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1998 FORD Ka OEM Service and Repair Workshop Manual

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Installation

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

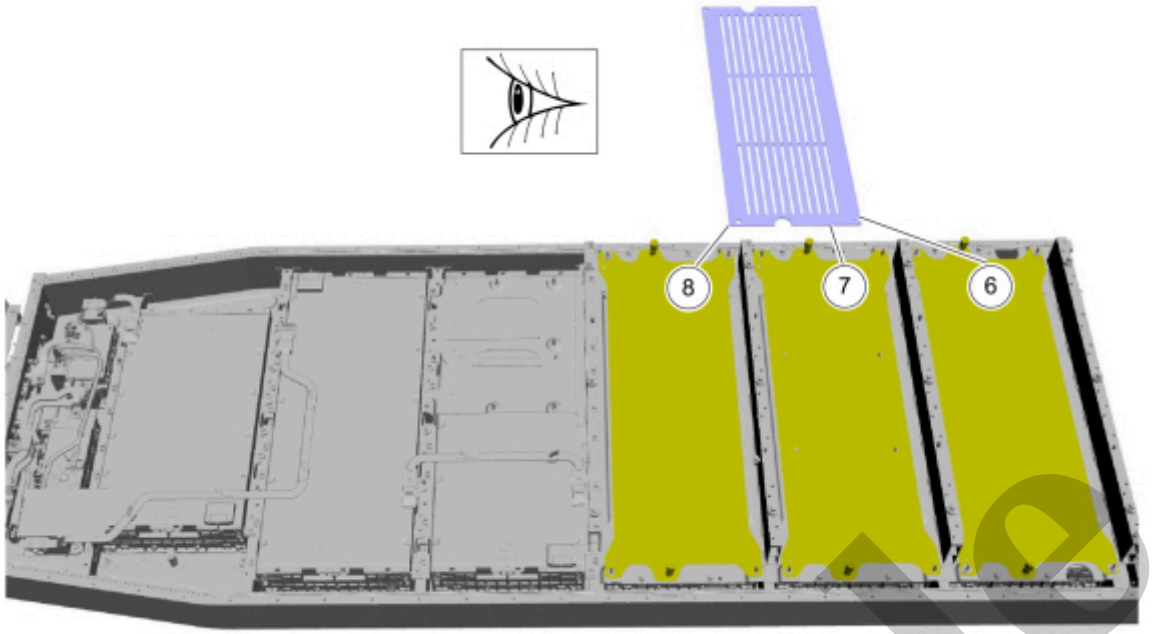
   The high voltage battery module balancer balances the voltage level of the replacement battery module to match the remaining original battery modules to ensure correct operation of the high voltage battery pack. This procedure must be repeated for each replacement battery module prior to installation.

   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.



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6. **NOTE**

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

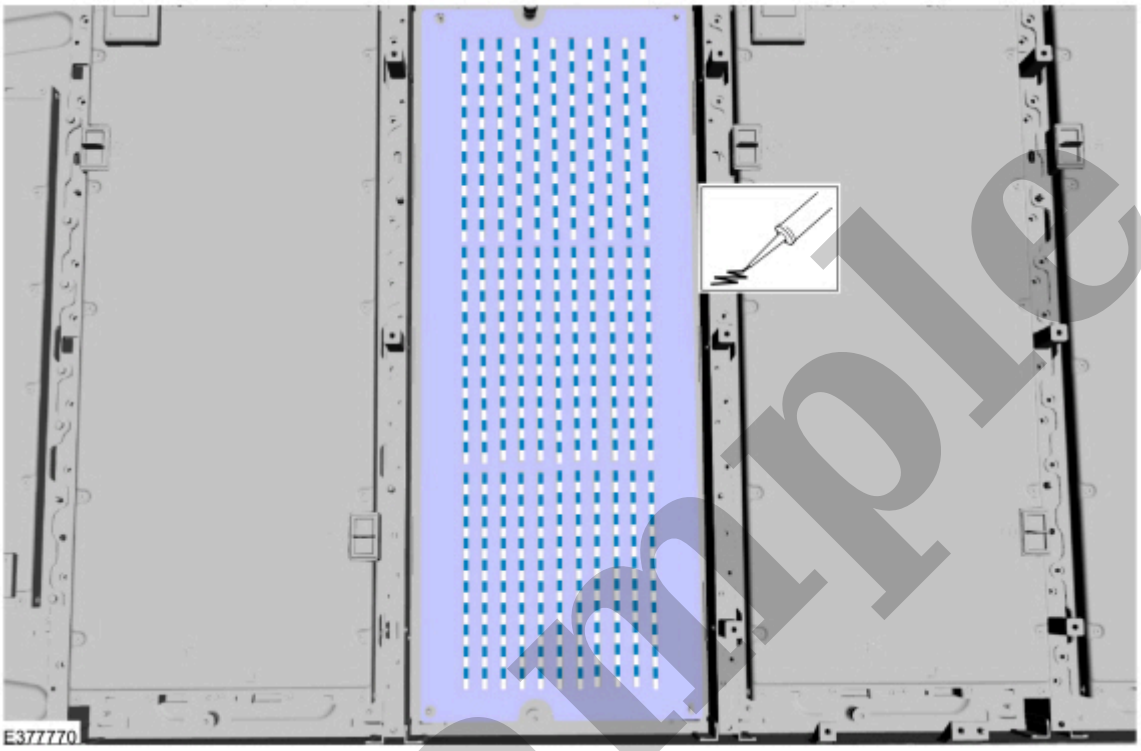
   Install the Thermal Interface Material (TIM) application template to the cold plate.

