



Preliminary Information

PIP5202C (EREV) Diagnostic Tips for Intermittent MIL With DTC P0AB9

Product Investigation Review Required

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Chevrolet	Volt	2011 - 2015All	All	All	All	
Cadillac	ELR	2014 - 2016	All	All	All	All

Supersession Statement

This PI was superseded to update Recommendation/Instructions. Please discard PIP5202B.

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

Condition / Concern

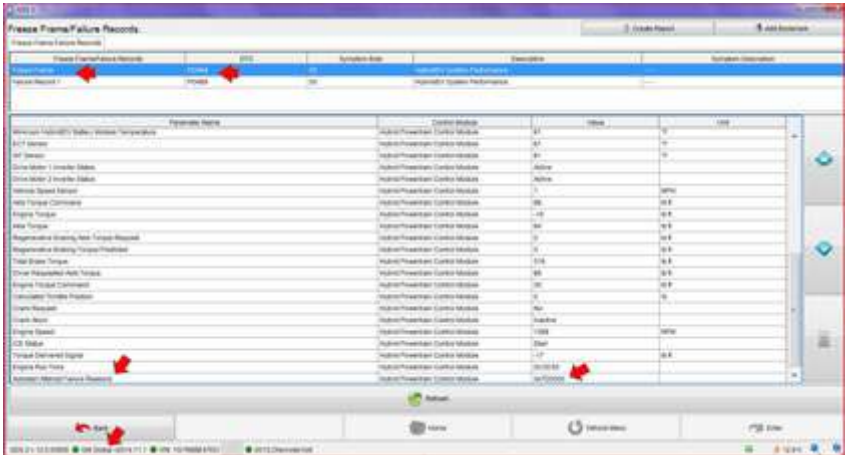
Some customers may comment that the Check Engine Light (CEL) illuminated with an "Engine Unavailable" and "Reduced Propulsion" messages on the DIC. The customer may have commented that there was a red Battery Indicator lamp and "Vehicle Not Charging" message on briefly.

During diagnosis, a technician may find only a P0AB9 (HPCM) and P0AC4 (ECM). In some cases other powertrain DTCs may be set as current or history.

Recommendations / Instructions

The following items should be reviewed and may aid in diagnosing a vehicle setting P0AB9.

- 1) Review all modules for DTCs using GDS2 and select "Vehicle Wide DTC Check With Module Info" under the Vehicle Diagnostics Menu. DO NOT clear any DTC's. Review the HPCM and ECM Freeze Frame Data, then create a report. You can save the report or email it after doing so.
- 2) The HPCM Freeze Frame and Failure Records will include "Autostart Attempt Failure Reasons". In order to view them in the Freeze Frame Record, GDS2 must be updated to v12.0.0.00835 - Global v2014.11.1 or later.



3) P0AB9 can set due to poor quality fuel or a very low fuel level, Verify that the vehicle had not been run very low or out of fuel. Recommend using a Top Tier brand fuel and clear DTCs. If DTCs do not return, do not perform any repairs. Review Diagnostic Aids in SI for P0AB9.

4) Verify the customer did not press the Power Button causing the vehicle to turn off while driving. This may cause P1B10 (HPCM) to set in History and lead to inaccurate diagnosis.

5) Verify that the ICE (Internal Combustion Engine) runs properly and no other engine related or communication related DTCs are present. Diagnose P0AB9 last after all other powertrain (P) or communication (U) codes as these codes can also cause a P0AB9 to set. Many cases for P0AB9 have been caused by fuel saturated Evaporative Fuel Canisters, loose or corroded Fuse Block or ground connections or related to an engine controls concern.

Note: A P0AC4 will also be stored in the ECM and is only a request for a MIL by the HPCM. The CEL may not be illuminated if the DTC has run and passed according to OBD II regulations per Service information.

6) Contact the customer and see if the customer has used remote cabin conditioning (Remote Start) on the last two drive cycles before the DTC set.

If they have used remote start, make the customer aware that the P0AB9 can set when the vehicle has been remote started and someone enters the vehicle and depresses the gas pedal before the vehicles ignition is turned on. If this is the concern, Clear DTCs, If DTCs do not return,

DO NOT perform any repairs. There may be an ECM software update to address this concern.

7) Check that ground locations G106 (engine block) and G113 (drive unit case) have been cleaned and are secure making sure the ground eyelets do not spin. There have been rare occasions where the bolt hole for G113 is not drilled suitably, allowing the bolt to bottom out before the eyelet is fully tightened. If you find that the mounting bolt is tight but the G113 ground eyelet is still very loose, Remove the mounting bolt and install a shorter size bolt with the same threads.

8) Check past service history for prior mechanical engine or wiring harness repairs. (Fuse Block, Camshaft Actuators, Timing Chain, Crank or Cam Sensors, Cylinder Head, etc.)

9) Check for loose or corroded electrical connections or improper cam timing can lead to P0AB9

10) If there are no additional DTCs and no engine drivability concerns present, **DO NOT** CLEAR the P0AB9 and drive the vehicle until the ICE starts then shuts down. (Mountain Mode may be used). Allow ICE to stop and restart as much as possible in an attempt to reproduce the DTC. Continue the stops and restarts for 4 additional key cycles and the MIL should extinguish.

If the DTC does not reset, the vehicle can be released as the DTC is highly unlikely to reset at that point. If P0AB9 returns after the MIL has extinguished, contact GM Technical Assistance.

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 actual cause and repair.

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.

