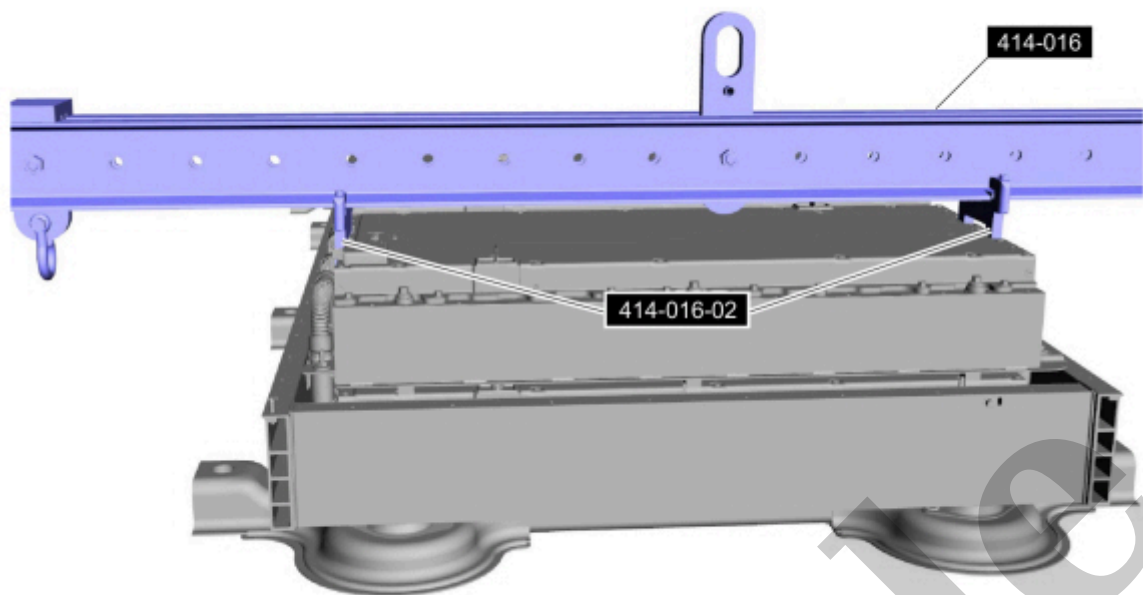


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## 2002 FORD Fusion European OEM Service and Repair Workshop Manual

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E377784

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20. Mark the battery location for installation if not being replaced.

- Remove the cold plate nuts.

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

- Using a floor crane, remove the bolts and the battery array number six assembly.

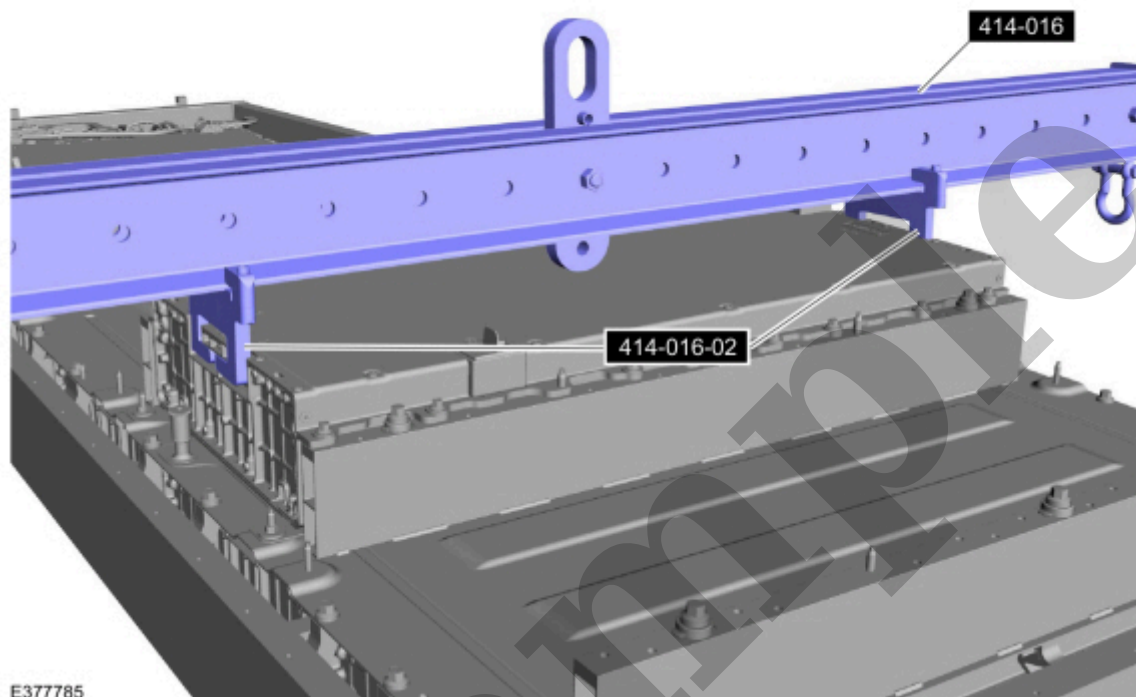
***Torque*** : 133 lb.in (15 Nm)

