Service Bulletin

PRELIMINARY INFORMATION

Subject: Suspension DTCs C0696 Or C0711 - Incorrect Trim Height - Compressor Inlet Hose Loose Or Compressor Self Test Inoperative

Models: 2001-2014 Cadillac Escalade Models

2001-2013 Chevrolet Avalanche

2001-2014 Chevrolet Tahoe, Suburban 1500
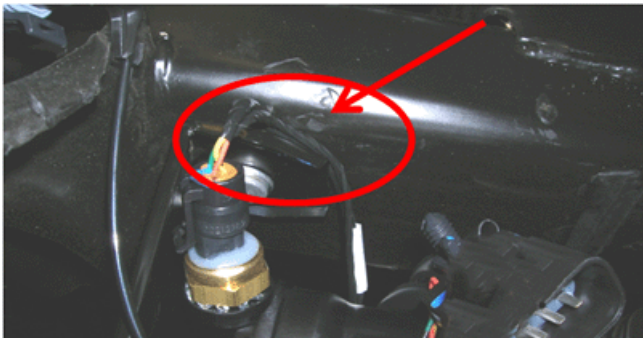
2001-2014 GMC Yukon Models

With RPO Z55 or Z95

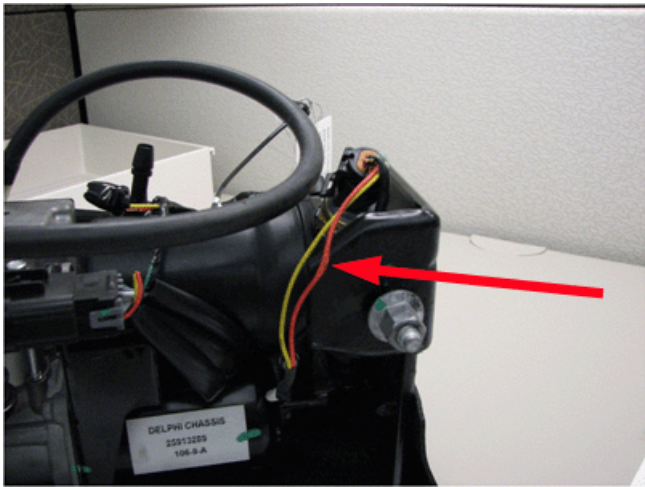*This PI was superseded to update model years. Please discard PIT4954C.*

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

Condition/Concern

CONDITION #1:

Some customers of 2009 or prior vehicles, may comment of a Service Suspension System message on the DIC and the rear suspension ride height is incorrect. When checking for DTCs the Electronic Suspension Control (ESC) module will have DTC C0696 or C0711 set. This concern could be caused by the wiring to the automatic level control (ALC) pressure sensor being shorted to ground, as shown below. Note: The air compressor assembly may need to be removed from the vehicle to determine if the wiring is possibly pinched between the compressor assembly and frame.

CONDITION #2:

Some customers may comment of a Service Suspension System message on the DIC and may also comment that the rear suspension ride height may be low under a heavy payload. When checking for DTCs the Electronic Suspension Control (ESC) module will have DTC C0711 set. This concern may be caused by an internal fault in the automatic level control (ALC) pressure sensor. This may occur due to moisture getting into the sensor.

CONDITION #3:

Some customers may comment of a loose hose hanging down in the left rear of the vehicle. Upon inspection it may be determined that the hose is damaged or has become disconnected from the air inlet filter of the auto leveling suspension air compressor.

CONDITION #4:

Some customers may comment that the automatic level control compressor is no longer performing a self test (compressor activating for a few seconds) at start up.

Recommendation/Instructions

CONDITION #1:

Note: Do NOT replace the complete air compressor assembly for this concern.

Repair any damaged or shorted circuits and then reposition the wiring so it does not get damaged again during the compressor assembly installation.

CONDITION #2:

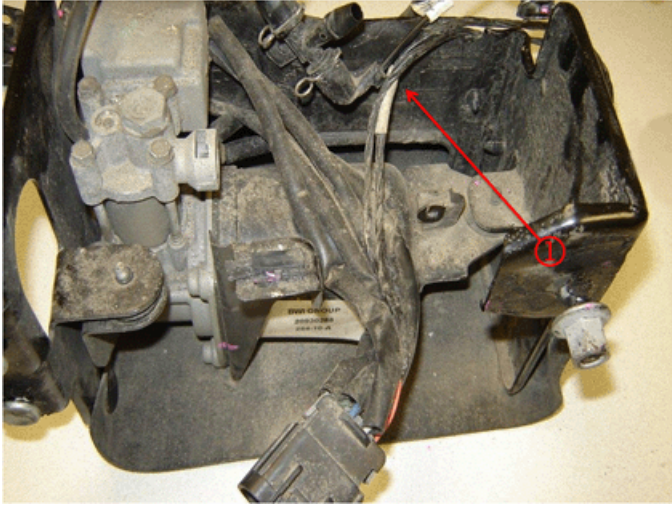**Note:** Do NOT replace the complete air compressor assembly for this concern.

