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#PIT4846B: Locations Of High Speed GMLAN Wiring Concerns - keywords cycle gage gauge hard hi lamp LAN lock light MIL off shift short start - (Jan 27, 2010)

Subject: **Locations Of High Speed GMLAN Wiring Concerns**

Models: **2007-2010 Cadillac Escalade Models**
2007-2010 Chevrolet Avalanche, Silverado, Suburban, Tahoe
2007-2010 GMC Sierra, Yukon, Yukon XL, Yukon Denali, Yukon Denali XL

This PI was superseded to update model years. Please discard PIT4846A.

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

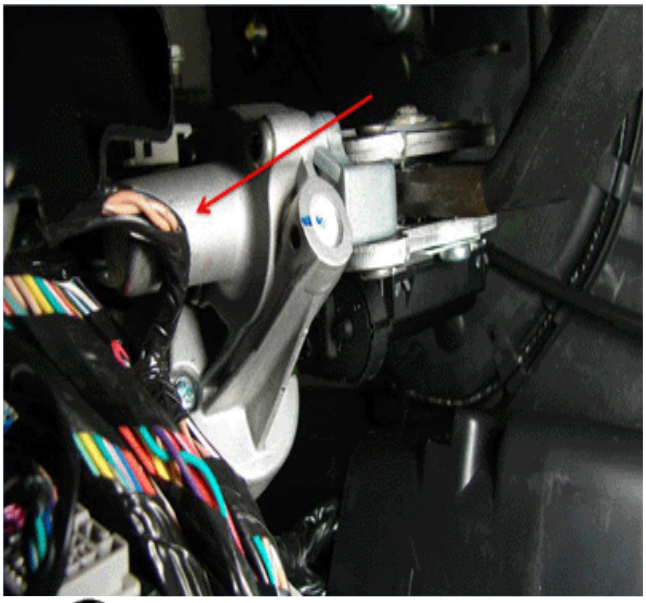
Condition/Concern:

Some owners may comment on various vehicle issues ranging from: IPC indicators on, gages going inoperative, no crank, harsh transmission shifting, no transmission shifting, door locks cycling, etc. When checking for DTCs there will be loss of communication codes for the High Speed GMLAN modules example: u0100, u0101, u0102, u0106, u0109, u0117, u0121, u0122, u0132, u0137, u0140, and/or u0073.

These issues may be intermittent making it difficult to diagnose. Below is a list of common areas where the High Speed GMLAN wiring may have been shorted, chaffed, pinched, terminals backed out, or poor pin fit. These areas have been identified by the field and may not apply to every vehicle depending on the year, make, model and vehicle options.

Recommendation/Instructions:

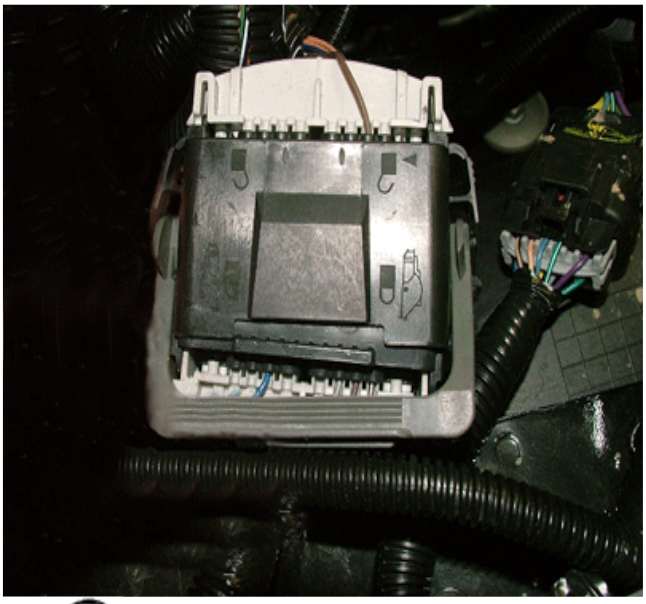
- Adjustable Pedal Motor- As the brake pedal is applied the DLC wiring harness may rub on the adjustable pedal motor and short out, shown below. One hint is the concern will normally occur when the brake pedal is being applied.



