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## 12V/LV Power (Disconnect and Connect)



### Correction Codes and FRTs

- [Original Model 3](#): 17010200, 0.10
- [Heat Pump Model 3 with Lead Acid Battery](#): 17010400, 0.05
- [Model 3 with Li-Ion Battery](#): 17010410, 0.05

**NOTE:** Unless otherwise explicitly stated in the procedure, the above correction code and FRT reflect all of the work required to perform this procedure, including the linked procedures. **Do not stack correction codes unless explicitly told to do so.** **NOTE:** See [Flat Rate Times](#) to learn more about FRTs and how they are created. To provide feedback on FRT values, email [LaborTimeFeedback@tesla.com](mailto:LaborTimeFeedback@tesla.com). **NOTE:** See [Personal Protection](#) to make sure wearing proper PPE when performing the below procedure.

- 1108272-00-B Cap, Logic Conn, Inv, 3DU (For Original Model 3)

### Warning

This procedure disables 12V power, but does not verify that high voltage power is no longer available to high voltage components (PTC heater, A/C compressor, inverters, etc). Perform


Vehicle Electrical Isolation Procedure after this procedure, and before servicing high voltage components.

**Warning**

Failure to follow the exact order of steps in this procedure may cause permanent damage to the car computer.

## Torque Specifications

Table 1. Torque Specifications: 12V/LV Power (Disconnect and Connect)

Description	Torque Value	Recommended Tools	Reuse/Replace	Notes
(Lead acid) positive/negative cable to the battery terminal	 <b>6 Nm (4.4 lbs-ft)</b>	<ul style="list-style-type: none"><li>• 10 mm deep socket</li><li>• ¼ in std ratchet</li><li>• 4 in extension</li></ul>	Reuse	

## Disconnect (Original Model 3)

1. **Warning**

Prepare for these conditions before disconnecting 12V power:

- Closed windows might shatter if the door is opened.
- Closed doors might cause a lockout condition.
- Airbags do not deploy.
- Systems, displays, and other controls are off.

2. Disconnect any charging cable.

3. On the touchscreen, power off the climate control system, and wait at least 30 seconds for the climate control system to completely shut down.

4. Make sure the vehicle is in Park.

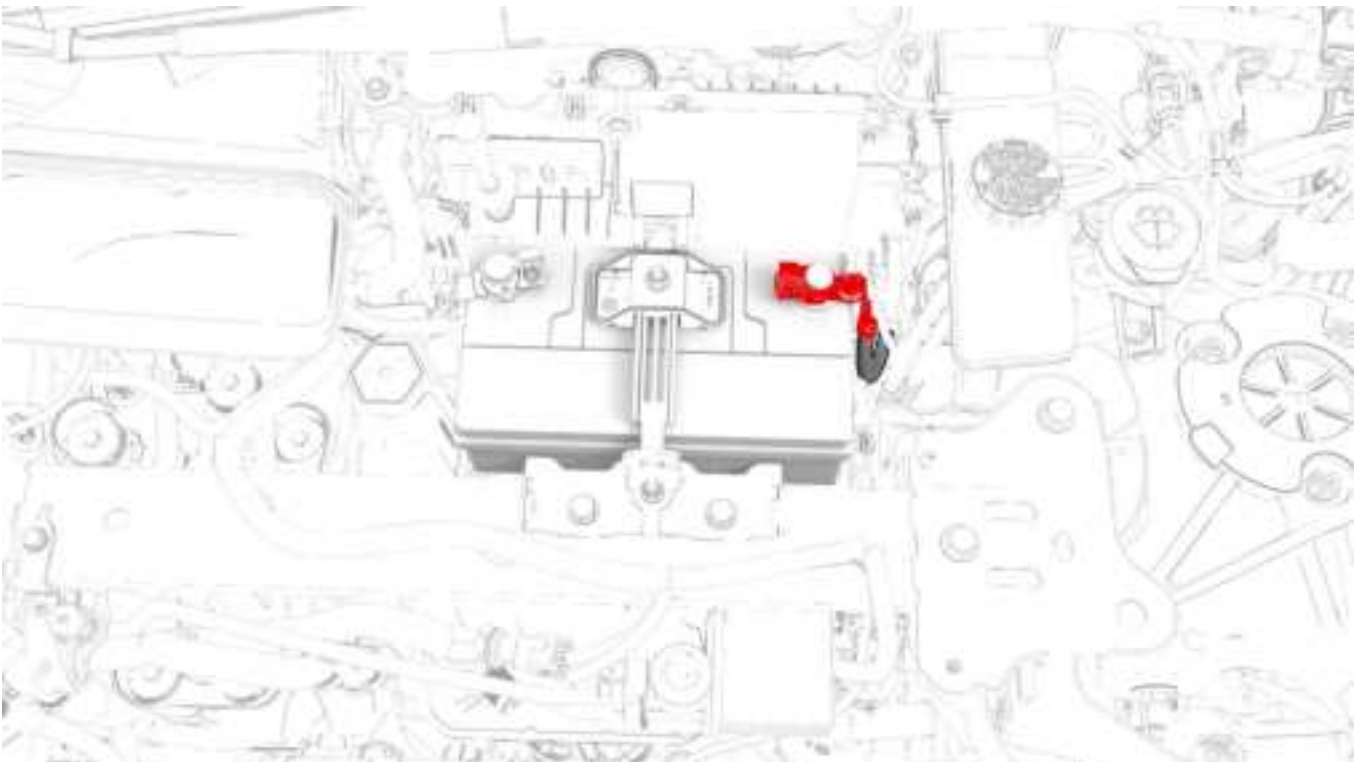
5. Fully lower all door windows to avoid glass shatter and door lockout conditions.

6. Open the LH and RH rear doors, and then pass a shop towel halfway through each door striker to prevent the latch from securing.
7. Remove the 2nd row lower seat cushion. See [Seat Cushion - Lower - 2nd Row \(Remove and Replace\)](#) ○ .
8. Remove the rear underhood apron. See [Underhood Apron - Rear \(Remove and Replace\)](#) ○ .
9. On the touchscreen, touch **Controls > Safety & Security > Vehicle Power > Power Off**.

