



Preliminary Information

PIC6089B (EREV) (BEV) Diagnostic Tips For Service Charging System, Battery Saver Message or Low Battery Indicator Displayed On Electric Vehicles

Models

| Brand: | Model: | Model Years: | VIN: | | Engine: | Transmissions: |
|-----------|----------|--------------|------|-----|---------|----------------|
| | | | from | to | | |
| Chevrolet | Spark EV | 2014 - 2015 | All | All | N/A | MME |
| Chevrolet | Volt | 2011 - 2015 | All | All | All | All |
| Cadillac | ELR | 2014 - 2016 | All | All | All | All |
| Opel | Ampera | 2011 - 2014 | All | All | All | All |

Equipped with RPO EN0

Supersession Statement:

This PI was superseded to update Model Years. Please discard PIC6089A.

Condition / Concern

A customer or technician may comment that there is or was a Battery Saver Message or red Battery Indicator displayed in the Driver Information Center (DIC).

There may or may not be any low voltage DTCs or P0AF8 set in history.

The Check Engine Lamp (CEL) or Service Vehicle Soon (SVS) Indicator may or may not be displayed.

Recommendations / Instructions

Check to see if the Accessory Battery may have been severely discharged and use the GR8 Battery tester to test its condition.

The technician will need to perform the DC Power Conversion Test published in Global Service Information (G.S.I.) to check for maximum current and voltage output.

This test requires the use of a Carbon Pyle load tester. In addition, the technician can select the 14V Power Module Control Function in the ECM and Accessory Power Module Setpoint in the BCM by using the Scan Tool in order to check that the system is able to respond to current loads.

If the 12v Battery was discharged for any reason (example: testing, lighting was left on or the vehicle left in Service Mode for an extended period of time), the technician may only need to charge the 12V Battery to extinguish the message allowing a drive cycle afterwards before maximum APM output will occur.

Please refer to the Charging System Description And Operation in Service Information.

If the test fails, if there were low voltage DTCs or P0AF8 was set, the technician should confirm that the 200 amp fuse located in the X50D Fuse Block is torqued to correct specification.

Voltage should be checked on both sides of the 200 amp Fuse with a digital multi-meter

while there is a load applied and comparing the voltage readings. Voltage Drop can be checked from the Positive Battery Post to the APM side of the 200 amp Fuse as well.

If the APM will output current under a load but the voltage is low on both sides of the fuse when compared to the voltage output at the APM, check the following:

- Follow Service Information for any other DTCs that may have led to the low voltage condition.
- APM output terminal is clean and torqued to specification
- The APM Output Cable Ring Terminal is properly seated to the APM Output Terminal Post and its condition
- Test the voltage drop on the ground cables to the Engine Block, Transmission, Body and Chassis to ensure they are within specification

Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.



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