

## CERTAIN 2012 - 2014 MODEL YEAR FOCUS ELECTRIC VEHICLES — HIGH VOLTAGE WIRE HARNESS EXTENDED COVERAGE

### OVERVIEW

In some of the affected vehicles, a “Stop Safely Now” message with a red triangle indicator may display in the instrument panel cluster. This condition may result from a shield circuit making contact with a power circuit within the High Voltage Wire Harness. When this condition occurs, Diagnostic Trouble Code (DTC) P0AA6:00 will be stored in the Battery Energy Control Module (BECM). Vehicles exhibiting this condition will continue to operate normally, but may fail to restart after the driver shuts the vehicle off. Dealers are to perform the following Service Procedure to determine if the High Voltage Wire Harness is the cause of the concern.

**NOTE:** It is possible for other vehicle components to cause DTC P0AA6:00 to be set in the BECM. Additional hybrid electric unique components not covered by this program already have 8 year / 100,000 mile coverage. Use the Part Coverage tool in OASIS to determine warranty eligibility of the causal part determined to be the root cause.

### SERVICE PROCEDURE

1. Retrieve all DTCs. Is DTC P0AA6:00 present in the BECM?

Yes - Proceed to Step 2.

No - This program does not apply. Continue with normal diagnostic and repair procedures.

2. Disconnect the High Voltage Battery Service Disconnect. Please follow the Workshop Manual (WSM) procedures in Section 414-03A.



**WARNING:** Service of the high voltage system on this vehicle is restricted to qualified personnel. The required qualifications vary by region. Always observe local laws and legislative directives regarding electric vehicle service. Failure to follow this instruction may result in serious personal injury or death.



**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 300 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.



**WARNING:** Never install the service disconnect plug when a high-voltage service cover is removed. Always install the cover prior to connecting the service disconnect plug. The cover prevents inadvertent contact with the high voltage which is present at several points under the cover. Failure to follow these instructions may result in serious personal injury or death.



**WARNING:** Disconnect the 12 volt battery before servicing the direct current to alternating current (DC-AC) inverter or alternating current (AC) powerpoint to prevent the risk of high voltage shock. Failure to follow this instruction may result in serious personal injury.



3. Position the vehicle on a hoist. Please follow the WSM procedures in Section 100-02.
4. With the help of an assistant, remove the lower high voltage battery pack underbody cover. See Figure 1.

