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1996 FORD Maverick SWB OEM Service and Repair Workshop Manual

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2. If the bead does not drop all the way to the bottom, there is a gross seal leak and indicates the Gross Leak Check has failed. The source could be either loose battery pack cover bolt(s), battery pack seal, vent patch not covered completely, or one of the custom connectors. Make sure that the connections are secured.
3. Apply SNOOP solution to the pressure test connector(s). If a leak is found the connector may be damaged and require replacement.
4. If the leak cannot be located: For PHEV-C battery packs, INSTALL a new battery cover gasket and repeat the Gross Leak Test. If the leak is still present INSTALL new high voltage and low voltage connector headers one at a time followed by repeating the Gross Leak Test until the leak can be corrected. For PHEV-A battery packs, INSTALL a new connector header and wiring harness assembly and high voltage battery cover.

Do not proceed to the SNOOP Solution Test if the Gross Leak test does not pass.



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

14. **NOTE**

SNOOP solution can be difficult to apply in tight areas with deep wells. Instead of using a manual applicator, it is recommended to apply with a spray applicator.

Apply SNOOP solution according to the directions below:

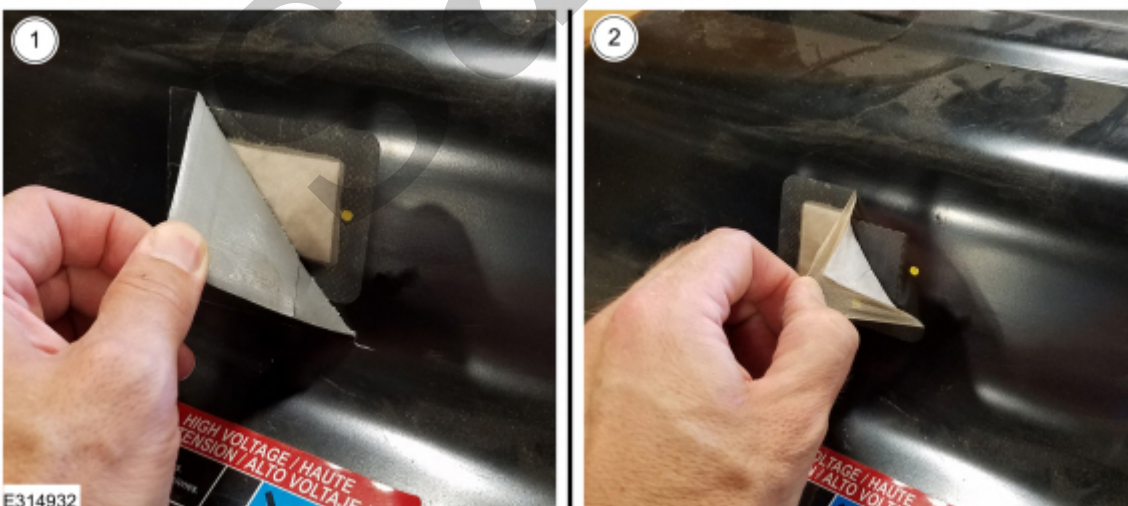


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16. NOTICE

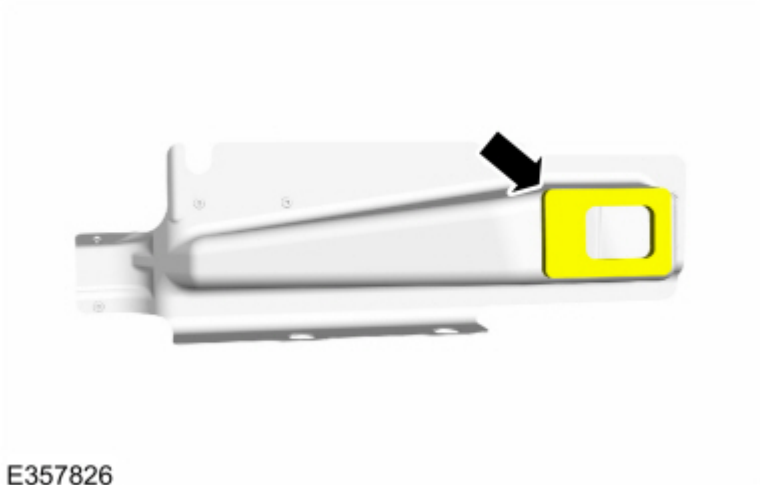
If the bandage and tape are not removed from the vent patch, damage to the high voltage battery can result.

