Date: September 24, 2019

Subject: N172130462-02 - Customer Satisfaction Program
        Loss of Propulsion Due to Low Cell Voltage
        Revised population

Models: 2012 - 2015 Chevrolet Volt
        2014 - 2016 Cadillac ELR

To: All General Motors Dealers

This bulletin has been revised to add model year 2012 Chevrolet Volt and
model year 2016 Cadillac ELR vehicles. Please discard all copies of bulletin
N172130462-01 (18217).

END OF MESSAGE
GLOBAL SAFETY FIELD INVESTIGATIONS
Customer Satisfaction Program
N172130462 (18217) Loss of Propulsion Due to Low Cell Voltage

Release Date: September 2019
Revision: 02

Revision Description: This bulletin has been revised to add model year 2012 Chevrolet Volt and model year 2016 Cadillac ELR vehicles. Please discard all copies of bulletin N172130462-01 (18217).

Attention: This program is in effect until October 31, 2021.

<table>
<thead>
<tr>
<th>Make</th>
<th>Model</th>
<th>Model Year From</th>
<th>To</th>
<th>RPO</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chevrolet</td>
<td>Volt</td>
<td>2012</td>
<td>2015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cadillac</td>
<td>ELR</td>
<td>2014</td>
<td>2016</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Involved vehicles are marked “open” on the Investigate Vehicle History screen in GM Global Warranty Management system. This site should always be checked to confirm vehicle involvement prior to beginning any required inspections and/or repairs.

Condition: Certain 2012 - 2015 model year Chevrolet Volt vehicles and 2014 – 2016 model year Cadillac ELR vehicles equipped with a high voltage battery, may have a condition where it could gradually lose the ability to maintain voltage. If battery concerns are not addressed, over time the vehicle could enter a reduced propulsion mode while driving, or lose propulsion, or it may not start.

Correction: Dealers are to update the Hybrid Powertrain Control Module 2 (HPCM2). This software update is intended to increase the amount of warning time provided.

Parts
No parts are required for this repair.

Warranty Information

<table>
<thead>
<tr>
<th>Labor Operation</th>
<th>Description</th>
<th>Labor Time</th>
<th>Trans. Type</th>
<th>Net Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>9104372*</td>
<td>Verified Module Software or Calibration Level: Module Programmed with Same Level Software or Calibration</td>
<td>0.2</td>
<td>ZFAT</td>
<td>N/A</td>
</tr>
<tr>
<td>9104230*</td>
<td>Hybrid Powertrain Control Module 2 Programming and Setup with SPS</td>
<td>0.4</td>
<td>ZFAT</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* To avoid warranty transaction rejections, the SPS Warranty Claim Code must be entered when submitting this transaction. Note that if multiple modules are reprogrammed, all claim codes must be entered with a comma separating each code.

Warranty Claim Code Information Retrieval

If the SPS Warranty Claim Code was not recorded on the Job Card, the code can be retrieved in the SPS system as follows:
- Open TIS on the computer used to program the vehicle
- Select and start SPS
- Select Settings
- Select the Warranty Claim Code tab

The VIN, Warranty Claim Code and Date/Time will be listed on a roster of recent programming events. If the code is retrievable, dealers should resubmit the transaction making sure to include the code in the SPS Warranty Claim Code field.

Service Procedure

Note: Avoid reprogramming the HPCM2 if the state of charge is in the 28% - 62% range. If the state of charge is within this range, charge the vehicle to above 62% before proceeding.
The new calibration needs to see a state of charge outside of this range for proper initial operation of the vehicle.

Note: Carefully read and follow the instructions below.
- Ensure the programming tool is equipped with the latest software and is securely connected to the data link connector. If there is an interruption during programming, programming failure or control module damage may occur.
Stable battery voltage is critical during programming. Any fluctuation, spiking, over voltage or loss of voltage will interrupt programming. Install a GM Authorized Programming Support Tool to maintain system voltage. Refer to www.gmdesolutions.com for further information. If not available, connect a fully charged 12 V jumper or booster pack disconnected from the AC voltage supply. DO NOT connect a battery charger.

Turn OFF or disable systems that may put a load on the vehicles battery such as; interior lights, exterior lights (including daytime running lights), HVAC, radio, etc.

Clear DTCs after programming is complete. Clearing powertrain DTCs will set the Inspection/Maintenance (I/M) system status indicators to NO.

Note: If the Same Calibration/Software Warning is noted on the SPS Summary screen, record the warranty claim code (WCC) and select OK and follow screen instructions. The WCC is located in the Service Programming System dialogue box of the SPS Summary screen. No further action is required. Refer to the Warranty section of the bulletin.