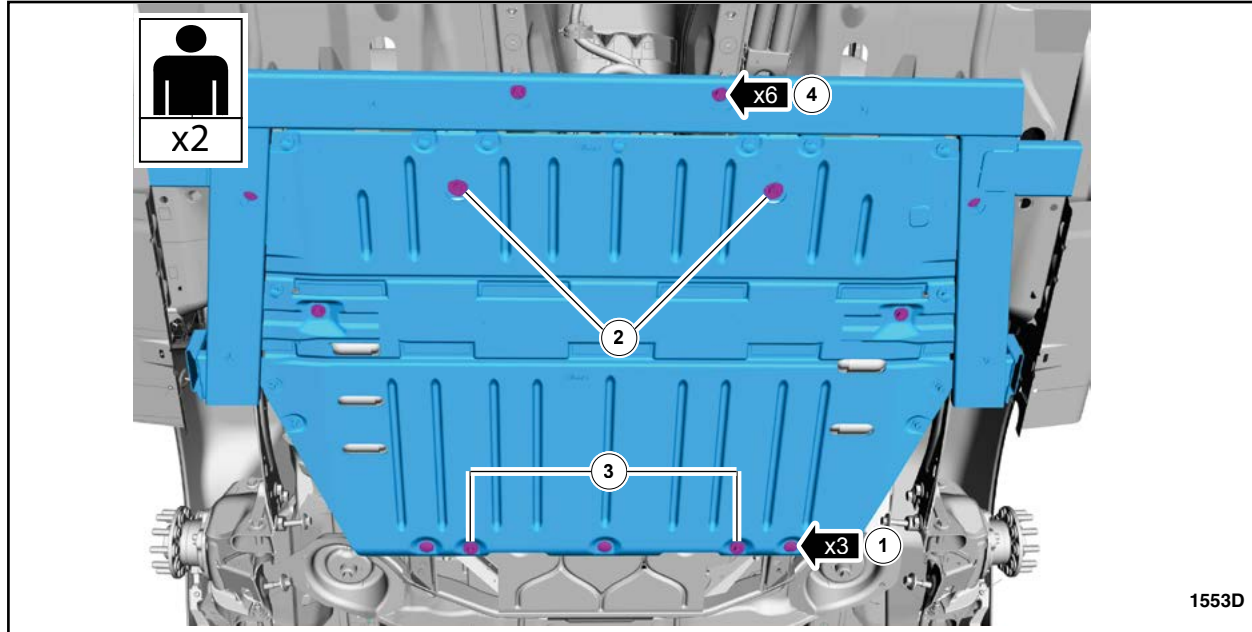


FIGURE 1

5. Disconnect the lower high voltage battery pack connectors C4804A, C4804B, C4804C