



Service Bulletin

File in Section: -

Bulletin No.: PIT5122C

Date: June, 2012

PRELIMINARY INFORMATION

Subject: Service Stability Message Low Power Brake Light And Cruise Control Operation - DTC C0161 And/Or C0277

Models: 2012 Cadillac Escalade Models
2012 Chevrolet Avalanche, Express, Silverado, Suburban, Tahoe
2012 GMC Savana, Sierra, Yukon and Denali Models

This PI was superseded to update condition/concern. Please discard PIT5122B.

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

Condition/Concern:

New for the 2012 models is a Dual Brake Pedal Position (BPP) Sensor (two sensors in one). The Dual BPP replaces the old style open/closed brake switch which has been used for years. The Dual BPP is directly wired to the BCM and ECM (see example Document ID: 2611404) and is based on a variable resistance in the sensor, like a TPS. The Dual BPP sensor requires a relearn procedure in both the BCM and ECM (examples: BCM relearn Doc ID: 1835636 and ECM relearn Doc ID: 2655204). The relearn procedures will set the BPP sensor's home values. The BCM's value is used to determine the action of the driver applying the brake pedal and to provide this information to the vehicle's subsystems via the GMLAN communication bus. The ECM's value is used for a new feature called "Electronic Brake Pedal Override". This feature will reduce engine power if it detects the brake pedal is applied while the accelerator is also applied.

The following service repairs will require a BPP Relearn:

- Replacement or removal of the brake pedal position sensor
- ECM Replacement and/or Reprogram
- BCM Replacement and/or Reprogram
- Installation of any GM Accessory which requires programming of the ECM or BCM

Symptoms of an unlearned BPP sensor are as follows:

BCM

- C0161 will set in the EBCM
- Service Stability Message
- C0277 Sym4B - Home position not learned
- Brake lights stay on without brake pedal applied
- Must press down farther than normal on the brake pedal to disengage the cruise control
- Must press down farther than normal on the brake pedal to turn on the brake lights

ECM

- Unwanted Electronic Brake Pedal Override (Low Power, feels like the truck is in a TCS or VSES event. If the TCS is turned off the issue will be gone. There will be NO Indication to the driver that the system is active.)

Note: Other items which may disable the Electronic Brake Pedal Override: TCS Disable, VSES Disable, 4wd Low Range, and Auto Transmission Ranges M3, M2, and M1.

Recommendation/Instructions:

If you experience any of the above symptoms perform a BPP relearn procedure for each of the modules, BCM and ECM.

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.