



English

For Dismantlers

VITARA

S-CROSS

SX4 S-CROSS

SHVS Mild Hybrid System

Lithium-ion Battery (48V-350Wh)

Removal Manual

CAUTION:

Servicing SHVS system involves a danger of electric shock. For precaution, use insulation tools and gloves.

NOTICE:

Lithium-ion battery consists of high precision parts and can be easily damaged by large shock.

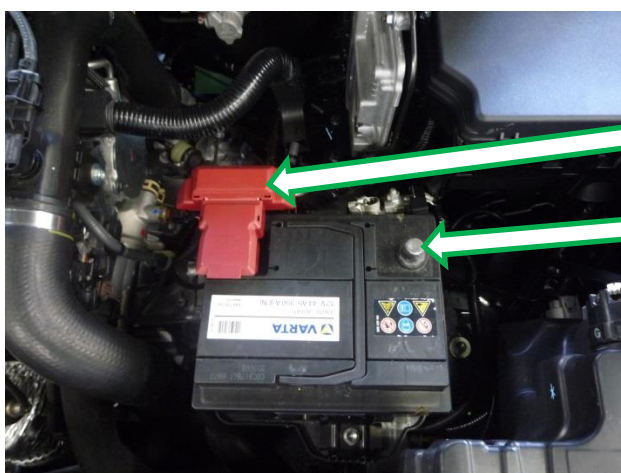
Handle the lithium-ion battery carefully and do not expose it to large shock.

- 1) Set front wheels in straight ahead position.
- 2) Set ignition "OFF" and keep ignition "OFF" for 3 minutes.
- 3) Disconnect the negative (–) cable from the lead-acid battery.
- 4) Disconnect the positive (+) cable from the lead-acid battery.

By disconnecting the cables from the lead-acid battery, as a safety mechanism, the lithium-ion battery will shut off its power circuit.



Lead-acid battery



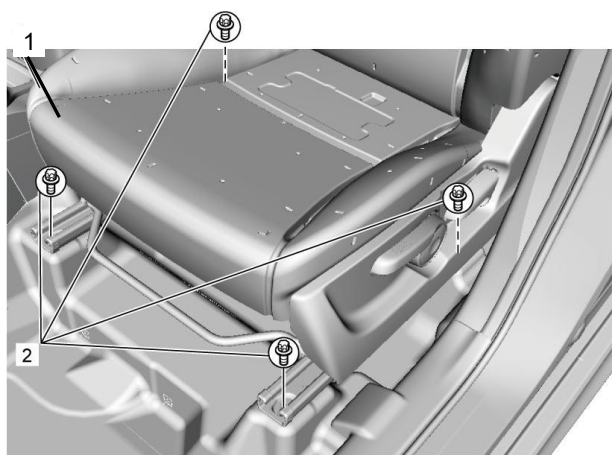
Positive (+) cable

Negative (–) cable

- 5) Wait for at least 90 seconds after performing Step 4).

6) Disconnect the connector from the right-side front seat.

7) Remove the 4 mounting bolts (2) and remove the right-side front seat (1).



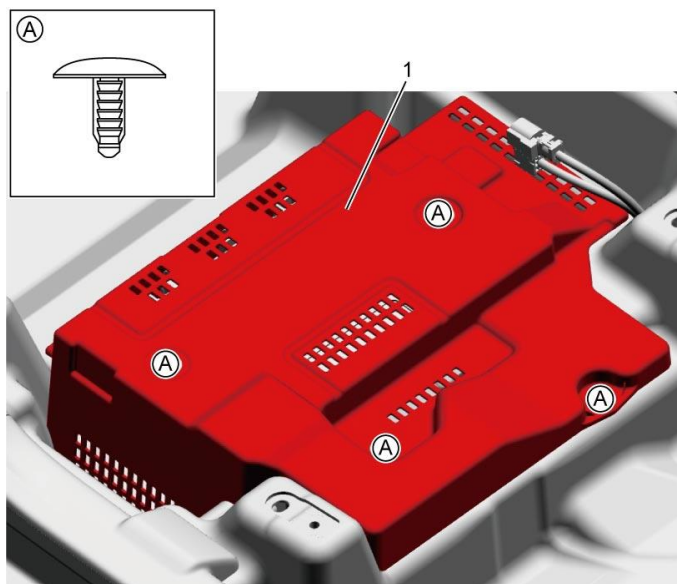
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The left figure shows the left-side front seat.

