



# Service Bulletin

## PRELIMINARY INFORMATION

**Subject:** Ambient Temperature Display Not Reading Outside Temperature at Times or A/C Compressor Inoperative Due To Low Ambient Temperature

**Models:** 2008-2016 Buick Enclave  
2009-2016 Chevrolet Traverse  
2007-2016 GMC Acadia  
2007-2010 Saturn Outlook  
2007-2014 Cadillac Escalade Models  
2007-2013 Chevrolet Avalanche, Silverado  
2007-2014 Chevrolet Silverado 2500/3500, Suburban, Tahoe  
2007-2013 GMC Sierra  
2007-2014 GMC Sierra 2500/3500, Yukon Models

*This PI was superseded to update the Models section. Please discard PIT4211C.*

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

### Condition/Concern

The outside air temperature display utilizes a very specific filtering routine of the ambient temperature sensor signal so the display will update gradually without making large jumps in the reading and to eliminate the possibility of erratic readings under certain driving conditions.

A number of important functional characteristics that may be helpful in determining if the system is functioning properly.

The temperature display is always allowed to update quickly when the ambient temperature is getting colder while driving, but the display takes much longer to update when the temperature is getting warmer.

This prevents false updates to the temperature display while driving in slow or stop and go traffic in hot weather.

The temperature display will always read the actual ambient temperature when the vehicle is started if the temperature has dropped since the last key cycle. It will not update to the actual ambient temperature if it is warmer since the last key cycle unless the key has been off for at least 2.5 hours.

If a customer has a concern with the function or accuracy of the outside air temperature display, perform the instant update to determine if the display will read the accurate temperature. If the instant update creates an accurate reading, do not replace the ambient temperature sensor.

Explain to the customer that the system is designed to filter the ambient temperature sensor reading to prevent erratic readings in temperature.

Additionally, when diagnosing an HVAC system concern, some technicians may find that the A/C compressor will not engage because the ambient temperature is too low as determined by the Ambient Temperature Sensor.

The A/C compressor is disabled in temperatures below 2 degrees Celsius (36 degrees Fahrenheit). Typically this will occur when the vehicle is parked outside in temperatures below 2 degrees Celsius (36 degrees Fahrenheit) and then brought into the shop.

Since the ambient temperature does not update instantly, it will be necessary to perform an instant update of the ambient temperature sensor in order to proceed with diagnostics.

### Recommendation/Instructions

To perform an Instant Update of the Ambient Temperature Sensor, Press and hold the Recirc button and A/C button on the HVAC Control Head simultaneously

It is also possible to perform this by using a scan tool in special function mode and select instant OST update.

Within a few seconds, the DIC should display the current temperature.

### **Additional SI Keywords**

intermittent

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.

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