and C4804D. See Figures 2 and 3.

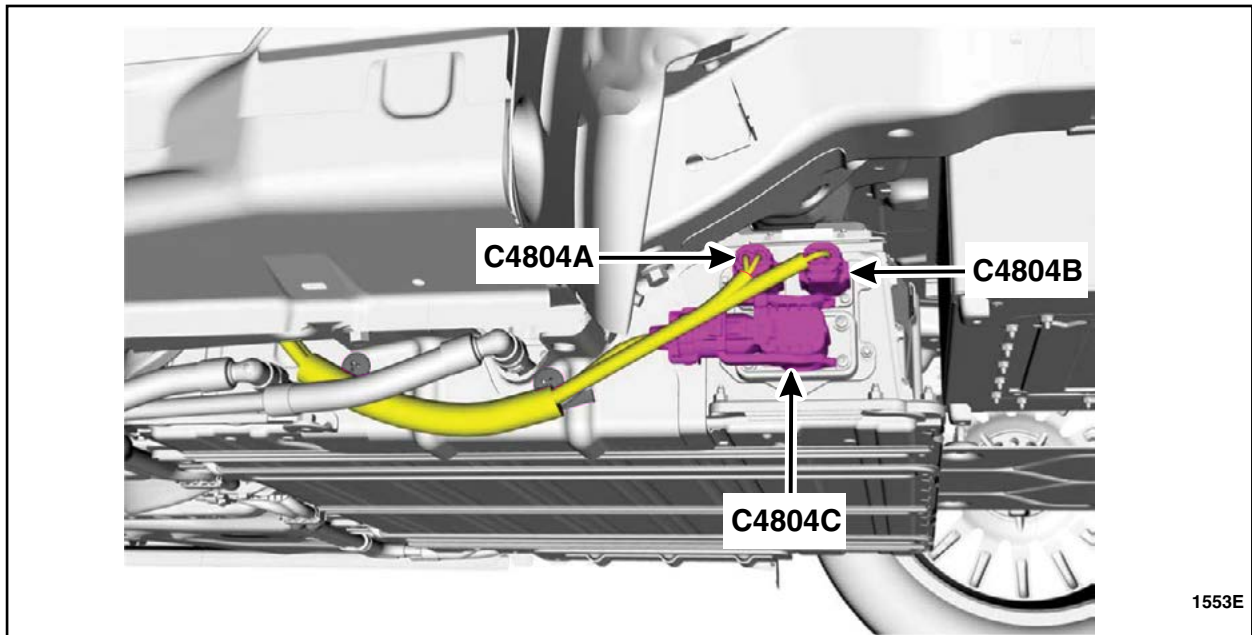
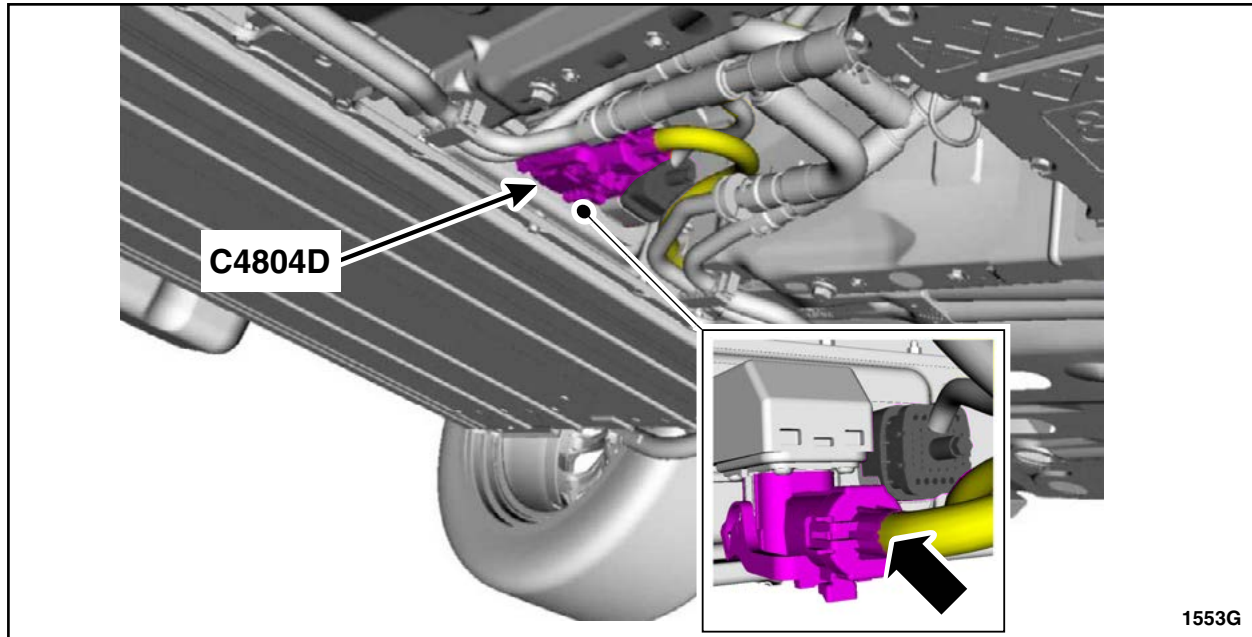


