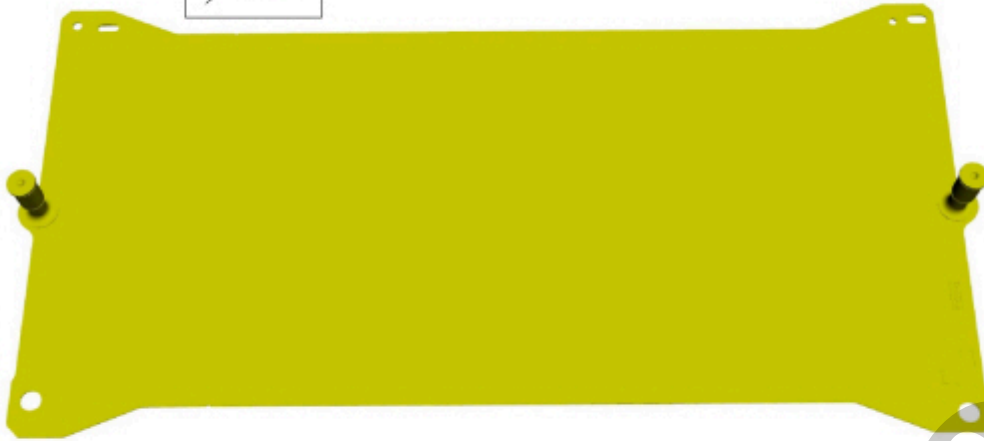


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## 2003 FORD Ka OEM Service and Repair Workshop Manual

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#### 4. NOTICE

Do not lift the cold plate by the coolant pipes or allow the cold plate to bend or component damage may occur.

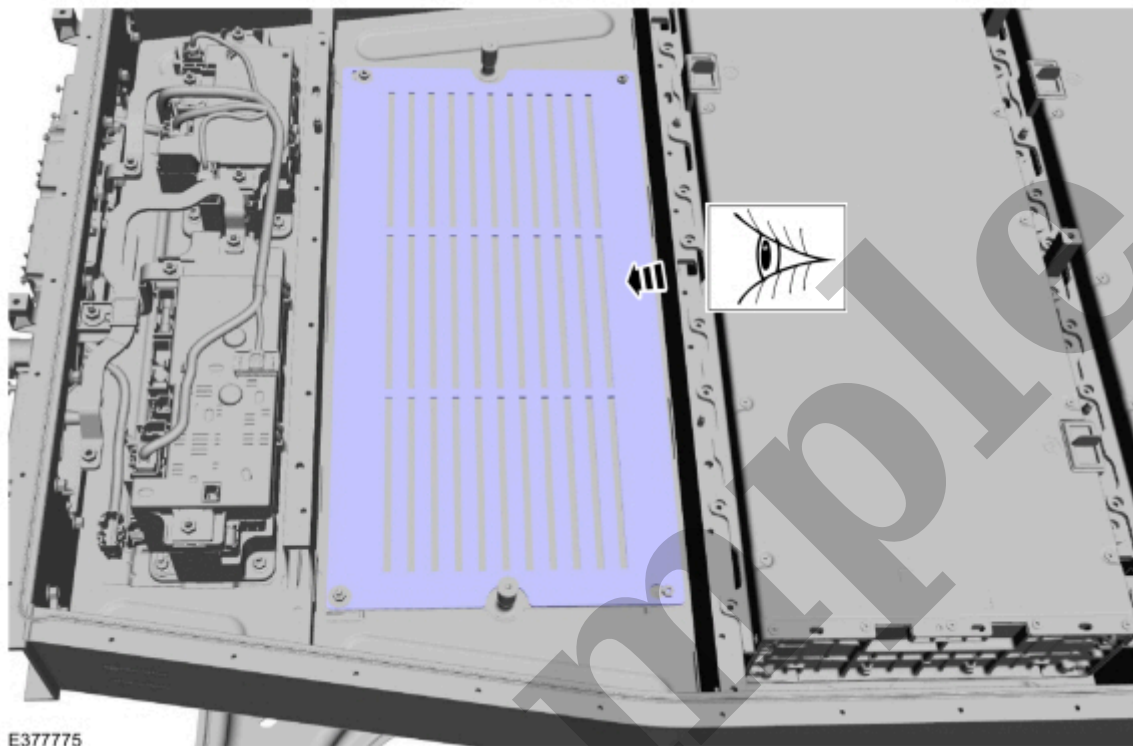
Install the cooling plate and nuts.

