

#08-07-30-021E: Loss of High Speed GMLAN Communications, Intermittent No Crank, IP Gage Fluctuation, Intermittent Door Lock Cycling, Intermittent Chime Operation, Various IP Warning Lamps Illuminated - (Jun 7, 2010)



Subject:

Loss of High Speed GMLAN Communications, Intermittent No Crank, IP Gage Fluctuation, Intermittent Door Lock Cycling, Intermittent Chime Operation, Various IP Warning Lamps Illuminated, Transmission May Not Shift, Communication DTCs U0073, U0100, U0101, U0102, U0109, U0121 or U0140 Set (Repair Backed Out Terminal in Transmission Harness Connector, Repair Open or Shorted GM High Speed LAN Circuits, Open or Shorted Data Link Resistor, Correct Corrosion or Poor Connections in Various Control Module Connectors)

Models:

**2007-2010 Cadillac Escalade Models, XLR
2009-2010 Cadillac Escalade Hybrid
2007-2010 Chevrolet Avalanche, Corvette, Silverado, Suburban, Tahoe
2008-2010 Chevrolet Silverado Hybrid, Tahoe Hybrid
2007-2010 GMC Sierra, Yukon Models
2008-2010 GMC Sierra Hybrid, Yukon Hybrid
2008-2009 HUMMER H2
Equipped With 6 Speed 6L80 (RPO MYC) or 6L90 (RPO MYD) or Hybrid Two Mode 2ML70 Automatic Transmission
Please Refer to GMVIS**

This bulletin is being revised to update the Parts and Warranty Information. Please discard Corporate Bulletin Number 08-07-30-021D (Section 07 - Transmission/Transaxle).

Condition

Some customers may comment on any of the following conditions:

- Instrument panel cluster (IPC) warning lamps may illuminate.
- The transmission may not shift or defaults to 2nd gear.
- The door locks may cycle by themselves.

- The engine may not crank intermittently.
- A driver information center (DIC) message is displayed.
- The IPC gages may fluctuate.
- Applying the brakes may cause the IPC to become erratic and the chimes to operate simultaneously.

Depending on the vehicle, technicians may find one or more of the following High Speed GMLAN Communications DTCs set as Current or History:

- U0073: Control Module Communications Bus OFF
- U0100: Lost Communication With ECM/PCM
- U0101: Lost Communication With TCM
- U0102: Lost Communication With Transfer Case Control Module
- U0109: Lost Communication With Fuel Pump Control Module
- U0121: Lost Communication With ABS Control Module
- U0140: Lost Communication With Body Control Module (BCM)

Cause

These conditions may be caused by, but not limited to, any of the following:

- The terminal(s) for the High Speed GMLAN Serial Data Bus has backed out of the 16-way electrical connector to the automatic transmission.
- The terminal position assurance (TPA) lock in the transmission 16-way electrical connector is not fully seated.
- The High Speed GMLAN Serial Data Bus circuits are open or shorted to ground.
- Corrosion in various control module connectors.
- Intermittent or poor connections in the inline connectors containing the High Speed GMLAN Serial Data Bus circuits.
- The data link resistor is open or shorted.
- Water intrusion in various control module connectors.

Correction

Do This	Don't Do This
Repair or replace any backed out or damaged transmission connector terminal(s) as necessary.	DO NOT replace any control module or wiring harness until you have followed this procedure in its entirety.

Ensure that the transmission connector TPA is fully seated (TPA is centered in check window).	
Repair the High Speed GMLAN Serial Data Bus circuits that are open, shorted to ground or have poor connections.	
Repair the corrosion or water intrusion condition in the affected module connector(s).	
Replace the data link resistor that is open or shorted.	