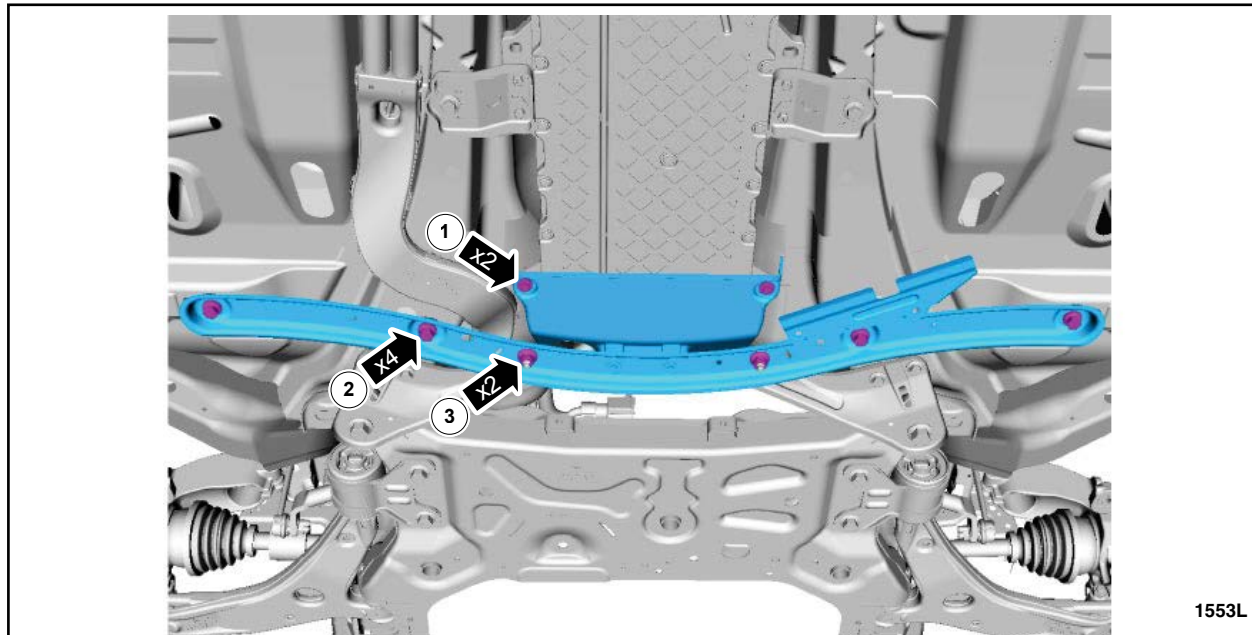
FIGURE 2





**FIGURE 3**

6. Remove the crossbrace and connector cover as an assembly. See Figure 4.