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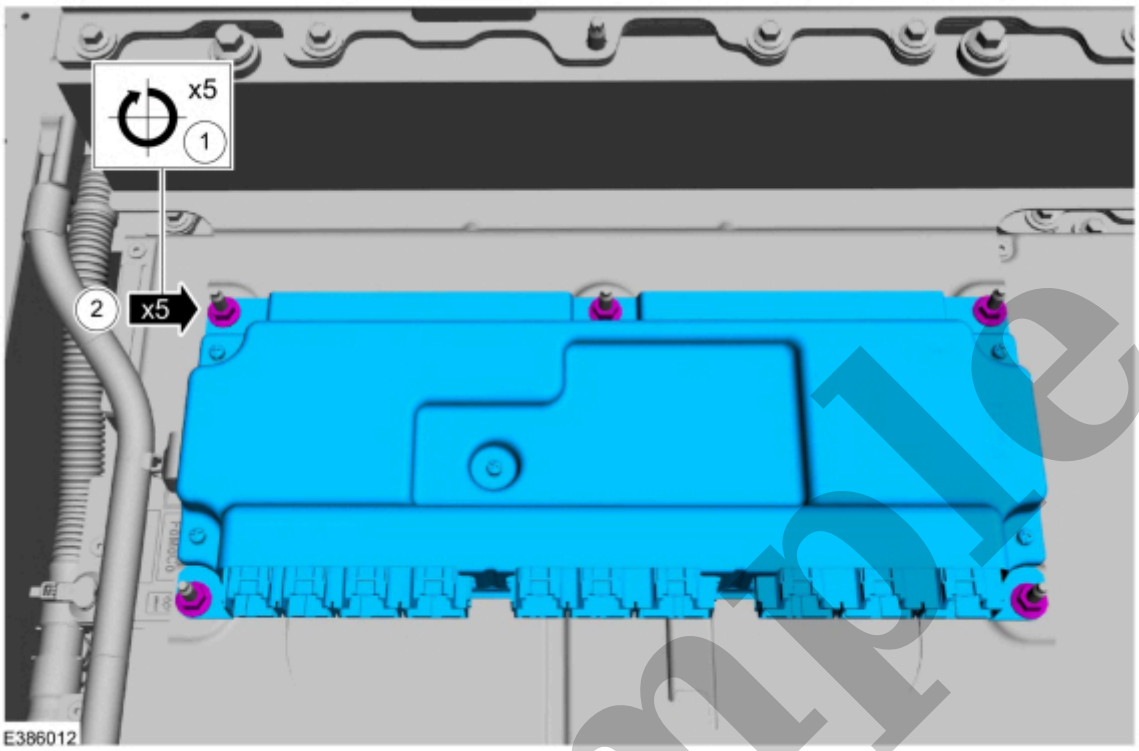
8. Remove the excessive Thermal Interface Material (TIM) from the top of the template.

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.

High Voltage Battery - Electric

414-03A High Voltage Battery, Mounting and Cables	***2022 F-150***
Removal and Installation	***Procedure revision date: 11/29/2022***

High Voltage Battery - Electric

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.

