



Service Bulletin

File in Section: -

Bulletin No.: PI1231

Date: May, 2014

PRELIMINARY INFORMATION

Subject: Electric Vehicle Electronics and Propulsion Diagnostic Tips

Models: 2014 Cadillac ELR
2011-2014 Chevrolet Volt
2014 Chevrolet Spark EV
Equipped with RPO EN0 or EVB
United States, Canada and Korea

Condition/Concern

Some electrified vehicles may arrive at the Dealer for service with various hybrid electronics or propulsion related concerns, with or without diagnostic trouble codes (DTC) and with or without a Service Vehicle Soon (SVS) lamp or a Malfunction Indicator Lamp (MIL) illuminated.

Depending on the specific customer concern, there may be one or more reasons for the Condition/Concern, or simply the customer may need to be educated on some of the unique features of their electrified vehicle.

Recommendation/Instructions

Notice: This is a general request to increase the level of up front data gathering in any cases involving electrified vehicles. Recognizing the newness of the technology and the greater difficulty that some customers may have in describing or self-diagnosing symptoms when compared to traditional IC engine vehicles, and is not part of a specific product investigation.

Obtaining an Accurate Description From the Customer of the Condition/Concern

In order to root cause a potential issue, the Service Advisor needs to get an accurate description from the customer of the Condition/Concern.

The following is a list of questions that the Service Advisor should ask the customer, in order to help the Service Personnel identify the Electronics and Propulsion Condition/Concern:

- What was the battery range at the time the Condition/Concern occurred?
- Were there any driver information center (DIC) messages displayed or any malfunction indicator lamps (MIL) illuminated?
- What were the driving conditions at the time the Condition/Concern occurred, such as city, highway, elevation, etc.?
- How long had the vehicle been running when the Condition/Concern occurred?
- What were the ambient conditions at the time the Condition/Concern occurred, such as temperature, rain, snow or ice?
- What accessories were turned ON?
- Was OnStar® contacted at the time the Condition/Concern occurred?
⇒ If the Condition/Concern as described by the customer is related to charging, then refer to the latest version of Corporate Bulletin #12-08-45-001 or #PIP5155.

Observing the Vehicle for DIC Messages, Illuminated Lamps and DTCs

Notice: It is especially important on electrified vehicles to record all stored DTCs and data prior to clearing DTC information, or performing Techline Service Programming updates. In some cases it may be necessary to perform an update for a specific DTC or symptom, but this should never be a Technician's first diagnostic step.

The Service Technician should perform the following actions:

1. Perform the Diagnostic System Check - Vehicle. Use a scan tool to perform a Vehicle Wide DTC Check with Module ID Information. This will capture the DTCs, current software levels and part numbers of any vehicle modules that may be needed for future reference.
 - ⇒ If any DTCs are set, record them on the Job Card and then follow the published diagnostics in SI. Refer to Diagnostic Trouble Code (DTC) List - Vehicle in SI.
 - ⇒ If no DTCs are set, Go to Step 2.
2. Observe the DIC for a Service Vehicle Soon Message being displayed.
 - ⇒ If a Service Vehicle Soon Message is displayed, record it on the Job Card and for diagnosis and repair information, refer to the System Diagnosis and the Description of Operation that the message relates to.
 - ⇒ If a Service Vehicle Soon Message is not displayed, Go to the subsection titled: Root Cause Not Identified.

Root Cause Not Identified

Notice: The following is especially important for any repair occurrences or repurchase requests.

In the event that the root cause of the Condition/Concern is not identified, the Service Personnel should contact the GM Technical Assistance Center (TAC) for assistance. All Spark EV calls should follow the current Volt/ELR prompts.

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