TECHNICAL

Subject: Malfunction Indicator Lamp (MIL) Illuminated - DTC/s P1AE6, P1FFF, P0ABB Set

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	**to**	**from**	**to**		
Chevrolet	Bolt EV	2017	2017				

Involved Region or Country	North America and N.A. Export Regions
Condition	Some customers may comment that the MIL is illuminated. The technician may find one or more of the following DTC/s set: • P1AE6 • P1FFF • P0ABB
Cause	This condition may be caused by a set code in the Hybrid Powertrain Control Module 2 (HPCM2) in conjunction with a hardware fault in the Battery Energy Control Module.
Correction 1	**Note:** Removing the MSD fuse may cause multiple DTCs to set along with P1AE6. Validate the MSD fuse is fully seated. 1. With the vehicle in Ready Mode, with GDS2 under the HPCM2 module, compare the Hybrid/EV Battery Voltage and the Hybrid/EV battery Voltage Sensor Average Voltage and ensure the voltages are within 3V of each other (Note: Multiply the Hybrid/EV battery Voltage Sensor Average Voltage by 96. That value should be within 3 V of the Hybrid/EV Battery Voltage). • If High Voltage Battery Average Cell Voltage and Hybrid Battery Processed Voltage <u>ARE NOT</u> within 3V of each other, verify the software in the HPCM2 is to the latest calibrations, then proceed to correction 2. • If High Voltage Battery Average Cell Voltage and Hybrid Battery Processed Voltage <u>ARE</u> within 3V of each other, follow normal service procedures for P1AE6.

Correction 2	After the software in the HPCM2 has been updated to the latest calibrations:
	 1. Install a new Battery Energy Control Module.
	 2. After installation and programming of a new Battery energy Control Module, verify P1AE6 and P0ABB do not return.
	    2.1. Turn the vehicle ON.
	    2.2. Turn the vehicle Off.
	      • Wait 1 minute to allow the vehicle to give active isolation time to run.
	    2.3. Turn the vehicle ON.
	    2.4. Validate if DTC P1AE6 has returned.
	    2.5. Repeat steps 2.1 - 2.4 a total of 2 more times.

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 to maintain system voltage. 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.

Refer to *Hybrid Powertrain Control Module 2 Programming and Setup* in SI.

Refer to *Battery Energy Control Module Replacement* in SI.

Parts Information

Causal Part	Description	Part Number	Qty
	MODULE, BAT ENGY CONT (W/O CALN & OPERG SYS)	24284196	1

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
2810265	Hybrid Powertrain Control Module 2 Reprogramming with SPS	Use Published Labor Operation Time
5031010	Battery Energy Control Module Replacement	

Version	2
Modified	Released October 12, 2017
	November 21, 2017 - Removed Ampera-e from Model section and added Battery Energy Control Module information.