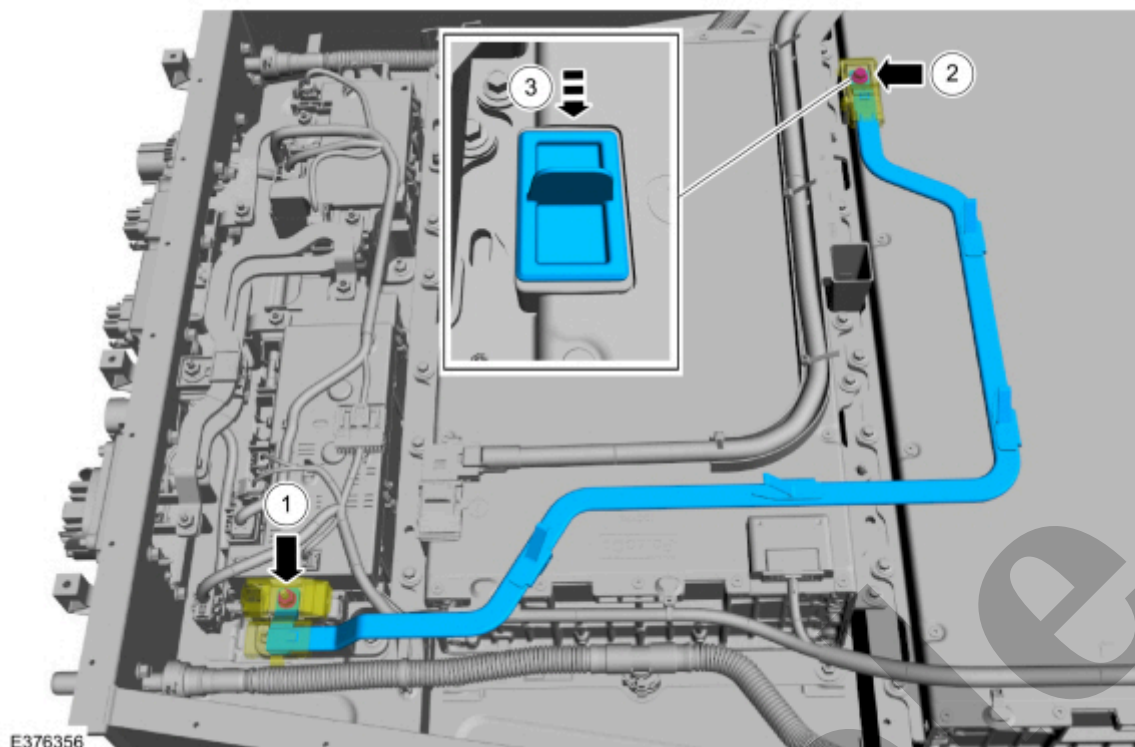


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2008 FORD Ka OEM Service and Repair Workshop Manual

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All Batteries

7. NOTE

Gently pry the fuse out with a flathead screwdriver.

Remove the high voltage low current fuse.

High Voltage Low Current Fuse - Full Hybrid Electric Vehicle (FHEV)

414-03A High Voltage Battery, Mounting and Cables	2022 F-150
Removal and Installation	Procedure revision date: 10/21/2020

High Voltage Low Current Fuse - Full Hybrid Electric Vehicle (FHEV)

Removal

WARNING

To prevent the risk of high-voltage shock, always follow precisely all warnings and service instructions, including instructions to depower the system. The high-voltage system utilizes approximately 450 volts DC, provided through high-voltage cables to its components and modules. The high-voltage cables and wiring are identified by orange harness tape or orange wire covering. All high-voltage components are marked with high-voltage warning labels with a high-voltage symbol. Failure to follow these instructions may result in serious personal injury or death.

1. **WARNING**

Before beginning any service procedure in this section, refer to Safety Warnings in section 100-00 General Information. Failure to follow this instruction may result in serious personal injury.