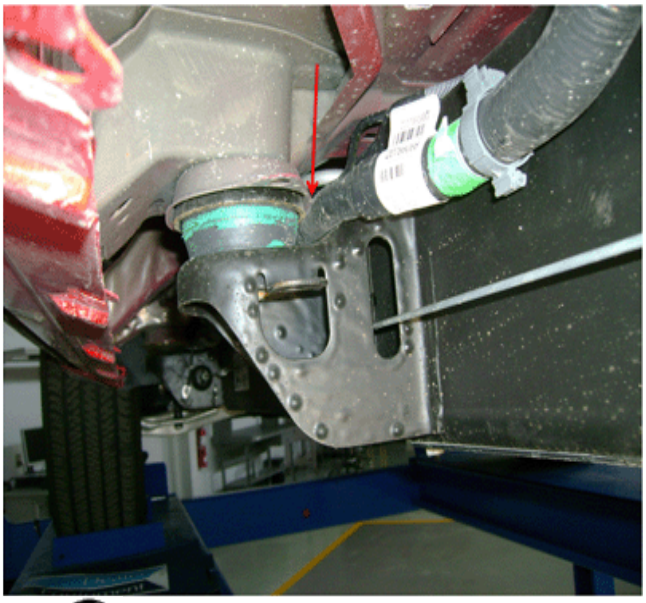
- Rear of Transfer Case- Wiring Harness chaffing on the Transfer Case.
- Terminating Resistor-Review PIT3993C for more information.
- Pinched harness between Pickup Box and Frame-Review PIT4444A for more information.
- Inline Connector X115 or C115- Inspect for backed out, bent, or poor terminal fit USING THE CORRECT TEST PROBE!
- EBCM Connector- Inspect for corrosion/water in connector/harness, backed out, or poor terminal fit USING THE CORRECT TEST PROBE!
- PTO Connector- Inspect for corrosion/water in connector, connector not fully seated (even though the lever on the connector is locked down), and poor terminal fit USING THE CORRECT TEST PROBE!
- FPCM (Fuel Pump Control Module) Connector or Module- Inspect for corrosion/water in connector or module, connector not fully seated (even though the lever on the connector is locked down), and poor terminal fit USING THE CORRECT TEST PROBE!
- VCIM, Connector, or Harness (On Star Module) - Inspect for aftermarket equipment that may be mounted to the lower center part of the dash. The screws used to mount the equipment have been known to pierce the VCIM harness or module. Inspect the VCIM connector for poor terminal fit USING THE CORRECT TEST PROBE! Inspect for two VCIM's listed in the DTC module list with the TECH 2 under Vehicle Control Systems/ Vehicle DTC

Information/ DTC Display, as this may indicate a faulty VCIM. If the VCIM is suspect remove the "Info" fuse, which is the power feed to the VCIM and see if the High Speed GMLAN concern is gone.

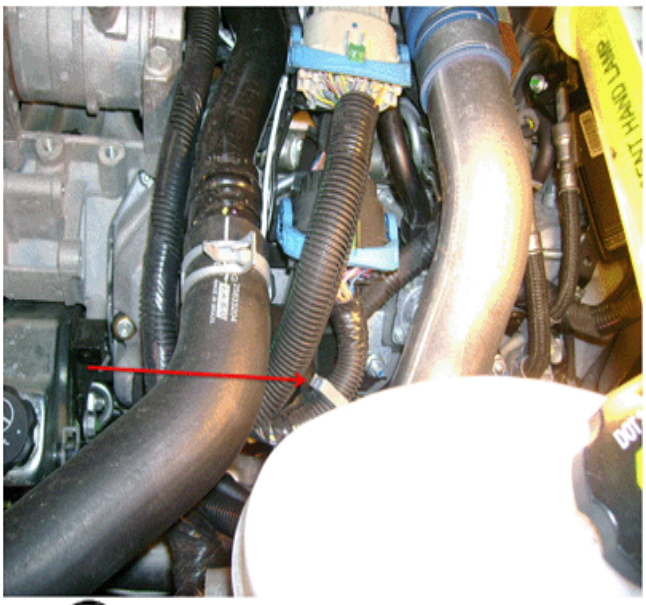
- Inline Connector X109-Inspect for backed out, bent, or poor terminal fit USING THE CORRECT TEST PROBE! Also check for the connector not being fully seated together even though the lever on the connector is locked down, shown below.



- 6L80/6l90 Auto Trans 16 way Round Pass Through Connector- Review bulletin 08-07-30-021B for more information.
- Chaffed Harness Near Parking Brake Pedal/Sill Plate Area- Refer to bulletin 07-08-49-018 for more information
- Chaffed Harness at the Left IP Junction Block Mounting Bracket- Remove junction block and inspect for any shorted/chaffed wiring.
- Pickup Chassis Harness Chaffing At the Body Mounts Along Left Frame Rail, see below.



- Trucks with Diesel Engine inspect the engine wire harness for chaffing on the connector/harness mounting bracket at the X108 connector break out, shown below.



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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