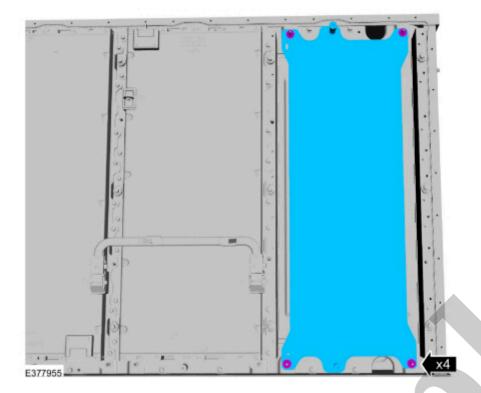


# Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2004 FORD Fusion European OEM Service and Repair Workshop Manual

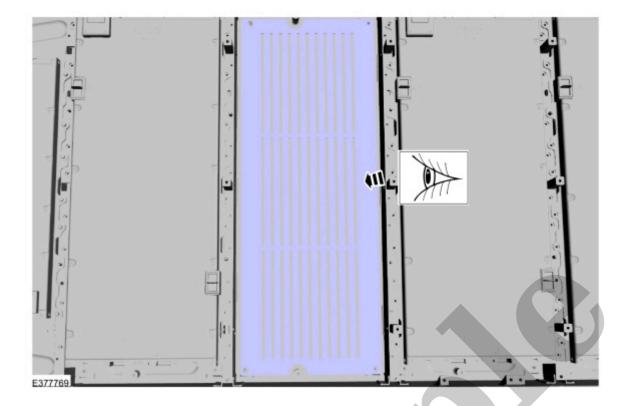
Go to manual page



# 5. NOTE

Make sure the correct application template is used and is properly orientated.

Extended range high voltage battery



#### 7. NOTE

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

#### NOTE

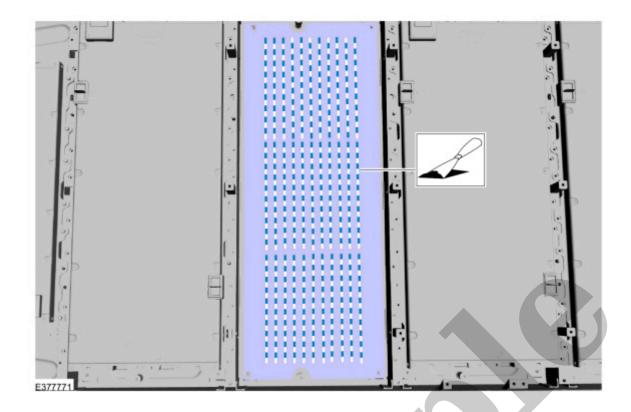
The use of two 200 mL (6.7 oz) of Thermal Interface Material (TIM) cartridges are necessary when replacing a single high voltage battery module.

#### **NOTE**

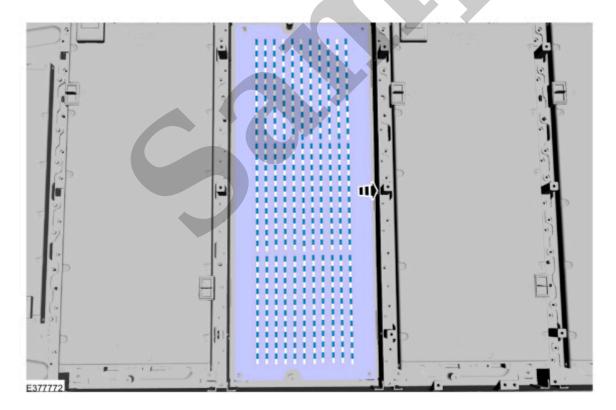
Use a power caulk gun that applies the Thermal Interface Material (TIM) with less effort and a continuous bead.

#### **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



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



Click here to learn about symbols, color coding, and icons used in this manual.

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

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

Sixth Row Upper 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.