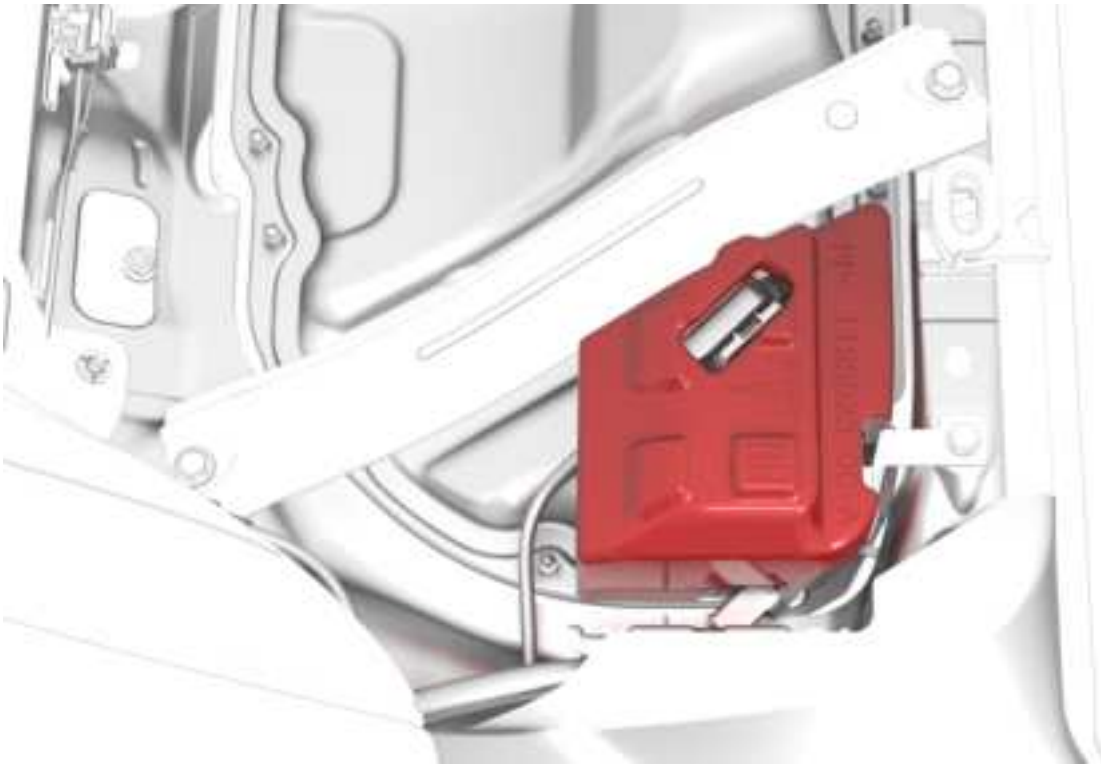
**⚠ CAUTION**

Do not proceed until the climate control system has been powered off for at least 30 seconds.  
Do not disconnect 12V power while the climate control system is operational.

10. Loosen the nut that attaches the 12V battery negative cable to the battery, and then disconnect the cable from the battery.



11. Remove the foam cover from the RH side of the penthouse.



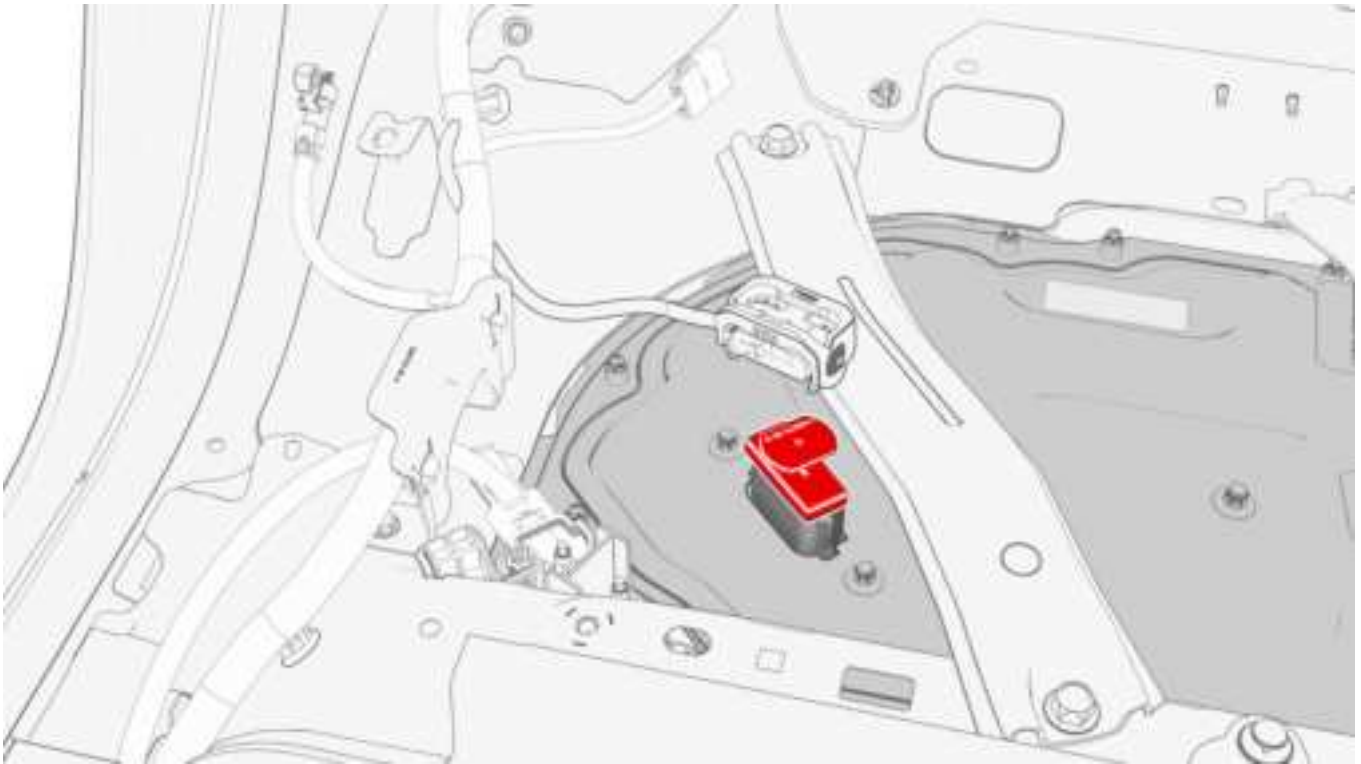
**12.** Disconnect the electrical harness from the high voltage controller connector.

**i Note**

The HV battery positive contactor and negative contactor open with a clunk sound.



**13.** Install the logic connector cap onto the high voltage controller connector to prevent mistaken reconnection and protect the connector.



14. Before continuing, wait 2 minutes for the electrical system to fully discharge.
15. If 12V power was disconnected to service a high voltage component, verify that high voltage power is no longer available to that component. See [Vehicle Electrical Isolation Procedure](#) ○ .

## Disconnect (Heat Pump Model 3 with Lead Acid Battery)

1. Disconnect any charging cable.
2. On the touchscreen, power off the climate control system, and wait at least 30 seconds for the climate control system to completely shut down.
3. Make sure the vehicle is in Park.
4. Fully lower all door windows to avoid glass shatter and door lockout conditions.
5. Open the LH and RH rear doors, and then pass a shop towel halfway through each door striker to prevent the latch from securing.
6. Remove the rear underhood apron. See [Underhood Apron - Rear \(Remove and Replace\)](#) ○ .
7. On the touchscreen, touch **Controls > Safety & Security > Vehicle Power > Power Off**.

