



Preliminary Information

PIP4005A Intermittent No Crank, Battery Light, and/or SES Light - Inspect Hybrid Battery

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Saturn	Vue	2007 - 2009	All	All	All	All

Supersession Statement

This PI was superseded to update Model Years. Please discard PIP4005.

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

Condition / Concern

On rare occasions, an intermittent loss of IPC gauges may be encountered, and the SES and Battery Lights may illuminate. Additionally, a no crank concern may be encountered once the vehicle is turned off unless a battery charger is connected to the 12 volt battery. During diagnosis, DTCs P0AF8 and/or P0AFB will be stored. In most instances, both DTCs will be stored together.

This may be the result of a poor connection at the negative hybrid battery cable. If a poor connection exists, the 12 volt battery may discharge enough to cause this concern. If the vehicle is operated like this long enough, a no crank may occur because there may not be enough 12 volt system voltage present for the SGCM to energize the Starter Generator and start the engine. Once a battery charger is connected to the 12 volt battery, the SGCM will have enough voltage to energize the Starter Generator and start the vehicle.

Recommendations / Instructions

If the SI diagnostics do not isolate a cause for this concern, follow all safety precautions and SI procedures to check for a loose negative hybrid battery cable at the hybrid battery. This is the cable on the driver's side of the hybrid battery. If the cable is loose, follow SI procedures to remove the negative hybrid battery cable from the hybrid battery and note the break-away torque of the composite nut on the repair order. Once the cable is removed, remove the fuse the fuse that is behind the negative hybrid battery cable terminal and inspect the negative hybrid battery stud, fuse, and negative cable terminal for signs of arching. If there is any sign of arching, replace the damaged component (s) as necessary. If the negative hybrid battery stud shows signs of arching, it will be necessary to replace the complete hybrid battery assembly. If the negative cable was loose but there was no sign of arching on any of these components, reassemble the negative hybrid battery connection by following all safety precautions and SI procedures. The composite nut for the negative hybrid battery cable should be torqued to 95 lb in (10.7 Nm). Once the composite nut is torqued to specification, confirm that the negative cable is tight. If so, note the serial number and manufacturing date (shown in the photo below) on the repair order.

Important: As requested above, please document the battery serial number, battery manufacturing date, and composite nut break-away torque on the repair order. If there is a TAC case on this concern, please contact TAC and ask the TAC consultant to document this information in your TAC case.



- 1) Serial Number
- 2) Manufacturing Date

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.