Information for the Procedures to Diagnose and Repair the Above Conditions

1. ***Perform the Diagnostic System Check-Vehicle to begin your diagnosis of these conditions.***
2. ***Perform a thorough visual inspection of the vehicle.***
3. ***Depending on the vehicle, some of the procedures may not be applicable.***
4. ***The following procedure is the only one applicable to the Corvette and XLR.***

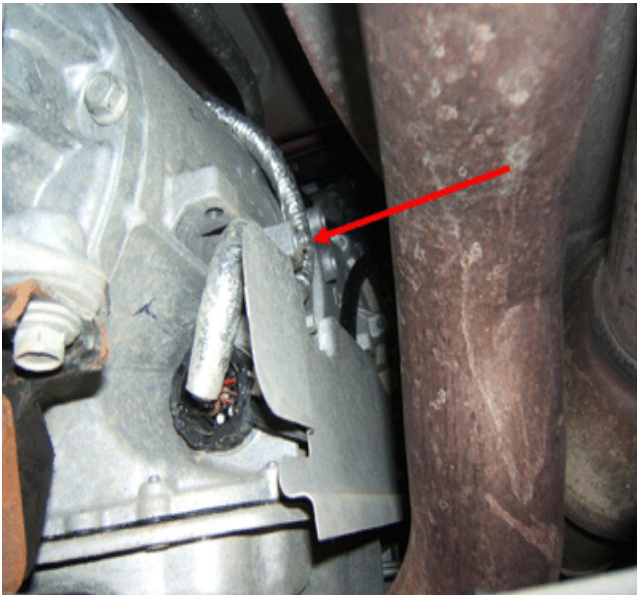
Chafed Wiring Harness at Transmission Case Retaining Clip and Inspection of the 16-way Electrical Connector for Backed Out Terminals

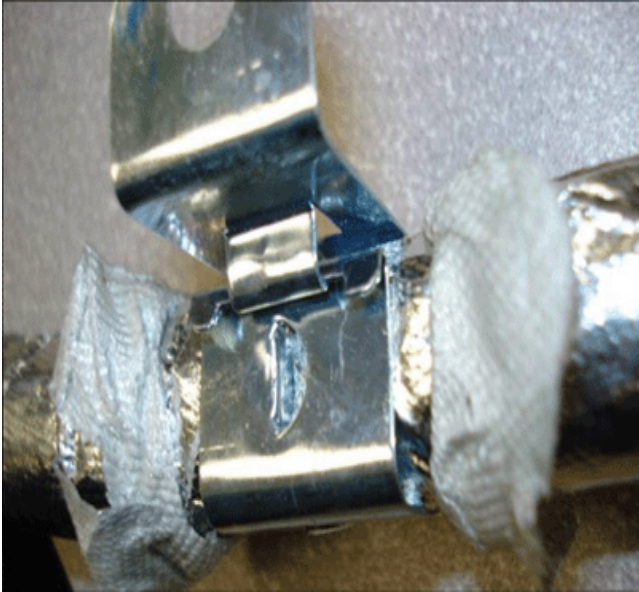
1. Turn OFF the ignition and all accessories.
2. Disconnect the negative battery cable. Refer to Battery Negative Cable Disconnection and Connection in SI.

3. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle in SI.



4. Locate the 16-way electrical connector on the right side of the automatic transmission as shown.

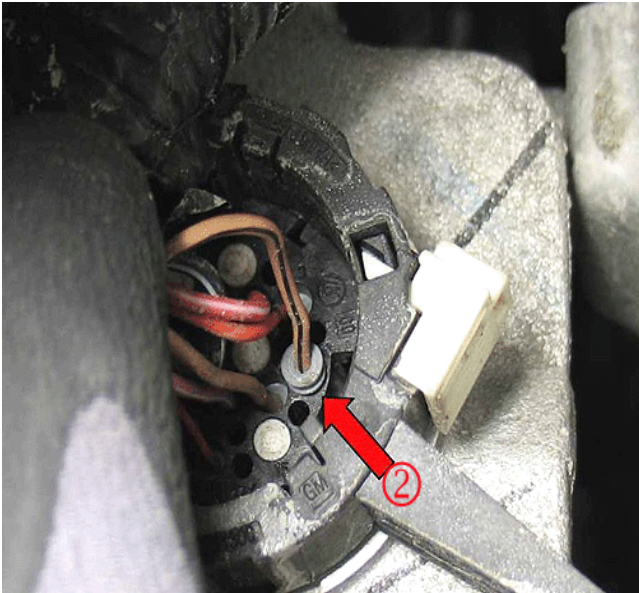




5. Inspect for a pinched/cut wiring harness where it is attached at the transmission by a metal attachment clip as shown. Inspect any of these harness clips that you may observe as needed.

