

Part 573 Safety Recall Report

21V-560

Manufacturer Name : General Motors, LLC**Submission Date :** JUL 23, 2021**NHTSA Recall No. :** 21V-560**Manufacturer Recall No. :** N212343880**Manufacturer Information :**

Manufacturer Name : General Motors, LLC

Address : 29427 Louis Chevrolet Road
MAIL CODE 480-210-2V WARREN MI
48093

Company phone : 586-596-1733

Population :

Number of potentially involved : 50,413

Estimated percentage with defect : 1 %

Vehicle Information :

Vehicle 1 : 2017-2019 Chevrolet Bolt EV

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : The condition is specific to vehicles involved in NHTSA recall 20V701. These vehicles contain battery cells produced at LG Chem's Ochang, Korea plant that are design level N2.1. Manufacturing records were used to identify vehicles built with battery cells of this design level that were produced at this facility.

All 2017-2018 Bolts are affected as well as certain 2019 Bolts with design level N2.1 batteries manufactured at LG Chem's Ochang plant.

Production Dates : JUL 26, 2016 - SEP 10, 2019

VIN Range 1 : Begin :

NR

End : NR

 Not sequential**Description of Defect :**

Description of the Defect : General Motors has decided that a defect which relates to motor vehicle safety exists in certain 2017-2019 model year Chevrolet Bolt EV vehicles. A certain number of these vehicles were built with high voltage batteries produced at LG Chem's Ochang, Korea facility that may pose a risk of fire when charged to full, or very close to full, capacity.

GM previously recalled these vehicles for this condition. Through additional investigation, experts from GM and LG have now identified the root cause, and GM is commencing a new recall to replace defective battery modules in the recall population.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : If the batteries in certain vehicles within this population are charged to full capacity, or very close to full capacity, the batteries may pose a risk of fire.

Description of the Cause : The root cause is the simultaneous presence of two rare manufacturing defects in the same battery cell in design level N2.1 batteries produced at LG Chem's Ochang, Korea facility. The condition appears to be aggravated by routinely charging the battery to a full or nearly full state of charge after it has been substantially depleted.

Identification of Any Warning that can Occur : The battery may emit smoke or heat, and the condition may melt or damage the battery and other vehicle components.

Involved Components :

Component Name 1 : Battery ASM-High VLTG

Component Description : High Voltage Battery Pack

Component Part Number : 24285164, 24286670, 24286783, 24289545, 24290235, 24289548

Component Name 2 : Battery ASM-High VLTG

Component Description : High Voltage Battery Pack

Component Part Number : 24291630, 24295959, 24289549, 24291802, 24295962, 24288644

Supplier Identification :

Component Manufacturer

Name : LG Electronics

Address : 363-8 Gyeongseo-dong, Seo-gu,
Incheon Foreign States

Country : Korea, Republic of

Chronology :

GM launched the final remedy campaign in Recall 20V701 in late April 2021. The recall remedy for these vehicles involved (a) performing diagnostic procedures to identify and replace potentially defective battery cell-module assemblies and (b) installing advanced onboard-diagnostic software designed to detect and warn owners regarding potential issues related to changes in battery-module performance over time.

After launching the remedy campaign, GM and LG Chem continued to investigate the underlying root cause and

monitor the effectiveness of the final remedy program by analyzing field data for new potential battery fires. On July 2, 2021, GM became aware, through a media report, of an alleged battery fire in a vehicle that had the final recall remedy performed. While GM worked to inspect this vehicle and confirm the origin and cause of the fire, GM became aware, on July 13, 2021, of a second alleged battery fire involving a 2019 Bolt EV that had received the final remedy.

On July 14, 2021, as a precaution while it completed its investigation into these two incidents, GM advised owners of vehicles in the recall population to park their vehicles outdoors immediately after charging and to not leave their vehicles charging overnight. GM also updated NHTSA regarding the status of its investigation.

On July 16, 2021, a preliminary examination of the vehicle identified in the July 2nd article confirmed that the vehicle's battery was the likely source of the fire. The second vehicle identified on July 13, 2021 is not available for inspection; the cause of that fire remains unknown. On July 17, 2021, GM's Safety and Field Action Decision Authority decided to conduct a safety recall, while engineering teams from GM and LG continued to investigate the root cause. On July 21, 2021, experts from GM and LG identified the simultaneous presence of two rare manufacturing defects in the same battery cell as the root cause of the battery fires.

Description of Remedy :

Description of Remedy Program : The remedy will be the replacement of defective battery modules in the recall population. Until the updated recall remedy is performed, customers should take the following interim steps:

1. Customers should, whether or not they received the current software update, return their vehicle to the 90% state of charge limitation using Hilltop Reserve mode (for 2017-2018 model years) or Target Charge Level (for 2019 model year) mode. If customers are unable to successfully make these changes, or do not feel comfortable making these changes, we are asking them to visit their dealer to have these adjustments completed.
2. Additionally, we ask that customers charge their vehicle after each use and avoid depleting their battery below approximately 70 miles of remaining range, where possible.
3. Out of an abundance of caution, customers should continue to park their vehicles outside immediately after charging and not leave their vehicles charging overnight.

Owners who have not visited their dealer to receive the original recall remedy should visit their nearest Chevrolet EV dealer to obtain this important software update, which includes a diagnostic check on the health of their vehicle's battery system. After obtaining the software update, customers should still take the interim steps summarized above.

Pursuant to 49 C.F.R. § 573.13(d)(1), all covered vehicles are under warranty, so reimbursement is not offered.

How Remedy Component Differs from Recalled Component : Replacement components are not components of design level N2.1 batteries manufactured at LG Chem's Ochang plant.

Identify How/When Recall Condition was Corrected in Production : Design level N2.1 battery cells were no longer used in production after 2019 model year.

Recall Schedule :

Description of Recall Schedule : Dealers will be notified on July 23, 2021. Interim owner notification is estimated to mail on September 6, 2021. GM will provide estimated mailing dates for the final remedy when available.

Planned Dealer Notification Date : JUL 23, 2021 - JUL 23, 2021

Planned Owner Notification Date : SEP 06, 2021 - SEP 06, 2021

* NR - Not Reported