Follow diagnostic procedures to determine if the sensor needs to be replaced. The sensor is no longer serviced separately. For sensor replacement, install a complete air filter, dryer, and sensor assembly. Installing this complete assembly will provide a better repair than replacing the sensor only. Refer to SI procedure, Automatic Level Control Air Compressor Filter Replacement.

Note: An improved sensor design was implemented beginning with vehicles built in May, 2012. Vehicles built before May, 2012, will require a jumper harness for the updated sensor design. The jumper harness is included with complete air filter, dryer, and sensor assembly, PN 22964558. Vehicles built in May, 2012 and later do not require the jumper harness, and use PN 22941807.

Note: Ensure the sensor wiring (1) is routed carefully under and around the air filter, dryer, and sensor assembly to prevent damage along the vehicle frame
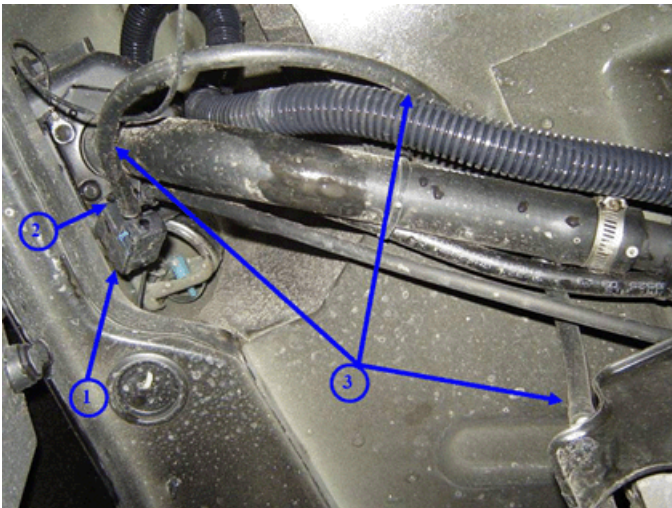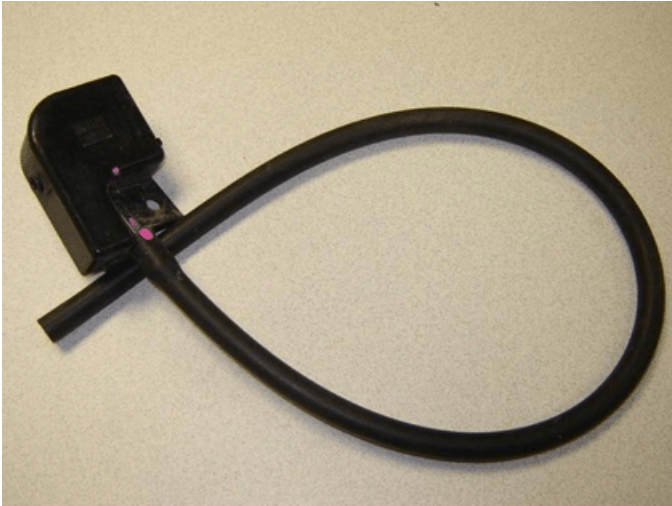
during compressor assembly installation.

CONDITION #3:

Note: Do NOT replace the complete air compressor assembly for this concern.

Replace the auto leveling compressor air inlet filter and hose assembly (PN 22197160), shown below.

1. Raise and support the vehicle. Refer to Vehicle Lifting and Jacking in SI.
2. Release the air compressor air inlet filter (1) from the retainer (2) securing the rear axle vent hose and compressor air inlet to the fuel fill pipe assembly.
3. Remove the remaining air inlet hose (3) from the air compressor.
4. Install the new air inlet filter and hose assembly, PN 22197160. Ensure the air inlet hose (3) is routed as shown.

CONDITION #4:

The automatic level system normally will not or very infrequently cycle the compressor at key up. The Electronic Suspension Control module checks the automatic level system pressure at start up. If the pressure is below 10 psi (69 kpa) then the system will operate the compressor to add air to the shocks as a replenishment cycle. This typically would only happen if the vehicle sat for a long period of time or there was a very small leak.

Parts Information

Part Number	Description	Qty
22964558	Filter Asm-Auto Lvl Cont Air Cmpr (With Sensor and Sensor Jumper Harness Adapter)(For Vehicles Built Before May, 2012)	1
22941807	Filter Asm-Auto Lvl Cont Air Cmpr (With Sensor) (Vehicles Built May 2012 and Later)	1
22197160	HOSE, AUTO LVL CONT AIR CMPR FLTR (Air Inlet Filter and Hose Asm)	1

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. For 2010 model year vehicles or newer, also refer to latest version of bulletin 10-00-89-005 for warranty information on electrical 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.