**FIGURE 4**



7. Disconnect the Battery Charging Control Module (BCCM) connector C1821B. See Figure 5.

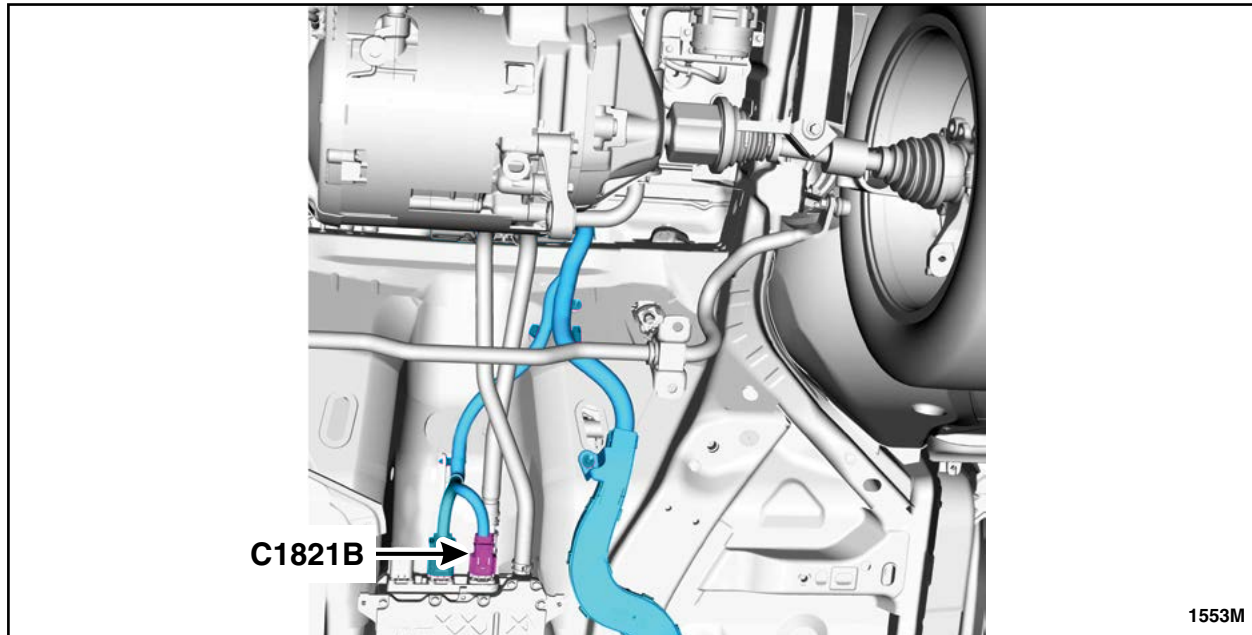


FIGURE 5

8. Position the RH rear seat