If the wiring is damaged, repair as needed. Refer to Wiring Systems and Power Management > Diagnostic Information and Procedures in SI.

6. Protect the harness by covering the sharp edge with butyl tape or a suitable material. Secure the harness as needed.

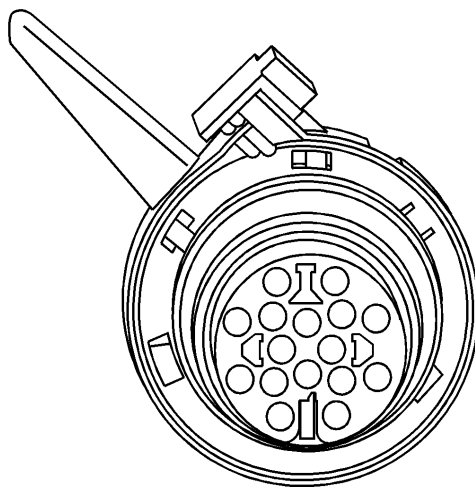




7. **Before** disconnecting the 16-way connector, **inspect** for any backed out terminals (2) as shown. Fully seated terminals (1) are shown for comparison.

- 7.1. If a backed out terminal (2) is found, identify the terminal(s) on the **repair order**.
- 7.2. Look at the connector in order to identify the number of the cavity with the backed out terminal. Refer to Wiring Systems and Power Management > Component Locator > Master Electrical Component List in SI.

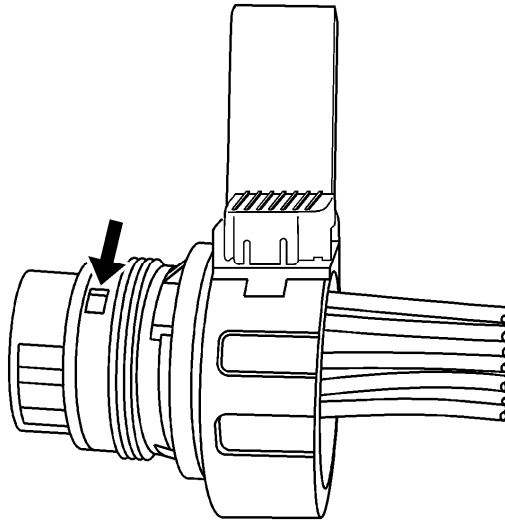
9.



10. Use the following procedure to disconnect the 16-way electrical connector:

- 8.1. For 2ML70 Only: Disconnect the 24-way electrical connector.
- 8.2. Release and hold the slide lock on the wiring harness connector.
- 8.3. Rotate the connector lever and remove the connector from the component.

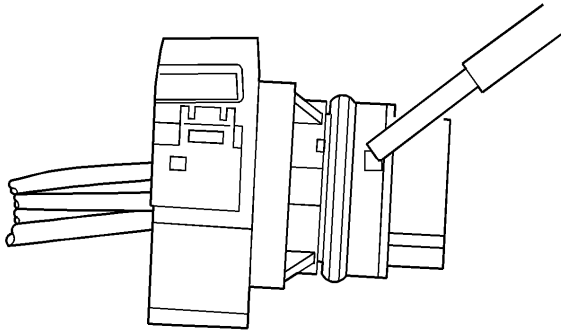
13. Repair or replace the terminal(s) as necessary using the following procedure:



9.1. Locate the terminal position assurance (TPA) as shown.

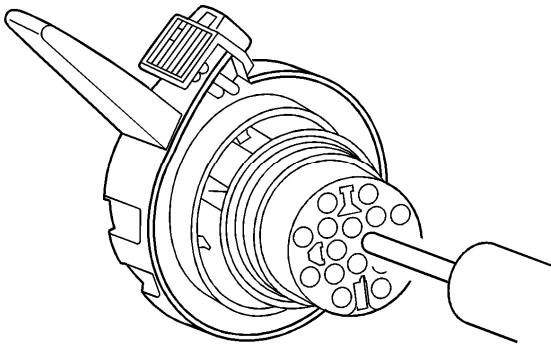
Note: The TPA cannot be removed from the connector while there are terminals present in the connector body.

