



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

ODI RESUME

OFFICE OF DEFECTS INVESTIGATION



Investigation: PE23022
Prompted By: VOQ Review, EWR Field Report Review
Date Opened: 11/29/2023
Investigator: Sean A Hays **Reviewer:** Sharon Yukevich
Approver: Tanya Topka
Subject: Loss of Motive Power due to the Battery Energy Control Module

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: General Motors, LLC
Products: 2016 Chevrolet Volt, 2017 Chevrolet Volt, 2018 Chevrolet Volt, 2019 Chevrolet Volt
Population: 72,926

Problem Description: Alleged battery energy control module (BECM) failure can cause a loss of motive power, including a stall, reduced power state, or a no-start condition. Loss of motive power can occur at various speeds and vehicle may not have the ability to restart afterwards.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	EWR D&I	Other	Total	EWR Field Reports
All Incidents:	61	0	0	0	61*	CONF
Crashes/Fires:	0	0	0	0	0	0
Injury Incidents:	0	0	0	0	0	0
Number of Injuries:	0	0	0	0	0	0
Fatality Incidents:	0	0	0	0	0	0
Number of Fatalities:	0	0	0	0	0	0

*Total eliminates duplicates received by the manufacturer

ACTION/SUMMARY INFORMATION

Action: A Preliminary Evaluation (PE) has been opened.

Summary:

The Office of Defects Investigation (ODI) has received 61 complaints and multiple TREAD (Transportation

Recall Enhancement, Accountability and Documentation) field reports alleging a loss of motive power, including a stall, reduced power state, and/or a no-start condition due to the Battery Energy Control Module (BECM) in model year (MY) 2016-2019 Chevrolet Volt passenger car vehicles manufactured by General Motors (GM). The complaints allege that a loss of motive power or reduced power mode can occur at various speeds and the ability to restart after this occurs may not be available. Some complaints also allege that there is little to no warning when the loss of motive power or reduced power mode occurs.

The hazard posed by a vehicle stalling event is manifested in the inability of the vehicle to move with the flow of surrounding traffic. The stalled vehicle along with its operator and occupants becomes a stationary target with traffic moving past the vehicle. Two factors have a major impact on the potential hazard to the vehicle, its occupants and surrounding vehicles, the surrounding traffic speed and the stalled vehicle's restart ability.

If the vehicle operator can restart the vehicle immediately or within a reasonable amount of time, the hazard is reduced, and the vehicle can rejoin the flow of traffic. If the surrounding traffic is not traveling at a significantly higher speed than the stalled vehicle, the surrounding traffic has sufficient time and ability to take evasive measures to avoid the road hazard imposed by the stalled vehicle.

GM has released Technical Service Bulletin (TSB) 18-NA-261 which concerns the BECM in the MY 2016-2019 Chevrolet Volt. This TSB states that a no-start condition or illumination of a malfunction indicator light (MIL) along with various diagnostic trouble codes (DTCs) is possible. TSB states that this condition is caused by an internal issue in the BECM, and the repair is to replace and reprogram the BECM. Data from both ODI and GM has been discussed with the company on several occasions.

ODI is opening this Preliminary Evaluation (PE) to determine the scope and severity of the potential problem and to fully assess the potential safety-related problems.

To review the ODI reports cited in the Opening Resume ODI Report Identification Number document, go to [NHTSA.gov](https://www.nhtsa.gov).



U.S. Department
of Transportation
**National
Highway Traffic
Safety
Administration**

OPENING RESUME ODI REPORT IDENTIFICATION NUMBERS

Investigation ID: PE23022

Date Opened: 11/29/2023

Subject: Loss of Motive Power due to the Battery Energy
Control Module

List of 61 ODI Report reference numbers:

11419273, 11423758, 11441303, 11443126, 11447039, 11448633, 11450500, 11459128, 11461402, 11462636,
11463386, 11464632, 11466630, 11466657, 11470136, 11472671, 11473027, 11474143, 11474168, 11475728,
11476401, 11477470, 11480405, 11481600, 11482135, 11482925, 11485009, 11485013, 11485815, 11487388,
11488235, 11488788, 11489126, 11490389, 11490766, 11493480, 11493790, 11494246, 11495029, 11495051,
11495368, 11495449, 11495532, 11497186, 11498415, 11501667, 11503782, 11509514, 11509785, 11513442,
11515573, 11515897, 11520855, 11528182, 11533715, 11545935, 11548743, 11549089, 11549740, 11550431,
11552553



Service Bulletin

Bulletin No.: 18-NA-261

Date: March, 2022

TECHNICAL

Subject: No Start, Malfunction Indicator Lamp (MIL) Illuminated - DTC U2603, U2604, U2605, U2606, U2617, U2618, U2619, U2620, U2621, U2622, U2623 and/or U2624 Set

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Volt	2016	2019	—	—	—	—

Involved Region or Country	North America, South Korea
Condition	<p>Some customers may comment on one or more of the following conditions:</p> <ul style="list-style-type: none"> • MIL Illuminated • No start <p>Some technicians may find one or more of the following DTCs set:</p> <ul style="list-style-type: none"> • U2603: Battery Energy Control Module Lost Communication with Hybrid/EV Battery Interface Control Module 1 • U2604: Battery Energy Control Module Lost Communication with Hybrid/EV Battery Interface Control Module 2 • U2605: Battery Energy Control Module Lost Communication with Hybrid/EV Battery Interface Control Module 3 • U2606: Battery Energy Control Module Lost Communication with Hybrid/EV Battery Interface Control Module 4 • U2617: Battery Energy Control Module Lost Communication with Hybrid/EV Battery Interface Control Module 5 • U2618: Battery Energy Control Module Lost Communication with Hybrid/EV Battery Interface Control Module 6 • U2619: Battery Energy Control Module Lost Communication with Hybrid/EV Battery Interface Control Module 7 • U2620: Battery Energy Control Module Lost Communication with Hybrid/EV Battery Interface Control Module 8 • U2621: Battery Energy Control Module Lost Communication with Hybrid/EV Battery Interface Control Module 9 • U2622: Battery Energy Control Module Lost Communication with Hybrid/EV Battery Interface Control Module 10 • U2623: Battery Energy Control Module Lost Communication with Hybrid/EV Battery Interface Control Module 11 • U2624: Battery Energy Control Module Lost Communication with Hybrid/EV Battery Interface Control Module 12
Cause	This condition may be caused by an internal issue within the Battery Energy Control Module.
Correction	Replace and reprogram the Battery Energy Control Module per SI.

Service Procedure

Important: Stable battery voltage is critical during programming. Any fluctuation, spiking, over voltage or loss of voltage will interrupt programming. Install the EL-49642 SPS Programming Support Tool (GM Dealer Equipment Item #PSC-550) to maintain system voltage. If not available, connect a fully charged 12V jumper or booster pack disconnected from the AC voltage supply. DO NOT connect a battery charger.

Refer to *Battery Energy Control Module Replacement* in the Service Manual.

Parts Information

Causal Part	Description	Part Number	Qty
X	MODULE, BAT ENGY CONT	24296900	1

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
5031010	Battery Energy Control Module Replacement	Use Published Labor Operation Time

Version	2
Modified	Released June 24, 2018 March 09, 2022 – Added the 2019 Model Year and updated Part Number to 24296900 in the Parts Information section.

