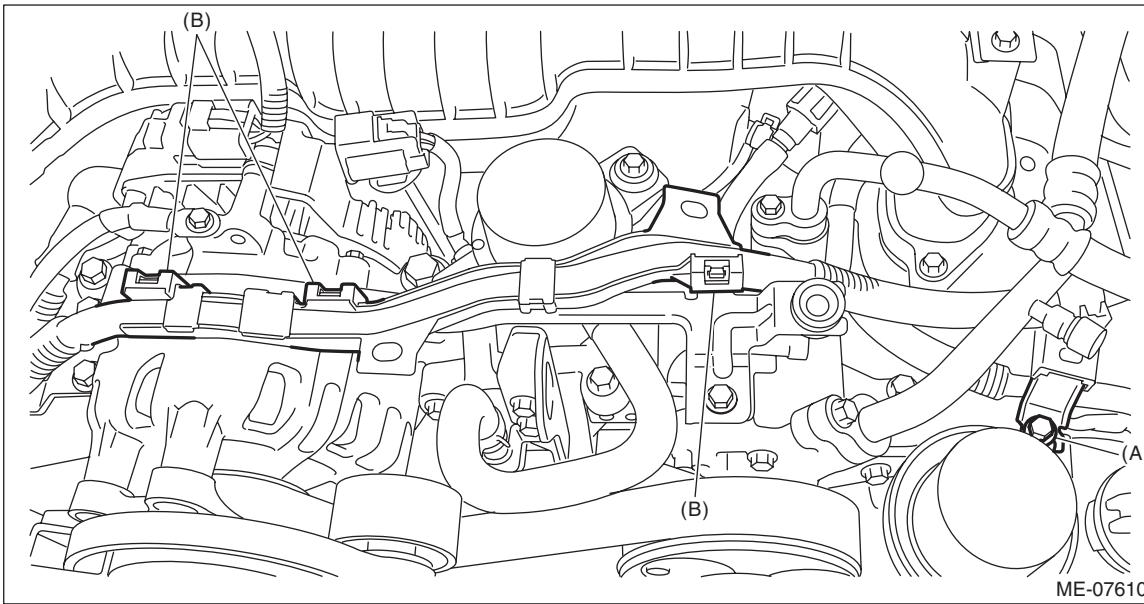
Battery Cable Assembly

STARTING/CHARGING SYSTEMS

13) Remove the nuts fastening the battery cable assembly to the slow blow fuse (12 volt auxiliary battery), and remove the battery cable assembly from the main fuse box.



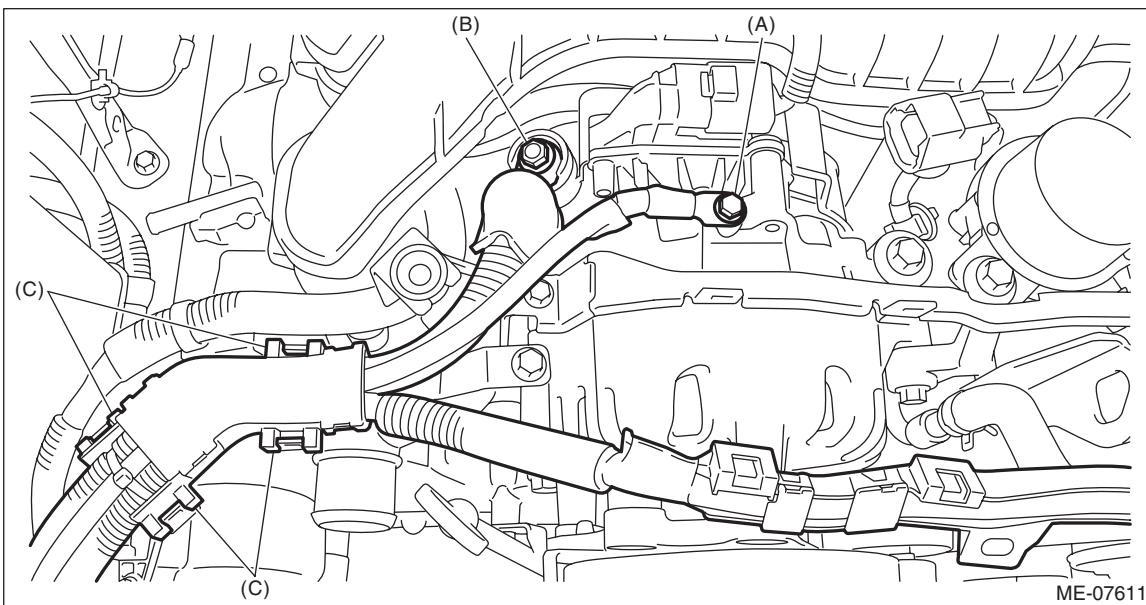
14) Remove the bolt (A) securing the battery cable stay to the chain cover, and remove the clip (B) securing the battery cable assembly to the collector cover bracket.