**Torque** : 80 lb.in (9 Nm)

6. **NOTE**

Make sure the correct application template is used and is properly orientated. The template must be fully seated.

Install the Thermal Interface Material (TIM) application template to the cold plate.



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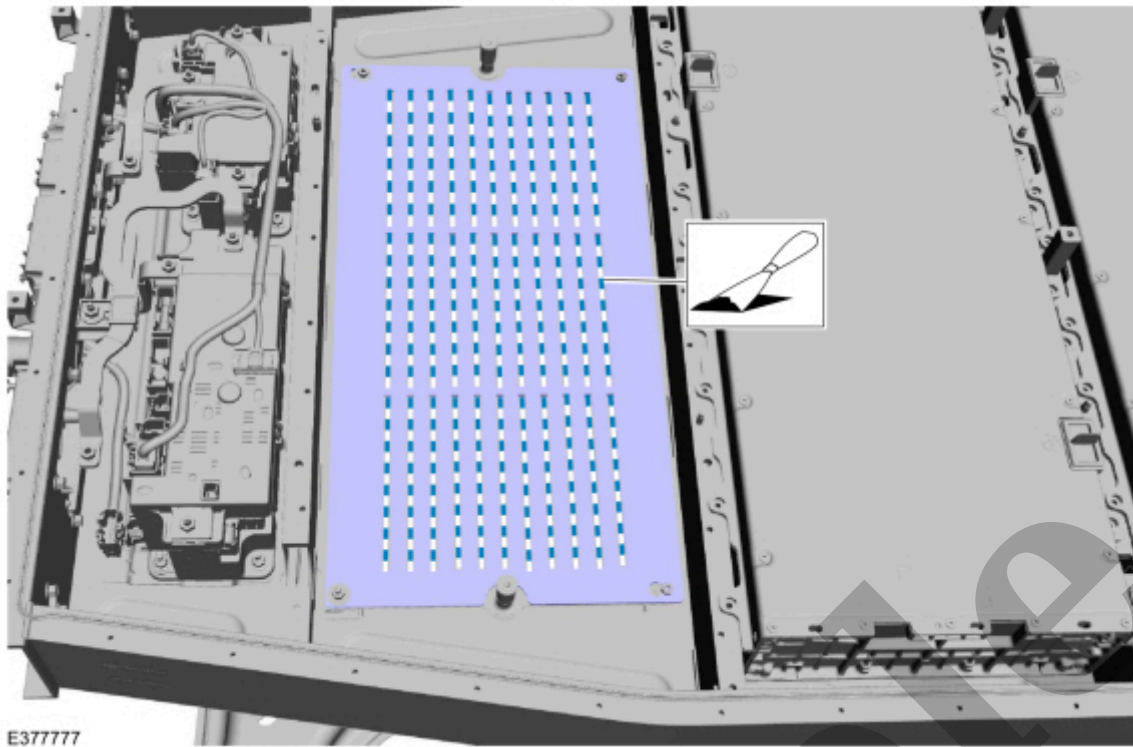
7. **NOTE**

The high voltage battery modules must be installed within 2 hours of applying the Thermal Interface Material (TIM).