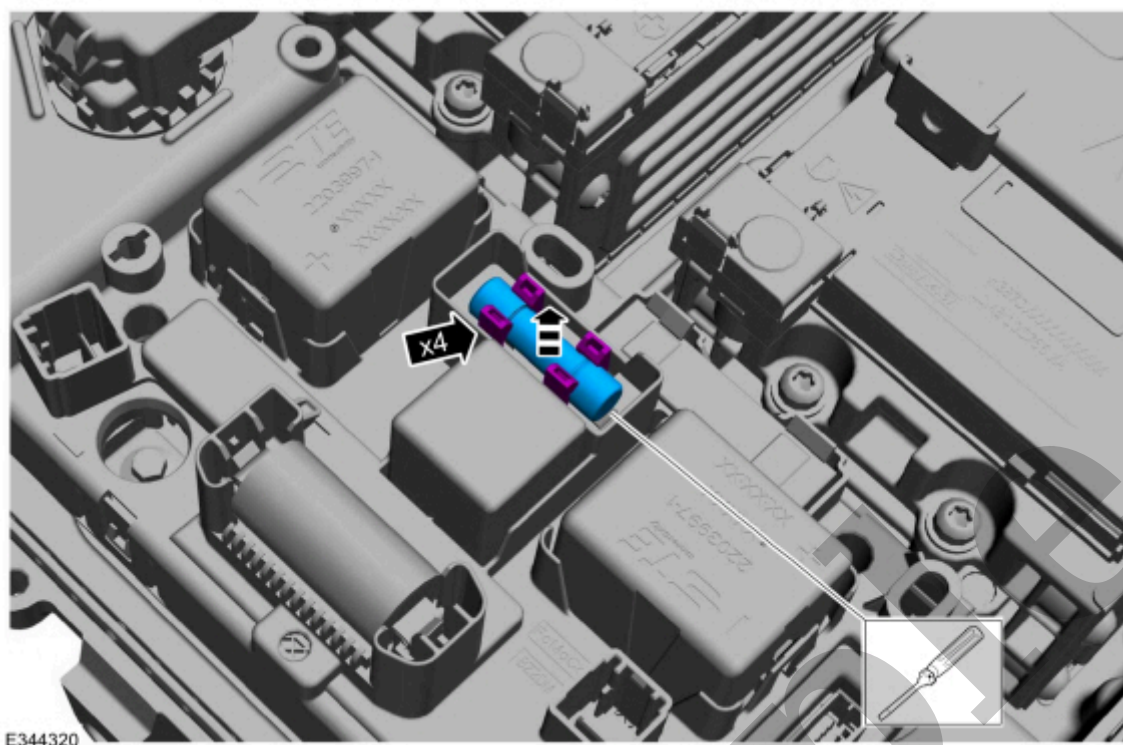
Refer to: [High Voltage System Health and Safety Precautions - Overview](#)(100-00 General Information, Description and Operation).

2. Remove the high voltage battery.

Refer to: [High Voltage Battery - Full Hybrid Electric Vehicle \(FHEV\)](#)(414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).

3. Remove the bolts and the high voltage battery cover.

5. Using a fuse puller or a flathead screwdriver, remove the high voltage low current fuse.



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Installation

1. To install, reverse the removal procedure.
2. Finger-start the high voltage battery cover bolts and torque in the sequence shown.

Torque :

Stage 1: 62 lb.in (7 Nm)

Stage 2: 177 lb.in (20 Nm)



Second Row High Voltage Battery Module - Electric, Vehicles With: Extended Range Battery

414-03A High Voltage Battery, Mounting and Cables	2022 F-150
Removal and Installation	Procedure revision date: 04/23/2022

Second Row High Voltage Battery Module - Electric, Vehicles With: Extended Range Battery

Removal

WARNING

To prevent the risk of high-voltage shock, always follow precisely all warnings and service instructions including instructions to depower the system. The high-voltage system utilizes high-voltage cables to its components and modules. The high-voltage cables and wiring are identified by orange harness tape or orange wire covering. All high-voltage components are marked with high-voltage warning labels with a high-voltage symbol. Failure to follow these instructions may result in serious personal injury or death.