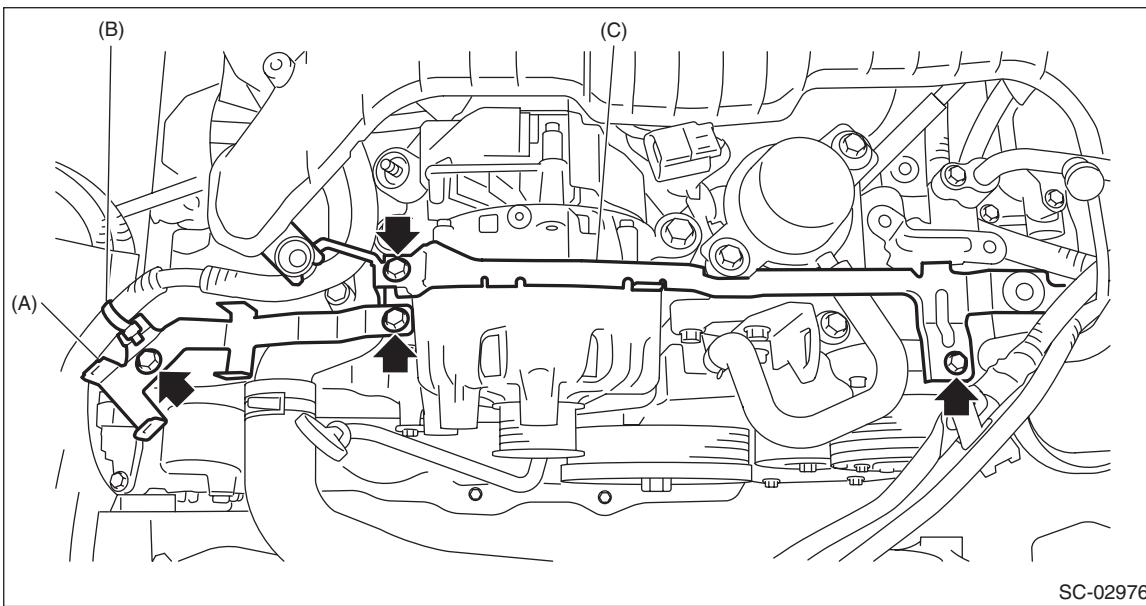
Battery Cable Assembly

STARTING/CHARGING SYSTEMS

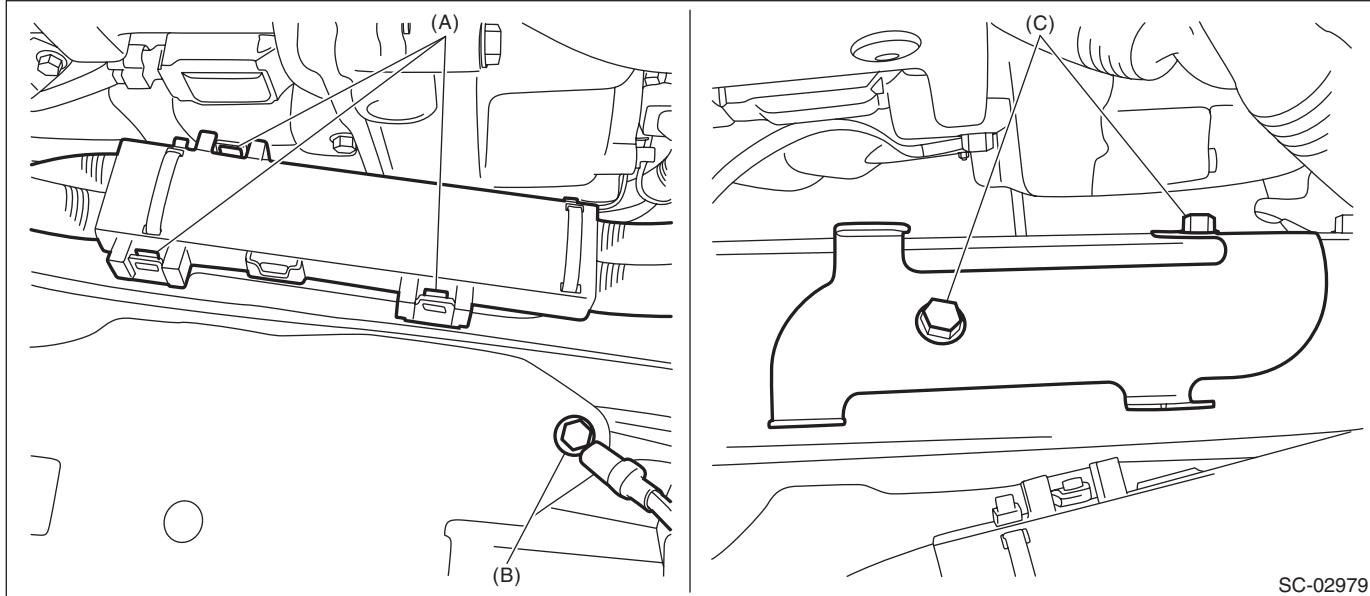
- 15) Disconnect the terminal (A) and the terminal (B) from ISG.
- 16) Remove the clip (C) which holds the battery cable assembly to the battery cable bracket No. 1.



