



CERTAIN 2023 MODEL YEAR MUSTANG MACH-E VEHICLES — 12 VOLT (12V) BATTERY TEST AND REMOTE CLIMATE CONTROL MODULE (RCCM) RESET

SERVICE PROCEDURE

IMPORTANT! The Service Technician Specialty Training (STST) Competency 10 certification requirement, for U.S. market only, will be enforced starting with repair orders opened on or after April 1, 2024. Field Service Action (FSA) repairs will reject if the repairing technician is not certified in STST Competency 10 FSA. See Electronic Field Communication (EFC) 14251 for more details.

IMPORTANT! This Field Service Action (FSA), must be performed by a certified BEV technician.

 **WARNING:** Before beginning any service procedure in this section, refer to Safety Warnings in section 100-00 General Information. Failure to follow this instruction may result in serious personal injury.

 **CAUTION:** The area around the 12V battery may have sharp edges. Use caution when working with your hands avoid injury.

IMPORTANT! This procedure was modified from the original Workshop Manual (WSM) procedure. Follow technical instructions carefully. (Removal of the Underhood Storage Compartment is not necessary).

NOTE: Diagnostic Trouble Code (DTC) B1616-04 may set which will also cause a message on the Instrument Cluster to appear stating “Electrical System Drain Service Required”.

1. De-energize the high voltage system. Follow procedures in Workshop Manual (WSM) Section 414-03A.



2. Loosen, but do not remove the nut. Position the negative battery cable aside. See Figure 1.

- Torque: 48 lb.in (5.4 Nm)

NOTE: Disconnecting the Battery Monitoring Sensor (BMS) electrical connector before the battery cable may induce Diagnostic Trouble Codes (DTC's).

3. Disconnect the BMS electrical connector from the sensor. See Figure 1.

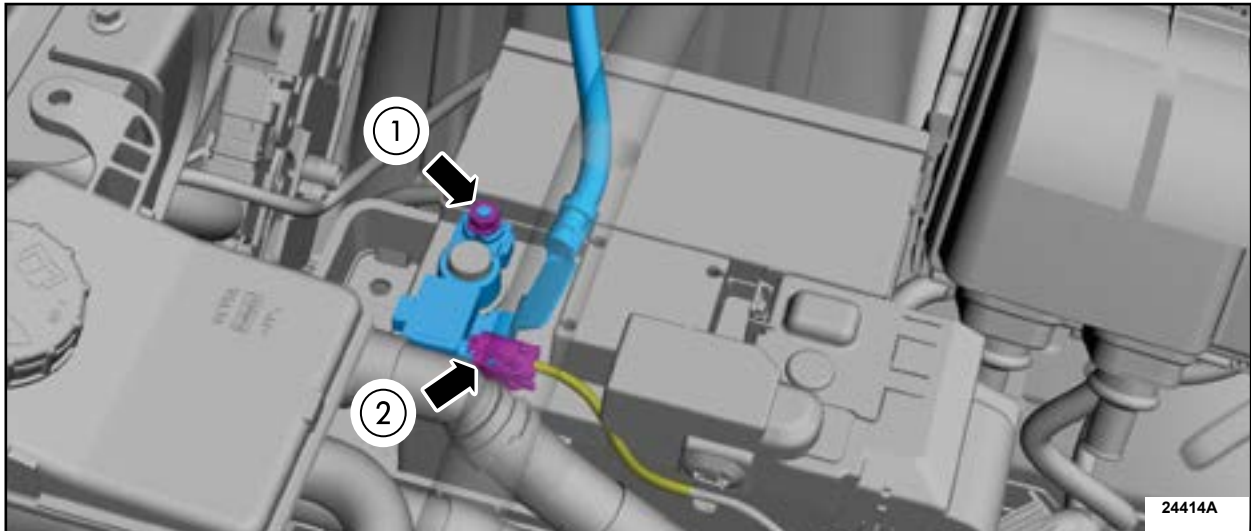


FIGURE 1

4. Remove the bolts and the battery hold down clamp. See Figure 2.

- Torque: 53 lb.in (6 Nm)

