

Part 573 Safety Recall Report

22V-934

Manufacturer Name : Lightning eMotors Inc.**Submission Date :** JUL 04, 2023**NHTSA Recall No. :** 22V-934**Manufacturer Recall No. :** LeM Recall 2022-002**Manufacturer Information :**

Manufacturer Name : Lightning eMotors Inc.

Address : 815 14th Street SW
Suite A100 Loveland CO 80537

Company phone : (970)744-7241

Population :

Number of potentially involved : 27

Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2021-2022 Lightning eMotors FE4-129

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : All Lightning eMotors FE4-129 vehicles equipped with Romeo Power battery packs are included in this recall. FE4-129 vehicles equipped with eMatrix battery packs are not part of the recall.

Lightning eMotors/FE4-129 Qty 27

Production Dates : JAN 01, 2021 - OCT 21, 2022

VIN Range 1 : Begin : NR End : NR

☐ Not sequential**Description of Defect :**

Description of the Defect : Due to multiple software and hardware discrepancies internal to the Romeo Power battery packs installed in certain Lightning eMotors (LeM) FE4-129 series vehicles, the vehicle may fail to operate in cold temperatures, fail to start when the key is placed on, or may lose traction power while driving.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : A loss of traction power while driving may increase the risk of a crash.

Description of the Cause : Lightning eMotors has identified that there are multiple faults internal to the Romeo Power 30.6 kWh Battery Packs installed on the subject vehicles. These include:

- 1) Flood Sensor fault
- 2) HVIL fault
- 3) Cell Imbalance fault

- Identification of Any Warning that can Occur :
- 4) Low Temp (0 degrees C) sensor
These faults result in potential for the vehicle to be rendered inoperative in both the start-up condition and while in normal operation. Both real and false positive sensor faults cause the battery contactors to open to prevent internal battery pack damage, preventing traction power from being available to the driver.
 - 1) Malfunction Indicator Lamp (MiL) telltale illuminates in either steady or flashing mode
 - 2) Wrench Light telltale illuminates
 - 3) Sudden loss of indicated State of Charge (SOC)/Range Remaining on driver displays
 - 4) Vehicle fails to operate in temperatures below 32 degrees Fahrenheit
 - 5) Vehicle fails to operate at any temperature

Involved Components :

Component Name 1 : Traction Battery; Romeo Power

Component Description : Orion Pack A-C6; 30.6 kWh

Component Part Number : P00016247 (LeM 811-021)

Supplier Identification :

Component Manufacturer

Name : Romeo Power, Inc.

Address : 5569 Katella Ave
Cypress California 90630

Country : United States

Chronology :

10/21/2022: Due to an observation of a high number of field failures requiring battery pack replacements, an investigation was commenced; vehicles at factory and in production were placed on Quality Hold pending the investigation.

11/09/2022: LeM's technical teams escalated the issue to LeM legal and compliance team for evaluation.

12/09/2022: Lightning eMotors Recall Committee met. Based upon the results of the investigation, a safety defect determination was made.

There have been no reports of accidents or injuries related to this condition. There were 14 warranty claims involving replacement of Romeo batteries from December 2021 through November 2022.

Description of Remedy :

Description of Remedy Program : The remedy is currently under development. Owner notification letters are expected to be mailed no later than February 14, 2023. Owners may contact Lightning eMotors customer service at +1 (970) 744-4926 or (800) 223-0740.

LeM will notify vehicle owners of the noncompliance and arrangements will be made to update their vehicles free of charge.

Pursuant to 49 CFR 577.11(e), LeM requests that it be exempt from providing notification of a reimbursement plan. Any pre-notification product failure would have been replaced under the manufacturer's limited warranty. Accordingly, no person would be eligible for reimbursement pursuant to 573.13.

How Remedy Component Differs from Recalled Component : LeM will replace the Romeo battery with a non-defective battery, free of charge. If a replacement battery is unavailable, LeM will discuss alternative remedy options with you.

Identify How/When Recall Condition was Corrected in Production : The condition is internal to the Romeo Power battery packs. Vehicles currently in production have been placed on Quality Hold, awaiting a remedy from the battery supplier. Romeo Power has been formally notified of this event. Lightning eMotors is awaiting a response and remedy plan.

Recall Schedule :

Description of Recall Schedule : There are no affected dealers, so LeM will not be issuing a dealer notification. Accordingly, there is no "Dealer Notification" schedule.

Owners will be notified in accordance with the "Planned Owner Notification" dates.

Planned Dealer Notification Date : NR - NR

Planned Owner Notification Date : FEB 14, 2023 - FEB 14, 2023

* NR - Not Reported