**NOTE**

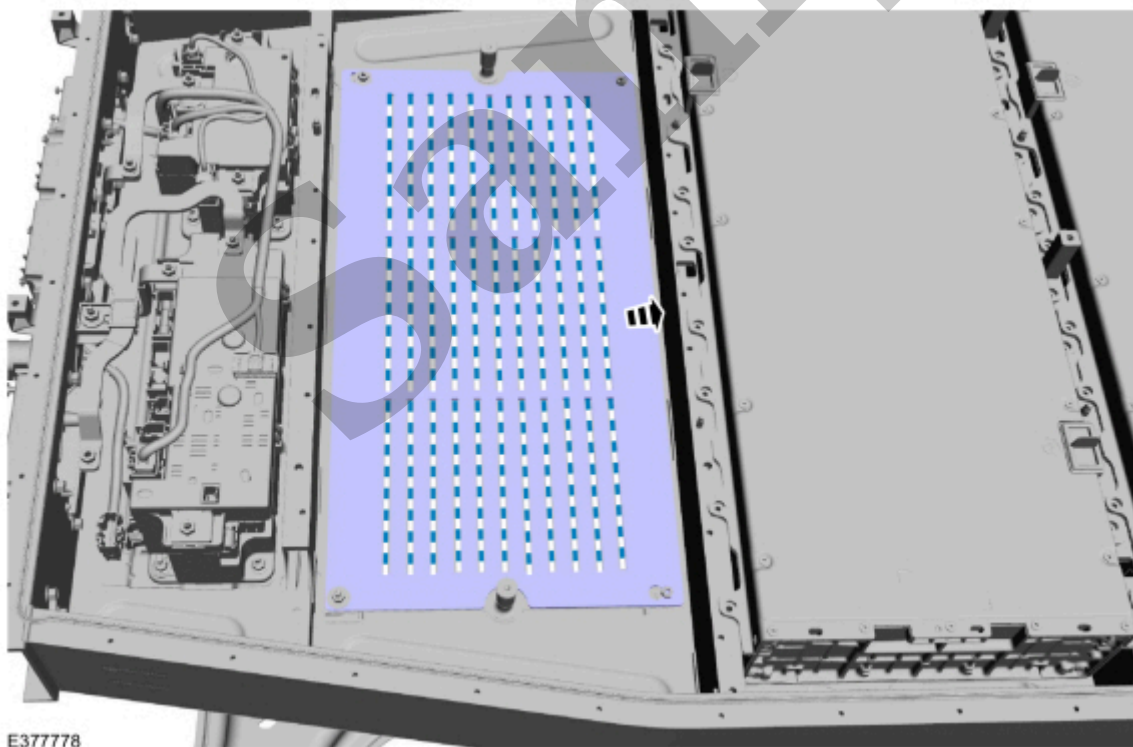
The use of two 200 mL (6.7 oz) of Thermal Interface Material (TIM) cartridges are necessary when replacing a single high voltage battery module.

**NOTE**



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9. Remove the Thermal Interface Material (TIM) application template from the cold plate.



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# Fourth 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