22. 1. Install the battery array lift adaptors.

**Use Special Service Tool** : 414-016-02 Adapter for 414-016

2. Install the battery lift fixture and position the battery array lift adaptors to the lift fixture and secure.

**Use Special Service Tool** : 414-016 Battery Lift Fixture



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23. Remove the bolts, the mid plate tray and battery.

Use the General Equipment: Floor Crane

**Torque** : 150 lb.in (17 Nm)

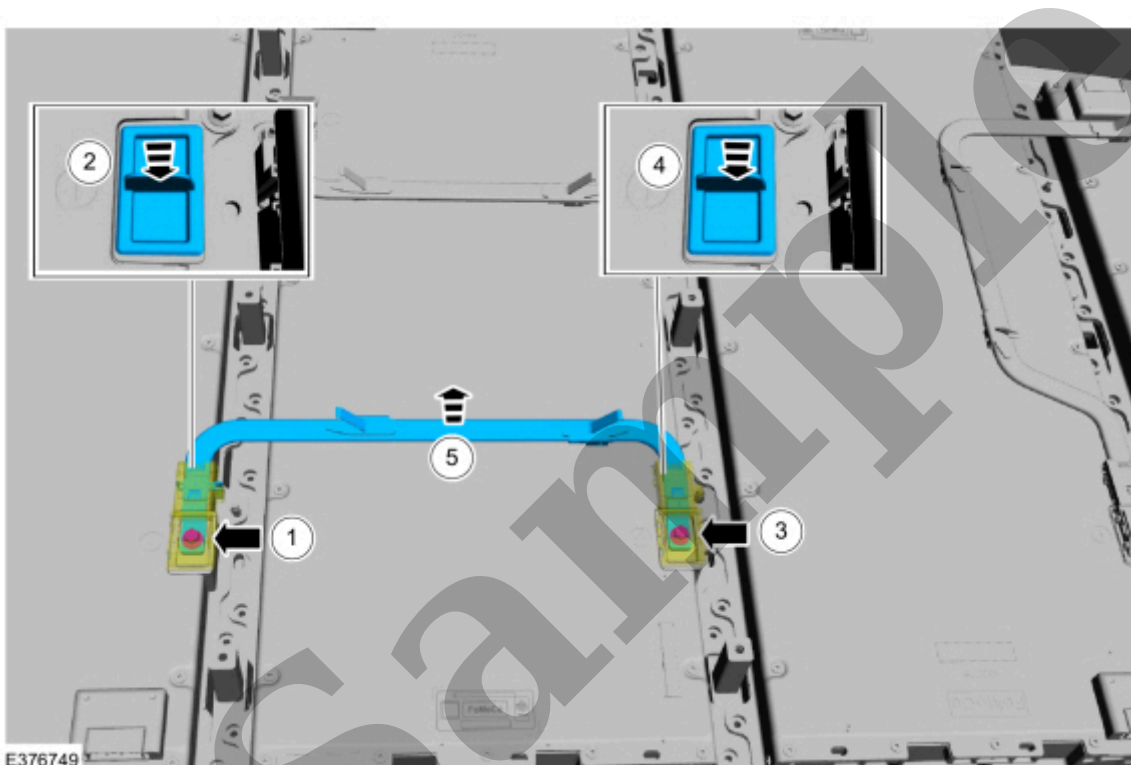
25. • Open the terminal cover and remove the bus bar bolt.