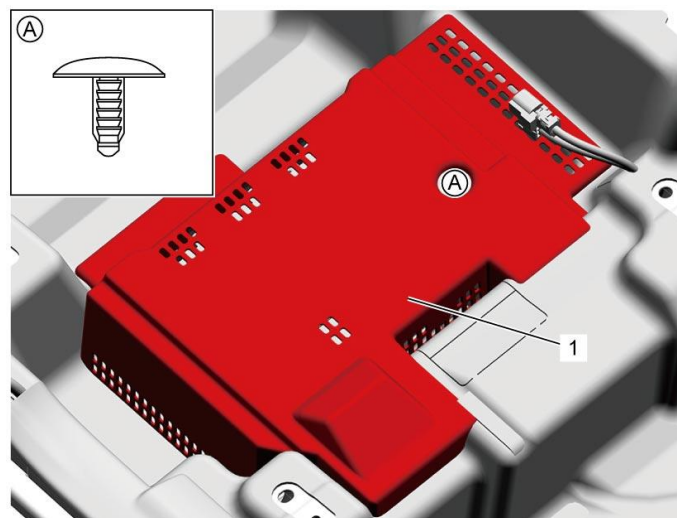
However, you can understand how to remove right-side front seat by this figure.

8) Remove the clips (A), and then remove the lithium-ion battery cover (1).

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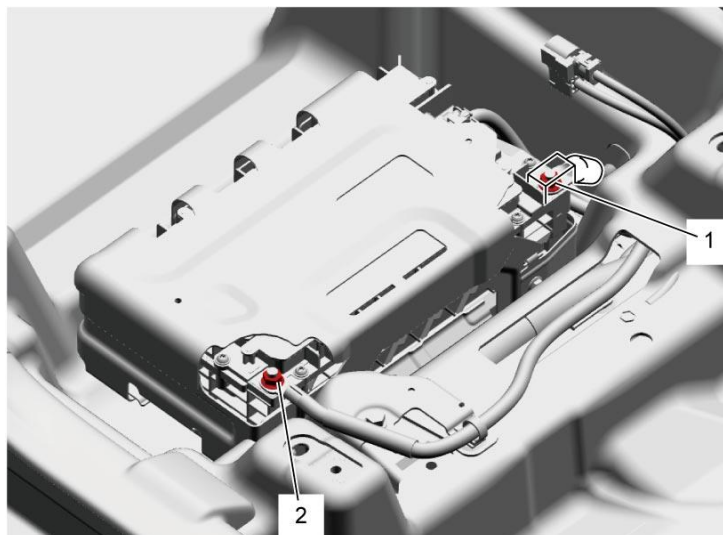


- 9) Check the terminal voltage between the “48V+” terminal (1) and the “48V-” terminal (2) is lower than 5V.

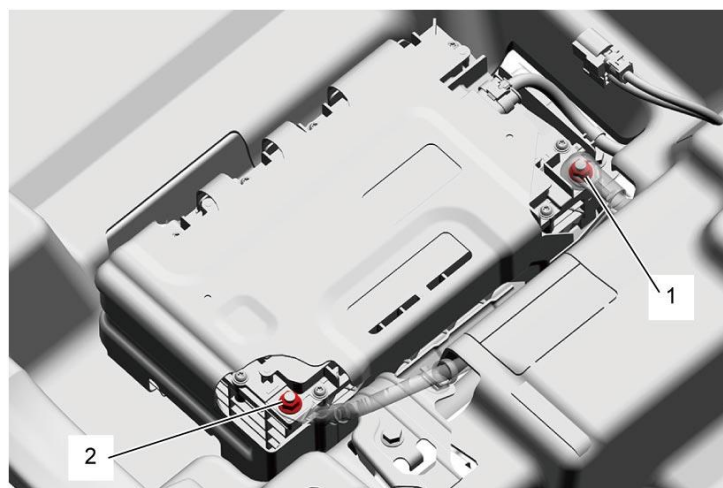
NOTE:

If the voltage is still higher than 5 V, check it again in 15 minutes.