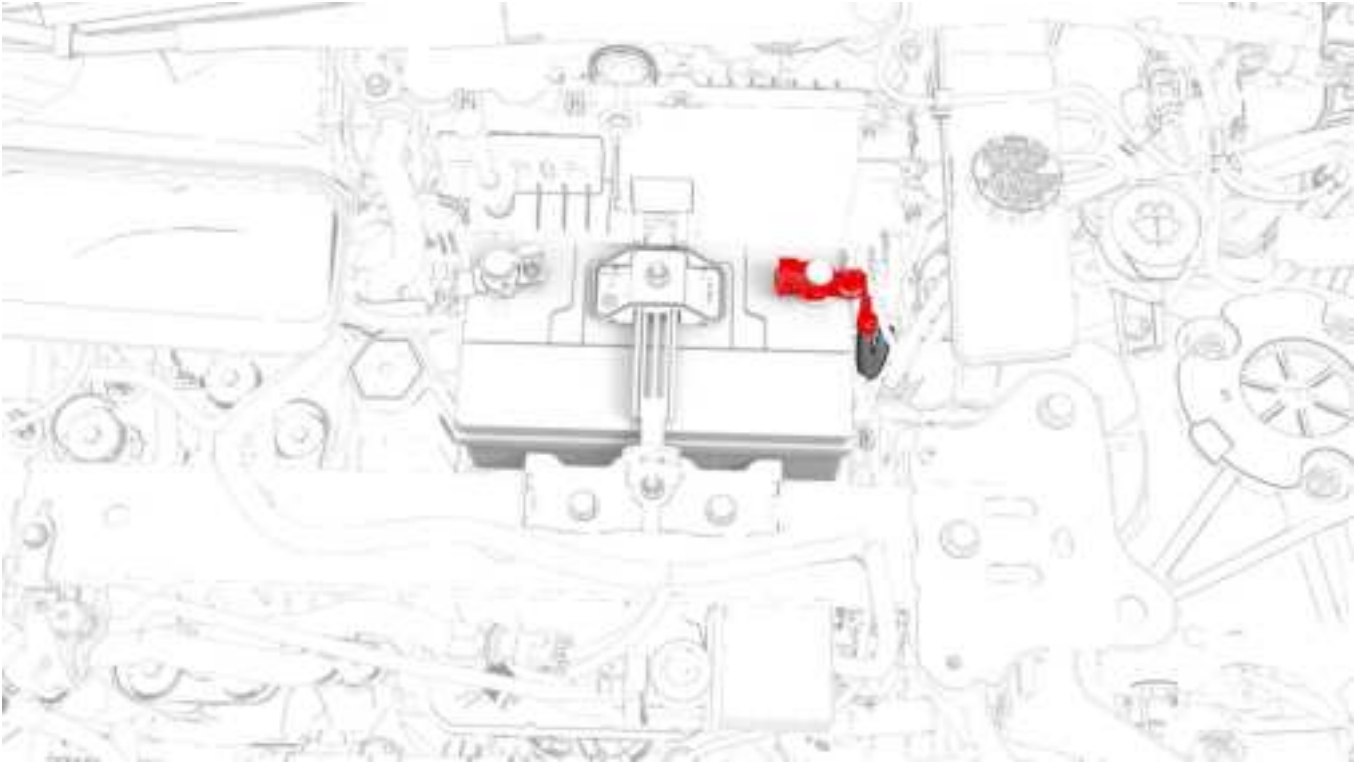
### CAUTION

Do not proceed until the climate control system has been powered off for at least 30 seconds. Do not disconnect 12V power while the climate control system is operational.

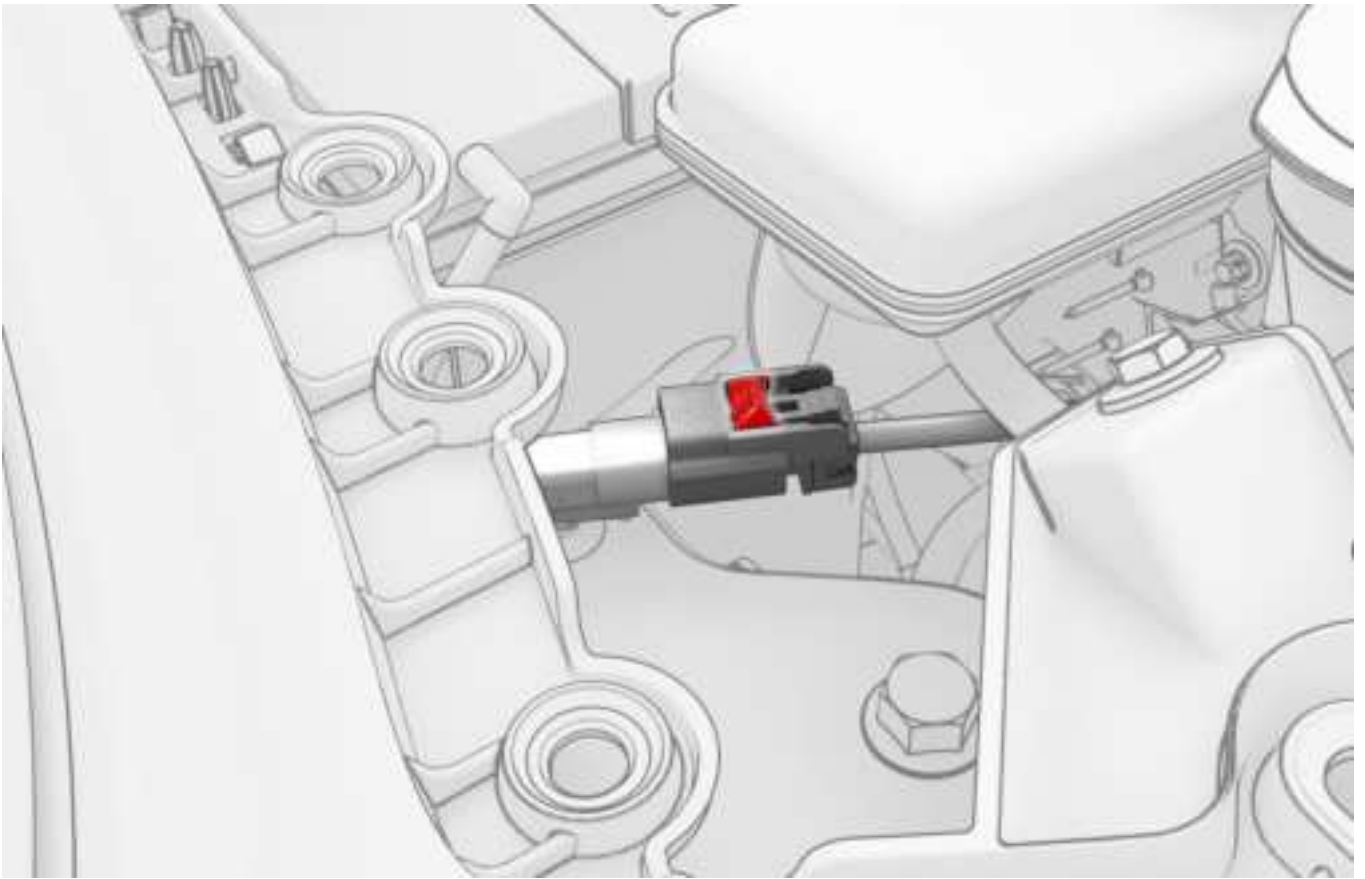
8. Loosen the nut that attaches the 12V battery negative cable to the battery, and then disconnect the cable from the battery.

