

Bulletin No.: PIT4585E

Date: Nov-2012

PRELIMINARY INFORMATION

Subject: 2-MODE (HYBRID) No Crank After Discharged Or Dead 12v Battery

Models: 2009-2013 Cadillac Escalade Hybrid

2008-2013 Chevrolet Tahoe and GMC Yukon Hybrid 2009-2013 Chevrolet Silverado and GMC Sierra Hybrid

All with Two-Mode Hybrid System (RPO HP2)

This PI was superseded to update model years. Please discard PIT4585D.

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

Condition/Concern

There may be a no crank condition after the vehicle has had very low accessory battery voltage or a dead battery condition. This may have also occurred after the vehicle was jump started with the vehicle key left in the "ON" position and DTC P0C76 may have set.

Recommendation/Instructions

Anytime a battery charger or booster pack is connected to the 12V battery, the ignition key should always be in the off position. If this recommendation is not followed, the Serial Data Gateway Module (SDGM) may not report "Crash Sense Failed" and the 300v Hybrid Battery Contactors will remain open until the Hybrid Powertrain Control Module's (HPCM) High Voltage (HV) DTCs are reset.

To reset the HPCM HV DTCs, please use the following procedure:

- Make sure the 12 volt battery is fully charged.
- 2. Clear DTCs in all modules.
- 3. Under the Body Menu of the Tech2 select the SDGM Special Functions Menu.
- 4. Select the "Crash Sensor Reset" in the SDGM by pressing "Enter" then select "Exit" to the Powertrain Menu.
- 5. Access the HPCM Special Functions Menu.
- 6. Select "Clear 300V Impact Detection DTC" and press the "Reset" soft key at the bottom of the screen. Exit to the Special Functions Menu.
- 7. Select the "Clear 300V Present DTC" screen and press the "Reset" soft key at the bottom of the screen. Exit the Special Functions Menu.
- 8. Turn the ignition key to the "OFF" position.
- 9. Power "Off" the Tech 2 scan tool and disconnect it from the vehicles diagnostic connector.
- 10. Open and then close the Driver's Door to disable the Retained Accessory Power (RAP).
- 11. Wait for 3 minutes and then start the vehicle.

Note: If there is a P0C76 setting, disconnect the 12v battery. With both 12v battery cables disconnected from the battery, discharge the capacitors by holding the cables together for 15 seconds. Reconnect the 12v battery and perform the above procedure again. If the DTC still resets, follow SI diagnostics and call the General Motors Technical Assistance Center if needed.

ADDITIONAL SI KEYWORDS:

PIT4585 draw drain electrical engine HCP M99 mode nocrank proactive SDG two unwanted voltage

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.

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safety. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.

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