1. Reprogram the hybrid powertrain control module.
2. Refer to Hybrid Powertrain Control Module 2 Programming and Setup in SI.

2. Record SPS Warranty Claim Code on job card for warranty transaction submission.

Dealer Responsibility

All new, used, GM Certified Used, courtesy transportation vehicles, dealer shuttle vehicles, etc. in dealers’ possession and subject to this program must be held and inspected/repaired per the service procedure of this bulletin before customers take possession of these vehicles. Involved vehicles must be held and not delivered to customers, dealer-traded, released to auction, used for demonstration, or any other purpose.
Customer Satisfaction Program
N172130462 (18217) Loss of Propulsion Due to Low Cell Voltage

All GM Certified Used vehicles currently in the dealers’ inventory within the Certified Pre-Owned Inventory System (CPOIS) will be de-certified and must be held and remedied per the service procedure in this bulletin. Upon submitting an accepted/paid warranty transaction in the Global Warranty Management (GWM) system, the vehicle can be re-certified for sale within the CPOIS system, or once again be used in the CTP program.

Dealers are to service all vehicles subject to this program at no charge to customers, regardless of mileage, age of vehicle, or ownership, through October 31, 2021. Customers who have recently purchased vehicles sold from your vehicle inventory, and for which there is no customer information indicated on the involved vehicle listing, are to be contacted by the dealer. Arrangements are to be made to make the required correction according to the instructions contained in this bulletin. A copy of the customer letter is provided in this bulletin for your use in contacting customers. Program follow-up cards should not be used for this purpose, since the customer may not as yet have received the notification letter.

In summary, whenever a vehicle subject to this program enters your vehicle inventory or is in your facility for service through October 31, 2021, you must take the steps necessary to be sure the program correction has been made before selling or releasing the vehicle.

Dealer Reports
For dealers with involved vehicles, a listing with involved vehicles has been prepared and will be provided to U.S. and Canadian dealers through the GM GlobalConnect Recall Reports or sent directly to export dealers. The listing may contain customer names and addresses obtained from Motor Vehicle Registration Records. The use of such motor vehicle registration data for any purpose other than follow-up necessary to complete this program is a violation of law in several states/provinces/countries. Accordingly, you are urged to limit the use of this report to the follow-up necessary to complete this program.

Customer Notification

USA & Canada - General Motors will notify customers of this program on their vehicle (see copy of customer letter included with this bulletin).

Export - Letters will be sent to known owners of record located within areas covered by the US National Traffic and Motor Vehicle Safety Act. For owners outside these areas, dealers should notify customers using the attached sample letter.
Dear General Motors Customer:

Your 2012 - 2015 model year Chevrolet Volt or 2014 – 2016 Cadillac ELR vehicle may have a condition where it could gradually lose the ability to maintain its battery voltage. Your vehicle is designed to provide a warning if the battery loses the ability to maintain voltage. This software update is intended to increase the amount of warning time provided to you before your vehicle enters a reduced propulsion mode while driving, loses propulsion, or might not start.

Your satisfaction with your Chevrolet Volt or Cadillac ELR is very important to us, so we are announcing a program to provide additional in-vehicle information regarding battery status.

**What We Will Do:** Your GM dealer will update the Hybrid Powertrain Control Module 2 (HPCM2). This software update is intended to increase the amount of warning time provided. This service will be performed for you at **no charge until October 31, 2021**. After that, any applicable warranty will apply.

**What You Should Do:** To limit any possible inconvenience, we recommend that you contact your GM dealer as soon as possible to schedule an appointment for this software update.

If you have any questions or concerns that your dealer is unable to resolve, please contact the appropriate Customer Assistance Center at the number listed below.

<table>
<thead>
<tr>
<th>Division</th>
<th>Number</th>
<th>Text Telephones (TTY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chevrolet</td>
<td>1-800-222-1020</td>
<td>1-800-833-2438</td>
</tr>
<tr>
<td>Cadillac</td>
<td>1-800-458-8006</td>
<td>1-800-833-2622</td>
</tr>
<tr>
<td>Puerto Rico – English</td>
<td>1-800-496-9992</td>
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</tr>
<tr>
<td>Puerto Rico – Español</td>
<td>1-800-496-9993</td>
<td></td>
</tr>
<tr>
<td>Virgin Islands</td>
<td>1-800-496-9994</td>
<td></td>
</tr>
</tbody>
</table>

We truly appreciate you taking the time to update your vehicle as we know your time is valuable. We want you to know that we will do our best, throughout your ownership experience, to ensure that your Chevrolet Volt vehicle provides you many miles of enjoyable driving.

Neelie O’Connor  
Executive Director  
North America Contact Center Operations

N172130462 (18217)