### CAUTION

Disconnect 12V battery negative cable before disconnecting the first responder loop.



9. Locate the first responder loop next to the RH side of the 12V auxiliary battery.



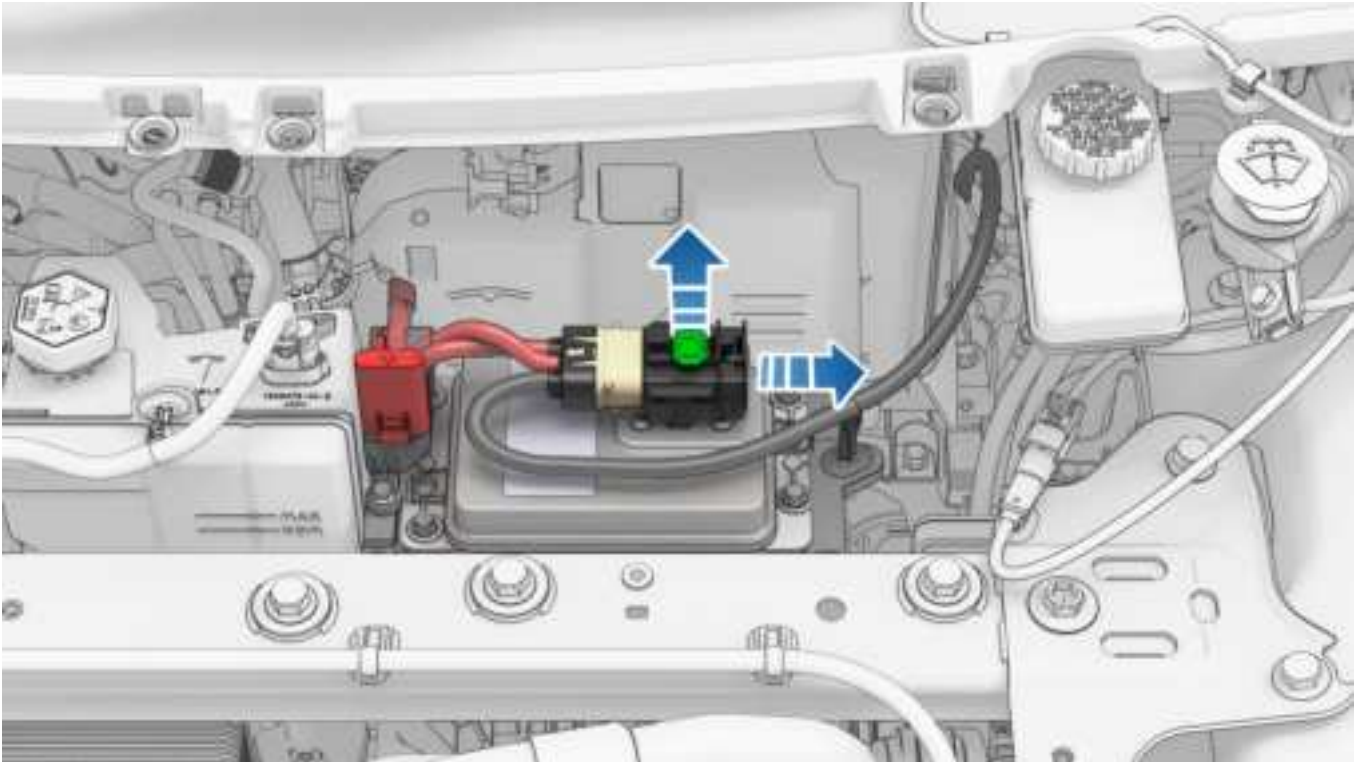
10. Slide the red locking tab back, press the black tab, and then disconnect the first responder loop.

11. Before continuing, wait 2 minutes for the electrical system to fully discharge.

12. If 12V power was disconnected to service a high voltage component, verify that high voltage power is no longer available to that component. See [Vehicle Electrical Isolation Procedure](#) ○ .

## Disconnect (Li-Ion)

1. Open the LH front door and lower the LH front window.
2. Power off the vehicle from the center display.
3. Remove the rear apron. See [Underhood Apron - Rear \(Remove and Replace\)](#) ○ .
4. Disconnect the LV battery connector from the LV battery: lift up to release the green locking tab, pull the black connector lock outwards to release the connector, and then pull up to disconnect the connector.

