Bulletin No.: PIP4992D
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Preliminary Information

PIP4992D BAS+ (Hybrid) eAssist Battery Cooling Fan Inoperative Due To Low System Voltage Conditions

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Buick	Lacrosse eAssist	2012 - 2016	All	All	LUK	All
Buick	Lacrosse Regal	2012 - 2016	All	All	LUK	All
Chevrolet	Impala	2014	All	All	LUK	All
Chevrolet	Chevrolet Malibu ECO eAssist	2013 - 2014	All	All	LUK	All

Supersession Statement

This PI was superseded to update Recommendation/Instructions. Please discard PIP4992C.

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.

Recommendations / Instructions

There may have been a Charging System Message, Battery Warning Lamp or Service Hybrid System Message displayed and may have DTCS

- **P0C32 Hybrid/EV Battery Pack Cooling System Performance**
- **P0A7E. Hybrid/EV Battery Pack High Temperature**

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.

1) Reprogram the Generator Control Module
2) Replace the fan if it is not operating when making the command (see test below).

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.

Warranty Information

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

Labor Operation	Description	Labor Time
2810025	Reprogram Hybrid (Generator) Control Module	Use Published Labor Operation 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.

GENERAL MOTORS