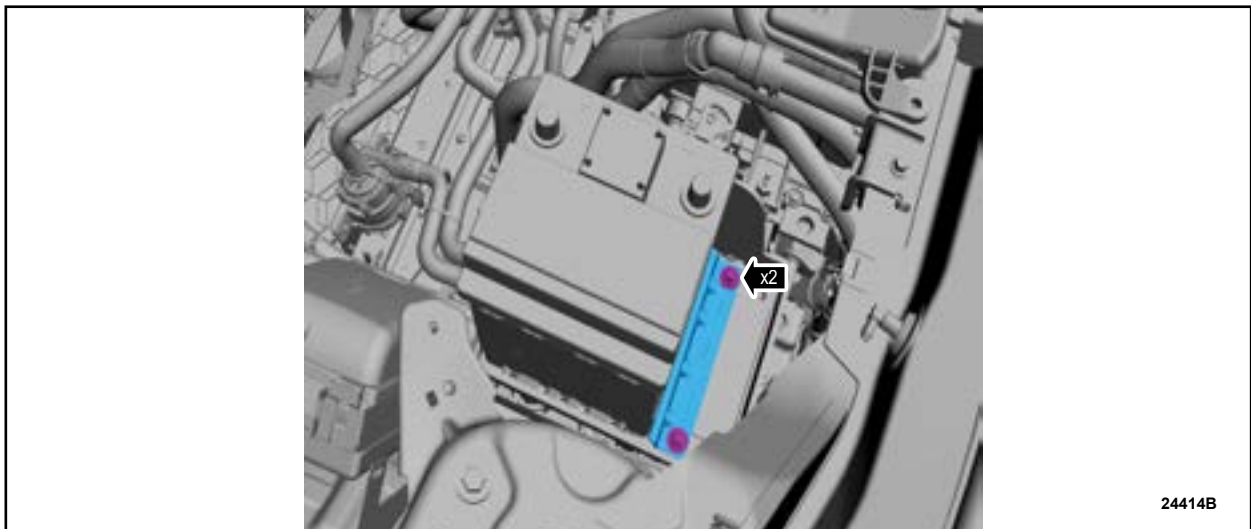


FIGURE 2



5. Position the 12V battery rearward. See Figure 3.

NOTE: Components removed for clarity.