15.



9.2. Use a small flat blade tool to push the TPA until it bottoms out.

16.



9.3. See the release tool cross reference in the Reference Guide of the J-38125 to ensure that the correct release tool is used. Use the J-38125-28 tool to release the terminals by inserting the tool into the terminal cavity as shown.

9.4. While holding the removal tool in place, **gently** pull the wire out of the back of the connector.

Note: If the female terminal(s) must be replaced, it is part number 22124472200. It is located in Yazaki tray number 12 in the J-38125 Terminal Repair Kit.

9.5. Repair or replace the terminal(s) as needed. Refer to the instructions in the J-38125 manual.

20. If the wiring is damaged, repair as needed. Refer to Wiring Systems and Power Management > Diagnostic Information and Procedures in SI.

21. Slide the new terminal(s) into the correct cavity at the back of the connector until it locks in place. The new terminal(s) should be even with the other terminal(s).

22. Ensure that each terminal is locked in place by **gently** pulling on the wire.

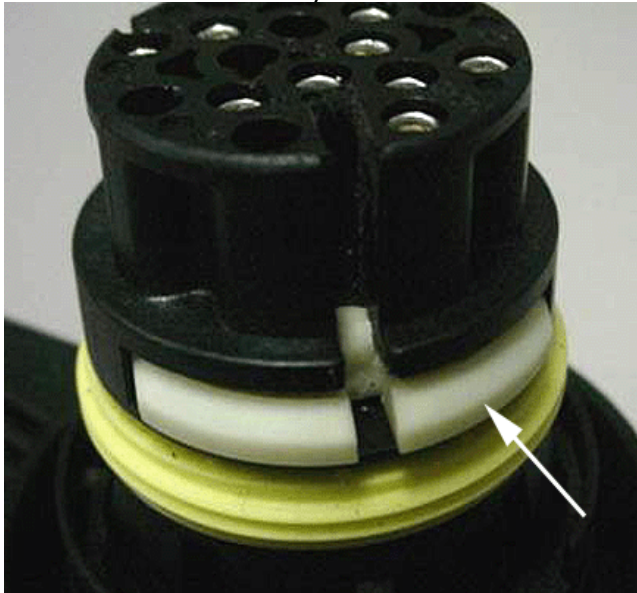
Note: The male terminal(s) cannot be repaired as they are an integral part of the transmission control module (TCM).

23. Inspect for bent or misaligned terminal(s) in the transmission half of the electrical connector.

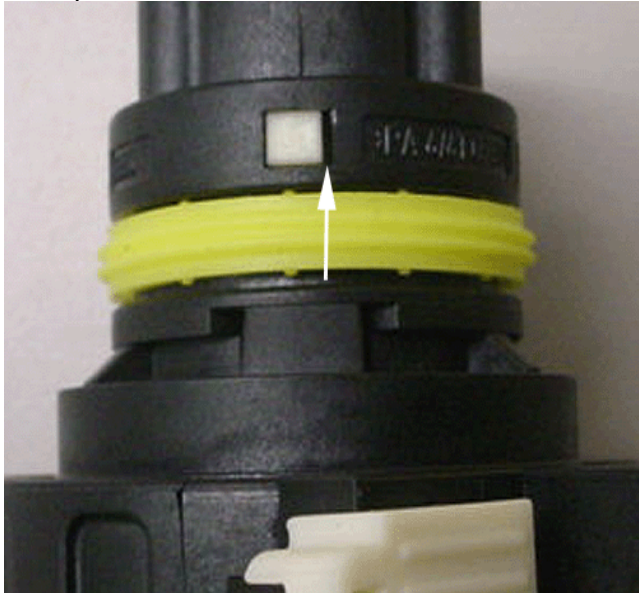
⇒ If they are bent, use a suitable tool and apply gentle pressure to straighten them. Indicate on the repair order the terminal number of the male terminal that was bent.

⇒ If they are damaged, refer to Control Solenoid Valve and Transmission Control Module Assembly Replacement in SI.