- 17) Remove the clip (B) which holds the engine harness from the battery cable bracket No. 1 (A).
- 18) Remove the battery cable bracket No. 1 (A) and collector cover bracket (C).



- 19) Remove the clip (A) securing the battery cable assembly, and remove the battery cable assembly from the battery cable bracket No. 2.
- 20) Remove the bolt (B) which holds the chassis ground terminal of the battery cable assembly from the vehicle.
- 21) Remove the bolt (C) securing the battery cable bracket No. 2 from the vehicle, and remove the battery cable bracket No. 2.



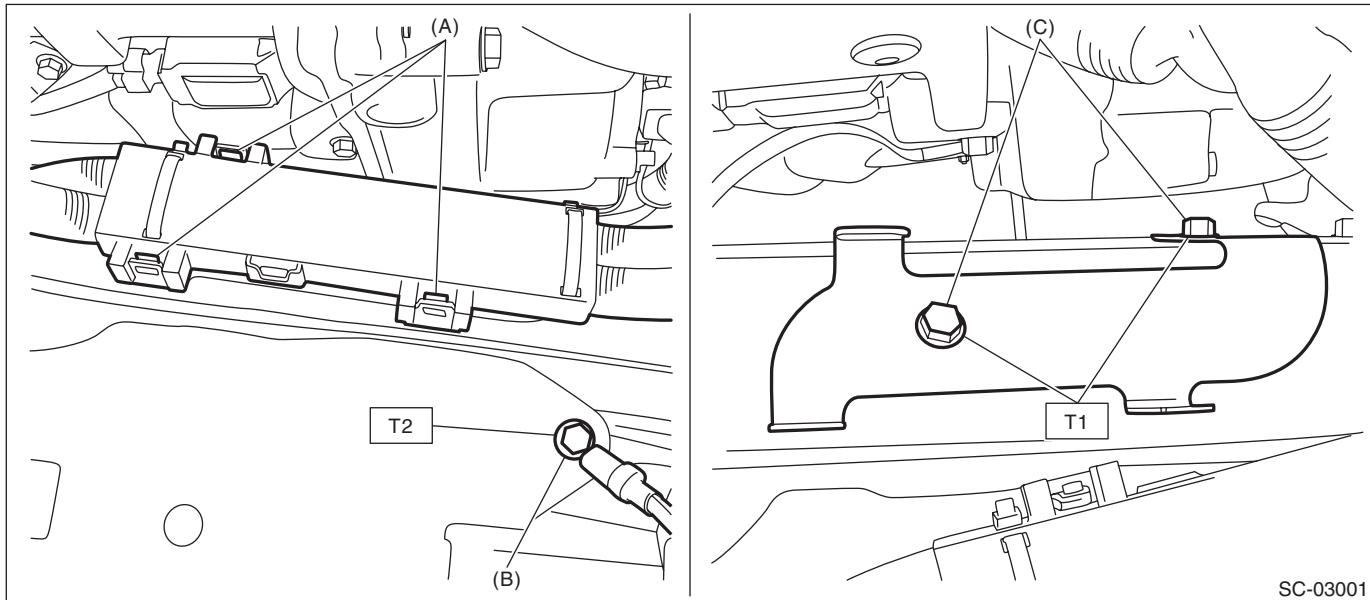
B: INSTALLATION

- 1) Install the bolt (C) which secures the battery cable bracket No. 2 to the vehicle, and secure the battery cable assembly to the battery cable bracket No. 2 with the clip (A).
- 2) Install the chassis ground terminal (B) of the battery cable assembly to the vehicle.