## Fourth 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.

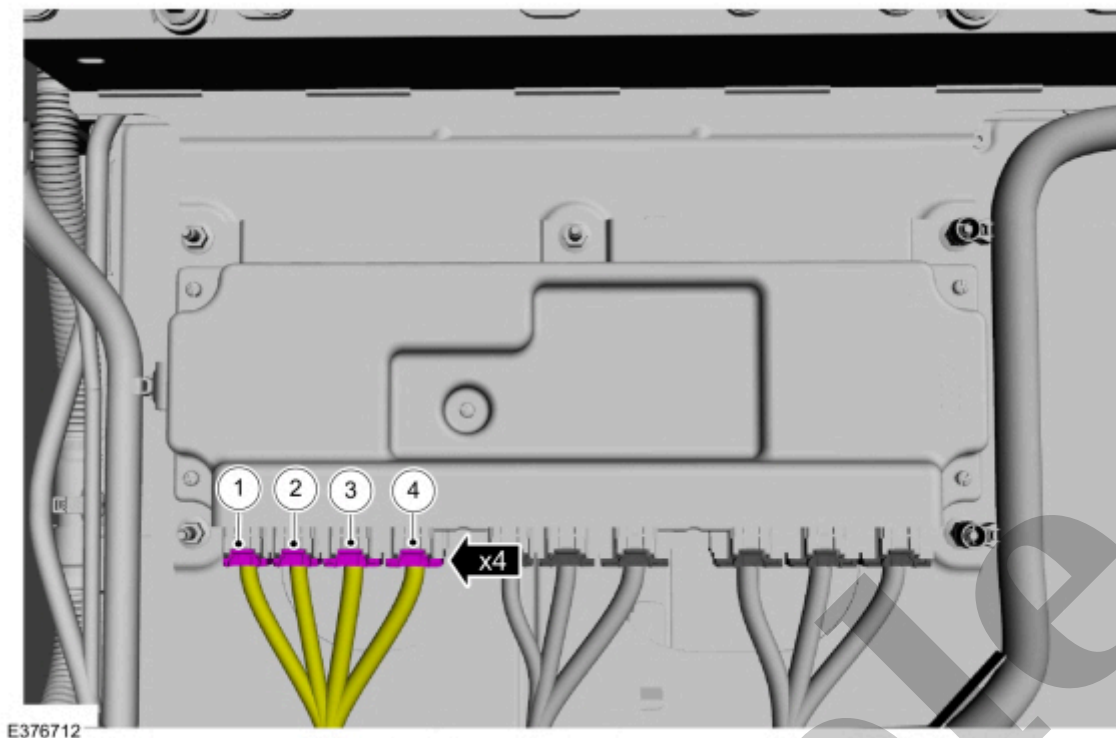
#### WARNING

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

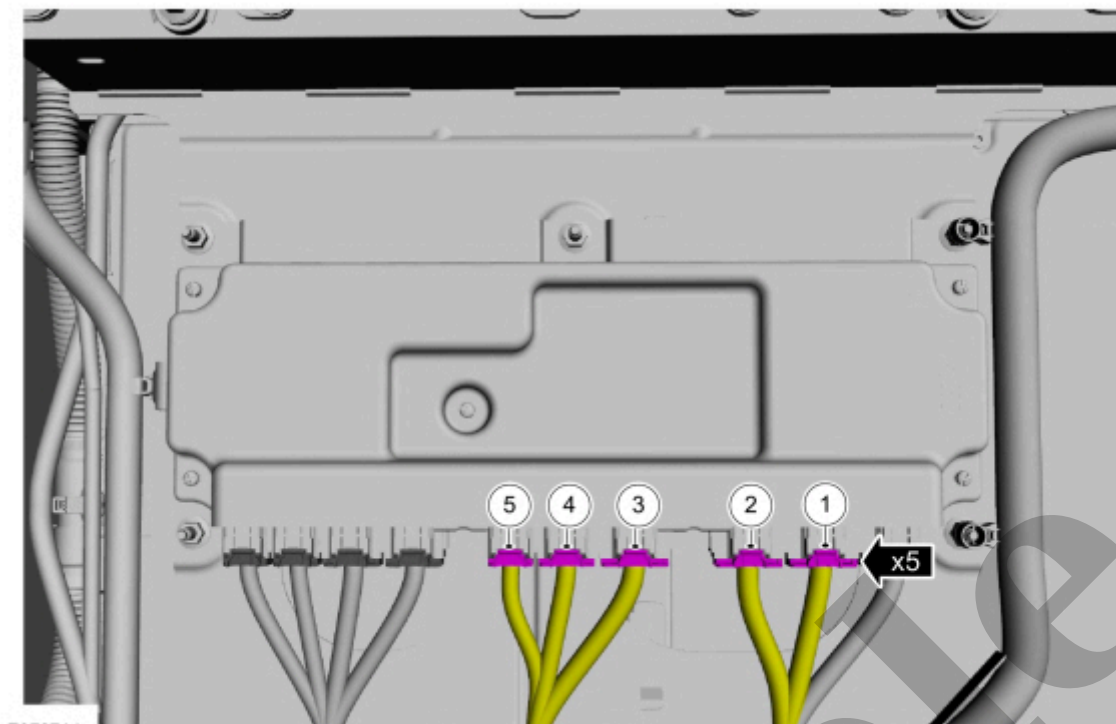


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#### 5. NOTICE

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.

