

# Part 573 Safety Recall Report

# 23V-037

**Manufacturer Name :** Lion Electric Company

**Submission Date :** FEB 01, 2023

**NHTSA Recall No. :** 23V-037

**Manufacturer Recall No. :** NR



## Manufacturer Information :

## Population :

**Manufacturer Name :** Lion Electric Company

**Number of potentially involved :** 32

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

**Estimated percentage with defect :** 100 %

**Company phone :** 1-855-546-6706

## Vehicle Information :

**Vehicle 1 :** 2021-2023 Lion Lion6 & Lion8

**Vehicle Type :** BUSES, MEDIUM & HEAVY VEHICLES

**Body Style :** 2-DOOR

**Power Train :** HYBRID ELECTRIC

**Descriptive Information :** We have determined the number of impacted vehicles with our database, and these are all lion6 and Lion8 vehicles sold in the United States. We have corrected the defect on the production line, since November

**Production Dates :** JAN 01, 2019 - JAN 24, 2023

**VIN Range 1 : Begin :** NR **End :** NR

Not sequential

## Description of Defect :

**Description of the Defect :** The mitre box input and output shaft size used in the steering system are not compatible with the connections of the other steering system components which could lead to play in the splines. The hardware must be tightened to a higher torque than specified to eliminate the backlash, which could lead to premature failure of the hardware. Without the higher torque, the play in the connexions can lead to damaged splines.

**FMVSS 1 :** NR

**FMVSS 2 :** NR

**Description of the Safety Risk :** Any play in the universal joint type couplings of the steering system would potentially introduce stress on them. Also, tightening the bolts beyond the specified torque increases bolt failure risk. Both issues can lead to a complete loss of the steering system. This loss of the system could increase the risk of a collision.

**Description of the Cause :** The defect is caused by the wrong integration of the miter box. The miter box itself is not defective or noncompliant. Curtis Machine Company is not responsible for this defect.

Identification of Any Warning NR  
that can Occur :

## Involved Components :

Component Name 1 : Miter box

Component Description : Angular gear used to transmit the steering column's rotation to the power steering.

Component Part Number : 10002055

## Supplier Identification :

### Component Manufacturer

Name : Curtis Machine Company

Address : 4209 Jayhawk Drive  
Dodge City Kansas 67801

Country : United States

## Chronology :

- October 2022: Discovery of a gap between the different components in production.
- October 2022 to January 2023: Investigation of potential non-compatibility of certain steering system components.
- January 23, 2023: Confirmation of the defect with respect to the Motor Vehicle Safety Regulations and approval of the recall proposal by Lion Electric's safety committee.
- To this day, there is no warranty claim 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. Lion will then contact each customer to determine a date of intervention where a team of technicians will be dispatched to replace the mitre gear for the new model.  
The vehicles are new and all costs will be covered by the Lion Electric Company under the warranty program.

How Remedy Component Differs from Recalled Component : The new mitre box input and output shaft will have a better fit with the other components of the steering system which will eliminate the play in the splines connexions.

Identify How/When Recall Condition was Corrected in Production : The recall condition was corrected in production with the implementation of the new mitre box on January 24th, 2023.

## Recall Schedule :

Description of Recall Schedule : We don't have any dealers to notify.  
Planned Dealer Notification Date : NR - NR  
Planned Owner Notification Date : FEB 20, 2023 - FEB 20, 2023

\* NR - Not Reported