Tightening torque:

T1: 7.5 N·m (0.8 kgf-m, 5.5 ft-lb)

T2: 13 N·m (1.3 kgf-m, 9.6 ft-lb)



Battery Cable Assembly

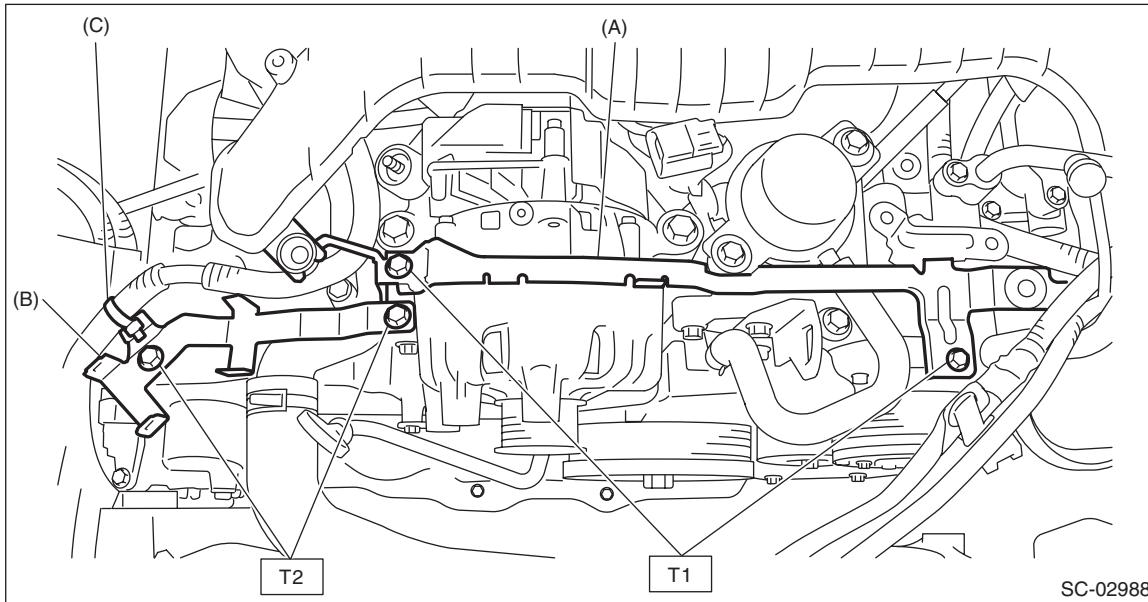
STARTING/CHARGING SYSTEMS

- 3) Install the collector cover bracket (A).
- 4) Install the battery cable bracket No. 1 (B), and secure the engine harness with the clip (C).

Tightening torque:

T1: 6.4 N·m (0.7 kgf-m, 4.7 ft-lb)

T2: 19 N·m (1.9 kgf-m, 14.0 ft-lb)



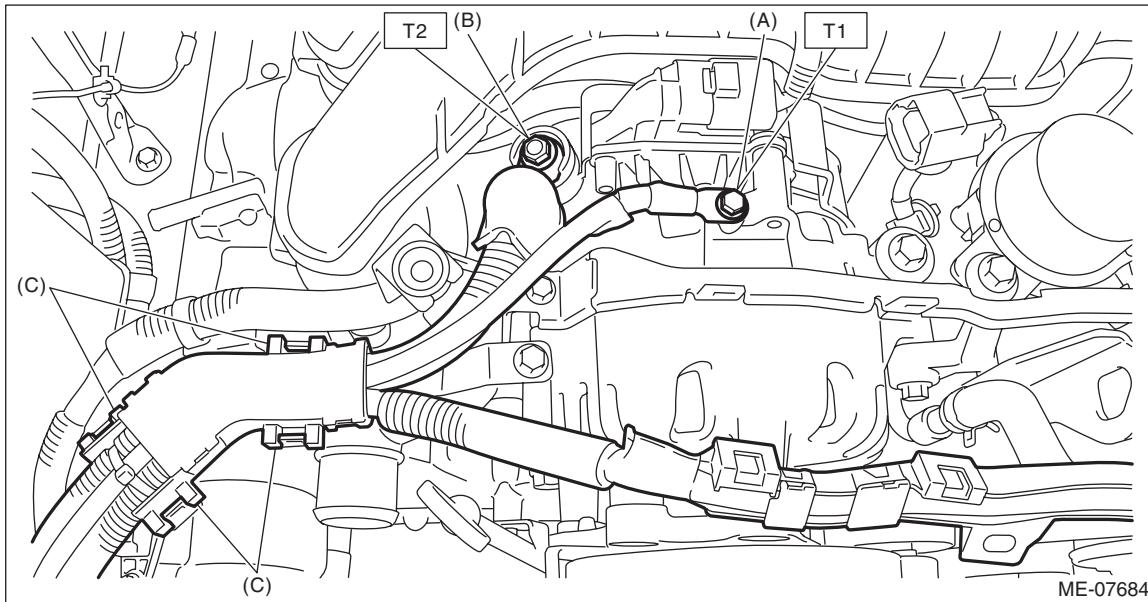
- 5) Set the battery cable assembly, and secure the battery cable assembly to the battery cable bracket No. 1 with the clip (C).

