File in Section:

Bulletin No.: PIT5206

Date: April, 2013

PRELIMINARY INFORMATION

Subject: Unwanted Grade Braking, Low Power, and/or Transmission Busy Shifting

Models: 2012-2013 Cadillac Escalade Models

2012-2013 Chevrolet Avalanche, Silverado, Suburban, Tahoe

2012-2013 GMC Sierra, Yukon Models

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

Condition/Concern

Some owners may comment of any/all of the following issues:

- Unwanted grade braking when not going down a grade
- Reduced/Low engine power with no DIC messages or DTCs (Brake Pedal Override Feature)
- Transmission busy or frequent up and down shifts with no DTCs

These issues may be caused by the Brake Pedal Position (BPP) sensor not being learned correctly in the ECM (Engine Control Module).

Recommendation/Instructions

To view the BPP data in the ECM use the Tech 2 and build it as follows: Powertrain/Select Engine Type/Engine Control Module/Data Display/Auto. Transmission Data. Scroll down and view the following parameter:

BPP Signal = Applied or Released (should read Released with brake pedal released)

BPP Sensor = 0% to 100% (should read 0% with brake pedal released)

BPP Sensor = Varying Voltage (should read near 1 volt (+/- .3 volt approximately) with pedal released)

BPP Sensor Learned Released Position = Voltage (should equal the BPP sensor voltage with pedal released)

Note: NOT ALL ENGINE TYPES WILL HAVE ALL OF THE ABOVE PARAMETERS.

With the brake pedal released use the BPP Sensor parameters to determine if the ECM has learned the BPP released position correctly. If the BPP Sensor Learned Released Position voltage does not match the BPP Sensor voltage with the pedal in the released position, the ECM will need to have a BPP Relearn performed. Reference Brake Pedal Position Sensor Learn procedure in SI.

If the ECM will not perform a BPP Sensor relearn, then SPS program the ECM. After the ECM SPS programming is complete, the BPP will relearn. Use the Tech 2 to verify the BPP Sensor is now showing 0% with the brake pedal released.

Warranty Information

The correction for this concern may be one of several repairs described above. For vehicles repaired under warranty, please use the appropriate warranty labor operation based on the actual cause and repair.

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.