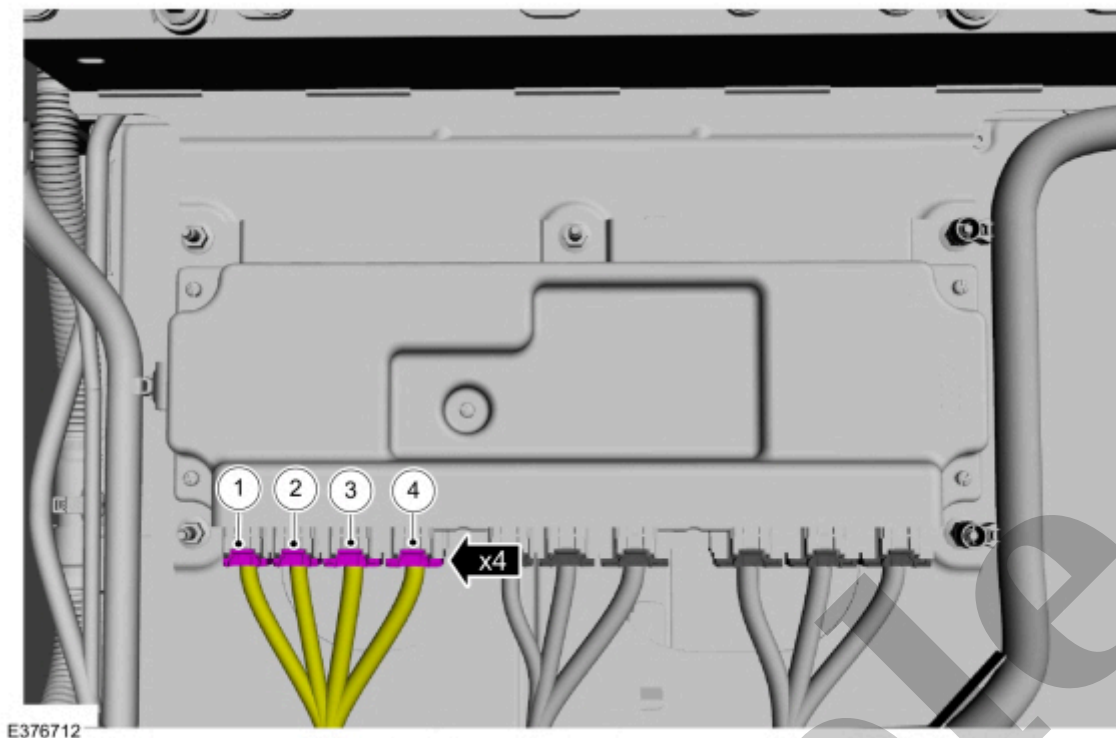
WARNING

The following step prescribes critical instructions. Perform the protective cap opening and closing sequence exactly as directed. Failure to follow these instructions may result in serious personal injury or death.

NOTICE

The high voltage battery module must be placed on a smooth, flat, padded surface, except when installing on the cold plate or component damage may occur.