- 6) Connect the terminal (A) and the terminal (B) to ISG.

Tightening torque:

T1: 7.5 N·m (0.8 kgf-m, 5.5 ft-lb)

T2: 15.5 N·m (1.6 kgf-m, 11.4 ft-lb)



Battery Cable Assembly

STARTING/CHARGING SYSTEMS

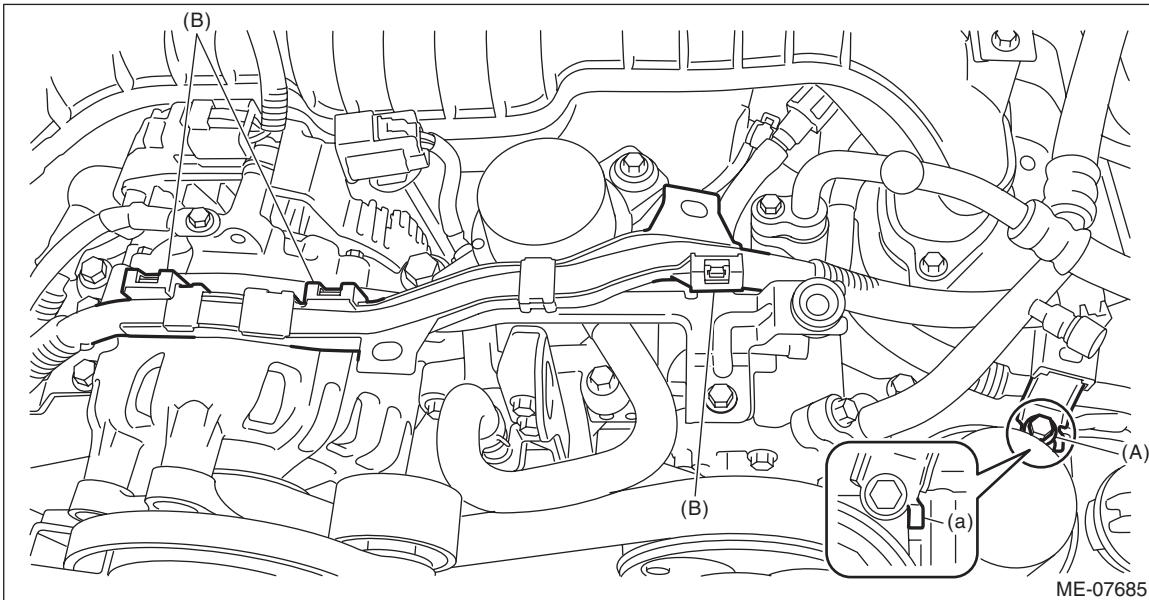
7) Secure the battery cable assembly to the collector cover bracket with the clip (B), and install the bolt (A) which secures the battery cable stay to the chain cover.

NOTE:

When installing the battery cable stay, install it by fitting the folded end (a) of the battery cable stay to the chain cover boss.