**Torque** : 115 lb.in (13 Nm)

- Install the battery module terminal cover.
- Open the terminal cover and remove the bus bar bolt.

**Torque** : 115 lb.in (13 Nm)

- Install the battery module terminal cover.
- Remove the bus bar.



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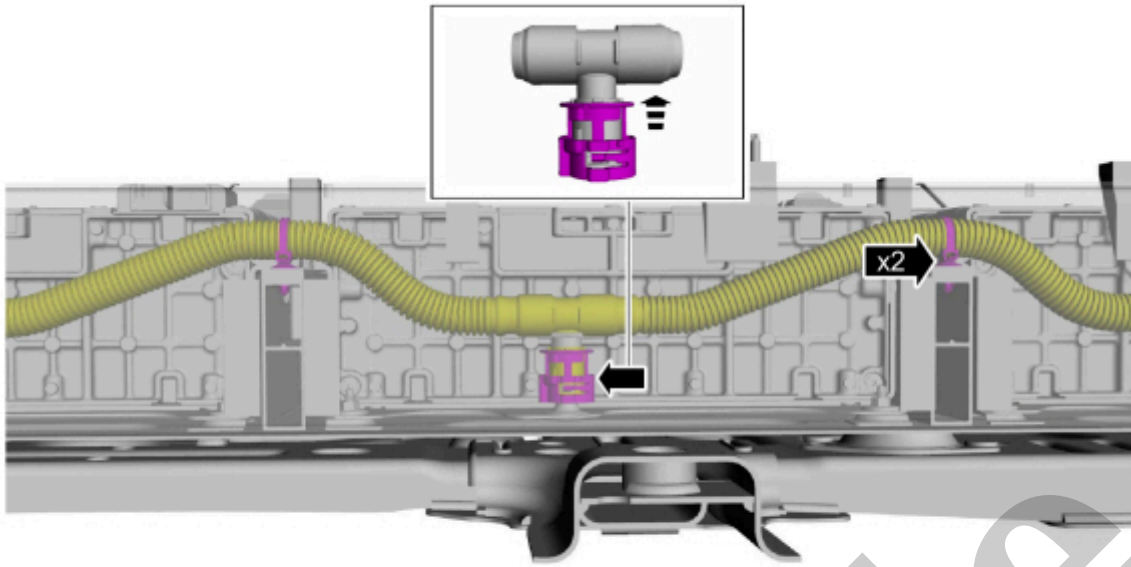
26. • Open the terminal cover and remove the bus bar bolt.

**Torque** : 115 lb.in (13 Nm)

- Install the battery module terminal cover.
- Open the terminal cover and remove the bus bar bolt.

**Torque** : 115 lb.in (13 Nm)

- Install the battery module terminal cover.