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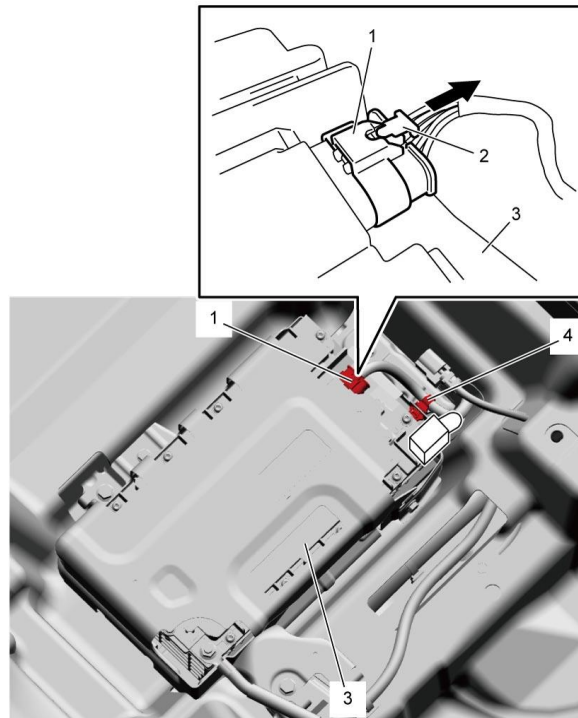
10) Disconnect lithium-ion battery connector (1) as follows.

a) Move the connector lock lever (2) in arrow direction as shown in the figure below.

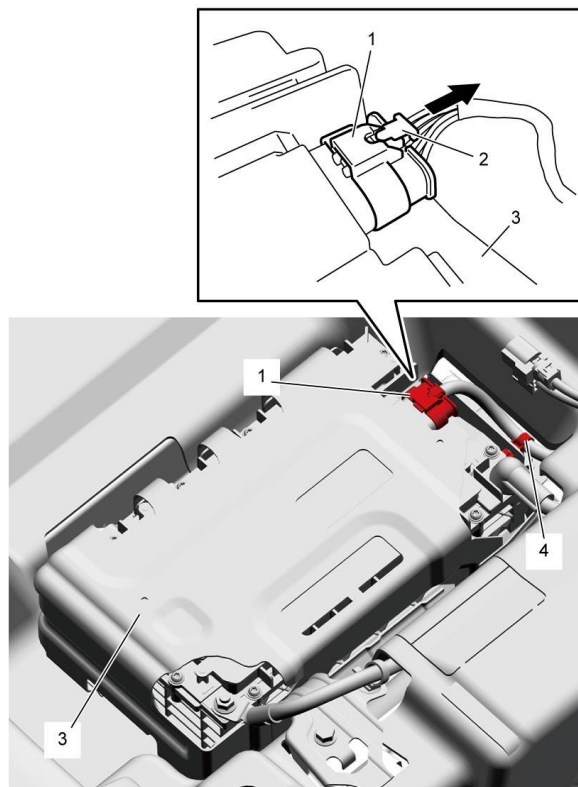
b) Push the connector lock lever and disconnect the connector from the lithium-ion battery (3).