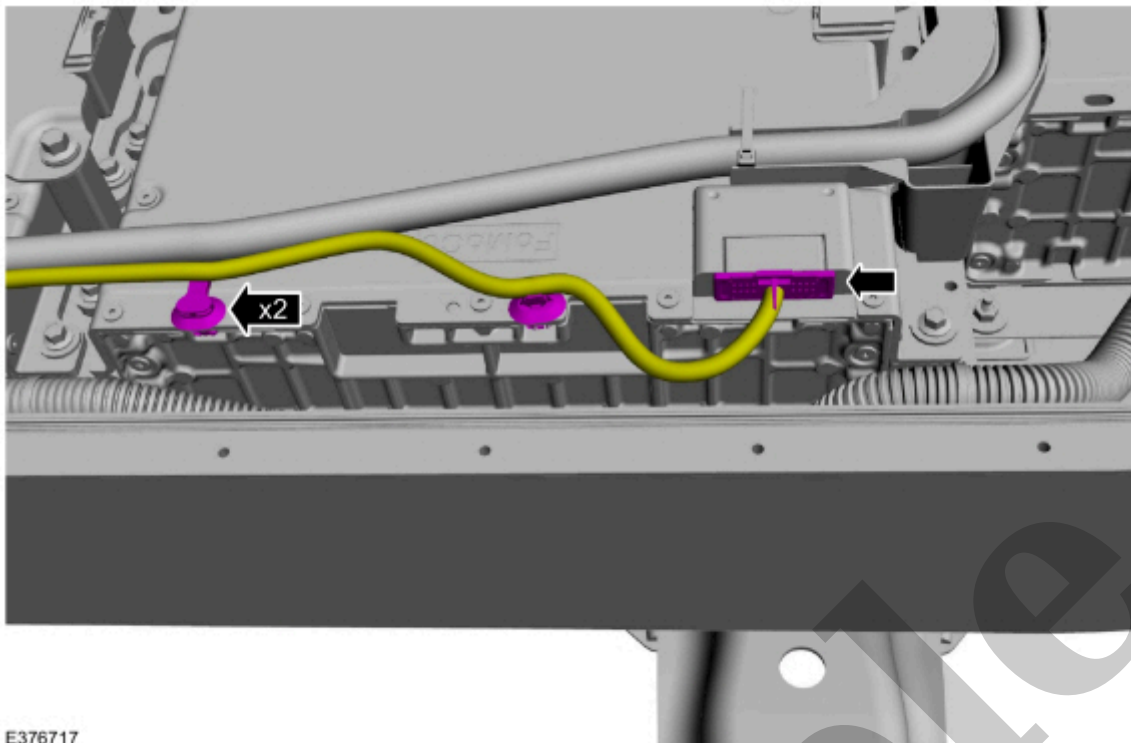


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8. Detach the retainers, disconnect the electrical connectors and position the wire harness aside.

