Service Bulletin

Bulletin No.: PIT4593D

Date: Nov-2012

PRELIMINARY INFORMATION

Subject: 2-MODE (HYBRID) No Brake Assist After Low 12V Battery Power or 12V Disconnect

Models: 2009-2013 Cadillac Escalade Hybrid

2008-2013 Chevrolet Tahoe and GMC Yukon Hybrid

2009-2013 Chevrolet Silverado and GMC Sierra Hybrid

with Two-Mode Hybrid System (RPO HP2)

This PI was superseded to update model years. Please discard PIT4593C.

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

Condition/Concern

You may find that there is a lack of brake assist (Hard Pedal) after disconnecting the battery or after the 12v battery has run low on voltage. This may also be followed by an ABS and red brake lamp with a possible DTC C121D sym00 or C056D sym00 being set in the EBCM. This may be caused by an improper 12v battery disconnect procedure.

Recommendation/Instructions

Technicians that are disconnecting the battery must wait for a period of at least 1 minute with the ignition in the "OFF" position prior to disconnecting the negative battery cable. During this one minute wait period it is critical that the key does not pause in the ACCESSORY mode, during this period it is also critical that the brake pedal is NOT depressed. Due to programmed parameters, it is necessary to allow the brake system pressure relief procedure to occur without interruption. Failure to follow these steps may result in warning lamps and/or DTCs being set pertaining to interruption of the pressure relief procedure. Other vehicle systems may also be affected by not allowing a 1 minute duration for power-down. If the 12V battery is disconnected prior to the completion of the brake system pressure relief procedure the next "Ignition On" drive cycle may present a hard brake pedal with little or no brake assist. If the vehicle's battery is disconnected prior to waiting the 1 minute period, please follow these steps to resolve the concern:

- Install the negative battery cable to the battery.
- 2. Rotate the lever lock clockwise until an audible click is heard in order to connect the negative battery cable to the battery.
- 3. Position the negative battery cable insulating cover over the negative terminal.
- 4. Start the vehicle without stepping on the brake pedal.
- 5. Shut the vehicle "Off" for one minute.
- **6.** Restart vehicle and check brakes for proper operation.
- 7. Clear codes in the ECM and the EBCM.

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 safely. 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.

