



Service Bulletin

File in Section: -

Bulletin No.: PIP4992A

Date: June, 2012

PRELIMINARY INFORMATION

Subject: BAS+ (Hybrid) eAssist Battery Cooling Fan Inoperative Due To Low System Voltage Conditions

Models: 2012 Buick Lacrosse eAssist
2012 Buick Regal eAssist
2013 Chevrolet Malibu ECO eAssist
All with RPO HP6

This PI was superseded to update recommended field. Please discard PIP4992.

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

Condition/Concern:

The Drive Motor Generator and Battery Control Module (Hybrid Powerpack) Cooling Fan may become inoperative due to low system voltage.

Recommendation/Instructions:

There may have been a Charging System Message, Battery Warning Lamp or Service Hybrid System Message displayed and may have DTCS P0C32 and/or P0A7E. If the voltage level drops to a predetermined level (below approximately 9V) use GDS2 to command the Battery Pack Cooling Fan Motor on to make sure it operates.

- For vehicle build dates December 15, 2011 to April 23, 2012, perform the following steps:
 - 1.1. Reprogram the Generator Control Module
 - 1.2. Replace the fan if it is not operating when making the command (see test below).
 - If the vehicle build date is before December 15, 2011 or after April 23, 2012 follow published G.S.I. Diagnostics.

Note: The technician may need to run the vehicle through several drive cycles to ensure that there is not another root cause for the low voltage condition. Review G.S.I for any criteria required for setting "Type B DTCs" so that the conditions will be met to ensure no further root cause exists.

How to Test the Fan:

In any scenario when low voltage was encountered, the following Function Test for the Battery Cooling Fan will need to be performed through GDS2.

1. Start GDS2 and enter the correct vehicle information. Make sure Engine RPO "LUK" is selected.
2. Select Module Diagnostics.
3. Select the Hybrid Powertrain Control Module (HPCM).
4. Select Control Functions.
5. Select the Hybrid/EV Battery Pack Cooling Fan.
6. Command the Fan on. Listen for Fan operation through the entire range and monitor Fan Speed (RPM).
7. Command the Fan off.
8. Start the car and monitor the Hybrid Battery Pack Voltage, Current and State of Charge (SOC) in the HPCM data list.
9. Exit GDS2.

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.