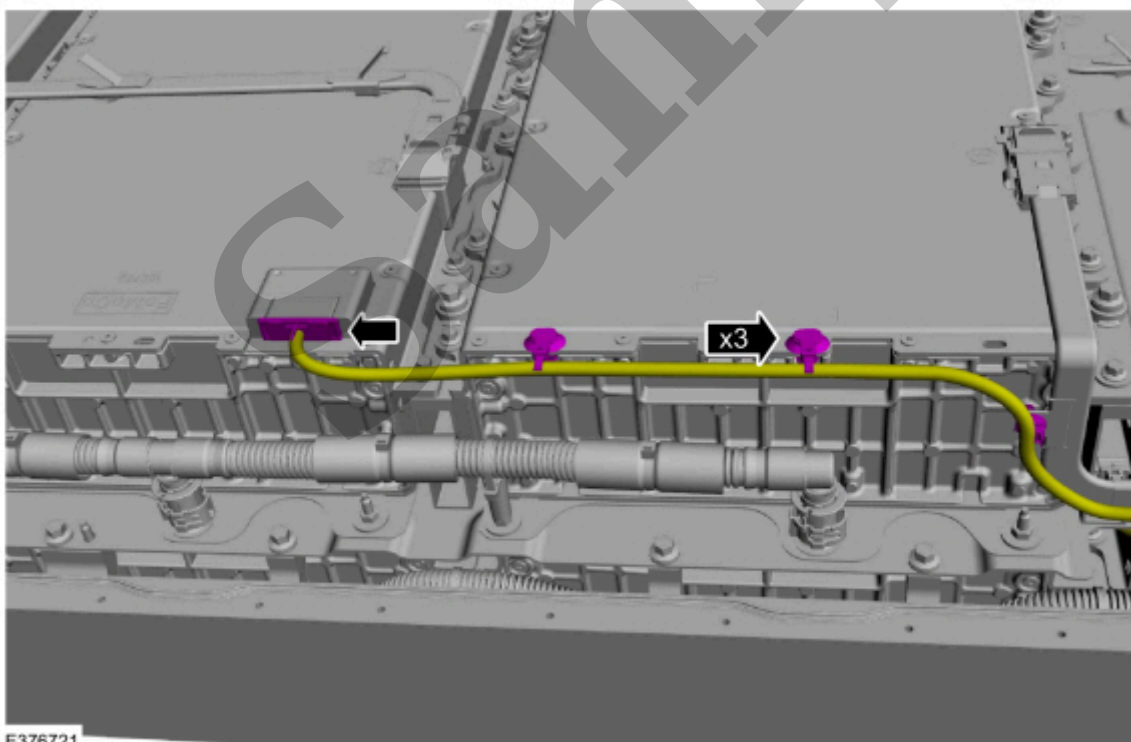




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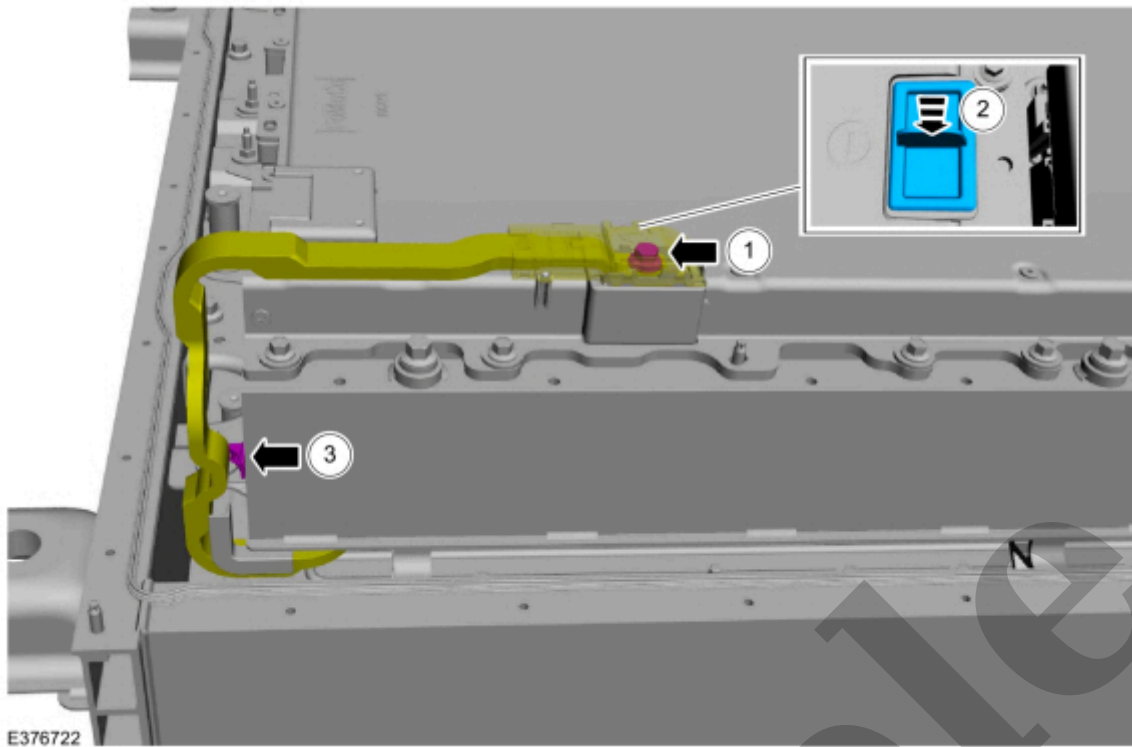
11. Detach the retainers, disconnect the electrical connector and position the wire harness aside.