Tightening torque:

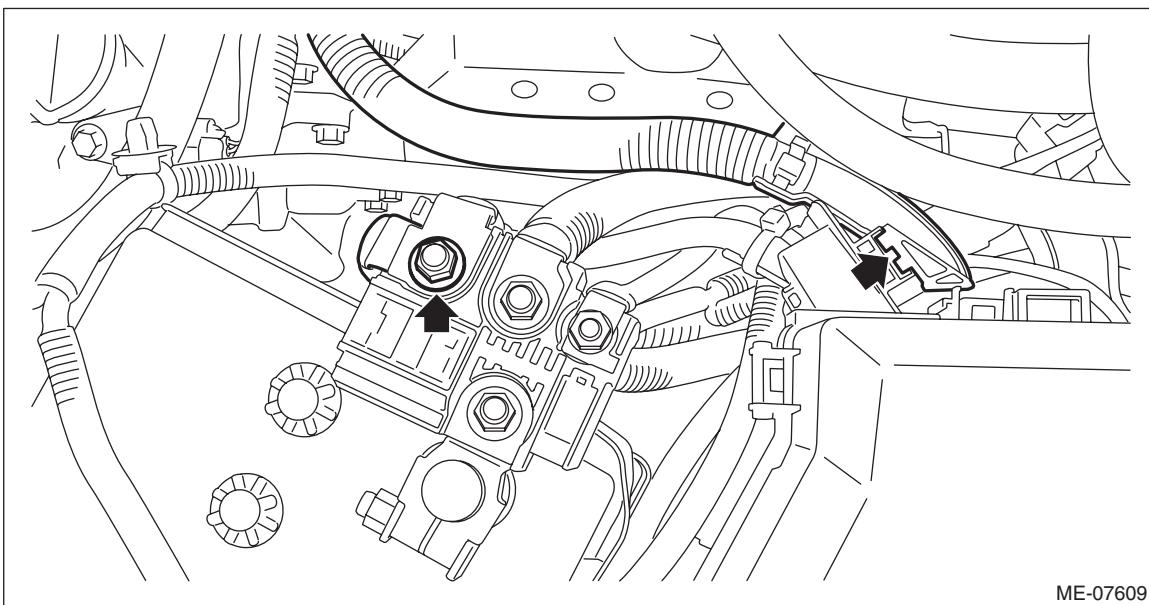
6.4 N·m (0.7 kgf-m, 4.7 ft-lb)



8) Install the battery cable assembly to the main fuse box, and install the nut which secures the battery cable assembly to the slow blow fuse (12 volt auxiliary battery).

Tightening torque:

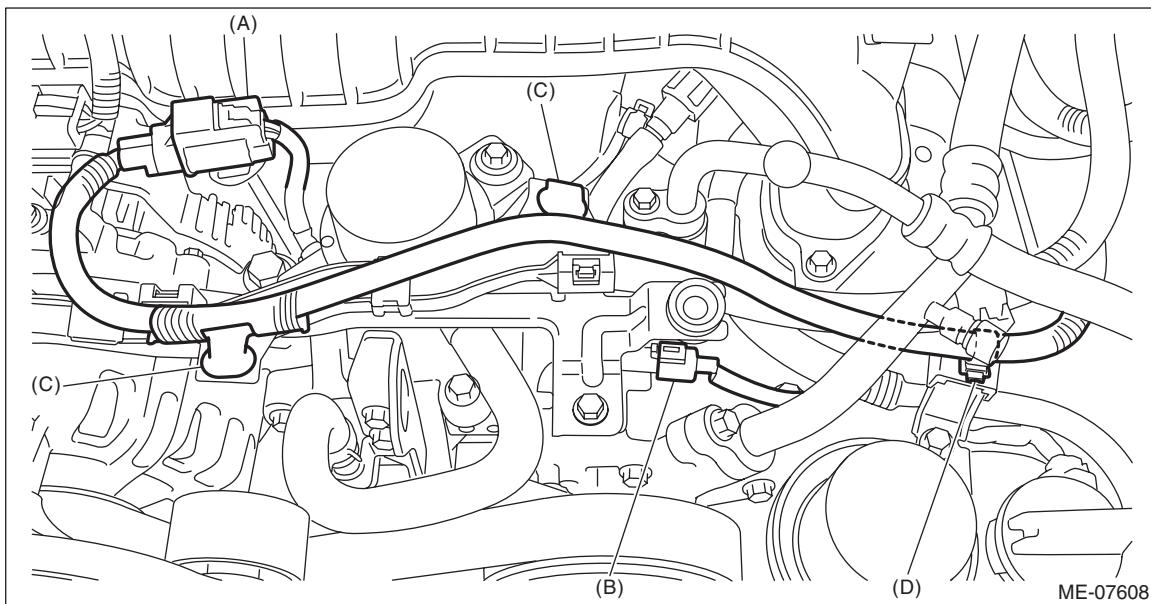
7.5 N·m (0.8 kgf-m, 5.5 ft-lb)