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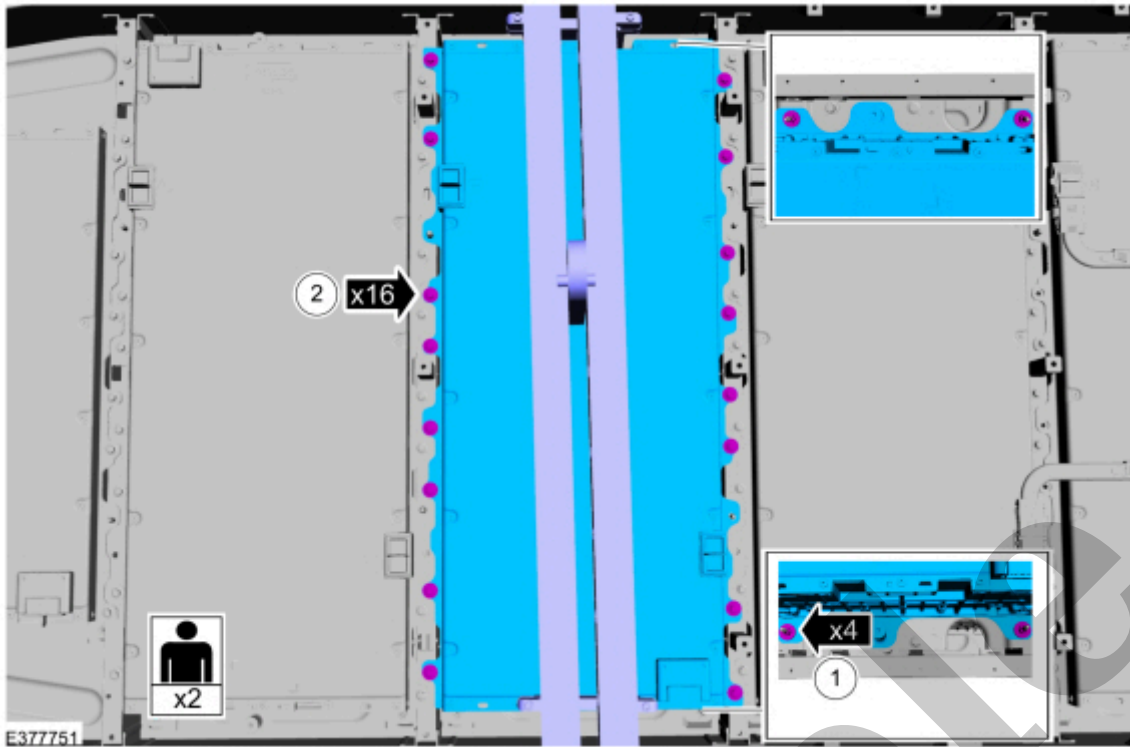
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28. 1. Install the battery array lift adaptors.

**Use Special Service Tool** : 414-016-02 Adapter for 414-016

2. Install the battery lift fixture and position the battery array lift adaptors to the lift fixture and secure.

**Use Special Service Tool** : 414-016 Battery Lift Fixture



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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.

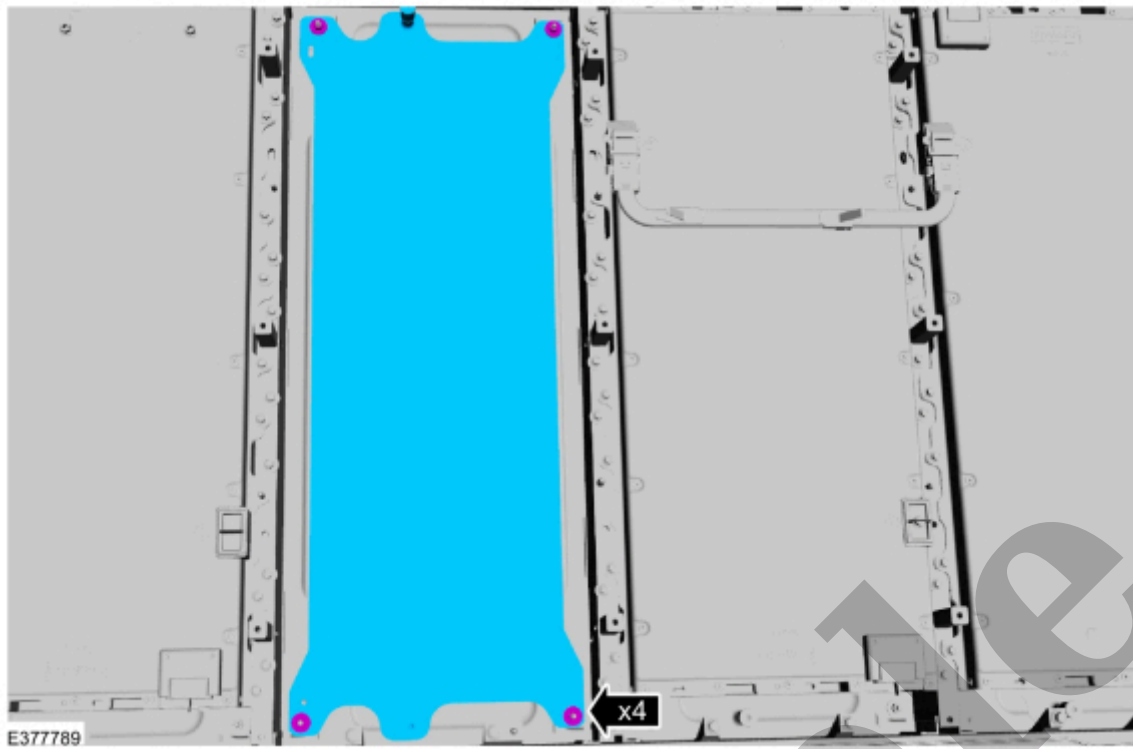
Carry out the High Voltage Battery Module Balancing on the new high voltage battery module(s).

