

Part 573 Safety Recall Report

23V-451

Manufacturer Name : Lion Electric Company**Submission Date :** JUL 10, 2023**NHTSA Recall No. :** 23V-451**Manufacturer Recall No. :** R2023-007a**Manufacturer Information :**

Manufacturer Name : Lion Electric Company

Address : 921 Chem. de la Rivière du N
Saint-Jérôme, Quebec, Canada 00 J7Y
5G2

Company phone : 1-855-546-6706

Population :

Number of potentially involved : 170

Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2021-2025 Lion Electric Lion6, Lion8

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : All vehicles made between 2021 and 2023 assembled with the problematic HVDU and DCJB hardware configuration.

Production Dates : JAN 01, 2020 - JUN 27, 2023

VIN Range 1 : Begin :

NR

End : NR

 Not sequential**Description of Defect :**

Description of the Defect : The hardware used in HVDU and DCJB enclosures can come loose and fall inside the enclosures. Loose hardware can then come into contact with the terminals of electrical connections and potentially create a short circuit.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : A short circuit of the electrical connections inside the HVDU or DCJB can potentially lead to the deactivation of the vehicle's high-voltage circuit. The loss of high voltage would lead to the loss of steering assistance, the vehicle's engine power and the loss of the vehicle's primary braking system. The secondary pump guarantees the vehicle's braking capacity, but braking power will be reduced. A loss of high voltage would increase the risk of collision.

Description of the Cause : NR

Identification of Any Warning NR
that can Occur :

Involved Components :

Component Name 1 : HVDU and DCJB enclosure

Component Description : High voltage distribution unit & Direct Current Junction box

Component Part Number : 50001627_00 & 50002288_01

Supplier Identification :

Component Manufacturer

Name : NR

Address : NR

NR

Country : NR

Chronology :

- May 26, 2023: First reported case of loose hardware in a LionC's HVDU box leading to deactivation of the vehicle's high voltage.
- May 26 to May 30, 2023: Investigation into potential causes. Inspection of 130 vehicles in service and application of a mitigation solution to prevent hardware loosening.
- May 30 to June 13, 2023: Definition and validation of hardware changes.
- June 21, 2023: Confirmation that the loosening hardware in the HVDU and DCJB housings represents a defect with regarding the Motor Vehicle Safety Regulations and approval of the recall proposal by Lion Electric's Safety Committee.
- To this day, no warranty claim is raised by the customers related to this issue.

Description of Remedy :

Description of Remedy Program : First, a notice will be sent to the owners of the impacted vehicles advising them of the defect and the precautions to take regarding their vehicle.

The precaution is to contact Lion Electric if any anomaly is detected.

Lion will then contact each customer to determine a date of intervention where a team of technicians will be dispatched to change the HVDU and DCJB hardware.

All costs will be covered by the Lion Electric Company under the warranty program.

How Remedy Component Differs from Recalled Component : The hardware inside the HVDU and DCJB will be updated and the torque applied will also be updated.

Identify How/When Recall Condition was Corrected in Production : NR

Recall Schedule :

Description of Recall Schedule : An inventory of all vehicles affected will be completed, and Lion plans to send the notice of defect to owners of affected vehicles and affected persons by August 20, 2023.

Planned Dealer Notification Date : AUG 21, 2023 - AUG 25, 2023

Planned Owner Notification Date : AUG 21, 2023 - AUG 25, 2023

* NR - Not Reported