backrest down. Remove the upper high voltage battery pack cover. See Figure 6.

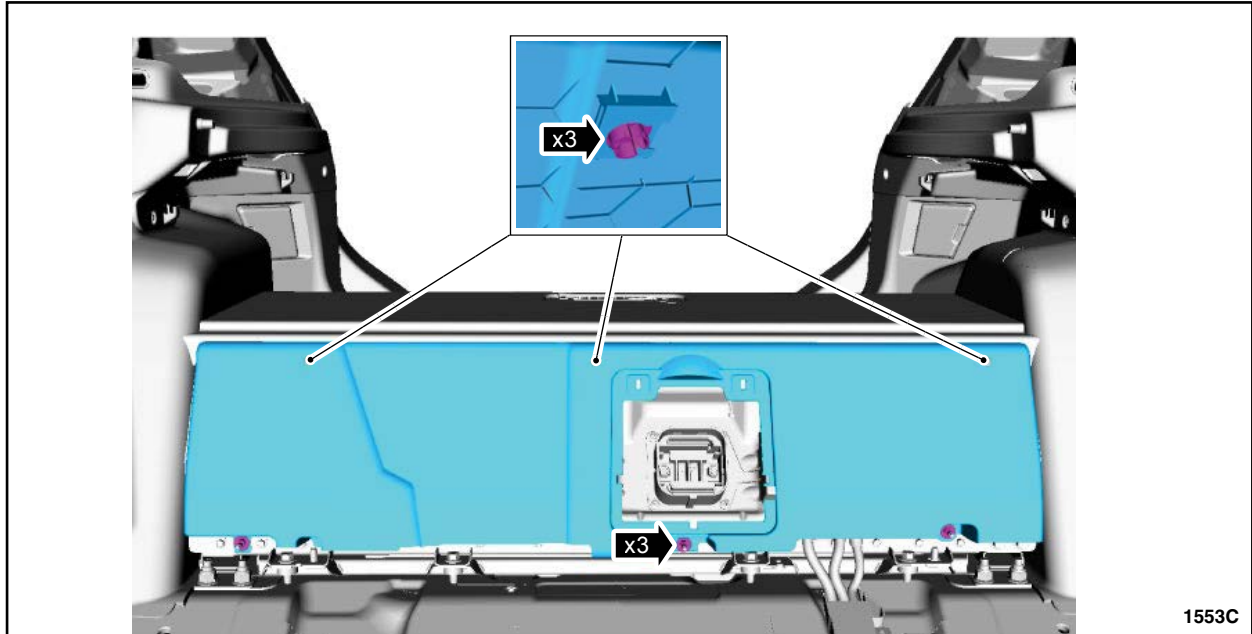
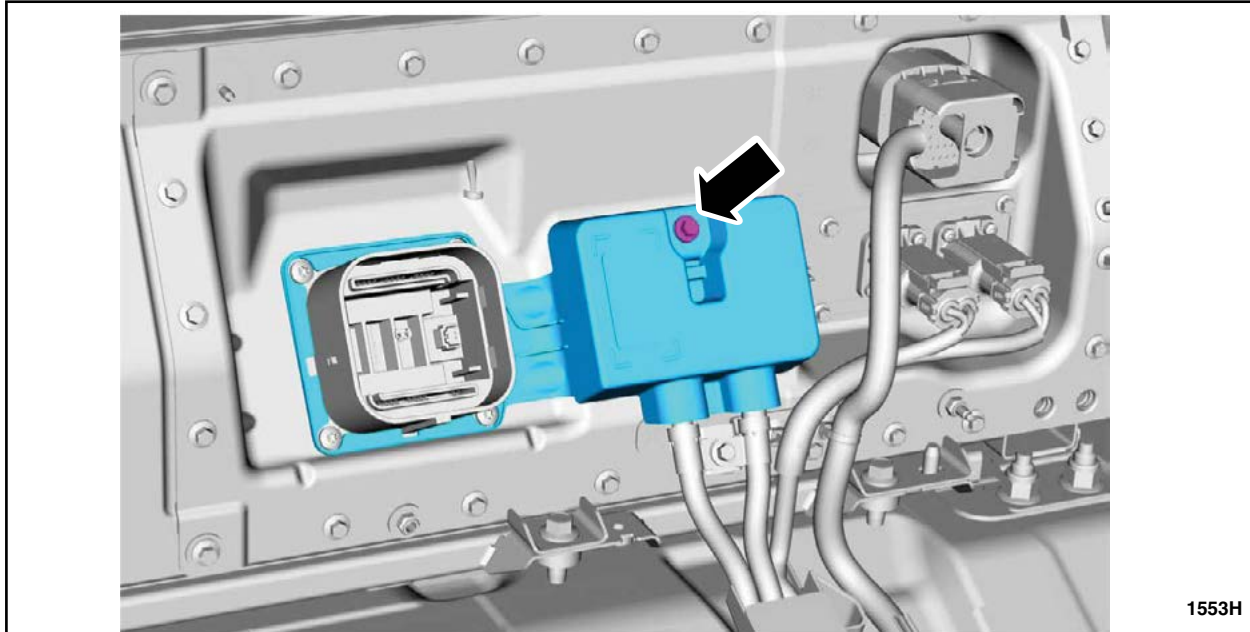