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.



[Click here to learn about symbols, color coding, and icons used in this manual.](#)

5. Use the correct Thermal Interface Material (TIM) application template for the cold plate.



[Click here to learn about symbols, color coding, and icons used in this manual.](#)

Use a power caulk gun that applies the Thermal Interface Material (TIM) with less effort and a continuous bead.

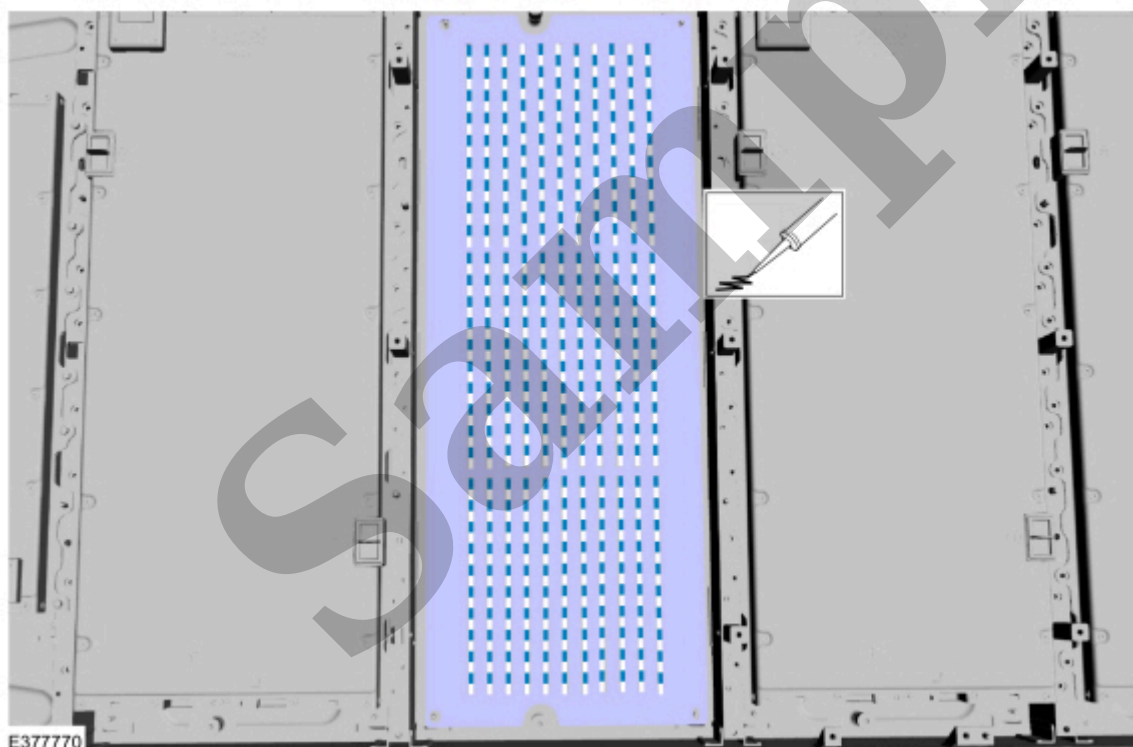
#### NOTE

Prior to applying the mixing tip, activate the power caulk gun until both parts of the Thermal Interface Material (TIM) come out of the end and is evenly mixed. Discard the premix TIM. Install the mixing tip and activate the power caulk gun until both parts of the TIM come out of the end of the mixing tip and is evenly mixed. Discard the premix TIM.