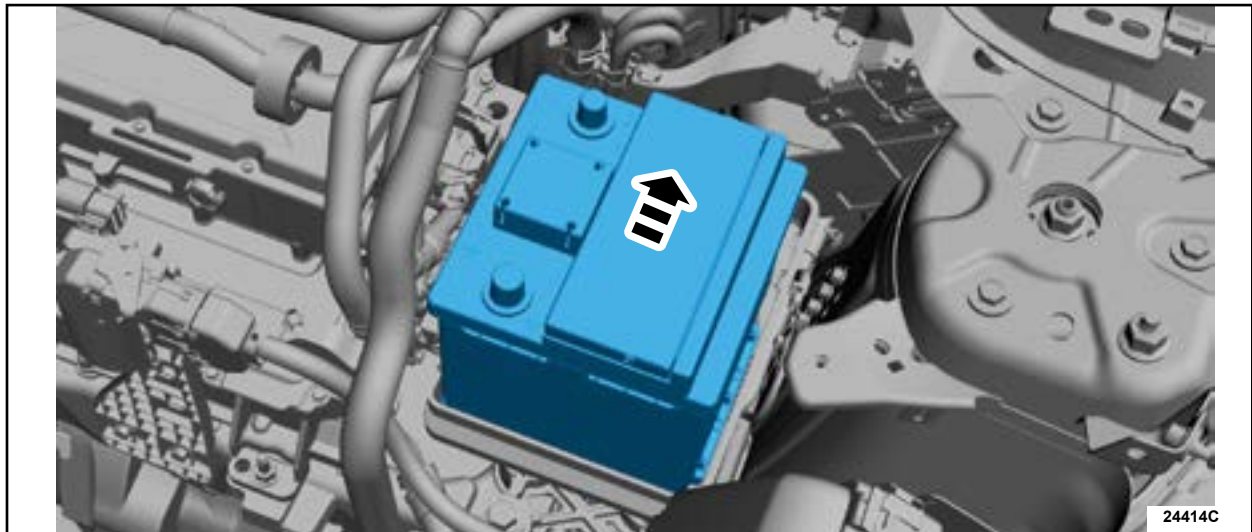


FIGURE 3

6. Position the positive battery cable terminal cover aside. See Figure 4.

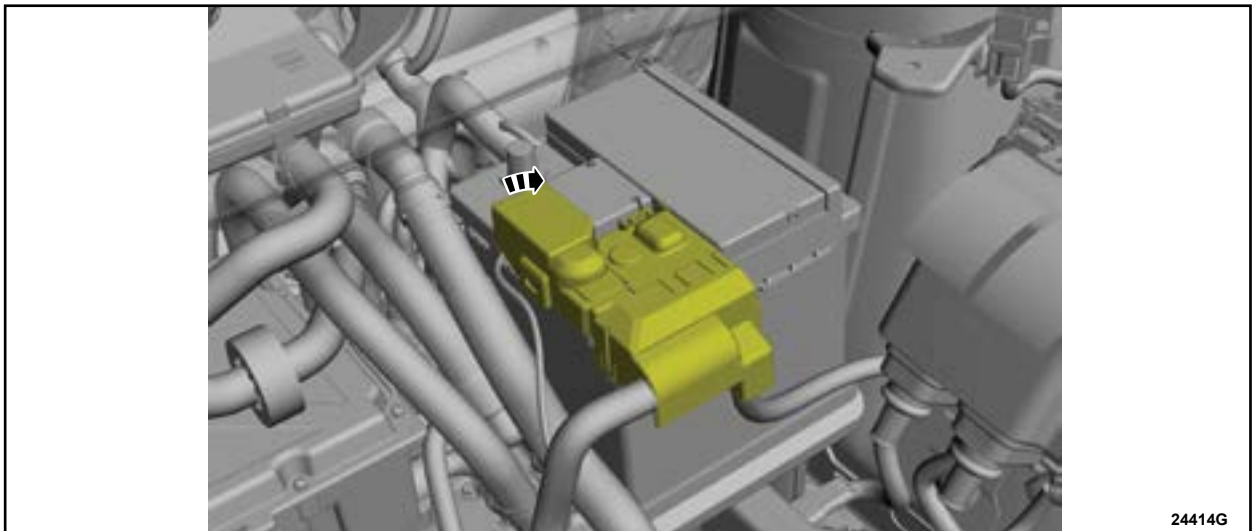


FIGURE 4



7. Using Diagnostic Battery Tester/Charger DCA-8000 or GRX-3590, verify the condition of the battery.

- Does the battery pass the diagnostic test?

Yes - Proceed to Step 8.

No - Proceed to Step 13.

8. Disconnect the battery tester/charger and leave the negative battery cable disconnected an additional 5 minutes to make sure the RCCM has reset.

9. Reassemble vehicle by reversing Steps 1-6.

10. Using Ford Diagnostic and Repair System (FDRS), from the list on the RH side of the screen, select **Self-Test** and click **RUN**.

11. Click the **Run Selected Tests** button in the lower right.

12. Click the **Clear & Retest** button at the top of the screen to clear DTCs in all modules. This completes this FSA.

For batteries that DO NOT pass the diagnostic test

13. Install a *new* 12V battery, continue to Step 14.

NOTE: When installing a *new* 12V battery, a total of 5 minutes is required to have lapsed between the time of testing the 12V battery and installing the *new* 12V battery to make sure the RCCM has reset.

NOTE: Both the DCA-8000 or GRX-3590 will provide two required codes for claiming when replacement of the 12V battery is necessary:

- Battery Tester/OWS Approval Code (5 Digit Code):
 - DCA-8000 starts with a "H".
 - GRX-3590 starts with a "F".