1. Once the pack has been confirmed to be sealed, disconnect the pressure test connector from the high voltage battery.
2. Remove the tape and bandage from the vent patch. Ensure that the vent patch has not been damaged or pulled off the battery pack. If damage is found INSTALL a new vent patch.



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BEV-G Battery Pack



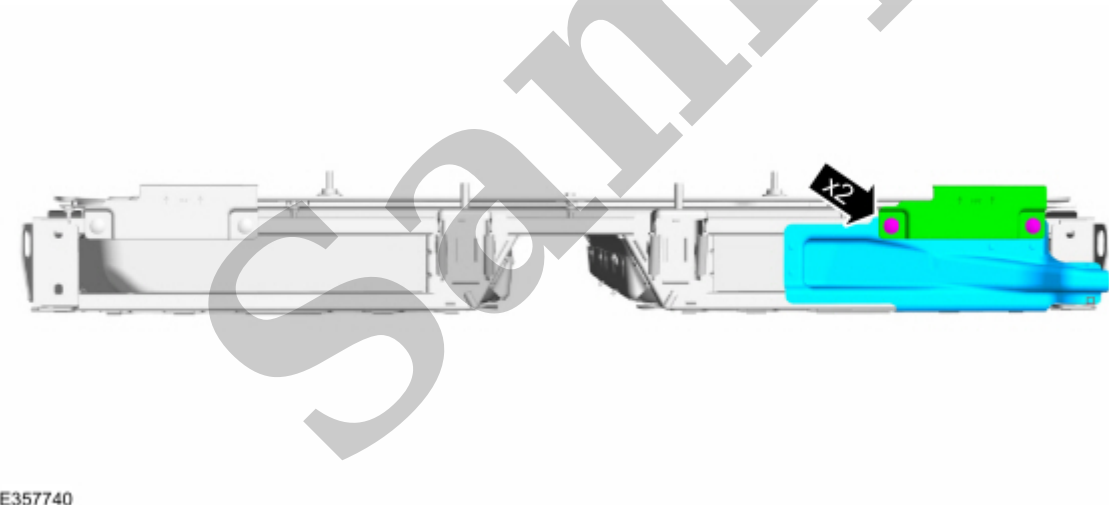
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19. **NOTE**

If equipped.

Install the high voltage battery rear outer shield and vent tube.



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This procedure must be completed prior to the installation of a replacement high voltage battery module directed by the Ford workshop manual. The replacement high voltage battery modules and Midtronics XMB-9640 module balancer must be placed on a stable clean work area with access to a AC (alternating current) wall power outlet.

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.

NOTE

The high voltage battery module balancing process may take up to 6 hours for each replacement battery module.

1. NOTE

The same scan tool that was previously used for the vehicle pinpoint test must be utilized for this step.

Using the scan tool open the current vehicle session from the previous sessions menu. Select the log viewer icon to view the session data. RETRIEVE and RECORD the BECM (battery energy control module) health tool generated target voltage code.

2. Connect the Midtronics XMB-9640 high voltage battery module balancer into an appropriate wall outlet and turn on the high voltage battery module balancer.

NOTE

Follow the remaining steps as instructed on the On-Screen display.

3. Select "Module Balancing" on the On-Screen display.
4. Scan or manually enter the 17 digit VIN (vehicle identification number) .