Battery Cable Assembly

STARTING/CHARGING SYSTEMS

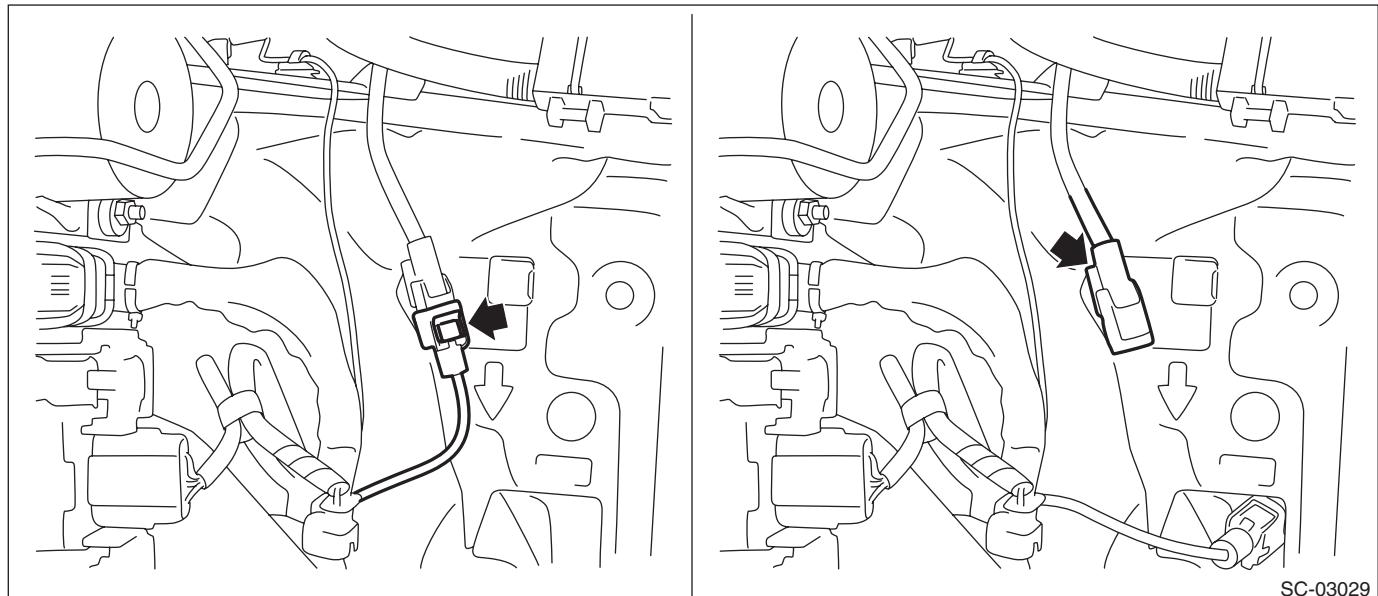
- 9) Install the terminal boot to the positive terminal of the 12 volt auxiliary battery.
- 10) Set the harness, and secure the harness to the battery cable assembly with the clip (C) and the clip (D).
- 11) Connect the connector (A) to the brake vacuum pump, and connect the connector (B) to the A/C compressor.



- 12) Install the battery cable assembly connector to the clip, and connect the battery cable assembly connector to the bulk head wiring harness.

NOTE:

If the clip is damaged, replace it with a new part.



- 13) Install the 12 volt engine restart battery. <Ref. to SC(H4DO(HEV))-42, 12 VOLT ENGINE RESTART BATTERY, INSTALLATION, Battery.>