NOTE

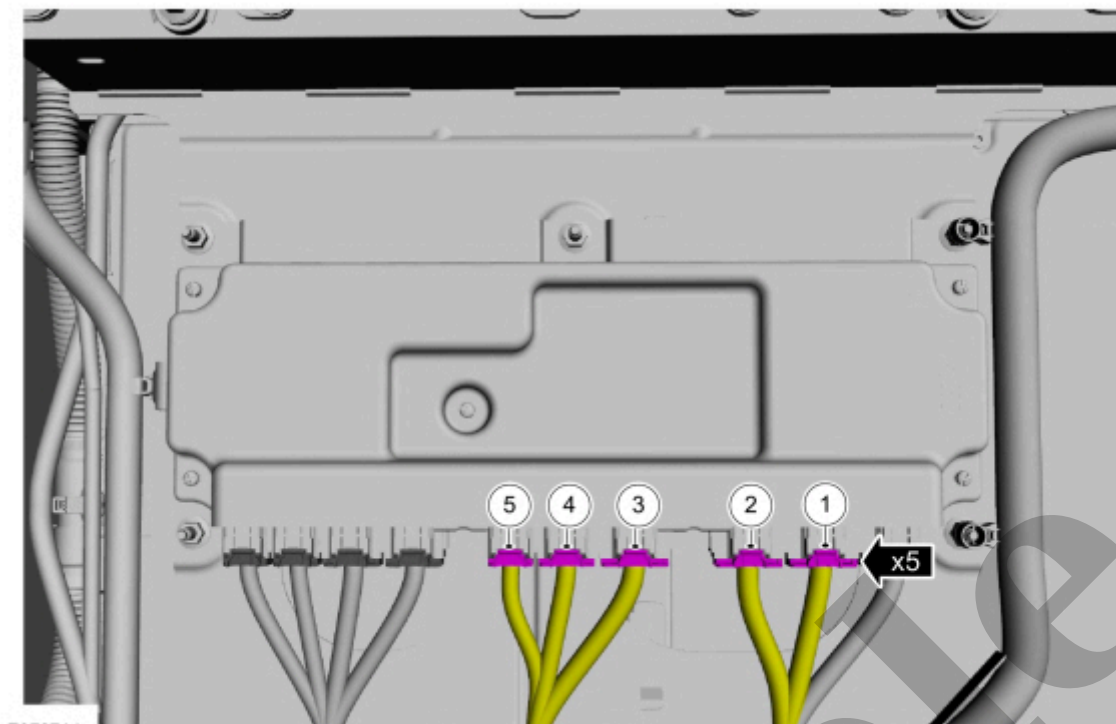


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5. NOTICE

Wait 10 seconds after disconnecting the BECM electrical connector shown, before disconnecting the remaining electrical connectors or component damage may occur.

Disconnect the BECM (battery energy control module) electrical connector.



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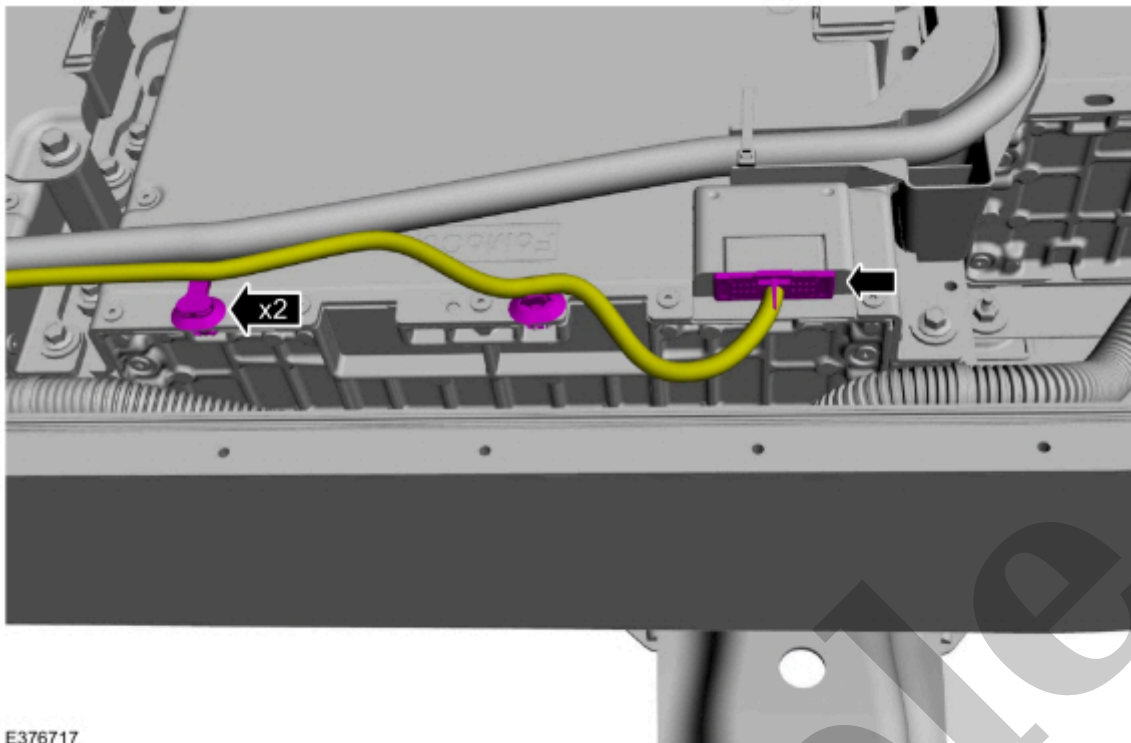
7. Detach the retainers, disconnect the electrical connectors and position the wire harness aside.



