File in Section:

Bulletin No.: PIT5202

Date: March, 2013

PRELIMINARY INFORMATION

Subject: New Normal Mode Powertrain Grade Braking Feature

Models: 2013 Cadillac Escalade Models

2013 Chevrolet Avalanche, Silverado, Suburban, Tahoe

2013 GMC Sierra, Yukon Models

Equipped with 6L80 (RPO MYC) or 6L90 (RPO MYD) Automatic Transmission

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

For the 2013 model year, Full Size Trucks and Utilities now have Powertrain Grade Braking while in Normal mode (Normal mode = Tow/Haul mode OFF), along with a new DIC message "GRADE BRAKING ON" when it goes active for the first time. Powertrain grade braking has been available since 2009 on LD models and 2007 on HD models, but Tow/Haul mode had to be selected. This feature (powertrain grade braking) should not be confused with "Cruise Grade Braking". For more information on cruise grade braking see the owner's manual or the latest version of bulletin 08-07-30-030.

PURPOSE

- Normal mode powertrain grade braking assists when driving on a downhill grade to help maintain desired vehicle speed by using the engine and transmission to slow the vehicle.
- · Helps reduce wear on the traditional braking system.

ACTIVATION

- Normal mode powertrain grade braking defaults to "ON" after each ignition key cycle.
- To disable or enable all grade braking within the current ignition key cycle, press and hold the Tow/Haul button for three seconds.
- No grade braking is available in Range Selection Mode (Manual Shift Mode).
- This feature requires the driver to apply steady brake pedal pressure to maintain desired speed while driving on a downhill grade. The vehicle's modules calculate brake temperature and enable normal mode powertrain grade braking if necessary. When the feature goes active for the first time that ignition cycle, the DIC will display "Grade Braking On" and you will notice the transmission down shifts and engine RPM increases. At this point, if the brake pedal is released the transmission will hold the current gear. If additional engine/transmission braking is needed to help maintain desired speed, reapply steady brake pedal pressure and additional down shifts may occur.
- Normal mode powertrain grade braking will have a less aggressive transmission down shift schedule than Tow/ Haul mode powertrain grade braking.
- Grade-braking can be exited by depressing the throttle.

MESSAGES

- GRADE BRAKING DISABLED: This message displays when the grade braking has been disabled with the tow/ haul mode button on the end of the shift lever.
- GRADE BRAKING ENABLED: This message displays when the grade braking has been enabled with the tow/ haul mode button on the end of the shift lever.
- GRADE BRAKING ON: This message displays when the grade braking has been activated while driving on downhill grades. This message will only appear the first time the feature is activated in an ignition cycle. This message will not display if Cruise Control Grade Braking goes active.

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.