



Service Bulletin

TECHNICAL

Subject: Harsh 1-2, Harsh 3-1 Decel Downshift, Harsh Downshifts Under Heavy Throttle

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Silverado	2016	2016			L83	8L90
GMC	Sierra Yukon Models	2016	2016			L83	8L90

Involved Region or Country	North America and N.A. Export Regions
Additional Options (RPO)	Equipped with 8L90 Automatic Transmission and 5.3L Engine (RPO L83)
Condition	<p>Some customers may comment on one or more of the following conditions regarding the 8L90 Automatic Transmission in their vehicle.</p> <ul style="list-style-type: none"> • Harsh 1-2 upshift (except for the first 1-2 upshift of the day) • Harsh 3-1 downshift when de-accelerating to a stop • Harsh downshift under heavy throttle apply

Correction

New TCM software has been developed to improve the conditions described above.

Important: Installation of this new TCM software will require that a Service Fast Learn (SFL) be performed. Performing the SFL will reset all the shift adapts. The transmission may exhibit poor shift quality until the clutch values are learned. Do NOT install the new ECM and TCM software if the customer does not have the symptoms described above.

Important: The new TCM software will not improve the following conditions and should not be installed for any of the following conditions:

- Shift quality of the first 1-2 shift of the day
- Power-On lift foot upshifts (Heavy throttle application followed by a closed throttle application which results in a transmission up shift)
- Delayed/slow engagement (Refer to Bulletins 16-NA-014 and 16-NA-364)
- TCC Shudder (Refer to PIP5337 and Bulletin 16-NA-175)
- Engine or Chassis induced vibrations
- Fuel Economy

To program an existing K20/K71 Transmission Control Module, perform the following procedure.

- The calibration numbers required for this service procedure are programmed into control modules via a Multiple Diagnostic Interface (MDI) with the calibration update. If you cannot access the calibration, call the Techline Customer Support Center and it will be provided.
- Ensure the programming tool is equipped with the latest software and is securely connected to the data link connector. If there is an interruption during programming, programming failure or ECU damage may occur.
- Stable battery voltage is critical during programming. Any fluctuation, spiking, over voltage or loss of voltage will interrupt programming. When required, install the *EL-49642* SPS Programming Support Tool to maintain system voltage. If not available, connect a fully charged 12 V jumper or booster pack disconnected from the AC voltage supply. DO NOT connect a battery charger.
- Turn OFF or disable systems that may put a load on the vehicles battery such as; interior lights, exterior lights (including daytime running lights), HVAC, radio, etc.
- During the programming procedure, follow the SPS prompts for the correct ignition switch position.
- Clear all DTCs after programming is complete.
 1. Install *EL-49642* SPS programming support tool.
 2. Access the Service Programming System (SPS) and follow the on-screen instructions.
 3. Perform one of the following SPS Programming functions:

Note: If both controller options below are listed, select K20/K71 Transmission Control Module.

- K20/ K71 Engine and Transmission Control Modules and follow the on-screen instructions.
- 4. Perform the Vehicle Setup. Follow the on screen instructions.
- 5. With a scan tool, clear DTCs from the K20 and K71 Transmission Control Module.
- 6. Ignition OFF for 2 minutes.
- 7. Perform Service Fast Learn (SFL) using GDS or SPS through the TIS2Web application.
- 8. After the installation of the calibration is complete the shift quality of the transmission should be evaluated. If necessary follow Bulletin 16-NA-019: Information on Transmission Adaptive Functions and Correcting Low Mileage Harsh Shifts, Slips, or Flares, to learn the clutches and improve shift quality.

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
8480318*	Transmission Control Module Reprogramming and Transmission Service Fast Learn	2.5 hrs
*This is a unique Labor Operation for Bulletin use only.		

Version	2
Modified	Jan. 20, 2017 – Updated Warranty Information.

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



WE SUPPORT VOLUNTARY TECHNICIAN CERTIFICATION