25. Prior to installing the transmission connector, perform the following steps to ensure that the TPA lock is fully seated.



26. Locate the TPA lock in the reassembled transmission connector. Refer to the arrow in the illustration above, which points to a TPA lock. This one is in an unseated position. Using a small flat blade tool, push to seat the TPA until it bottoms out. Verify the TPA is fully seated.



- If the TPA is off-center in the check window as shown, then it is only partially seated. Note the large gap at the arrow. Reseat the TPA lock and ensure that it is fully seated.

27.

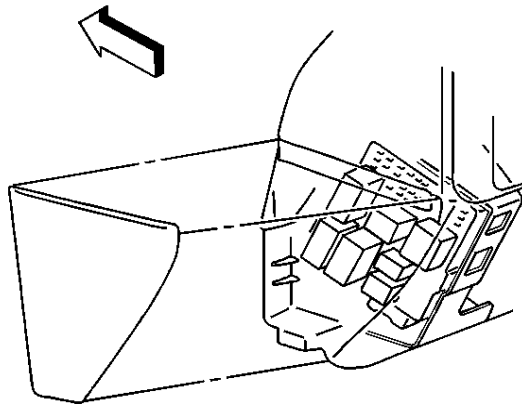


- If the TPA lock is centered in the window as shown, then it is fully seated. The gaps shown by the arrows should be even on both sides.

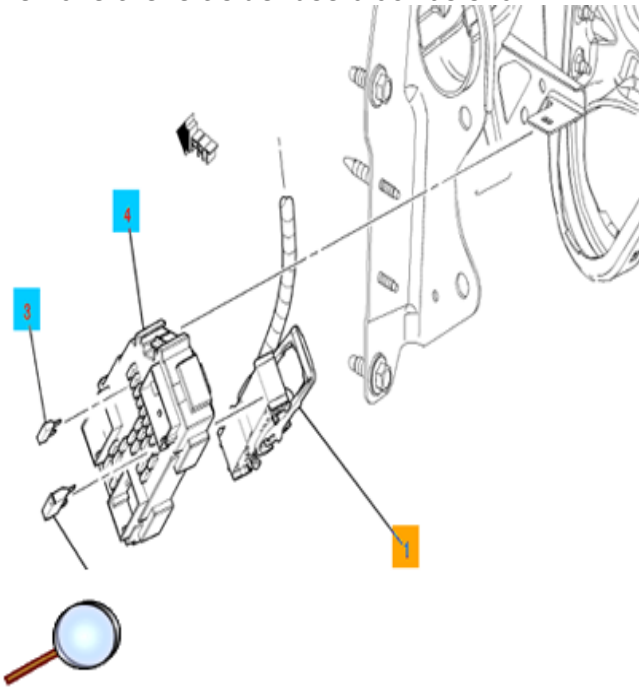
28. Install the transmission 16-way electrical connector.
29. Lower the vehicle.
30. Connect the negative battery cable. Refer to Battery Negative Cable Disconnection and Connection in SI.
31. Clear any DTCs that may be present with a scan tool and verify the proper operation of the vehicle.

Inspection of Fuse Block - I/P (Left Side) for Loose Connector X1

1. Turn OFF the ignition and all accessories.
2. Disconnect the negative battery cable. Refer to Battery Disconnect Caution and Battery Negative Cable Disconnection and Connection in SI.



3. Remove the left side fuse block as shown.



4. Inspect connector X1 (1) on the back of the fuse block for a loose connection as shown. Secure the connector as needed.
5. Install the left side fuse block.
6. Connect the negative battery cable. Refer to Battery Negative Cable Disconnection and Connection in SI.
7. Clear any DTCs that may be present with a scan tool and verify the proper operation of the vehicle.

Chafed IP Wiring Harness Near Park Brake Pedal Assembly

The above condition may cause one or more of the following fuses to open:

- 60A - MBEC1 (#72) (Underhood)
- 30A - AMP (#40) (Underhood)
- 15A - RDO (#41) (Underhood)
- 10A - IPC (#46) (Underhood)
- 15A - AIRBAG BATT (#51) (Underhood)
- 10A - DSM (Left side of IP)

Five areas of potential contact have been identified: