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Preliminary Information

PIT5457D Service ABS / TCS / Power Steering and/or Suspension Message DTC U0077 U0121 U0126 U0131 U0139 U0151 U0401 U0415 U0428 (Circuit 5986)

Product Investigation Review Required

<u>Models</u>

Brand:	Model:	Model Years:	VIN:		Enginet	Tronomiociono
			from	to	Engine:	Transmissions:
Cadillac	Escalade Models	2015 - 2019	All	All	All	All
Chevrolet	Silverado 1500	2014	All	All	All	All
Chevrolet	Silverado	2015 - 2018	All	All	All	All
Chevrolet	Silverado 2500/3500	2019	All	All	All	All
Chevrolet	Silverado LD	2019	All	All	All	All
Chevrolet	Suburban	2015 - 2019	All	All	All	All
Chevrolet	Tahoe	2015 - 2019	All	All	All	All
GMC	Sierra 1500	2014	All	All	All	All
GMC	Sierra	2015 - 2018	All	All	All	All
GMC	Sierra 2500/3500	2019	All	All	All	All
GMC	Sierra Limited	2019	All	All	All	All
GMC	Yukon Models	2015 - 2019	All	All	All	All

Supersession Statement

This PI was superseded to add the 2019 Models. Please discard PIT5457C.

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

Condition / Concern

Some owners may comment on any of the following issues:

- Service ABS and/or Traction control lights/message on.
- Service Power Steering System, if equipped with electric power steering.
- Service Suspension System, if equipped with RPO Z95.
- Backup reverse camera inoperative
- Backup camera grid or guidance lines missing/inoperative
- Vehicle Settings icon grayed out

- Loss of communication with EBCM, SDGM, SDM, SWPS, PSCM, PTO, HMI, and/or SCM (if equipped).

- DTC's: B127B, U0077, U0117, U0121, U0126, U0131, U0139, U0151, U0401, U0415, U0428, U18A3, and/or U2179

These concerns could be caused by high resistance/open/short in the Communication Enable circuit 5986. The BCM activates this circuit when the ignition key is in ACC, ON, and START positions (There will be voltage present in the OFF position only for a short time until the BCM goes to sleep). The communication enable circuit wakes up the module for serial data

bus communication. Circuit 5986 will have approximately 12 volts and should light a test light, but is not designed to handle heavier electrical loads like a headlight bulb.

Recommendations / Instructions

Monitor the voltage on the communication enable circuit 5986 at any of the modules affected, example EBCM, SDGM, PSCM, SWPS, SDM, HMI, PTO, and/or SCM. If low voltage or no voltage is present when the concern occurs, inspect for open/high resistance/shorts on circuit 5986. Repair any opens/high resistance/shorts in the circuit.

Tips:

- Circuit 5986 is a low amperage signal circuit and it may not be able to power certain test lights or bulbs. The use of a voltmeter and small bulb, example 194 bulb, is required to load test the circuit. With a battery charger/maintainer connected to the vehicle, attach one side of a 194 bulb to circuit 5986 (at the suspect module) and the other side to a good ground (battery negative). Next, wake up the BCM (by turning the headlights on, turning the ignition on, ect.) and make sure the bulb lights. If the bulb does NOT light, inspect for high resistance/open/shorts in circuit 5986. If the bulb lights, use a voltmeter and measure the voltage across the 194 bulb, to make sure there is at least 11 volts, if not inspect for high resistance/open/shorts in circuit 5986. A 194 bulb draws approximately 250 ma. Attaching too much of a load to circuit 5986 will pull the voltage down below 11 volts and lead to misdiagnosis.

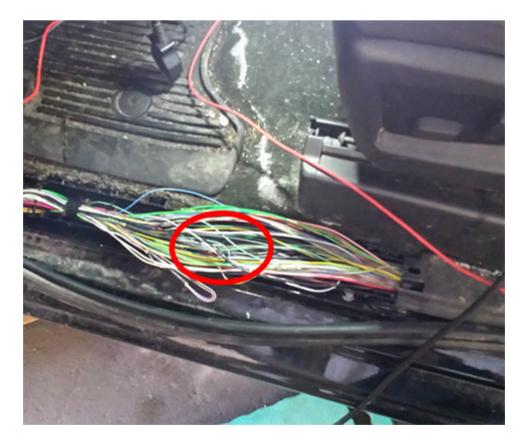
- The BCM monitors circuit 5986 for an excessive amperage draw and will shut down the output on circuit 5986 if it draws more than 0.88 amps (example short to ground).

- The BCM 1 and BCM 2 fuses are what the BCM uses to feed power to circuit 5986.

Below are three known areas where circuit 5986 has been found to be open/shorted/high resistance:

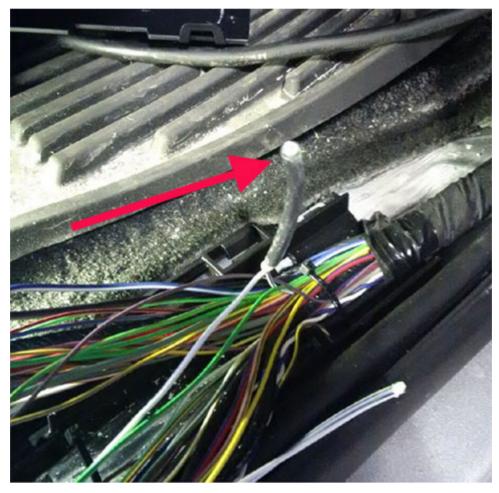
1. On short wheel base utilities (Escalade, Tahoe and Yukon), the chassis harness cut/pinched/shorted between the body and spare tire crossmember, see latest version of PIT5556 for more details.

2. Under the driver's sill plate, shown below.





3. Splice J365 located under the passenger front sill plate, shown below.



Warranty Information

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.



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