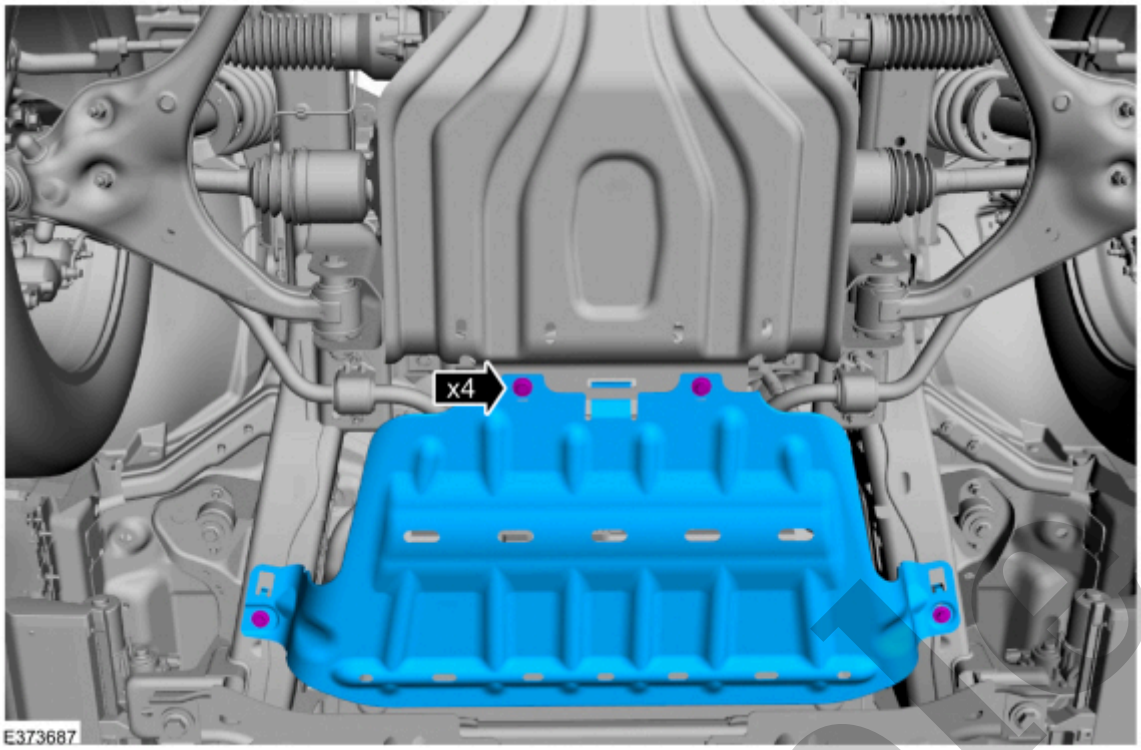
NOTE

Removal steps in this procedure may contain installation details.

1. Refer to: High Voltage System Health and Safety Precautions - Overview(100-00 General Information, Description and Operation).
2. With the vehicle in NEUTRAL, position it on a hoist.

   Refer to: Jacking and Lifting - Overview(100-02 Jacking and Lifting, Description and Operation).
3. **NOTE**

   This step is only necessary when installing a new component.