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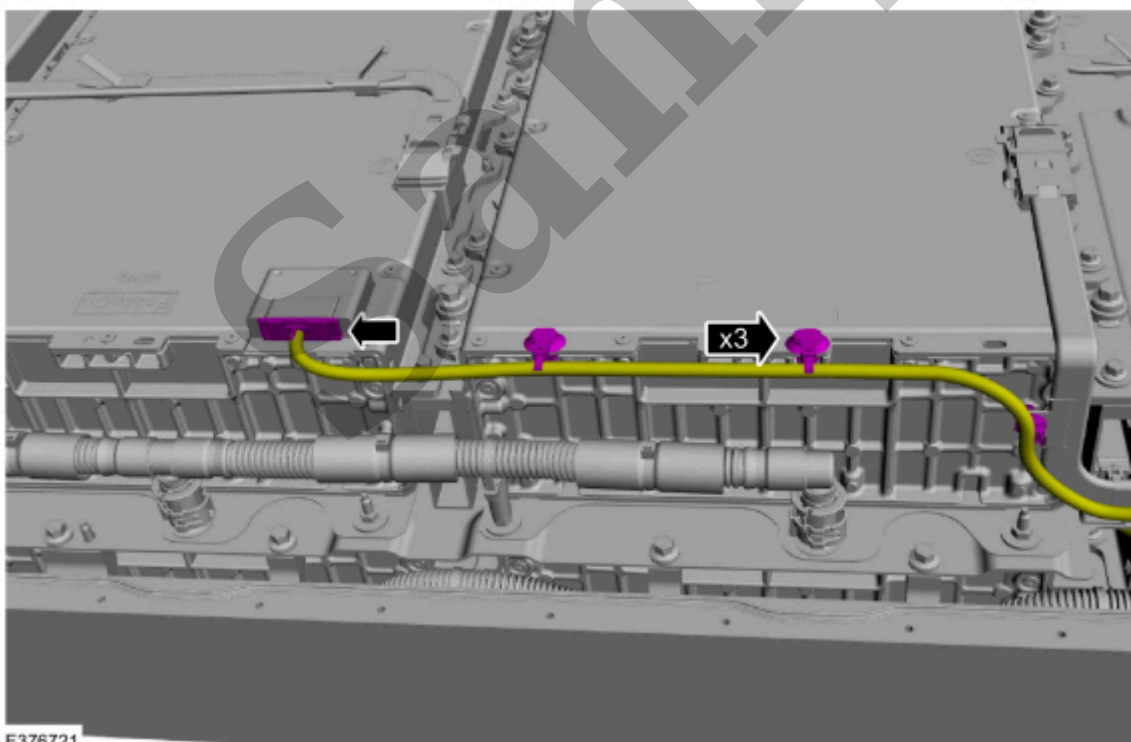
8. Detach the retainers, disconnect the electrical connectors and position the wire harness aside.