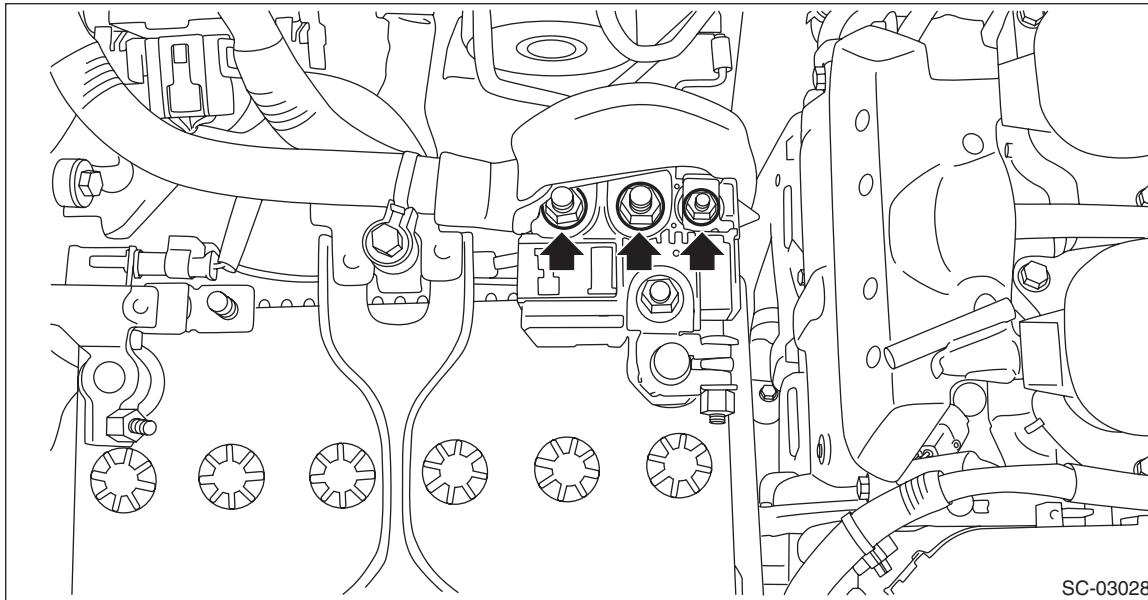
Battery Cable Assembly

STARTING/CHARGING SYSTEMS

14) Install the battery cable assembly to the slow blow fuse (12 volt engine restart battery), and install the nut which secures the battery cable assembly.

Tightening torque:

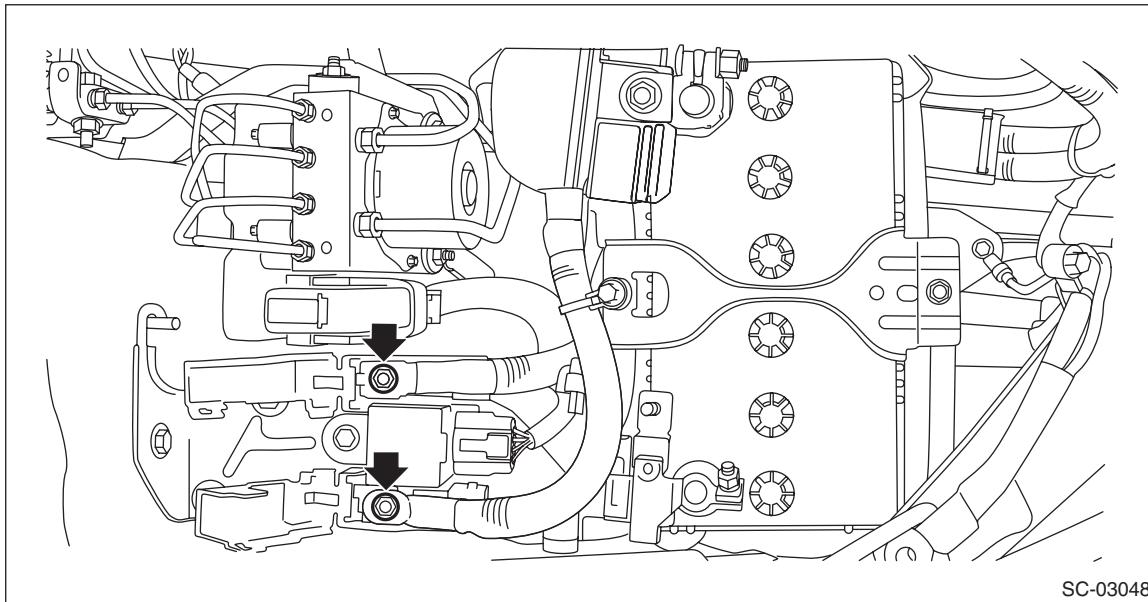
7.5 N·m (0.8 kgf-m, 5.5 ft-lb)



15) Install the battery cable assembly to the 12V battery relay, and close the install the 12V battery relay cover.

Tightening torque:

7.5 N·m (0.8 kgf-m, 5.5 ft-lb)



16) Install the intake duct. <Ref. to IN(H4DO(HEV))-17, INSTALLATION, Intake Duct.>
17) Install the air intake duct. <Ref. to IN(H4DO(HEV))-15, INSTALLATION, Air Intake Duct.>
18) Install the collector cover.
19) Connect the battery ground terminal. <Ref. to NT-5, BATTERY, NOTE, Note.>

C: INSPECTION

Check that the battery cable assembly has no deformation, cracks or other damages.