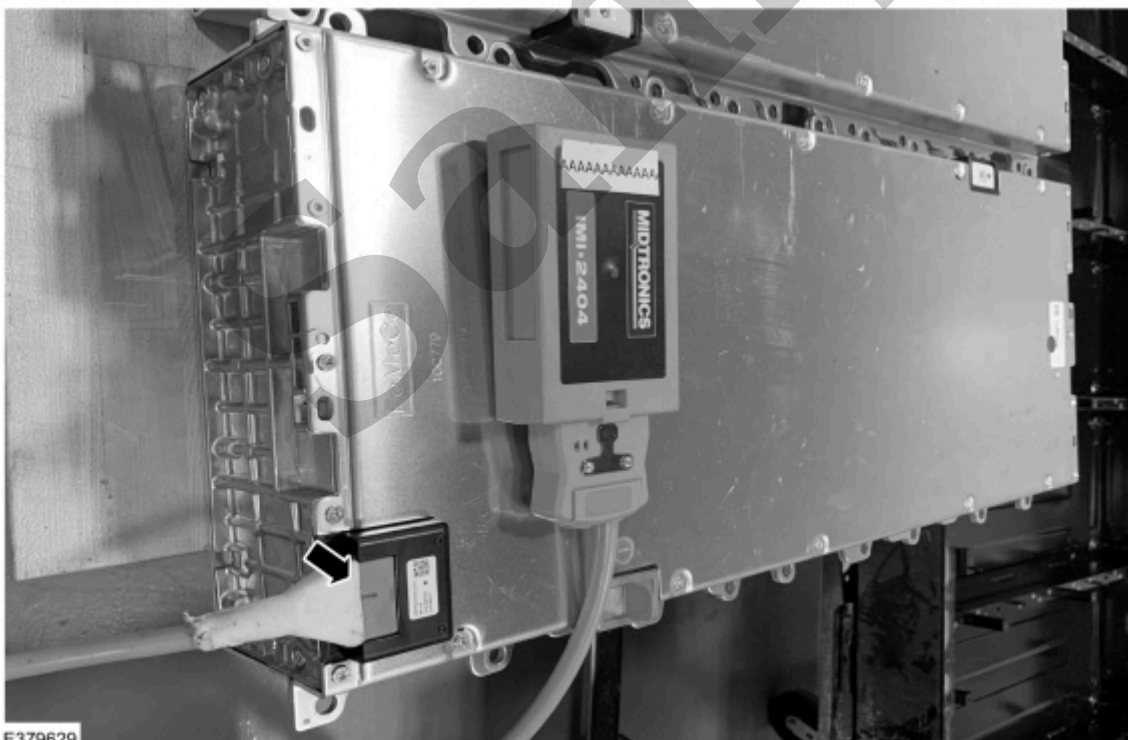
5. NOTICE



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8. Connect the electrical connector.



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9. Connect and tighten the cables to the battery module terminals.



High Voltage Connector Disconnect and Connect

414-03A High Voltage Battery, Mounting and Cables	2022 F-150
General Procedures	Procedure revision date: 06/3/2022

High Voltage Connector Disconnect and Connect

Disconnect

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.

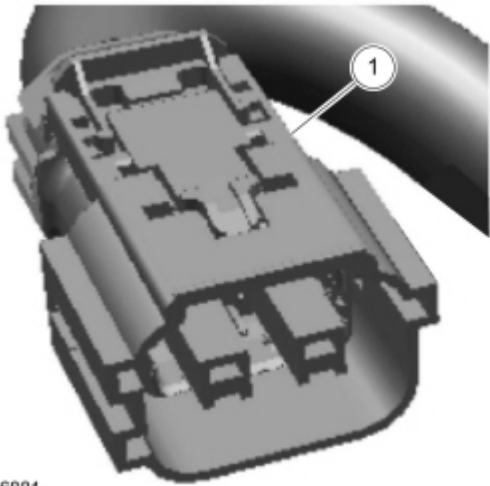
NOTICE

Before disconnecting the high voltage battery electrical connector, the electrical connector must be cleaned with a nylon brush and free of debris. Blow any dirt or debris from the electrical connector with compressed air before disconnecting or component damage may occur.