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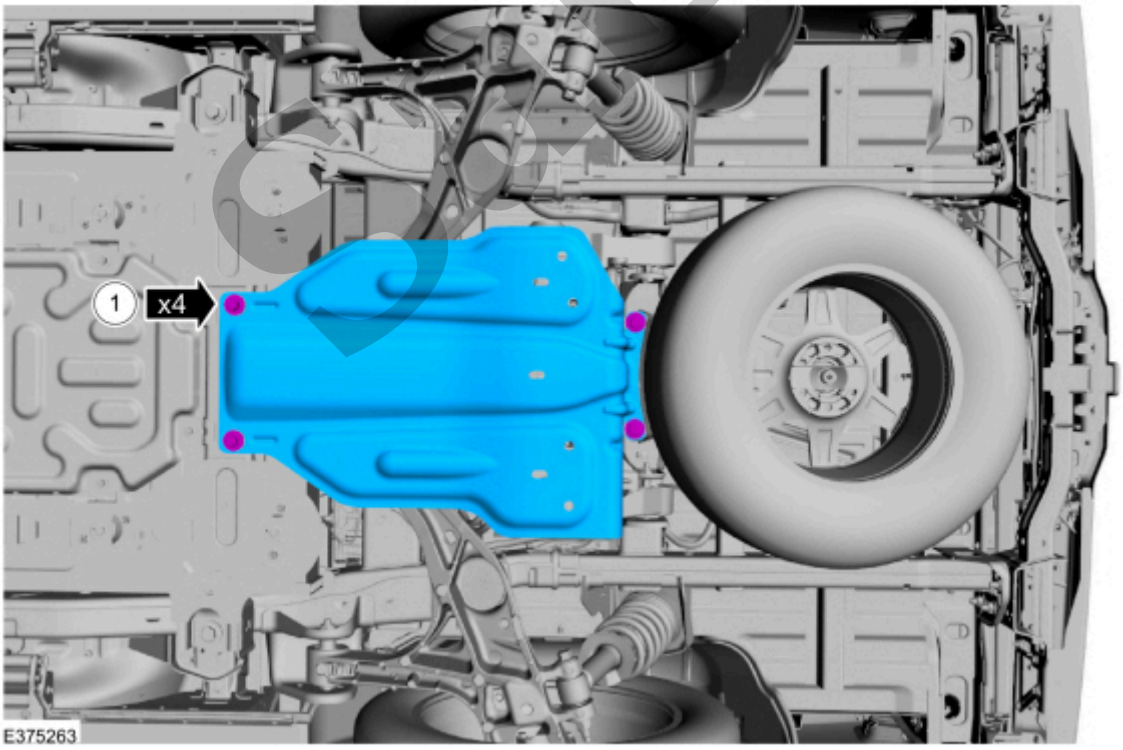
8. 1. Remove the bolts and the skid plate.

Torque : 35 lb.ft (47.5 Nm)



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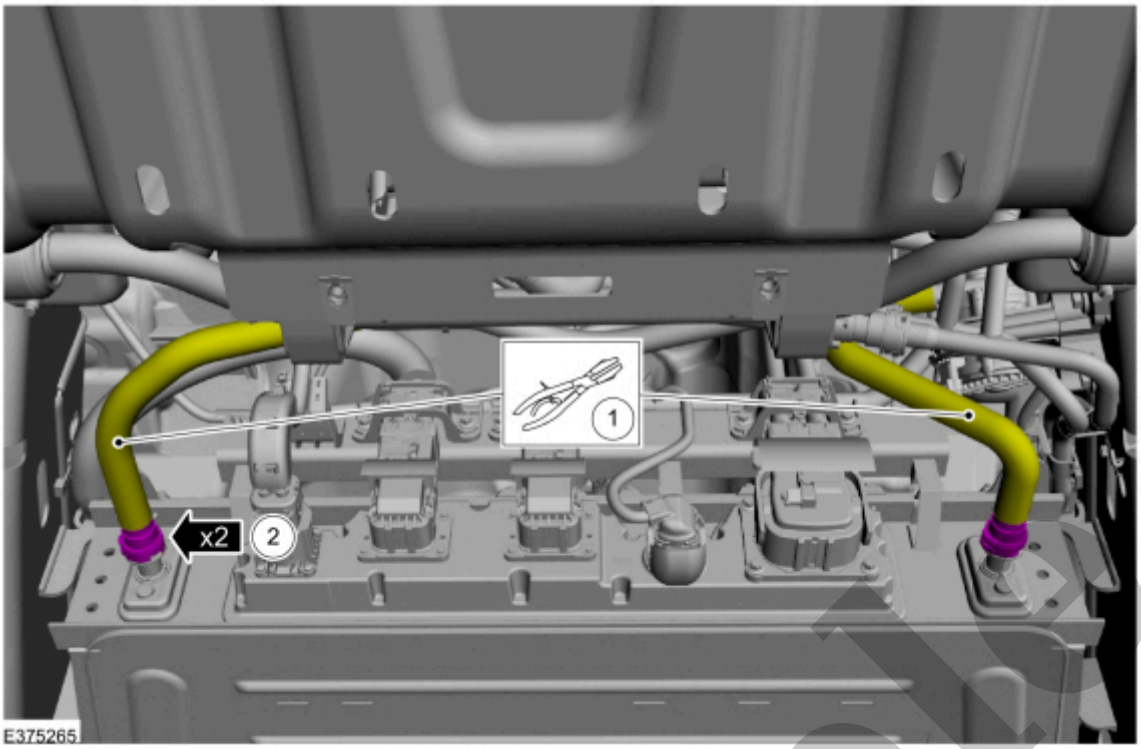

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11. **NOTE**

    This step is only necessary if the high voltage battery cover is not being removed.