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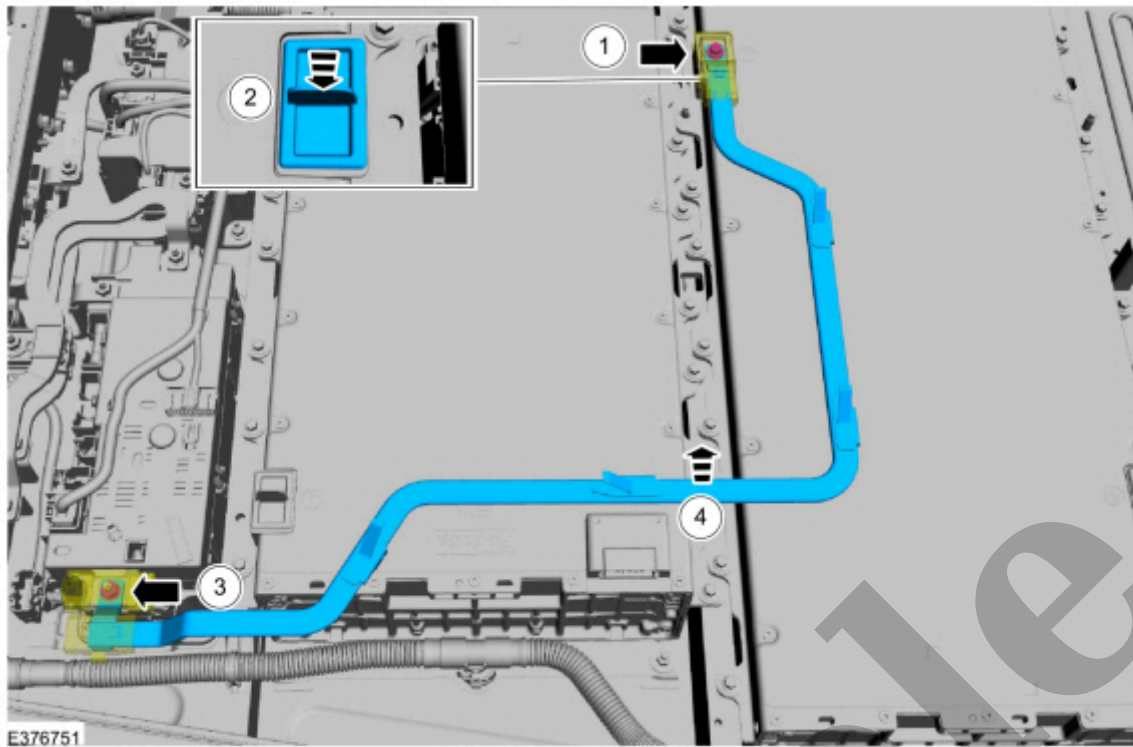
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11. Detach the retainers, disconnect the electrical connector and position the wire harness aside.