FIGURE 6



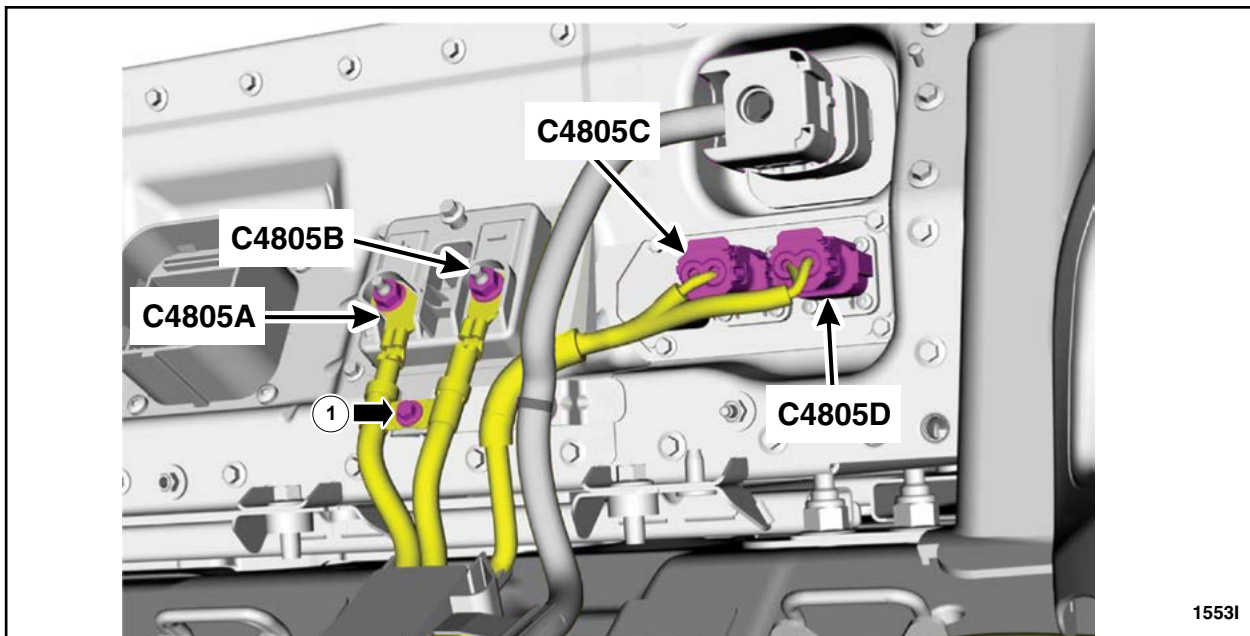


9. Remove the upper high voltage battery pack connector cover. See Figure 7.



**FIGURE 7**

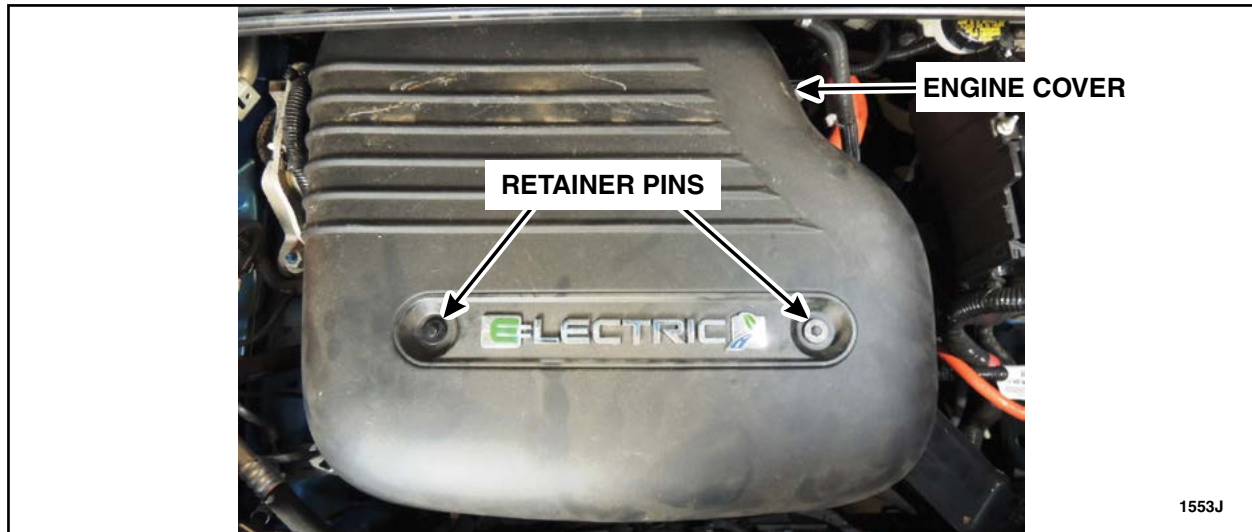
10. Disconnect the upper high voltage battery pack connectors C4805A, C4805B, C4805C, and C4805D. See Figure 8.