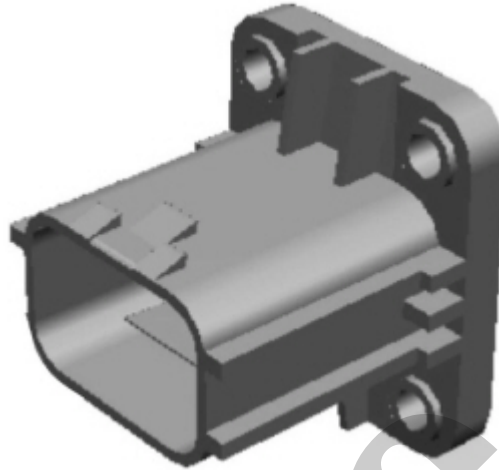
NOTICE

High voltage electrical connectors may require unique methods to be disconnected. If not properly disconnected, component damage may occur.

1	Stage 1 electrical connector
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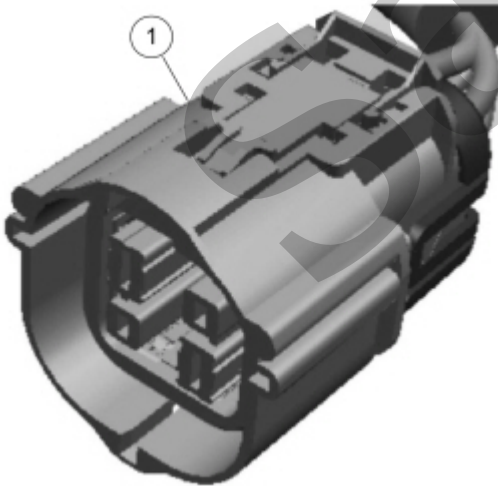
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6. CX482/CX483 - PHEV - Air Conditioning (A/C) Compressor Jumper Harness to Cabin Coolant Heater (4-way)

Callout	Connector
1	Stage 1 electrical connector



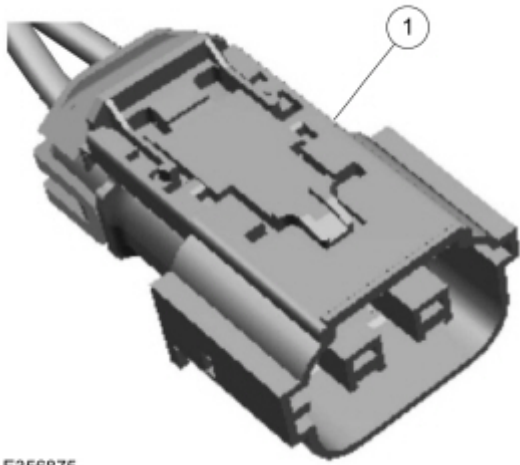
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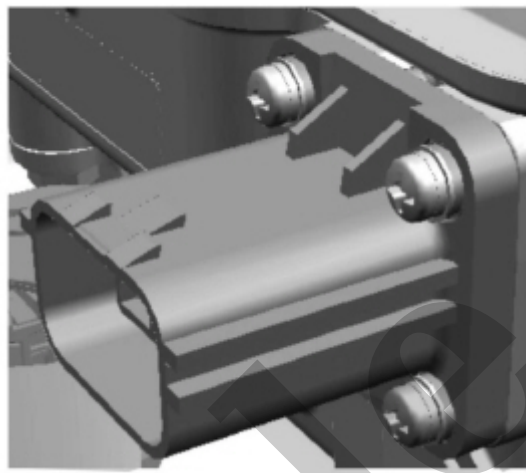
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7. CX482/CX483 - PHEV - High Voltage Battery to High Voltage Battery Cable (4-way)