11) Remove the floor harness clamp (4)

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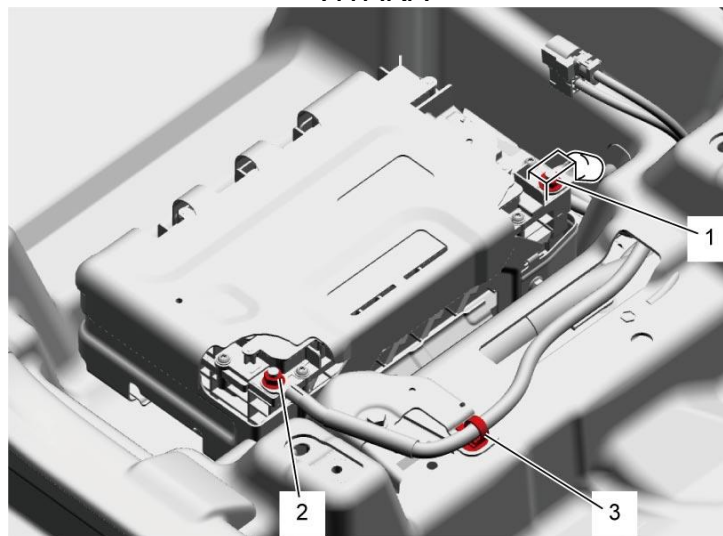


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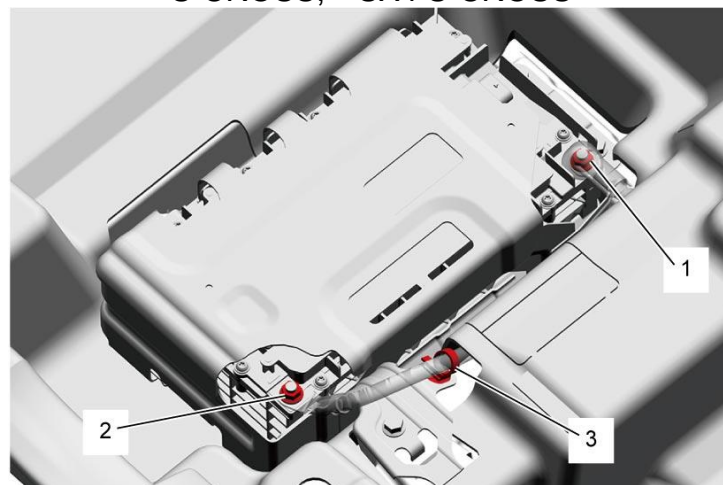


- 12) Remove the “48V+” terminal nut (1) and the “48V–” terminal nut (2), and then remove the cables.
- 13) Remove the “48V–” cable clamp (3).

