

# Part 573 Safety Recall Report

# 18V-648

**Manufacturer Name :** Lion Electric Company**Submission Date :** SEP 20, 2018**NHTSA Recall No. :** 18V-648**Manufacturer Recall No. :** 2018RECALL01**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 : 18

Estimated percentage with defect : 73 %

**Vehicle Information :**

Vehicle 1 : 2016-2016 The Lion Electric Co Lion C

Vehicle Type : BUSES, MEDIUM &amp; HEAVY VEHICLES

Body Style : 4-DOOR

Power Train : HYBRID ELECTRIC

Descriptive Information : After a thorough root cause analysis, we concluded that the non-conformity originated of an employee

failure to adhere to standard operation procedures.

We isolated this non-conformity to a period comprised between 2016-09-12 and 2016-11-28.

This time frame represents the employment period of the employee from whom resulted this non-conformity.

Production Dates : SEP 12, 2016 - NOV 28, 2016

VIN Range 1 : Begin :	2A9SN1126HJ198135	End :	2A9SN1126HJ198135	<input type="checkbox"/> Not sequential
VIN Range 2 : Begin :	2A9SP2122HJ198116	End :	2A9SP2122HJ198116	<input type="checkbox"/> Not sequential
VIN Range 3 : Begin :	2A9SP112XHJ198133	End :	2A9SP112XHJ198133	<input type="checkbox"/> Not sequential
VIN Range 4 : Begin :	2A9SP2124HJ198120	End :	2A9SP2124HJ198120	<input type="checkbox"/> Not sequential
VIN Range 5 : Begin :	2A9SN1124HJ198134	End :	2A9SN1124HJ198134	<input type="checkbox"/> Not sequential
VIN Range 6 : Begin :	2A9Sp2129hj198114	End :	2A9SP2129HJ198114	<input type="checkbox"/> Not sequential
VIN Range 7 : Begin :	2A9SP2122HJ198116	End :	2A9SP2122HJ198116	<input type="checkbox"/> Not sequential
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VIN Range 11 : Begin :	2A9SP112XHJ198133	End :	2A9SP112XHJ198133	<input type="checkbox"/> Not sequential
VIN Range 12 : Begin :	2A9SP2124HJ198120	End :	2A9SP2124HJ198120	<input type="checkbox"/> Not sequential
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VIN Range 18 : Begin :	2A9SP212XHJ198140	End :	2A9SP212XHJ198140	<input type="checkbox"/> Not sequential
VIN Range 19 : Begin :	2A9SP212XHJ198140	End :	2A9SP212XHJ198140	<input type="checkbox"/> Not sequential
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VIN Range 21 : Begin :	2A9SP2126HJ198118	End :	2A9SP2126HJ198118	<input type="checkbox"/> Not sequential
VIN Range 22 : Begin :	2A9SN1128HJ198136	End :	2A9SN1128HJ198136	<input type="checkbox"/> Not sequential
VIN Range 23 : Begin :	2A9SP2124HJ198117	End :	2A9SP2124HJ198117	<input type="checkbox"/> Not sequential
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VIN Range 38 : Begin :	2A9SP2123HJ198139	End :	2A9SP2123HJ198139	<input type="checkbox"/> Not sequential
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VIN Range 45 : Begin :	2A9SP2126HJ198118	End :	2A9SP2126HJ198118	<input type="checkbox"/> Not sequential
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VIN Range 47 : Begin :	2A9SP2124HJ198117	End :	2A9SP2124HJ198117	<input type="checkbox"/> Not sequential
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## Description of Noncompliance :

Description of the Nature : insufficient resistance to the stretching test under FMVSS221

Noncompliance : Physical location : Ceiling sheet metal joint

FMVSS 1 : 221 - School bus body joint strength

FMVSS 2 : NR

Description of the Safety Risk : in case of an accident the ceiling joint can split

Description of the Cause : This non-compliance is due to the fact that an employee did not follow the work instructions for the implementation of glue and rivet placement.

Identification of Any Warning that can Occur : There is no noticeable sign of alert before, during and after. but we added one inspection per bus by an quality inspector.

## Supplier Identification :

### Component Manufacturer

Name : NR

Address : NR

NR

Country : NR

## Chronology :

in may 2018 we received from NHTSA a non-compliance report to FMVSS 221.

May 2018 : root cause analysis

June 2018 : identification of the root cause

July 2018 : resistance test done by an external firm / implementation of corrective actions

July 2018 : identification of buses subject to non-compliance

## Description of Remedy :

Description of Remedy Program : We identified our failure to comply with the work instructions. We implemented several levels of inspections and training. Recruitment of management staff for the assembly operations of our roof plates department. Modification of our work instructions to facilitate the installation of glue and the installation of rivets. we will send a letter for information about the recall. we will pay 1h30 of labor per bus.

How Remedy Component Differs from Recalled Component :

After validation of our deficiency.  
☑ We have taken corrective action so that this issue will not happen again.  
☑ We set up a PDI for the entire bus by adding additional controls during critical fixtures such as mounting ceiling plates.  
☑ Training is given to each of the employees on each of the positions and an evaluation is scheduled at different times to validate the knowledge and compliance with the assembly instructions.  
☑ In case of non-compliance, the case is investigated by the quality department and if there is a human factor, we remove the employee from the line.  
☑ The latter goes back into training session, at the end, an evaluation is made to validate that the knowledge on its functions is acquired, then the return on the line is accepted.  
☑ These actions allowed us to have a significant decrease in nonconformities.

Identify How/When Recall Condition was Corrected in Production :

November 30, 2016  
☑ We were aware of a malfunction on the line due to non-compliance with work instructions.  
☑ Corrective action was automatically implemented, as set out in annex 3.  
☑ Although we are in control of the corrective actions we have taken, we have seriously read your non-compliance report, and we have decided to validate a change in engineering.  
☑ After studying the various solutions found, we submitted our proposals to an external laboratory which validated the solutions below.  
since 02 august 2018  
☑ In production: setting 1/4 rivets instead of 3/16 rivets n the field. set up screws • # 10 screws

## Recall Schedule :

Description of Recall Schedule :

we will inform our customers listed in annex 1 by letter on August 30, 2018.  
☑ The recall kits are being manufactured in our factory.  
☑ The only issues we are currently experiencing is related to the delivery time of our template that is made by our suppliers and in about 3 weeks.  
Finalized actions  
☑ identify customers  
☑ mount the instructions  
☑ prepare the kits (in progress)

Actions to be finalized

send the newsletter to our customers

send the recall kit upon receipt of our template

Planned Dealer Notification Date : OCT 01, 2018 - OCT 08, 2018

Planned Owner Notification Date : OCT 01, 2018 - OCT 08, 2018

\* NR - Not Reported