



# Service Bulletin

File in Section: 07 - Transmission/Transaxle

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## INFORMATION

**Subject:** Information on Transmission Adaptive Functions

**Models:** 2015 Cadillac Escalade, Escalade ESV  
2015 Chevrolet Corvette  
2015 GMC Yukon  
Equipped with 8L90 Automatic Transmission (RPO M5U)

Some customers may comment on low mileage vehicles with automatic transmission that shift feel to be too firm (harsh) or may slip or flare. Customers should be advised that the transmission makes use of an adaptive function that will help to refine the shift feel while driving and improve shift quality.

### Transmission Adaptive Functions

The Hydra-Matic® 8-Speed RWD transmission utilizes a line pressure control system during upshifts to compensate for new transmission build variation as well as the normal wear of transmission components. The variation experience on a new and normal wear of the apply components within the transmission over time can cause shift time (the time required to apply a clutch) to be longer or shorter than desired.

In order to compensate for these changes, the transmission control module (TCM) adjusts the pressure commands to the various pressure control (PC) solenoids to maintain the originally calibrated shift timing. The automatic adjusting process is referred to as "adaptive learning" and it is used to ensure consistent shift feel plus increase transmission durability.

The TCM monitors the A/T input speed sensor (ISS) and the A/T output speed sensor (OSS) during commanded shifts to determine if a shift is occurring too fast (harsh) or too slow (soft) and adjusts the corresponding PC solenoid signal to maintain the set shift feel. The purpose of the adapt function is to automatically compensate the shift quality for the various vehicle shift control systems. The adapt function is a continuous process that will help to maintain optimal shift quality throughout the life of the vehicle.

### How to Adapt Your Transmission

The Hydra-Matic® 8-Speed RWD transmission adaptive learn process can be accomplished by driving in the following manner. Execute the steps below with the vehicle warmed up on a smooth level road. The driver may observe a brief pulse behavior or firm shift feel while the transmission is optimizing the clutch learn characteristics.

#### For a concern with a 1-2 upshift:

Manually select 7th gear using tap switches with the shifter in the "M" position. Maintain a light acceleration rate of the vehicle while keeping engine speed between 1000-1750 rpm. Repeat this light acceleration rate up to 10 times.

#### For a concern with a 3-1 coastdown (closed throttle) shift:

Manually select 6th gear using tap switches with the shifter in the "M" position. Maintain a light acceleration rate of the vehicle while keeping engine speed between 1000-1750 rpm. Repeat this light acceleration rate up to 10 times.

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