



Preliminary Information

PIC5920F Vehicle Will Not Charge And Hybrid Loss Of Isolation With DTC P0AA6 And/Or P1F0E P0DAA

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Chevrolet	Volt	2011 - 2014	All	All	LUU	MKA
Cadillac	ELR	2014	All	All	LUU	MKA
Opel	Ampera	2011 - 2014	All	All	LUU	MKA
Holden	Volt	2013 - 2014	All	All	LUU	MKA

Supersession Statement

This PI was superseded to update Recommendation/Instructions and Warranty Information. Please discard PIC5920E. The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

Condition / Concern

Some customers may comment that their vehicle will not charge. Customers may also comment that a Check Engine Lamp is illuminated. Technicians may find a current code P0AA6 and / or a P1F0E set on 2011-2013 Volt or a P0DAA on 2014 Chevy Volt, Opel Ampera or Cadillac ELR in the HPCM2. When diagnosing these DTC'S, potential causes to consider when evaluating the vehicle are:

1. A loss of Hybrid/EV Battery Pack coolant (external or internal to the Hybrid/EV Battery Pack)
2. A loss of high voltage isolation within the battery cells or battery sections themselves

Recommendations / Instructions

Locate the Isolation Test Resistance that is located in the HPCM 2 data list under HPCM 2 / Data Display / Data Display / Hybrid/EV Powertrain Control Module 2 Data and note the current value on the repair order.
Also note the Isolation Resistance from the freeze frame records in the HPCM2 for the P0AA6, P1F0E, and/or P0DAA DTC.
Inspect Hybrid/EV Battery Pack coolant level by doing both of the following:

- Note if the coolant level is low in the under hood reservoir.
- Remove the drain plug for the battery to see if any water/coolant drains out, indicating a coolant leak in the battery pack.

If necessary, refer to the Hybrid/EV Battery Cooling System Diagnostic in Service Information.

Important: All P0AA6 failures must include an inspection of the Hybrid/EV Battery Pack drain plug, located on the battery tray, regardless of fluid level at the Hybrid/EV Battery Pack coolant reservoir. If any moisture is found during the drain plug inspection, contact the GM Technical Assistance Center (TAC).
If the coolant level in the reservoir is at the proper level and there is no coolant or water drained from the battery from the drain plug inspection, then update the HPCM2 and BECM (Battery Energy Control Module) with the latest Calibrations in TIS-2-Web. After installing the current calibration in each module, cycle the ignition two times waiting 2 minute in between each ignition cycle and then check the Isolation Test resistance (in the HPCM2/ Data Display/ Data Display / Hybrid/EV Powertrain Control Module 2 Data) and make sure the test resistance now reads greater than 275 kOhms. If the isolation resistance now reads 275 kOhms or greater, then no further Attention is needed. If the DTC sets again, then check the freeze frame for HPCM2 again also.
Important: If you have any moisture that is found in the battery during the drain plug inspection or the Isolation test resistance will not go above 275 kOhms after the HPCM2 and the BECM have been updated, please contact the Technical Assistance Center (TAC) for further direction.

Warranty Information

For 2011- 2014 Volt/Ampera And 2014 Cadillac ELR

Labor Operation	Description	Labor Time
2880268*	Reprogram the HPCM2 and the BECM.	0.6 hr
* This is a unique labor operation for bulletin use only. This will not be published in the Labor Time Guide.		

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.