



Service Bulletin

File in Section: -

Bulletin No.: PIC5626A

Date: April, 2013

PRELIMINARY INFORMATION

Subject: BAS+ (Hybrid) eAssist Service Charging System Message, MIL On With or Without DTCs P0A8F and P062F

Models: 2012 - 2013 Buick LaCrosse, Regal eAssist
2013 Chevrolet Malibu ECO eAssist
All with RPO HP6

This PI was superseded to update model years and recommendations. Please discard PIC5626.

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

Condition/Concern

Technician may comment that the 12V Battery is discharged with a Service Charging System Message, a MIL and Red Battery Light on, with or without P0A8F and P062F.

Recommendation/Instructions

- It may be necessary to road test the vehicle or meet certain drive cycle criteria in order for the DTC to reset.
- When setting up the Scan Tool and building the vehicle in GDS2, be certain Engine RPO "LUK" is selected. Failure to do so will result in a lack of communication with the Hybrid Powertrain Modules causing no DTCs to be found during the diagnostic check. Keep GDS2 installed during testing in an attempt to capture the concern while monitoring the appropriate data lists in the HPCM, BECM or other modules as necessary.
- The engine may start and run but the charging system may be inoperative. As a result, the 12V battery may discharge within 30 minutes or less.
- The 12V system may be charging but the Hybrid system voltage may eventually become low in voltage.
- The DTCs that were stored before the 12V battery discharged may no longer be stored in any module depending on the criteria for setting or clearing DTCs.

Note: Refer to Powertrain Diagnostic Trouble Code (DTC) Type Definitions for code setting criteria in Document ID: 1800770.

Perform the following checks:

- Make certain that the plastic flashing of the fuse block is not preventing the fuse to fully seat against the bar in the Fuse Block, and the nut is fully seated against the fuse. Check that the fuse nut is properly torqued to specification (4.7 Nm).
- Test for battery voltage on each side of the fuse.
- Test the voltage drop of each Fuse. This can be done without removing the fuse from the fuse block. The Vehicle must be running with accessories turned on to generate a load on the fuse.
- Attach the voltmeter leads as shown in Test A to check the 80 Amp Fuse. (Voltage Drop less than 58 mV)
- Attach the voltmeter leads as shown in Test B to check the 175 Amp Fuse. (Voltage Drop less than 77 mV)
- Check to make sure the APM cable connections and cable crimps at the SGCM / APM output terminal and Underhood Bussed Electrical center (UBEC) connections are secure.

Note: The actual specification for the 80A fuse is .541 milliohms (.000541 ohms) and the 175A fuse is .285 milliohms (.000285 ohms). Typically, a Technician will not have a meter capable of measuring a resistance value that low which is why the above method of testing is recommended.

If the fuses are within specifications, inspect around the edge of the black plastic portion of these fuses for any sign of voltage stress as shown in the photo below. Make sure that the metal blades of the fuse are not bent or showing signs of thermal damage. Service P/N is 19119015.



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If the fuses show voltage stress is present, this is most likely the result of a poor connection. The Fuses are now available individually. If the entire fuse block needs to be replaced for any reason the fuse block includes both fuses.



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If the fuses pass inspection and they are not visually damaged in any way, install the fuses, carefully torque them to 4.7 Nm (42 lb-in), and re-evaluate the charging system operation. If the 175A fuse is open or has a poor connection, a P0A8F may be stored in history but the DTC may not consistently reset.

Important: NOTE: If the vehicle build date is after December 15, 2011 and the voltage level dropped to a predetermined level (below approximately 9V), use GDS2 to command the Battery Pack Cooling Fan on to make sure it operates. If the Battery Pack Cooling Fan is inoperative when making the command, replace the Battery Pack Cooling Fan. If the vehicles build date is on or before December 15, 2011 follow published G.S.I. Diagnostics. If the Fan is inoperative, check that the Starter Generator Control Module has the latest software.

Warranty Information

The correction for this concern may be one of several repairs described above. For vehicles repaired under warranty, please use the appropriate warranty labor operation based on the original cause in addition to well documented straight time.

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.