

Part 573 Safety Recall Report

22V-530

Manufacturer Name : Lion Electric Company

Submission Date : JAN 12, 2023

NHTSA Recall No. : 22V-530

Manufacturer Recall No. : NR



Manufacturer Information :

Manufacturer Name : Lion Electric Company

Address : 921, chemin de la Riviere-du-Nord
Saint-Jerome, Quebec, Canada 00 J7Y
5G2

Company phone : 1-855-546-6706

Population :

Number of potentially involved : 39

Estimated percentage with defect : 90 %

Vehicle Information :

Vehicle 1 : 2020-2022 Lion LionC

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : We have determined the number of impacted vehicles with our database and these are all LionC vehicles produced and sold in the United States

Production Dates : JUN 29, 2020 - JUL 22, 2022

VIN Range 1 : Begin :

NR

End : NR

☐ Not sequential

Description of Noncompliance :

Description of the Noncompliance : Tests were conducted by Transport Canada, and it was found that the Lion C parking brake system, if not properly adjusted, did not meet the minimum requirement of CMVSS/FMVSS 105, section S5.2.2.

To meet this requirement, two main criteria must be met. The cable tension must be sufficiently high, and the cable sheath spring must operate freely to provide a constant parking brake force in both forward and reverse directions.

FMVSS 1 : 105 - Hydraulic and electric brake systems

FMVSS 2 : NR

Description of the Safety Risk : The identified failure of the parking brake may result in a crash, which is assessed as "unlikely". The driver could be inside the vehicle and will therefore be able to apply the brakes if the vehicle begins to move. Also, the vehicle is more likely to move when fully loaded and parked on a high grade, which is not a common operational situation.

Description of the Cause : The cable route was changed during a design update. Clamps around the

parking brake cable sheath were added causing additional tension for this new routing, resulting in an incorrect value when validating it.

Identification of Any Warning that can Occur : NR

Involved Components :

Component Name 1 : Parking brake
Component Description : parking brake system
Component Part Number : 15300018_00

Supplier Identification :

Component Manufacturer

Name : NR
Address : NR
NR
Country : NR

Chronology :

March 2022: Transport Canada purchases a LionC vehicle to perform CMVSS105 and CMVSS136 certification testing

May 2022: Transport Canada testing begins at PMG Technologies - Automotive Test and Research Center

June 6, 2022: Request from Transport Canada to support LionC testing as parking brake testing does not meet compliance requirements

June 9-10, 2022: Joint testing between Lion Electric Company, Transport Canada and PMG Technologies to find the problem

To this day (2023-01-12), there is no warranty claim raised by the customers related to this issue.

Description of Remedy :

Description of Remedy Program : First, a notice and instruction will be issued to the owners of the impacted vehicles advising them of the non-compliance and the precautions to be taken regarding their vehicle.
As a second step, Lion will contact customers to determine the date of service.

The remedy will consist off the rerouting of the cale and adjustment of the parking lever

Lion Electric will assume all cost of the recall.

How Remedy Component Differs from Recalled Component : The recalled component will stay the same. Only the routing of the cable will change and the adjustment of the system

Identify How/When Recall Condition was Corrected in Production : This recall will be corrected on all vehicles in production as of August 15, 2022.

Recall Schedule :

Description of Recall Schedule : We do not have Dealer to advise

Planned Dealer Notification Date : NR - NR

Planned Owner Notification Date : AUG 22, 2022 - AUG 31, 2022

* NR - Not Reported