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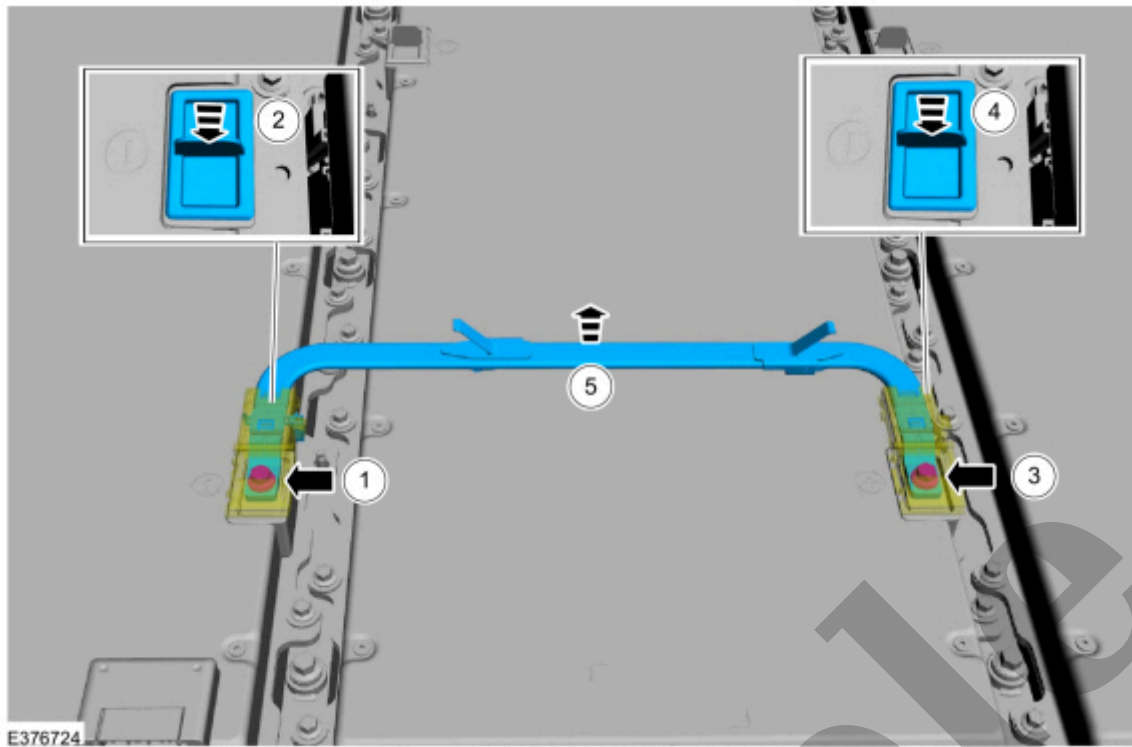
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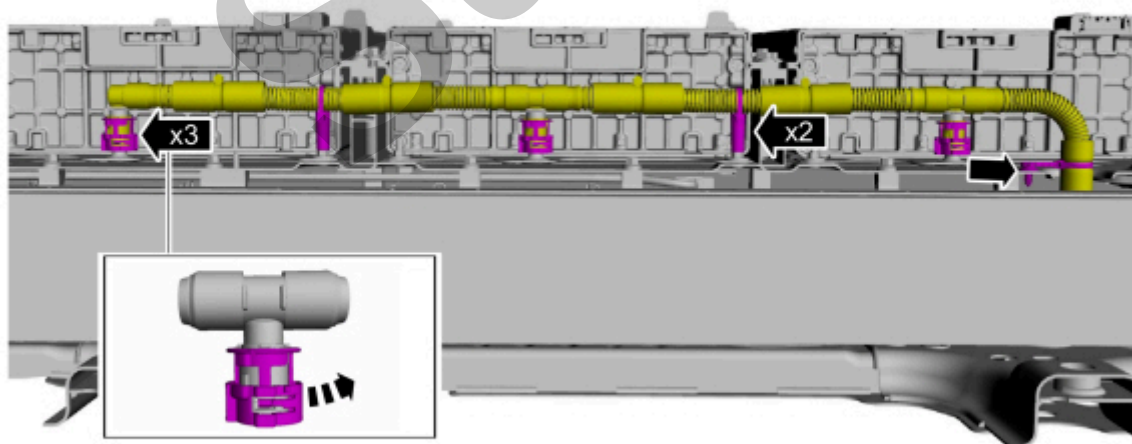
14.
  1. Open the terminal cover and remove the bus bar bolt.  
***Torque*** : 119 lb.in (13.5 Nm)
  2. Install the battery module terminal cover.
  3. Open the terminal cover and remove the bus bar bolt.  
***Torque*** : 119 lb.in (13.5 Nm)
  4. Install the battery module terminal cover.
  5. Remove the bus bar.



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16. On both sides.

Detach the retainers, release the cooling hose connectors to cooling plates and position the hose aside.



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