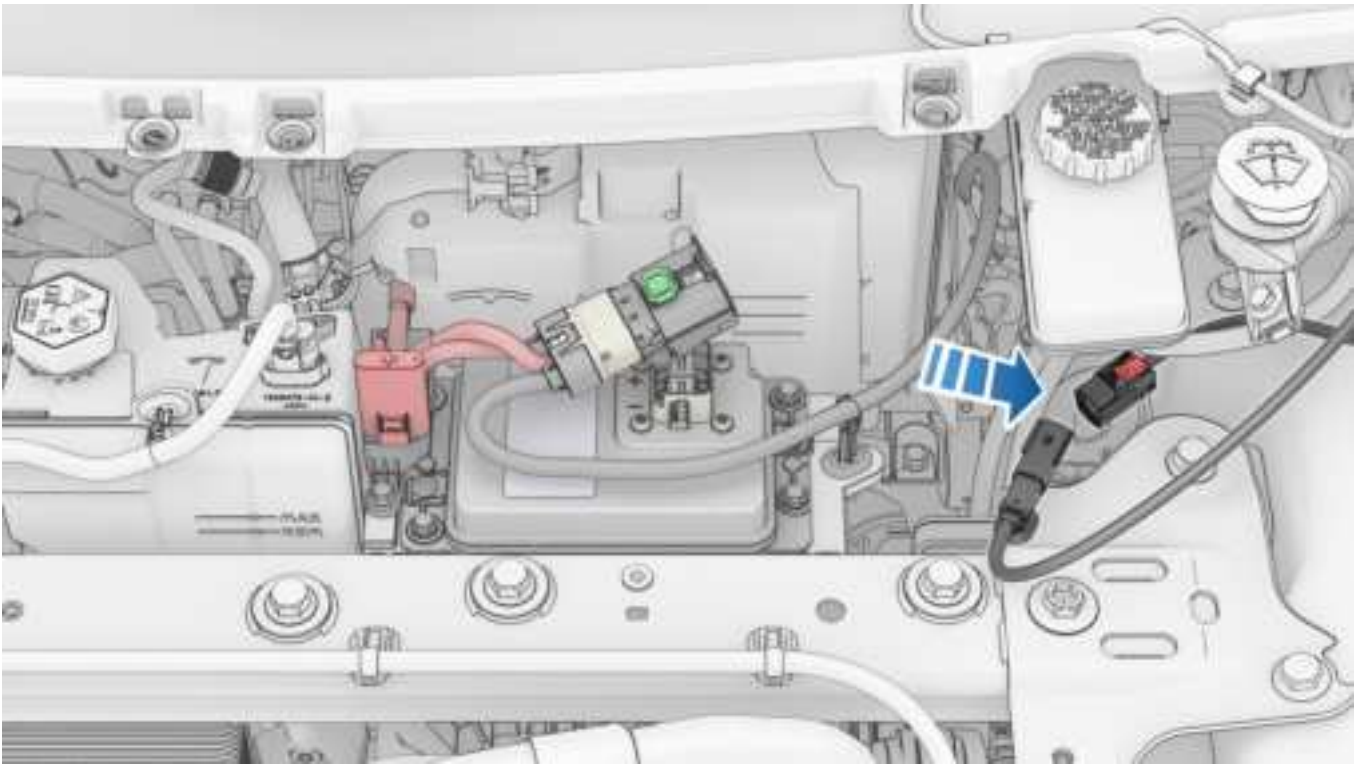



5. Disconnect the first responder loop.



### Note

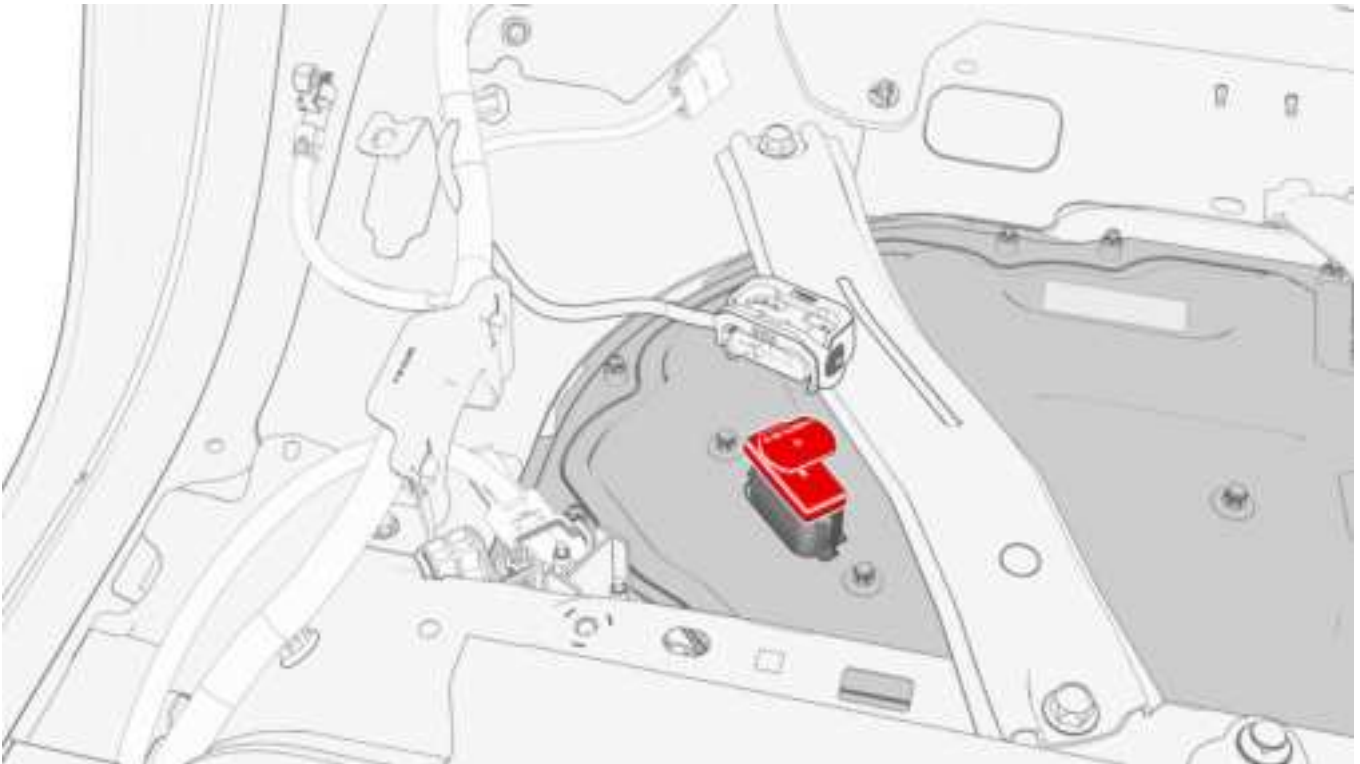
Before proceeding to service the vehicle, allow 2 minutes for all electrical circuits to discharge.



6. If 12V power was disconnected to service a high voltage component, verify that high voltage power is no longer available to that component. See [Vehicle Electrical Isolation Procedure](#) .

## Connect Original Model 3

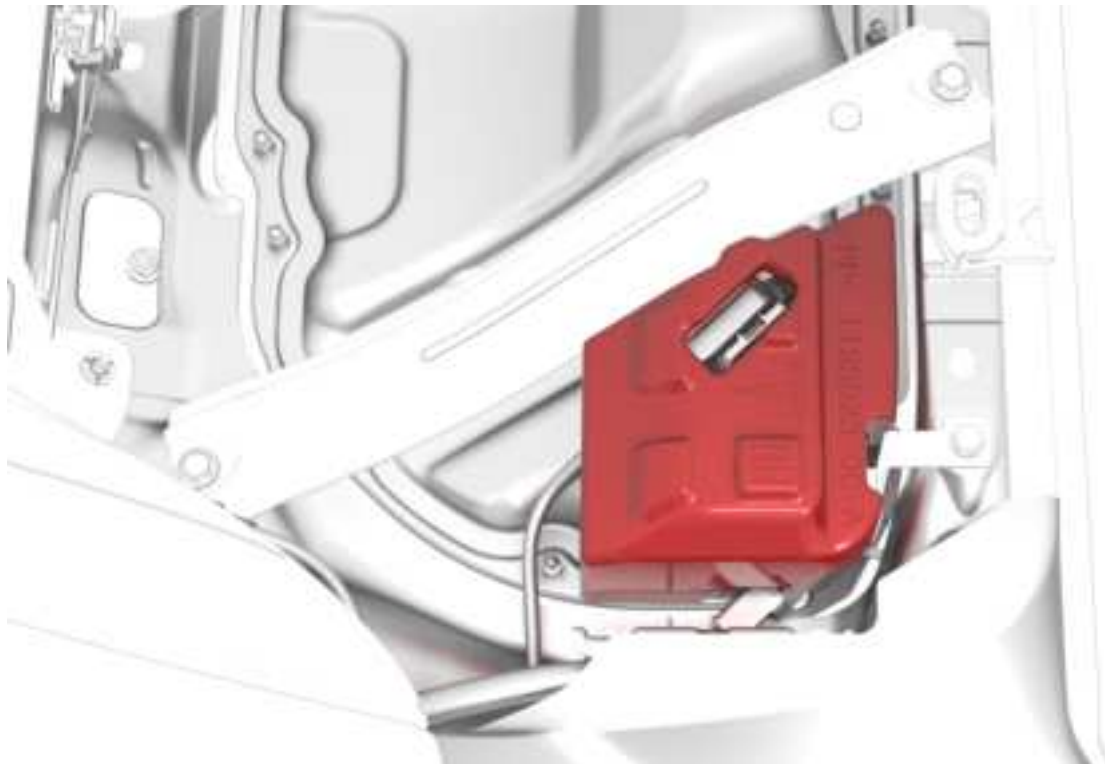
1. Remove the logic connector cap from the high voltage controller connector.



