File in Section: -
Bulletin No.: 18-NA-330
Date: November, 2018

Service Bulletin

TECHNICAL

Subject: Malfunction Indicator Lamp Illuminated and/or Intermittent No Start with Battery Circuit DTCs Set

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Volt	2016	2018	—		1.5L (RPO L3A)	5ET50 (RPO MKV)

Involved Region or Country	United States, South Korea and Canada
Condition	Some customers may comment that the Malfunction Indicator Lamp (MIL) is illuminated and/or an intermittent No Start Condition may occur.
Cause	Any one or more of the Hybrid/EV Battery 1 Circuit, Hybrid/EV Battery 2 Circuit or Hybrid/EV Battery 3 Circuit DTCs may have Set in the Hybrid Powertrain Control Module 2. There are 96 Battery Circuit DTCs.
Correction	The Cause of this Condition is not self-healing. Review the Information and perform the Service Procedure.

Service Procedure

Information

Important: If a DTC/Fault is Active when the operator attempts to start the vehicle, it will result in a No Start condition.

The A4 Hybrid/EV Battery Pack contains 192 individual cells. Two cells are welded together in parallel and called a cell group. There are a total of 96 cell groups in the A4 Hybrid/EV Battery Pack. These cell groups are electrically connected in series. Each individual cell group is rated at 3.7 V, for a nominal system voltage of 355 V direct current. The battery cell groups are joined to form 3 distinct sections. The first 24 battery cell groups make up C4A Hybrid/EV Battery Section 1. This section is adjacent to the cowl and contains battery cell groups 73 through 96. The next 28 battery cell groups make up C4B Hybrid/EV Battery Section 2. This section is located behind Battery Section 1 and contains battery cell groups 45 through 72. The C4C Hybrid/EV Battery Section 3 is the transverse battery section and it contains the remaining 44 battery cell groups 1 through 44. The battery sections also contain two temperature sensors, with one sensor located at each end of the section.

The K16 Battery Energy Control Module monitors the voltage of the 96 battery cell groups. The voltage sense lines are attached to each individual cell group, and these sense lines terminate at a connector located on the top surface of the battery section. A voltage sense harness joins this connector to the K16 Battery Energy Control Module.

The K16 Battery Energy Control Module will determine when a fault condition is present. Diagnostics and system status are communicated from the K16 Battery Energy Control Module to the K114B Hybrid/EV Powertrain Control Module 2 through serial data. The K114B Hybrid/EV Powertrain Control Module 2 is the host controller for DTC information.

Service Procedure

Perform the following:

1. Vehicle in Service Mode.
2. Perform the Diagnostic System Check - Vehicle. Refer to in the Service Manual
3. Are any of these Hybrid/EV Battery Circuit DTCs set?

   P0B3B, P0B40, P0B45, P0B4A, P0B4F, P0B54, P0B59, P0B5E, P0B63, P0B68, P0B6D, P0B72, P0B77, P0B7C, P0B81, P0B86, P0B8B, P0B90, P0B95, P0B9A, P0B9F, P0BA4, P0BA9, P0BAE, P0BB3, P0BB8, P1B28, P1B29, P1B2A, P1B2B, P1B2C, P1B2D, P1E4C, P1E4D, P1E4E, P1E4F, P1E50, P1E51, P1E52, P1E53, P1E54, P1E55, P1E56, P1E57, P1E58, P1E59, P1E5A, P1E5B, P1E5C, P1E5D, P1E5E, P1E5F, P1E60, P1E61, P1E62, P1E63, P1E64, P1E65, P1E66, P1E67, P1E68, P1E69, P1E6A, P1E6B, P1E6C, P1E6D, P1E6E, P1E6F, P1E70, P1E71, P1E72, P1E73, P1E74, P1E75, P1E76, P1E77, P1E78, P1E79,

P1E7A, P1E7B, P1E7C, P1E7D, P1E7E, P1E7F, P1E80, P1E81, P1E82, P1E83, P1E84, P1E85, P1E86, P1E87, P1E88, P1E89, P1E8A, P1E8B.

⇒ If any of the Battery Circuit DTCs are set, go to Step 4.

⇒ If none of the Battery Circuit DTCs are set, refer to in the Service Manual

4. The Hybrid/EV Battery Section schematics in Energy Storage identify the battery section and voltage sense circuit terminal locations appropriate to each cell group and its corresponding DTC. Refer to in the Service Manual
5. Replace the affected Hybrid/EV Battery Section. Refer to in the Service Manual
6. Upon completion of the Hybrid/EV Battery Section replacement, perform the Diagnostic Repair Verification in SI. Refer to in the Service Manual

Warranty Information

For vehicles repaired under the Emission coverage, use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
5031700	High Voltage Section Battery Replacement	Use Published Labor Operation Time

Version Information

Version	1
Modified	**Released November 05, 2018**