Callout	Connector
1	Stage 1 electrical connector



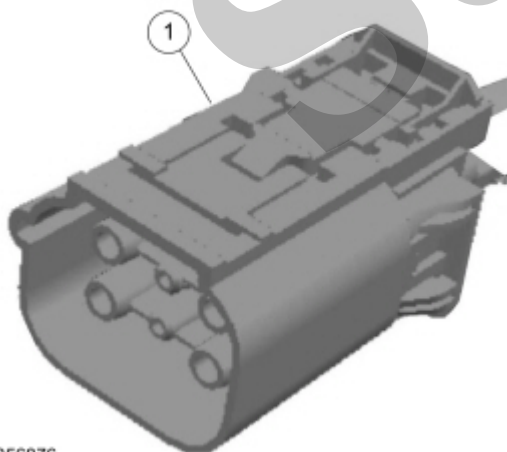
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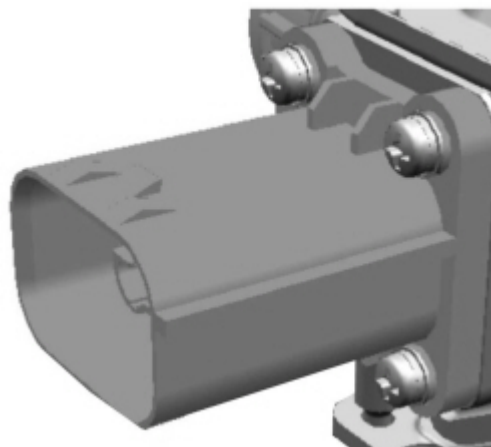
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10. CX482/CX483 - PHEV - High Voltage Battery Cable to Secondary On-Board Diagnostic Control Module A (SOBDM) (6-way)

Callout	Connector
1	Stage 1 electrical connector



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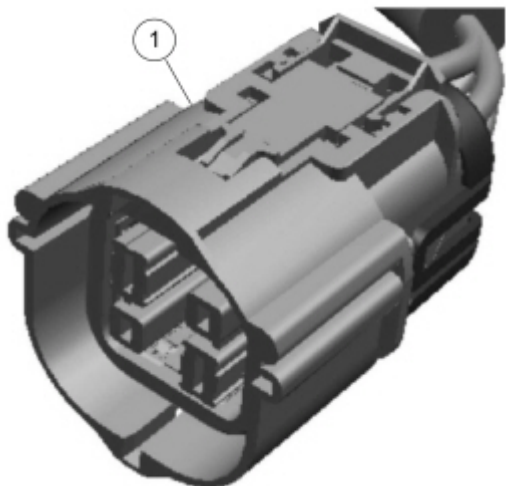


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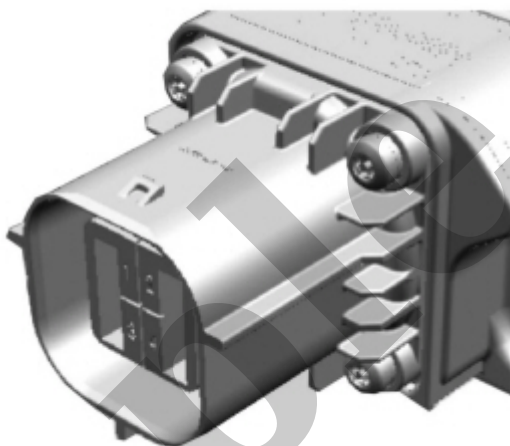
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13. CX727 - High Voltage Battery Cable to Cabin Coolant Heater (4-way)

Callout	Connector
1	Stage 1 electrical connector



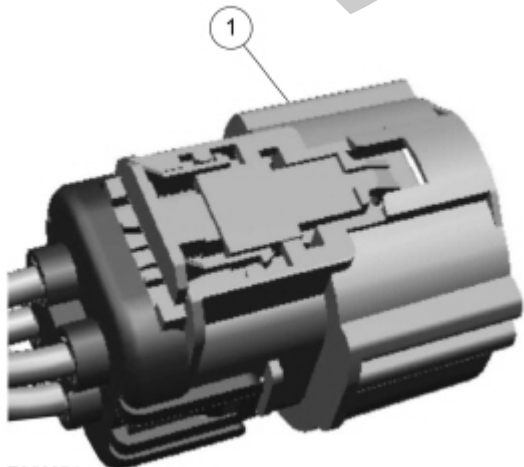
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14. CX727 - High Voltage Battery to High Voltage Battery Cable (4-way)

Callout	Connector
1	Stage 1 electrical connector



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