- DTC Battery Code (when claiming, must be entered without spaces):
 - DCA-8000 has 12 characters.
 - GRX-3590 has 7 characters.



14. Remove the Right Hand (RH) Under Hood Cover. See Figure 5.

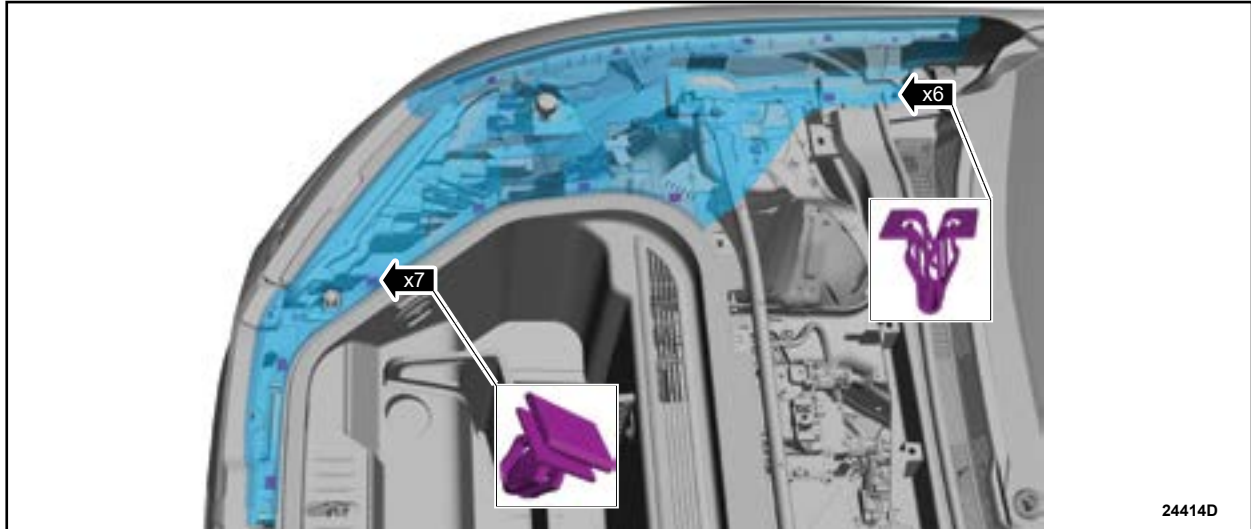


FIGURE 5

15. Remove the nuts and the front strut tower brace. See Figure 6.

- Torque: 66 lb.ft (90 Nm)

