

Part 573 Safety Recall Report

23V-688

Manufacturer Name : Ford Motor Company**Submission Date :** OCT 13, 2023**NHTSA Recall No. :** 23V-688**Manufacturer Recall No. :** 23C32**Manufacturer Information :**

Manufacturer Name : Ford Motor Company

Address : 330 Town Center Drive

Suite 500 Dearborn MI 48126-2738

Company phone : 1-866-436-7332

Population :

Number of potentially involved : 931

Estimated percentage with defect : 1 %

Vehicle Information :

Vehicle 1 : 2023-2023 Ford F-150 BEV

Vehicle Type : LIGHT VEHICLES

Body Style : ALL

Power Train : HYBRID ELECTRIC

Descriptive Information : Ford's team reviewed supplier process and maintenance records to determine the population of affected parts. Ford process is capable of tracing the electronic cabin coolant heater production to the vehicle in which the electronic cabin coolant heater is installed.

The electronic cabin coolant heater in certain 2023 model year F-150 BEV vehicles may have been manufactured with a missing solder joint.

These vehicles are not produced in VIN order. Information as to the applicability of this action to specific vehicles can best be obtained by either calling Ford's toll-free line (1-866-436-7332) or by contacting a local Ford or Lincoln dealer who can obtain specific information regarding the vehicles from the Ford On-line Automotive Service Information System (OASIS) database.

931 F-150 BEV vehicles are affected.

Production Dates : JUL 27, 2023 - AUG 30, 2023

VIN Range 1 : Begin :

NR

End : NR

 Not sequential**Description of Noncompliance :**

Description of the Noncompliance : The electronic cabin coolant heater module may have been manufactured without performing the proper solder assembly operation for a low voltage connector to the printed circuit board assembly. A missing solder joint can result in intermittent or no cabin heat. The electronic cabin coolant heater is the source of heat for windshield defrosting and defogging.

FMVSS 1 : 103 - Windshield defrosting and defogging systems

FMVSS 2 : NR

Description of the Safety Risk : The lack of a functioning windshield defrosting and defogging system may

Description of the Safety Risk : decrease the driver's visibility under certain driving conditions, increasing the risk of a crash.

Description of the Cause : The electronic cabin coolant heater modules were produced on a secondary, low volume production line at the supplier that did not have processes in place to prevent an improperly soldered electronic cabin coolant module from proceeding to the next assembly operation.

Identification of Any Warning that can Occur : Customers may notice a lack of heat in the vehicle cabin when the heater is on.

Involved Components :

Component Name 1 : High Voltage Coolant Heater

Component Description : Electronic Cabin Coolant Heater

Component Part Number : RL3H-18E64-BB

Supplier Identification :

Component Manufacturer

Name : Borg Warner

Address : 1100 Wright Street
Cadillac Michigan 49601

Country : United States

Chronology :

September - October 2023

On September 21, 2023, an issue pertaining to the electronic cabin coolant heater on certain 2023 model year Ford F-150 BEV vehicles was brought to Ford's Critical Concern Review Group (CCRG) for review. The issue was first identified at the vehicle assembly plant when plant personnel reported an F-150 BEV vehicle with a Diagnostic Trouble Code (DTC) indicating loss of communication with the electronic cabin coolant heater. The CCRG investigation determined that during the supplier's electronic cabin coolant heater manufacturing process, the solder assembly operation was not performed on one of the three low voltage connectors to the Printed Circuit Board Assembly (PCBA). Bench tests and vehicle drives were conducted during the investigation, and they showed that a missing solder joint can result in intermittent or no electronic cabin coolant heater function depending on the position of the non-soldered low voltage pin relative to the PCBA. Continued investigation determined that the potential for a missing solder joint was limited to parts produced on the supplier's secondary, low volume assembly line and is not present on the primary assembly line. The electronic cabin coolant heater is the source of heat in the 2023 model year F-150 BEV for both cabin

heating and windshield clearing. Vehicles with an intermittently functional or non-functional electronic cabin coolant heater may not meet the requirements of Federal Motor Vehicle Safety Standard (FMVSS) No. 103 Windshield defrosting and defogging systems.

As of October 4, 2023, Ford is not aware of any warranty claims, field reports or customer complaints related to this issue.

On October 6, 2023, Ford's Field Review Committee reviewed the concern and approved a field action. Ford is not aware of any reports of accident or injury related to this condition.

Description of Remedy :

Description of Remedy Program : Owners will be notified by mail and instructed to take their vehicle to a Ford or Lincoln dealer to have the electronic cabin coolant heater replaced. There will be no charge for this service. Ford provided the general reimbursement plan for the cost of remedies paid for by vehicle owners prior to notification of a safety recall in May 2023. The ending date for reimbursement eligibility is estimated to be February 23, 2024. Ford will forward a copy of the notification letters to dealers to the agency when available.

How Remedy Component Differs from Recalled Component : The remedy electronic cabin coolant heaters (Part Number RL3H-18E64-BB) are manufactured with proper solder joints.

Identify How/When Recall Condition was Corrected in Production : Not required per 49 Part 573.

Recall Schedule :

Description of Recall Schedule : Notification to dealers is expected to occur on October 16, 2023. Mailing of owner notification letters is expected to begin November 6, 2023 and is expected to be completed by November 10, 2023.

Planned Dealer Notification Date : OCT 16, 2023 - OCT 16, 2023

Planned Owner Notification Date : NOV 06, 2023 - NOV 10, 2023

* NR - Not Reported