# TECHNICAL SERVICE BULLETIN FHEV - No Crank/No Start Condition Due To A Loose Or Detached Eyelet Terminal - Built On Or Before 13-May-2022

**22-2340** 23 September 2022

Model:

Ford	Engine: 2.5L FHEV	
2022 Maverick	Built on or before 13-May-2022	

**Issue:** Some 2022 Maverick vehicles built on or before 13-May-2022 equipped with 2.5L full hybrid electric vehicle (FHEV) powertrain may exhibit a no crank/no start condition without 12v power supply in the battery junction box (BJB). This may be due to a loose or detached eyelet solder connection C1617E from the battery cable assembly. To correct the condition, follow the Service Procedure to make the replacement of the 14290 wiring assembly.

Action: Follow the Service Procedure to correct the condition on vehicles that meet all of the following criteria:

- 2022 Maverick
- Built on or before 13-May-2022
- 2.5L FHEV
- No crank/no start condition without 12V power supply in the battery junction box
- C1617E eyelet connection loose or detached

#### Parts

Service Part Number	Quantity	Description	Unit of Issue	Piece Quantity
LX6Z-14290-PA	1	Wire Assembly - High Power Cabling	1	1
W500566-S439	1	Torque Restrictor Bolt	4	1
W716053-S451	1	Interior Side Trim Clip	4	4
W710338-S403	2	Right Floor Storage Bin Clips	4	6

Parts

## Parts To Inspect And Replace Only If Necessary

Service Part Number	Quantity	Description	
BXT-99RT4-A	lf Needed	12V Battery	
VC-13-G	lf Needed	Motorcraft® Yellow Concentrated Antifreeze/Coolant (All Markets Except Canada)	
CVC-13-G	lf Needed	Motorcraft® Yellow Concentrated Antifreeze/Coolant (Canada Only)	

Quantity refers to the amount of the service part number required to repair the vehicle.

Unit of Issue refers to the number of individual pieces included in a service part number package.

Piece Quantity refers to the total number of individual pieces required to repair the vehicle.

If Needed indicates the part is not mandatory.

**Warranty Status:** Eligible under provisions of New Vehicle Limited Warranty (NVLW)/Service Part Warranty (SPW)/Special Service Part (SSP)/Extended Service Plan (ESP) coverage. Limits/policies/prior approvals are not altered by a TSB. NVLW/SPW/SSP/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.



### Labor Times

Description	Operation No.	Time
2022 Maverick: Diagnose And Replace The 12V Battery And High Voltage Battery Cables (Do Not Use With Any Other Labor Operations)	222340A	5.9 Hrs.
2022 Maverick: Diagnose And Replace The High Voltage Battery Cables (Do Not Use With Any Other Labor Operations)	222340B	5.8 Hrs.

### **Repair/Claim Coding**

Causal Part:	14290
Condition Code:	X2

## **Service Procedure**

- 1. Inspect the battery condition using a diagnostic battery charger such as Rotunda GRX-3590 or DCA-8000. If the battery is not in good condition, replace the battery. Refer to the Workshop Manual (WSM), Section 414-01 Battery, Mounting and Cables > Removal and Installation.
- **2.** Perform a wiggle test of the C1617E eyelet connection located on the left side of the engine compartment. Is the eyelet connection loose or detached?
  - (1). Yes proceed to Step 3.

(2). No - this article does not apply. Perform normal diagnostics and reinstall removed components. Refer to the WSM, Section 414-03 > High Voltage Battery, Mounting and Cables > Diagnosis and Testing.

**3.** Replace the high voltage battery cables. Refer to the WSM, Section 414-03 High Voltage Battery, Mounting and Cables > Removal and Installation.

(1). De-energize the high voltage system. Refer to the WSM, Section 414-03 High Voltage Battery > Mounting Cables > General Procedures.

(2). Disconnect the battery. Refer to the WSM, Section 414-01 Battery > Mounting and Cables > Removal and Installation.

(3). Remove the battery junction box. Refer to WSM, Section 414-01 > Battery, Mounting Hybrid and Cables > Removal and Installation > Low Voltage High Current Fuse.

(4). Remove the DC/DC converter control module. Refer to the WSM, Section 414-05 Voltage Converter/Inverter > Removal and Installation.

(5). Remove the battery. Refer to the WSM, Section 414-01 Battery > Mounting and Cables > Removal and Installation.

(6). Remove electrical connectors and nuts. Refer to the WSM, Section 414-03 High Voltage Battery > Mounting and Cables > Steps 3-4.

(7). Remove the engine front under shield. Refer to the WSM, Section 501-02 Front End Body Panels > Removal and Installation.

(8). Remove the underbody shields.

• Tighten to 22 lb-in (2.5 Nm).

(9). Detach the retainers from the high voltage battery coolant tubes, clips and remove bolts. Refer to the WSM, Section 414-03 High Voltage Battery > Mounting and Cables > Step 5.

(10). Remove bolts, clips, retainers and disconnect the high voltage battery electrical connectors. Refer to the WSM, Section 414-03 High Voltage Battery > Mounting and Cables > Step 6.

(11). Remove the nuts and position the heat shield above the exhaust converter rearwards.

(12). Remove the battery guard rail.

• Tighten to 35 lb-ft (47.5 Nm).

(13). Remove the 3 nuts and position the right body frame rail heat shield aside.

(14). Detach the retainers from the wiring harness. Refer to the WSM, Section 414-03 High Voltage Battery > Mounting and Cables > Step 7.

(15). Remove the coolant tube bolt and pushpin retainer.

(16). Remove the 6 bolts from the wiring assembly bracket. Refer to the WSM, Section 414-03 High Voltage Battery > Mounting and Cables > Step 8.

(17). Position the coolant tubes aside from the wiring bracket.

(18). Disconnect the electrical connectors, detach retainers, and bracket bolt from the wiring assembly. Refer to the WSM, Section 414-03 High Voltage Battery > Mounting and Cables > Step 9.

(19). Remove and discard the roll restrictor bolt.

• Tighten to 129 lb-ft (175 Nm).

(20). Remove the exhaust support bracket bolts.

• Tighten to 18 lb-ft (25 Nm).

(21). Remove the high voltage battery bracket bolts and bracket.

• Tighten 1 large bolt to 41 lb-ft (55 Nm), tighten 3 small bolts to 155 lb-in (17.5 Nm).

(22). Remove the wiring assembly nuts, disconnect the electrical connectors, and remove the high voltage battery cables. Refer to the WSM, Section 414-03 High Voltage Battery > Mounting and Cables > Step 10.

(23). Install the new high voltage battery cables.

4. To assemble the vehicle, reverse the removal procedure.

NOTE: The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford or Lincoln dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supersede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.

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