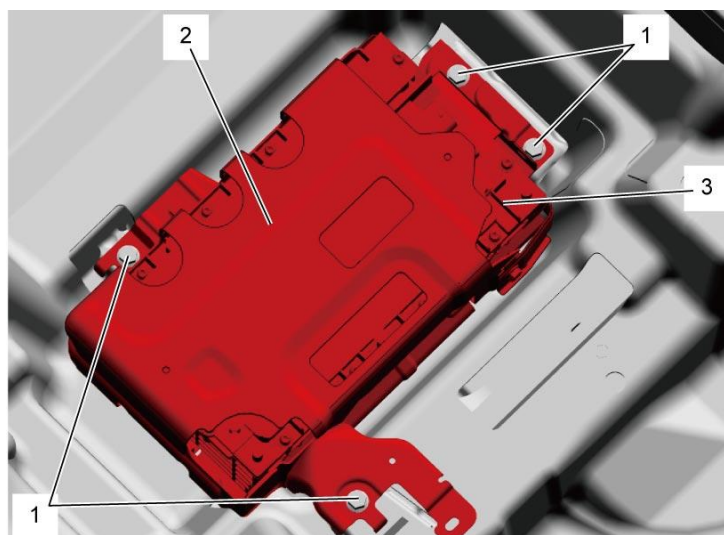
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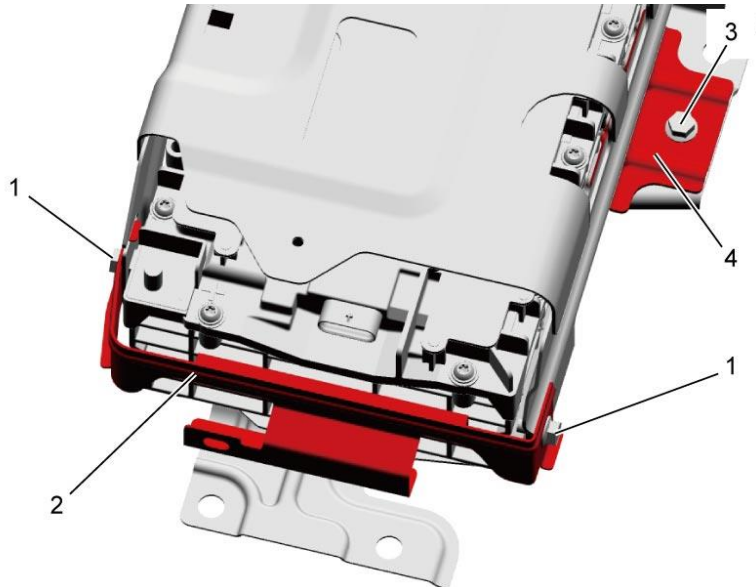
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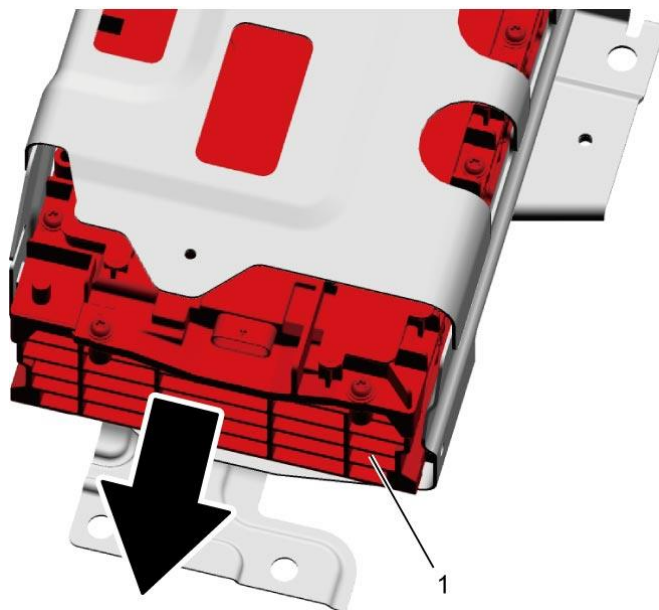
- 14) Remove the lithium-ion battery holder bolts (1), and then remove the lithium-ion battery holder (2) and the lithium-ion battery (3).



- 15) Remove the lithium-ion battery bracket No.1 bolts (1), and then remove the lithium-ion battery bracket No.1 (2).
- 16) Remove the lithium-ion battery bracket No.2 bolt (3), and then remove the lithium-ion battery bracket No.2 (4).



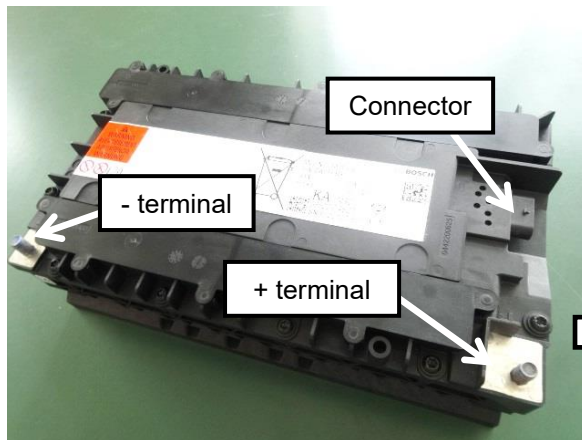
- 17) Remove the lithium-ion battery (1) by pulling it in arrow direction.



18) Prevention of a short circuit :

In order to prevent a short circuit, cover the +/- terminals and the connector of the removed lithium-ion battery by insulating tape securely as shown below.

<Before>



<After>