2. Connect the electrical harness to the high voltage controller connector.



3. Install the foam cover to the RH side of the penthouse.



4. Install the 2nd row lower seat cushion. See [Seat Cushion - Lower - 2nd Row \(Remove and Replace\)](#)

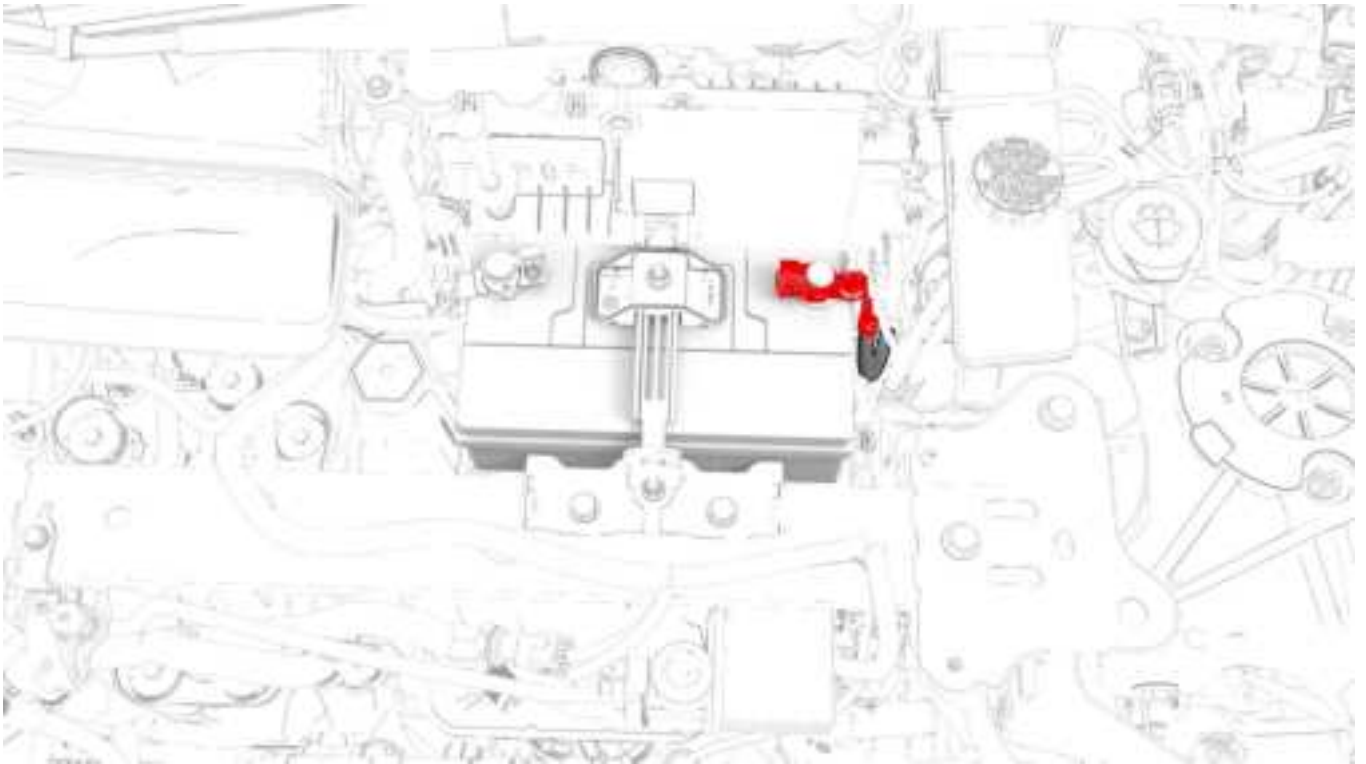



5. Connect the 12V battery negative cable to the battery, press down to firmly seat the terminal clamp onto the battery post.