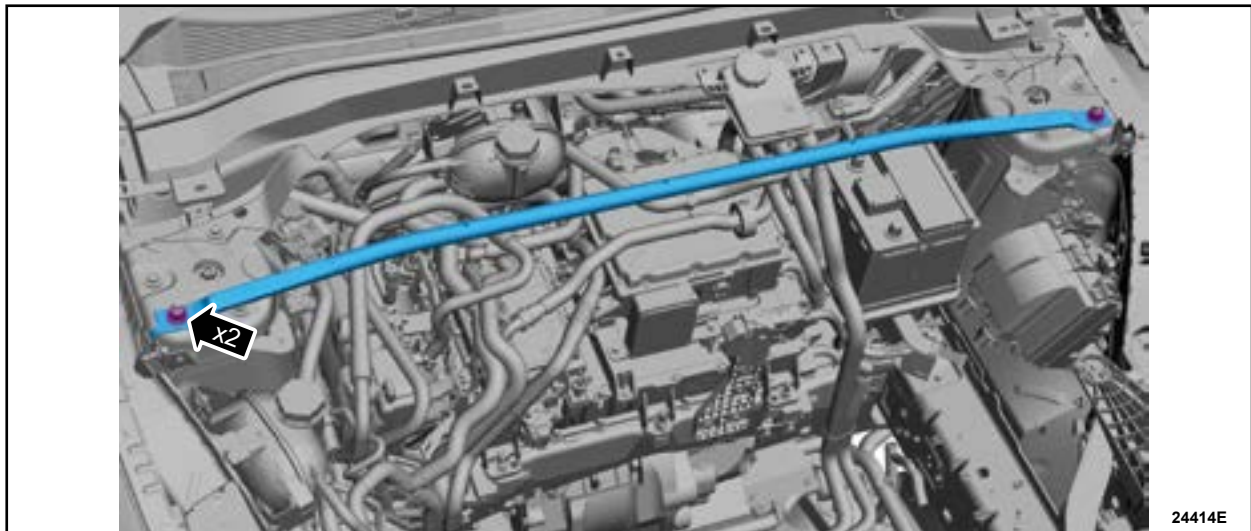


FIGURE 6



16. Loosen, but do not remove the positive battery cable terminal nut. See Figure 7.

- Torque: 48 lb.in (5.4Nm)

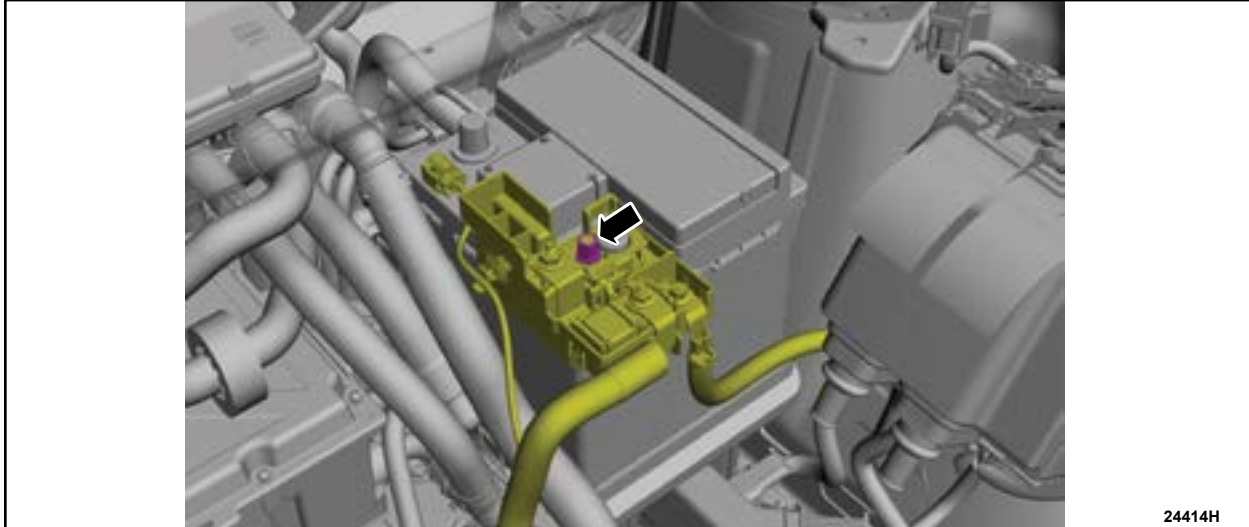


FIGURE 7

17. Position aside the positive battery terminal away from the 12V battery.

18. Remove the 12V battery using the hand placement shown. See Figure 8.



FIGURE 8



19. Install the *new* 12V battery. Reverse steps 14-18.
20. Reassemble vehicle by reversing Steps 1-6.
21. Using FDRS, from the list on the RH side of the screen, select **Self-Test** and click **RUN**.
22. Click the **Run Selected Tests** button in the lower right.
23. Click the **Clear & Retest** button at the top of the screen to clear DTCs in all modules. This completes this FSA.

IMPORTANT NOTE: Federal law prohibits selling motor vehicle parts or components that are under safety, compliance, or emissions recall. Unless a part is requested to be returned to Ford, all parts replaced under this FSA must be scrapped in accordance with all applicable local, state and federal environmental protection and hazardous material regulations. Refer to the Parts Retention, Return, & Scrapping section of the FSA dealer bulletin for further information.

