#### SB-10037409-9205



File in Section: -Bulletin No.: PI0310B Date: December. 2011

# PRELIMINARY INFORMATION

- Subject: Loss of Communication with Allison Transmission Control Module (TCM), Intermittent Transmission Hesitation, Reduced Torque, Range Inhibit, Clunk, Stuck in Gear or in Neutral, Won't Shift, DTC P0880 and/or U0101 Set (Inspect for Electrostatic Discharge (ESD) From Aftermarket Serpentine Belts and/or Added Equipment, Install OEM Belt, Relocate TCM)
- Models: 2007-2012 Chevrolet Silverado 2007-2012 GMC Sierra Equipped with Allison® A1000 Automatic Transmission RPO MW7

Service Bulletin

Attention: Please review the latest version of Corporate Bulletin Number 04-06-04-054B: Info -Non-GM Parts and Accessories (Aftermarket), for information regarding GM's policy on the use and installation of aftermarket components.

## This PI is being revised to add G102 information to the Condition/Concern and Recommendation/Instructions. Please discard PI0310A.

The following information may be helpful if the vehicle exhibits the symptoms described in this PI.

### **Condition/Concern**

Some customers may comment that the transmission will intermittently hesitate, clunk, gets stuck in gear or in neutral, won't shift, or experience reduced torque or range inhibit.

The technician may observe on a scan tool DTC P0880 and/or DTC U0101 set as Current or in History.

This condition may be caused by:

- Resistance in the G102 ground connection on the side of the engine block.
- During normal servicing, the OEM General Motors serpentine belt was replaced by an aftermarket serpentine belt.
- An aftermarket serpentine belt was intentionally installed, due to dimension changes from added aftermarket equipment such as a second alternator or clutch pump installed by an upfitter.

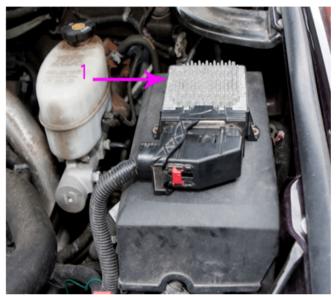
Certain brands of replacement aftermarket serpentine belts are made of compounds that will reduce the opportunity for audible belt noise, however these compounds can generate significant amounts of electrostatic charge on their surface. This electrostatic charge can discharge and cause DTC P0880 and/or DTC U0101 to set and be accompanied by any of the above symptoms.

### **Recommendation/Instructions**

**Important:** DO NOT replace the transmission control module (TCM) until the root cause of the problem has been properly resolved. The TCM ONLY NEEDS to be replaced if it has incurred permanent damage, such as hard failed codes, complete loss of communication or other erratic behavior that continues to exist AFTER completing the following steps.

- 1. Perform the Diagnostic System Check Vehicle.
  - ⇒ If DTC P0880 and/or U0101 are set as Current or in History, and/or the above symptoms are observed, proceed to Step 2.
  - ⇒ If DTC P0880 and/or U0101 are not set as Current or in History, and/or the above symptoms are not observed, refer to > Transmission > Automatic Transmission - Allison > Diagnostic Information and Procedures in SI.
- 2. Turn OFF the ignition.

- 3. Disconnect and inspect the G102 wire terminal and connection for looseness and corrosion. Clean any corrosion from the wire terminal and the surface of the engine block with a wire brush.
- 4. Apply dielectric grease to the wire terminal and engine block surface. Connect the G102 wire terminal and secure properly.
- 5. Inspect the engine for an aftermarket serpentine belt due to service replacement or added aftermarket equipment from an upfitter.
  - ⇒ If an aftermarket serpentine belt is installed on the original serpentine system, without added aftermarket equipment installed on the engine, replace the serpentine belt with an OEM General Motors serpentine belt. Refer to Drive Belt Replacement in SI.
  - ⇒ If an aftermarket serpentine belt is installed because of added aftermarket equipment installed on the engine, proceed to Step 6.



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**Important:** DO NOT relocate the transmission control module (TCM) if aftermarket equipment HAS NOT been installed on the engine.

Relocate the TCM ONLY if an additional or longer accessory drive belt has been installed on the engine, resulting in the drive belt being closer to the TCM.

Relocating the TCM on a vehicle that has not been modified, WILL NOT correct the DTCs and may result in a comeback.

6. Relocate the TCM (1) to the top of the UBEC cover and secure it using a heavy duty adhesive or Velcro® "hook and loop fastener". DO NOT use push pins as fasteners, they will compromise the water resistance of the UBEC cover.

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