**FIGURE 8**



11. Remove the engine cover. See Figure 9.



**FIGURE 9**

12. Disconnect the Transmission Control Module (TCM) connector. See Figure 10.

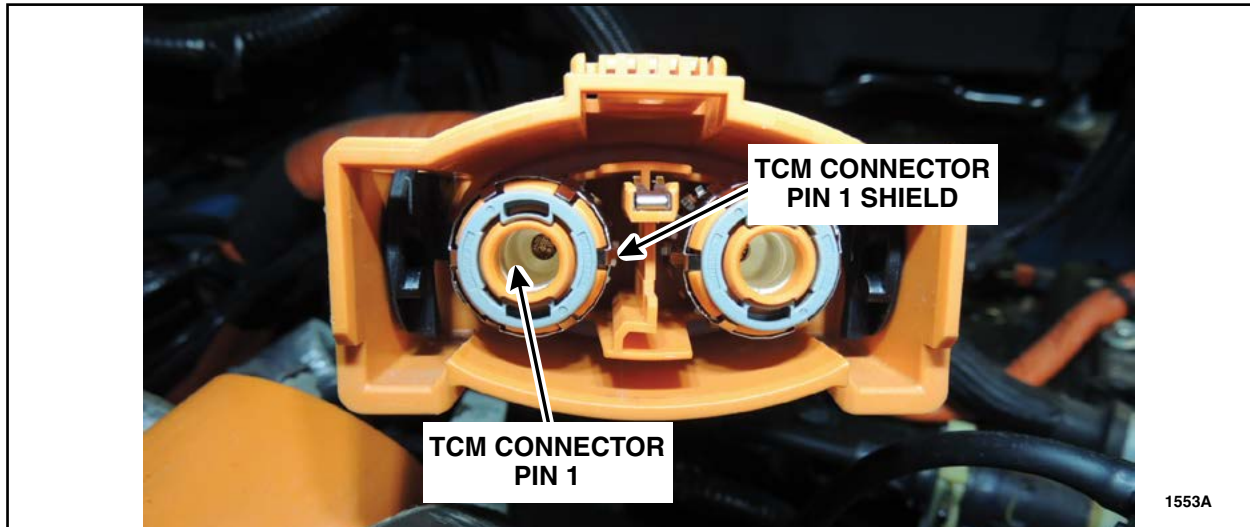


**FIGURE 10**

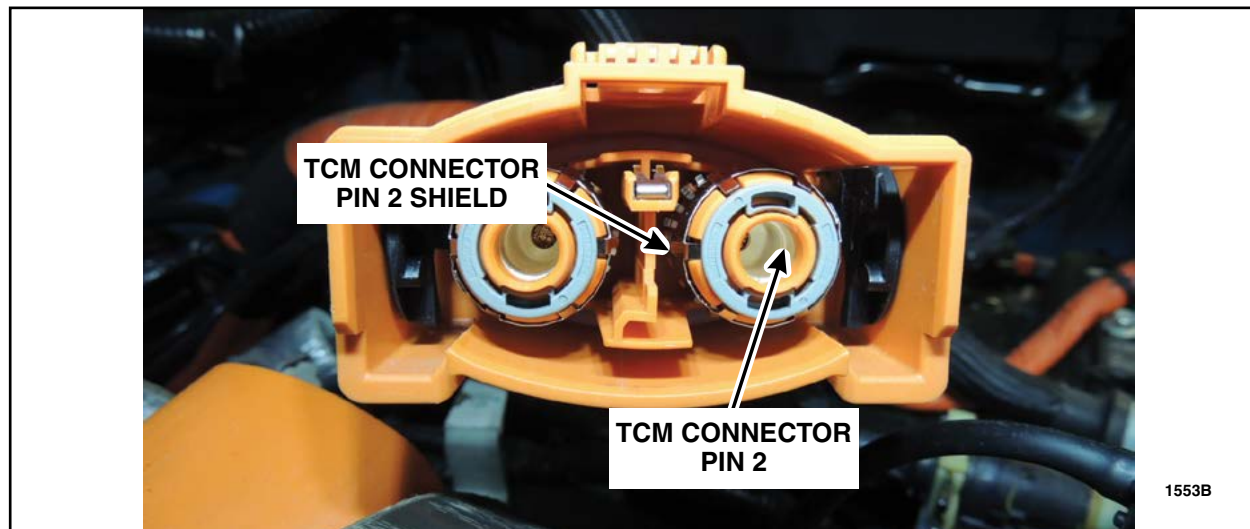


13. Measure electrical resistance (ohms) at the following TCM connector locations while wiggle testing the high voltage wire harness at each connector that was previously disconnected in this procedure.

- a. TCM C1822B Pin 1 to C1822 Pin 1 shield. See Figure 11.
- b. TCM C1822B Pin 2 to C1822 Pin 2 shield. See Figure 12.



**FIGURE 11**



**FIGURE 12**

14. Are the measured resistances greater than 173,000 ohms?

Yes - This concern is not caused by the high voltage wire harness and therefore this program does not apply. Continue with normal diagnostic and repair procedures.

No - Replace the high voltage wire harness. Please follow the WSM procedures in Section 414-03A.