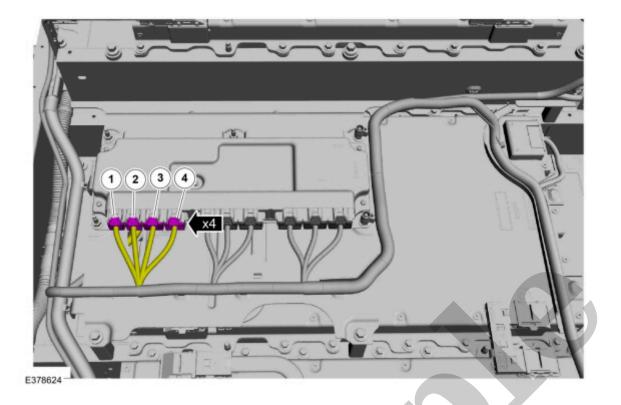
#### **WARNING**

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.

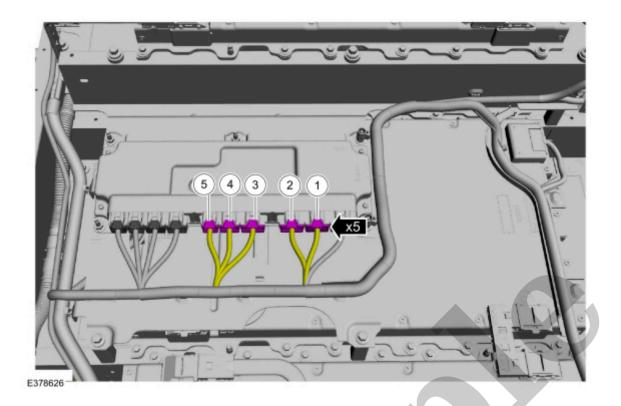
#### **NOTE**



# 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.



7. 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. Detach the retainers and remove the bus bar.

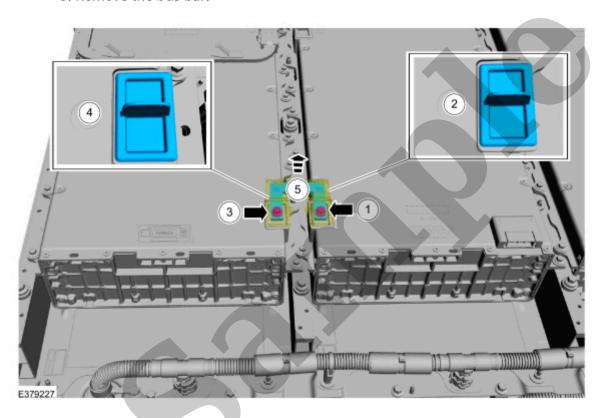
9. 1. Open the terminal cover and remove the bus bar bolt.

**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.



Click here to learn about symbols, color coding, and icons used in this manual.

10. 1. Open the terminal cover and remove the bus bar bolt.

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

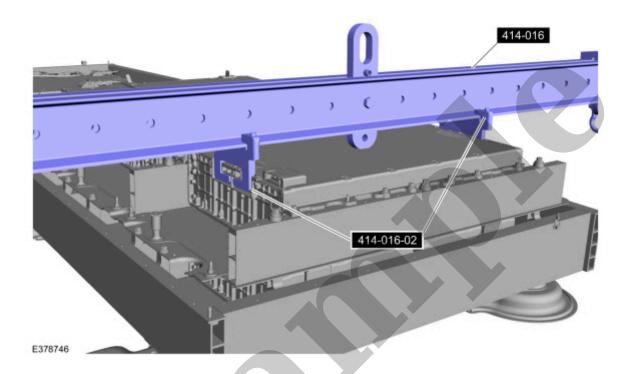
- 2. Install the battery module terminal cover.
- 3. Detach the retainer and position the bus bar aside.

12. 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



Click here to learn about symbols, color coding, and icons used in this manual.

- 13. Remove the cold plate nuts.
  - Using a floor crane, remove the bolts and the battery array number six assembly.

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



# 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)