

Part 573 Safety Recall Report

20V-701

Manufacturer Name : General Motors, LLC

Submission Date : MAY 26, 2021

NHTSA Recall No. : 20V-701

Manufacturer Recall No. : N202311730



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 : 50,526

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 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 the 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.

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 : GM and LG Chem's investigation concluded that the known field incidents were likely caused by one or more rare, latent cell-level manufacturing defects in design level N2.1 batteries produced at LG Chem's Ochang, Korea facility.

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

From July 20, 2020 through August 26, 2020, GM received four claims alleging that the high-voltage battery pack in a Chevrolet Bolt vehicle caused a fire. GM opened a product investigation on August 26, 2020 to investigate these claims.

From August 26, 2020 through November 5, 2020, GM's product investigation team conducted field- and warranty-data searches and onsite vehicle inspections to investigate the origin of the alleged fires. GM also worked with LG Chem, the supplier of the high-voltage battery cells, to identify a potential root cause. In total, GM has identified 12 fire-related allegations involving 2017 through 2019 model year Chevrolet Bolt vehicles that may be battery-related.

Of these 12 claims, GM has, to date, confirmed that a battery-related fire appears to have occurred in five cases. These five incidents occurred on: March 17, 2019; June 29, 2020; July 4, 2020; July 30, 2020; and August 25, 2020. GM has pre-incident battery state-of-charge data on four of these incidents; in all four cases, the vehicle's

high-voltage battery pack appears to have been at a high state of charge, according to the available data, just before the fire occurred.

GM updated NHTSA regarding the status of its investigation on September 2, 2020; September 16, 2020; September 30, 2020; and October 21, 2020. On November 5, 2020, GM's Safety and Field Action Decision Authority decided to conduct a safety recall.

Description of Remedy :

Description of Remedy Program : Dealers will perform diagnostic procedures and, if necessary, replace battery module assemblies that fail the diagnostics. Dealers will also install advanced onboard diagnostic software that, among other things, has the ability to detect potential issues related to changes in battery module performance before problems can develop. Until this remedy is available for all affected vehicles, dealers will reprogram the hybrid propulsion control module 2 (HPCM2) to limit full charge to 90% as an interim remedy. Until this interim remedy is completed, customers should enable either "Hilltop Reserve" (for 2017-18 model year vehicles) or "Target Charge Level" (for 2019 model year vehicles) using their vehicle's infotainment center. These two features will limit the vehicle's state of charge to 90% until the HPCM2 software recalibration is applied. If customers are unable to successfully make these changes, or do not feel comfortable making these changes, they will be advised to not park their car in their garage or carport until after they have visited their dealer. 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 : As part of the service procedure, dealers will replace battery module assemblies that fail the diagnostics with new modules. In addition, the new onboard diagnostic software has the ability to detect potential issues related to changes in battery module performance before problems can develop.

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 November 13, 2020. GM will notify customers pursuant to the customer notification strategy that GM reviewed with NHTSA on November 12, 2020. Owner notifications of the final remedy are estimated to occur in two phases; the first on May 13, 2021 to address 2019 model year vehicles and the second on May 31, 2021 to address remaining vehicles. The final remedy will be executed under bulletin N202311731. Until the final remedy is available, an interim remedy is executed under bulletin N202311730.

Planned Dealer Notification Date : NOV 13, 2020 - NOV 13, 2020

Planned Owner Notification Date : MAY 13, 2021 - MAY 31, 2021

* NR - Not Reported