    Install caps over the HVB (High Voltage Battery) coolant tube assembly openings.

13. **NOTICE**

Before disconnecting the high voltage battery electrical connectors, the electrical connectors must be cleaned with a nylon brush and free of debris. Blow any dirt or debris from the electrical connectors 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. Clean the HVB (High Voltage Battery) electrical connectors with a nylon brush. Blow any dirt or debris from the electrical connectors with compressed air.

2. **NOTE**

   To aid in disconnecting the high voltage battery electrical connector, gently pull the base of the connector while releasing the lock lever.

   Disconnect the HVB (High Voltage Battery) electrical connectors.

   Refer to: High Voltage Connector Disconnect and Connect(414-03A High Voltage Battery, Mounting and Cables, General Procedures).

15. **NOTICE**

Do not apply more than 206 kPa (30 psi) of air pressure into the high voltage battery coolant port or component damage may occur.

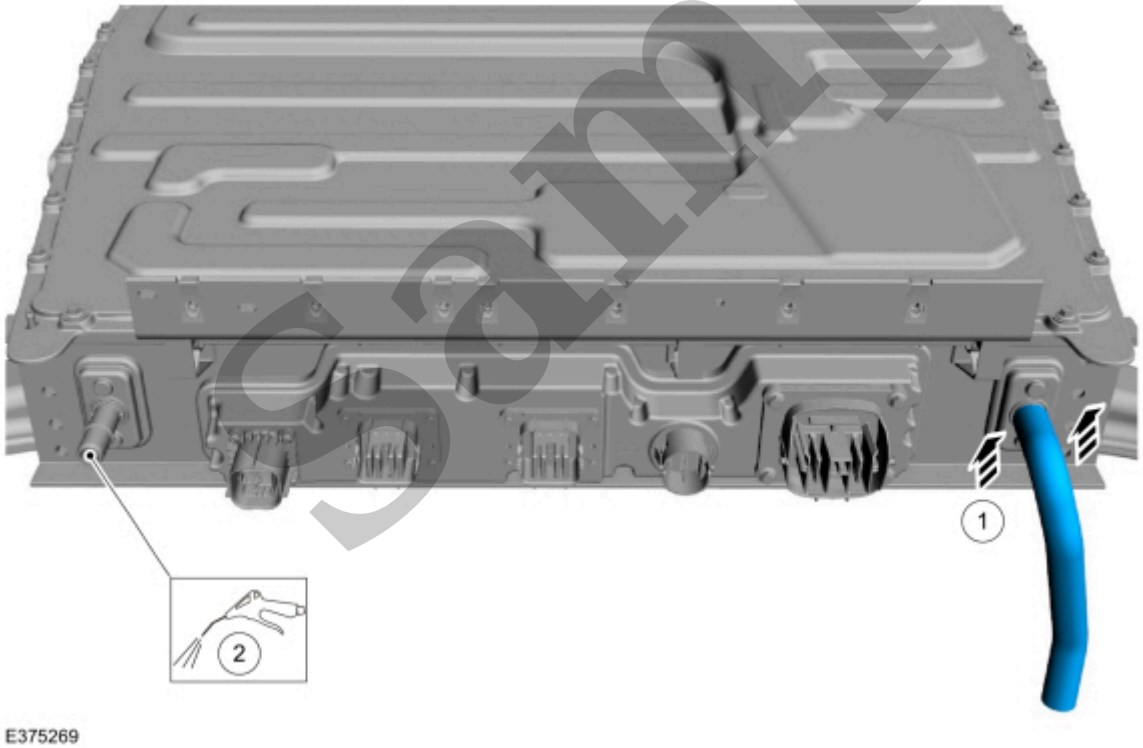
NOTE

This step is only necessary if the high voltage battery cover is being removed.

1. Install a drain tube to one port of the HVB (High Voltage Battery) coolant tube assembly.
2. **NOTE**

   Be prepared to collect escaping fluids.

   Using compressed air, remove the coolant from inside of the HVB (High Voltage Battery) .



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16. **NOTICE**