Using a power caulk gun, apply the Thermal Interface Material (TIM) between the template and the cold plate, slightly overfill the template spaces evenly.

Use the General Equipment: Power Caulk Gun

**Material** : Motorcraft® EV Battery Array Thermal Interface Material II / TA-38-B (WSS-M4G372-A1)



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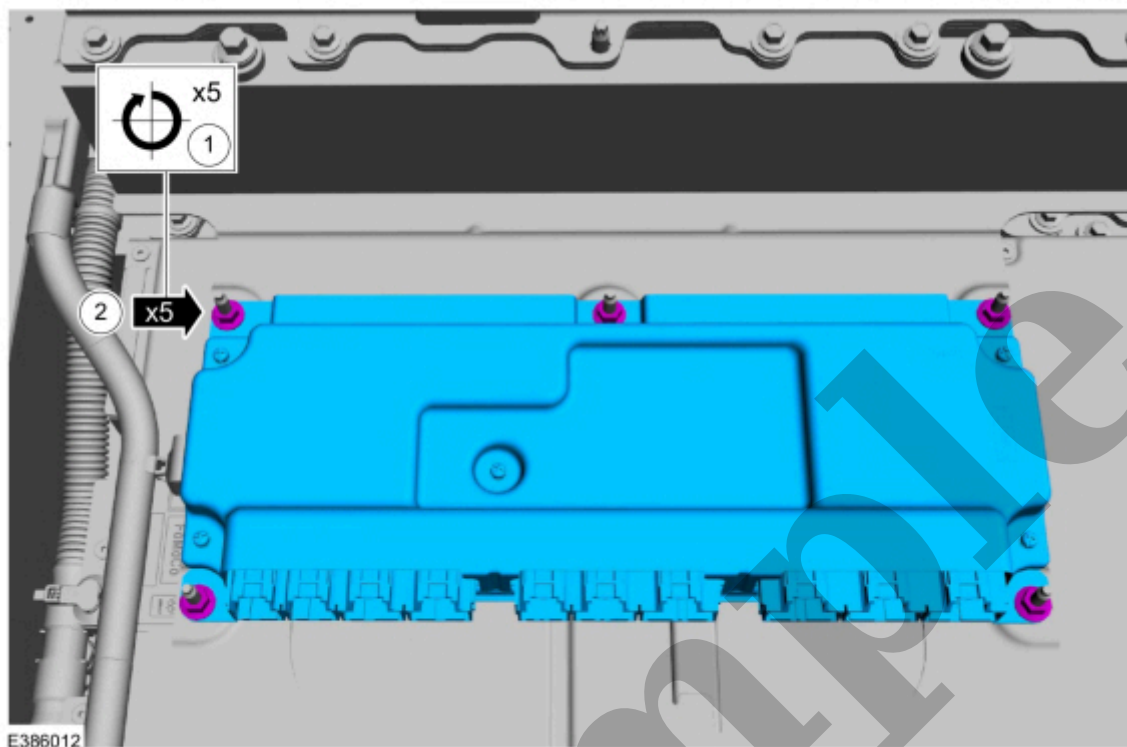
8. Remove the excessive Thermal Interface Material (TIM) from the top of the template.



10. 1. Install the BECM (battery energy control module) and hand start the nuts.

2. Tighten the nuts.

**Torque** : 119 lb.in (13.5 Nm)



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11. **NOTICE**

The BECM electrical connectors must be connected in the sequence shown or component damage may occur.

Connect the BECM (battery energy control module) electrical connectors in the sequence shown.

## Third Row High Voltage Battery Module - Electric, Vehicles With: Standard Range Battery

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

### Third Row High Voltage Battery Module - Electric, Vehicles With: Standard 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