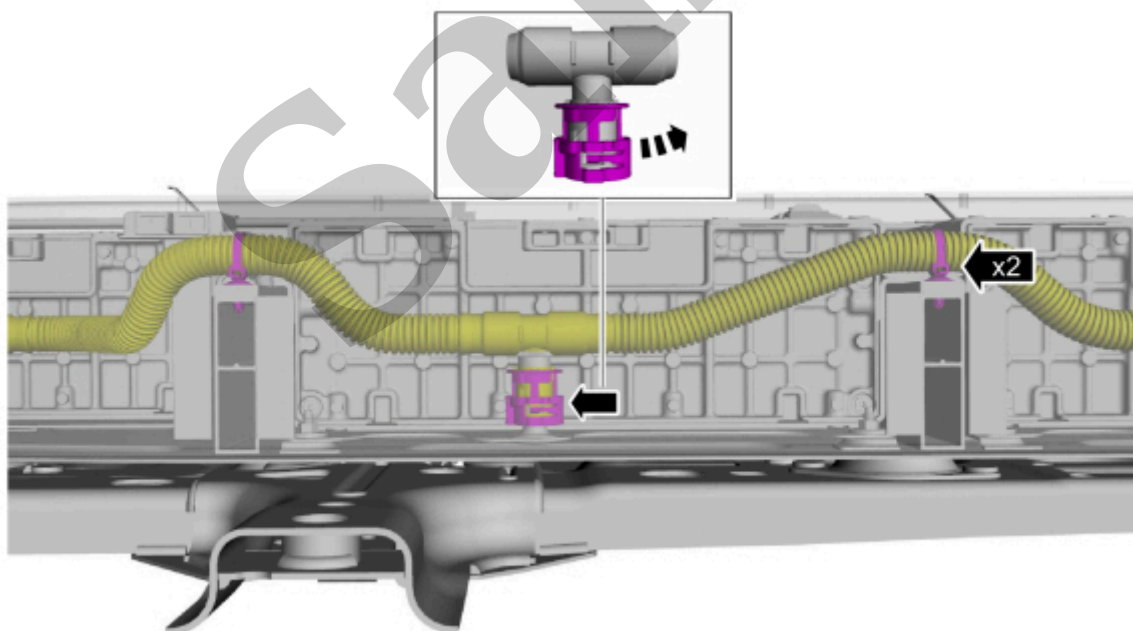
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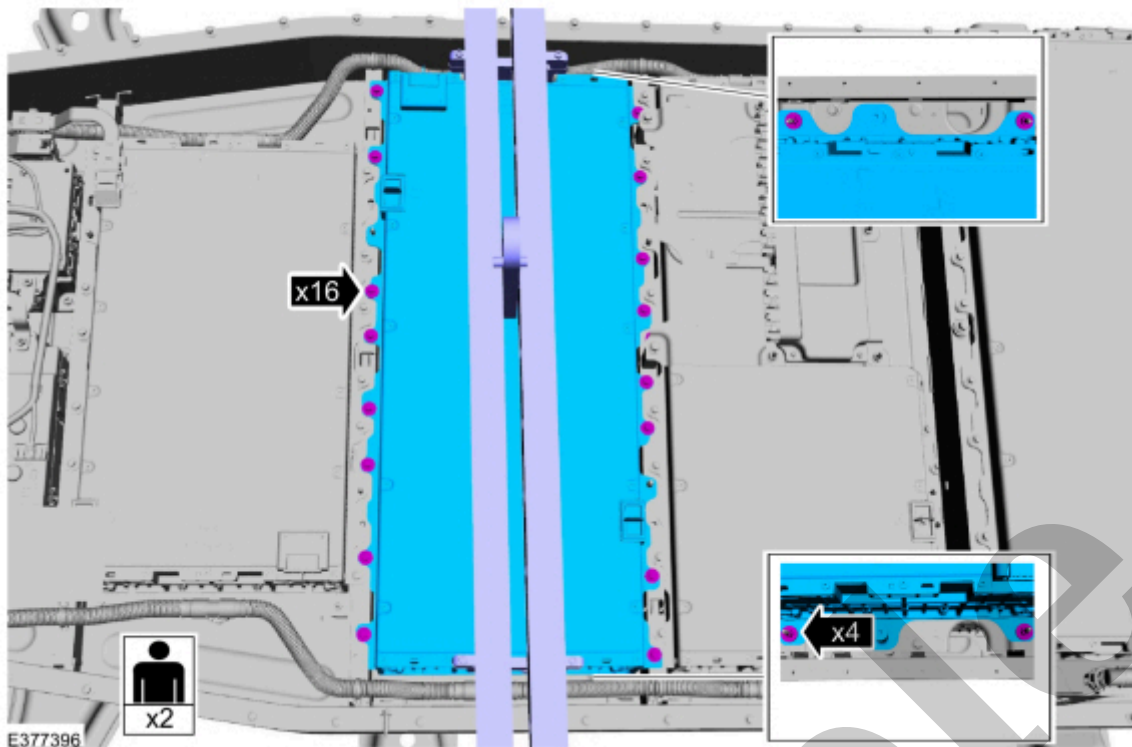
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14. Release the cooling hose connector to cooling plate, detach the pin-type retainers and position the cooling hose aside.



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Installation

1. To assemble, reverse the disassembly procedure, except for the steps below.

2. NOTE

The high voltage battery module balancer balances the voltage level of the replacement battery module to match the remaining original battery modules to ensure correct operation of the high voltage battery pack. This procedure must be repeated for each replacement battery module prior to installation.

Carry out the High Voltage Battery Module Balancing on the new high voltage battery module(s).

Refer to: [High Voltage Battery Module Balancing - Electric](#)(414-03A High Voltage Battery, Mounting and Cables, General Procedures).

3. NOTICE

For proper adhesion of the Thermal Interface Material (TIM), the cold plate must be clean and free of debris.

Clean and remove any debris from the top of the cold plate.