6. Install the nut that attaches the clamp to the post.



**6 Nm (4.4 lbs-ft)**



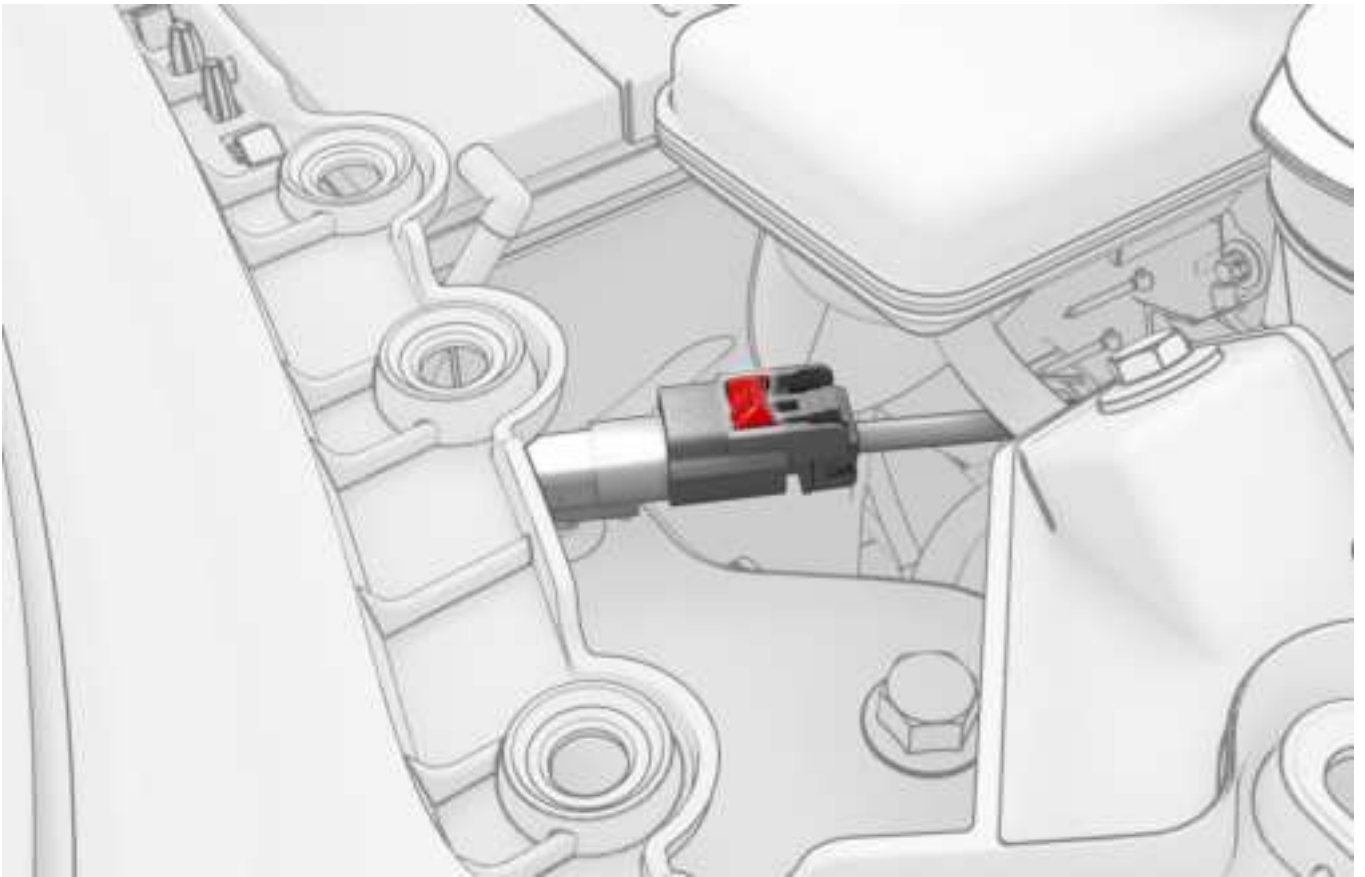
7. Install the rear underhood apron. See [Underhood Apron - Rear \(Remove and Replace\)](#) .
8. Press the brake pedal to turn on vehicle power.
9. Remove the shop towels from the rear door strikers.
10. Close the rear doors.
11. Return the windows, seats, climate control, audio, and charging to the state before service.

## Connect (Heat Pump Model 3 with Lead Acid Battery)

1. Connect the first responder loop, and then slide the red locking tab forward to lock the connector.

 **CAUTION**

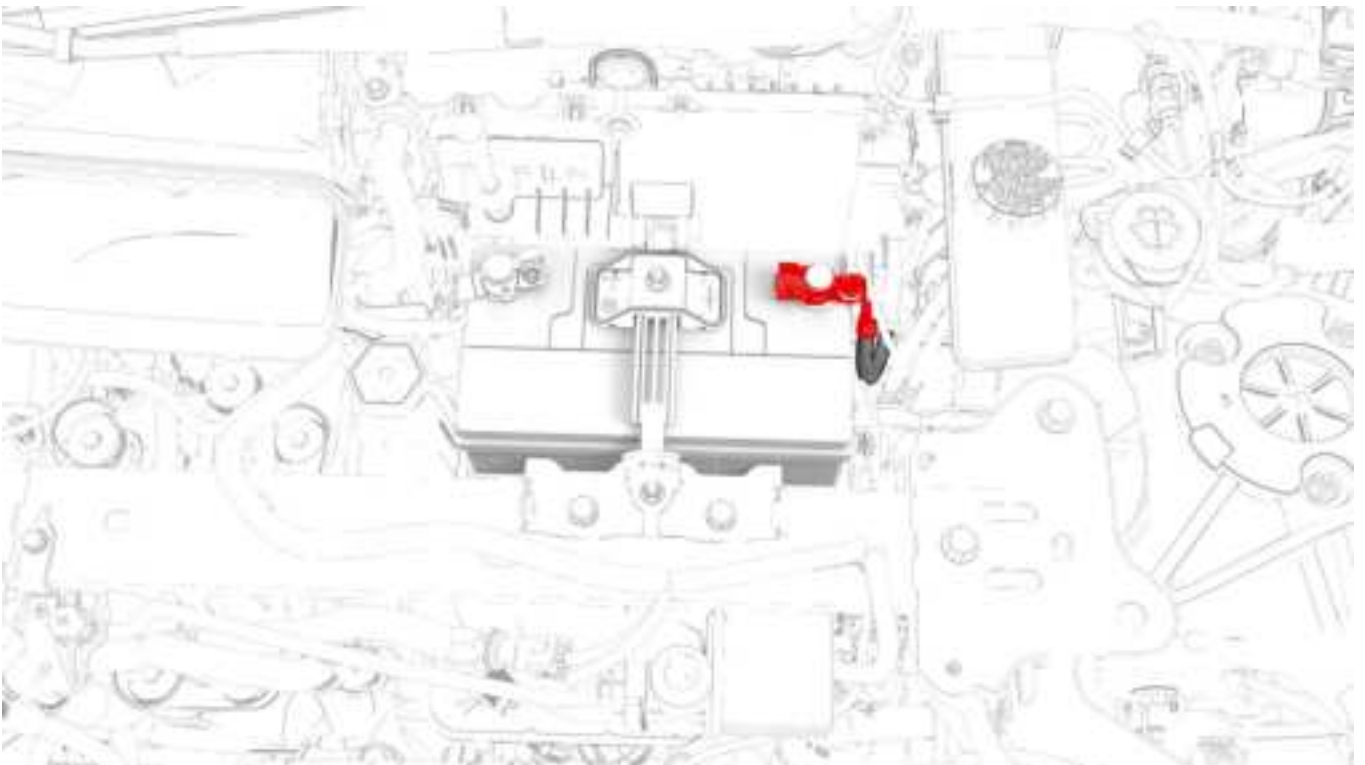
Do not reconnect the 12V negative terminal until the first responder loop is connected.



2. Connect the 12V battery negative cable to the battery, press down to firmly seat the terminal clamp onto the battery post.
3. Install the nut that attaches the clamp to the post.



**6 Nm (4.4 lbs-ft)**



4. Install the rear underhood apron. See [Underhood Apron - Rear \(Remove and Replace\)](#) ○ .

5. Press the brake pedal to turn on vehicle power.
6. Remove the shop towels from the rear door strikers.
7. Close the rear doors.
8. Return the windows, seats, climate control, audio, and charging to the state before service.

