



# Service Bulletin

File in Section: -

Bulletin No.: 16-NA-175

Date: June, 2016

## TECHNICAL

**Subject: Shake and/or Shudder During Light Throttle Acceleration Between 48 and 104 KM/H (30 and 65 MPH) at a Steady State**

Brand:	Model:	Model Year:		VIN Breakpoint	Engine:	Transmission:
		from	to			
Cadillac	Escalade Models	2016	2016	All vehicles Built after November 01, 2015	Equipped with 5.3L or 6.2L Engine (RPOs L83, L86)	Equipped with 8L90 Automatic Transmission (RPO M5U)
Chevrolet	Silverado	2016	2016			
GMC	Sierra	2016	2016			
GMC	Yukon Models	2016	2016			

<b>Involved Region or Country</b>	North America
<b>Condition</b>	<p>Some customers may comment on any of the following conditions:</p> <ul style="list-style-type: none"> <li>• A shake and/or shudder during light throttle acceleration between 48 and 104 km/h (30 and 65 mph) steady state driving when transmission is not actively shifting gears.</li> <li>• A shudder feeling that may be described as driving over rumble strips or rough pavement.</li> <li>• Shudder feeling is evident in both Drive and M7 mode.</li> </ul>

### Diagnosis Instructions

To ensure TCC shudder is diagnosed correctly, please drive the following schedule on a smooth road with transmission sump temperature between 50°C (122°F) - 70°C (158°F).

**Important:** For some road conditions, it may be required to apply the brake pedal and throttle simultaneously to stay within desired engine torque range.

Press and hold the tow-haul mode button for 5 seconds to disable grade braking to prevent downshifts during test.

#### Run the following tests for 3 operational modes:

- A. Normal Operation (GDS2 for viewing only).
- B. GDS2 Commanding TCC in Disabled Operation. (TCC Open).
- C. GDS2 Commanding TCC in Enabled Operation. (TCC Locked).

#### TEST:

Drive the vehicle in 8th gear, **V8 mode**, with a transmission input speed of 1,050–1,300 rpm with (approximately 64–89 km/h (40–55 mph)) **constant throttle input**, and engine torque 200–375 N•m

To confirm TCC shudder, the vibration concern must be created in normal operation (Mode A) of the test. If the concern is gone with the torque converter clutch disabled (Mode B, TCC Open) and is gone when the torque converter clutch enabled (Mode C, TCC Locked), **the vibration root cause is TCC shudder and the fluid flush procedure corrective action described below should be performed.**

If the concern is not present in Mode A, then the vibration concern is not TCC shudder. If the concern is still present with the torque converter clutch disabled (Mode B) or with the torque converter clutch enabled (Mode C, TCC slip speed at zero), the root cause of vibration is NOT shudder. Vibrations not identified as shudder should be further investigated using the "Vehicle Vibration Diagnosis and TAC Requests for Assistance with Vibration Related Complaints" Bulletin.

### Service Procedure

**Important:** Requires **NEW DEXRON HP Fluid** (GM Part No. 19331925, in Canada 19331926).

#### Step 1: Cooler Flush, Drain, Clean pan/magnet, Replace Filter (If needed), Oil Fill, & Circulate New Fluid

1 a.) Flush the cooler lines and cooler using published SI Procedures.

1 b.) Remove the transmission fluid pan and drain transmission fluid following SI procedures for the application you're working on. Discard all oil.

**Note:** If you find that the fluid is cloudy, milky, or appears to be contaminated with water or engine coolant, DO NOT proceed with below steps. Follow Both SI Procedures for "Cooling System Leak Testing (L83, L86)" and "Engine Coolant/Water in Transmission."

1 c.) Clean the pan/magnet if any metallic particles present and replace transmission filter if debris is found.

1 d.) Install the transmission fluid pan and refill with new transmission fluid using enough volume to have oil come out of oil level check plug.

**Important:** Operate the vehicle on the hoist for 10 minutes. Cycle through all forward gear ranges, Reverse and Neutral.

**Step 2: Drain, Oil Fill, & Circulate New Fluid**

2 a.) Remove the transmission fluid pan and drain transmission fluid again. Discard all oil.

2 b.) Install the transmission fluid pan and refill with new transmission fluid using enough volume to have oil come out of oil level check plug.

**Important:** Operate the vehicle on the hoist for 10 minutes. Cycle through all forward gear ranges, Reverse and Neutral.

**Step 3: Drain, Oil level Set, and Drive to Evaluate**

3 a.) Remove the transmission fluid pan and drain transmission fluid again. Discard all oil.

3 b.) Install the transmission fluid pan and refill with new transmission fluid following the "Fluid Fill Procedure" in SI to obtain correct fluid level.

The shudder should be improved after the completion of this triple flush procedure.

**Note:** Shudder should improve directionally right away, but for full affect the vehicle may need to be driven up to 322 km (200 miles) and at least two cold to hot drive cycles before determining if the fluid flush corrected the condition or not. Do not re-evaluate vehicle for additional customer shudder concerns until the vehicle has been driven 322 km (200 miles).

**Warranty Information**

For vehicles repaired under the Bumper-to-Bumper coverage (Canada Base Warranty coverage), use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
8480478*	Flush and Drain Fluids for Transmission Shake and/or Shutter Repair	Use Actual Clock Time
*This is a unique Labor Operation for Bulletin use only.		

Version	2
Modified	June 01, 2016 – Added breakpoint date.

