



# Service Bulletin

## PRELIMINARY INFORMATION

**Subject:** HVAC Blows Cold Due To Low System Voltage Or DTC B101E Symptom 4B

**Models:** 2010 - 2014 Chevrolet Equinox  
2010 - 2014 GMC Terrain  
with Auto HVAC System (RPO C68)

*This PI was superseded to update model years and diagnostic info. Please discard PIT5200.*

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

### Condition/Concern

Customers may comment on the HVAC system will start blowing cold air without being requested. This condition was found on the C68 auto HVAC system.

Example: Customer set temperature to 76 degrees F and while driving the HVAC changes to cold and unable to increase temperature when moved to full hot.

A Technician may find either no DTCs or DTC B101E symptom 4B. NOTE: DTC B101E is set when a temperature or mode actuator has lost its learn position, is out of range, or is inoperative. This concern may also occur when system voltage is low.

### Recommendation/Instructions

Recent field cases found the cause to be low system battery voltage due to corrosion at the starter connections.

For vehicles that exhibit this condition and when the condition is present, use GDS and select "Remote Heater and Air Conditioning Module", select "HVAC System Data", and check the "Ignition Voltage" parameter. If voltage is less than 12 volts, inspect for signs of corrosion at the starter stud battery cable connections. Clean and recheck battery charging voltage.



For situations in which DTC B101E is set and Ignition Voltage is greater than 12 volts, perform the following:

1. Operate the HVAC recirculation to fresh air mode, vent position modes and operate temperature from hot too cold to see if the modes will change in all positions. Example: The temperature remains cold and GDS reflects the counts remain at zero (0).
2. Using GDS, perform the Actuator Calibration Learn procedure. Under "HVAC Door Position Data 1", check for actuators that are not learned. Example: The left temperature actuator is not learned and does not move. After checking for a mechanical bind, suspect a faulty connection at the suspect temperature actuator.

## Warranty Information

For vehicles repaired under warranty use:

Labor Operation	Description	Labor Time
5480048*	Check Ignition System Voltage and Clean Positive Battery Cable Terminal at Starter	0.3 hr
4480088*	Actuator Calibration Learn Procedure	0.3 hr
* This is an unique labor operation for bulletin use only. This will not be published in the Labor Time Guide.		

For wiring repairs covered under warranty, please refer to latest version of bulletin 10-00-89-005 for warranty information on wire/connector repairs.

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.



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