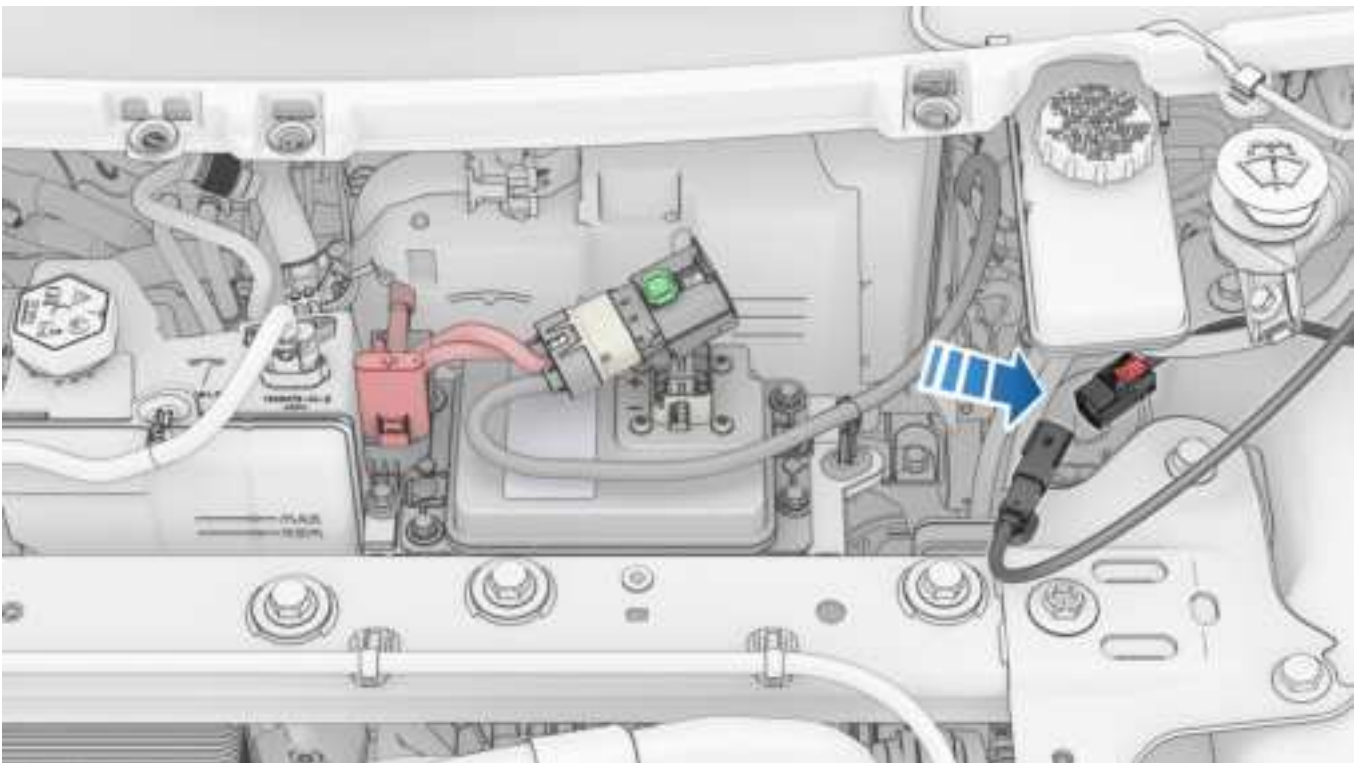
## Connect (Li-Ion)

1. Connect the first responder loop.

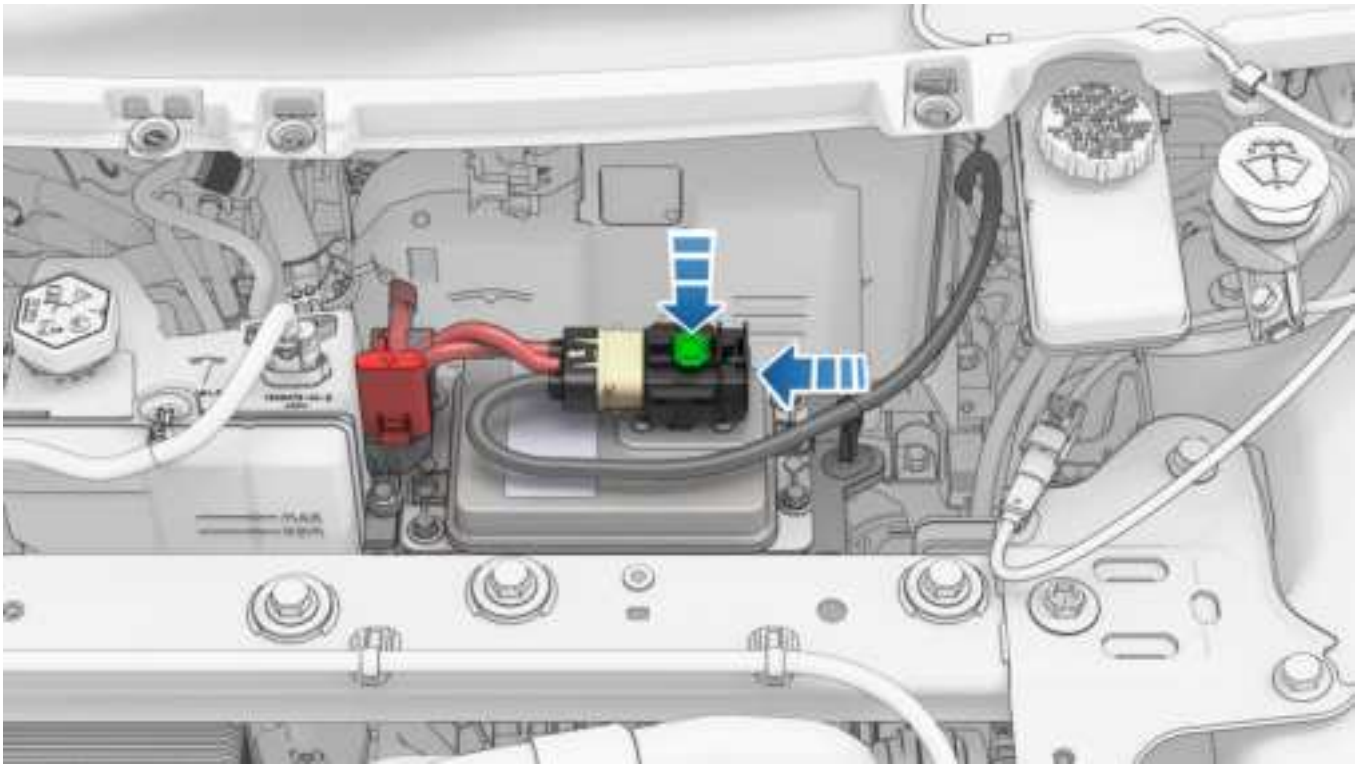


### CAUTION

Connect the first responder loop **BEFORE** connecting the LV battery connector.



2. Connect the LV battery connector to the LV battery: insert the connector, push the black connector lock inwards to engage the lock, ensure the connector is fully seated, and then engage the green locking tab.



3. Install the rear apron. See [Underhood Apron - Rear \(Remove and Replace\)](#) ○ .
4. Raise the LH front window.