



# Service Bulletin

File in Section: 04 - Driveline/Axle

Bulletin No.: 99-04-20-002H

Date: April, 2013

## INFORMATION

**Subject:** Information on Driveline Clunk Noise

**Models:** 2014 and Prior GM Passenger Cars and Light Duty Trucks

**This bulletin is being revised to add the 2013-2014 model years. Please discard Corporate Bulletin Number 99-04-20-002G (Section 04 – Driveline/Axle).**

**Important:** The condition described in this bulletin should not be confused with the following previous bulletins:

- Clunk, Bump or Squawk when Vehicle Comes to Complete Stop or Accelerating from Complete Stop (Replace Rear Drive Shaft Nickel-Plated Slip Yoke) (Corporate Bulletin Number 01-04-17-004B or later)
- Clunk Noise at Stop or From Launch (Clean/Lubricate Rear Propshaft Slip Yoke Splines) (Corporate Bulletin Number 09-04-21-003D or later)
- Bump Feel/Clunk Noise at Stop or From Launch (Clean/Lubricate Propeller Shaft Slip Yoke Splines) (Corporate Bulletin Number 09-04-17-002E or later)

Some customers of vehicles equipped with automatic transmissions may comment that the vehicle exhibits a clunk noise when shifting between Park and Drive, Park and Reverse, or Drive and Reverse. Similarly, customers of vehicles equipped with automatic or manual transmissions may comment that the vehicle exhibits a clunk noise while driving when the accelerator is quickly depressed and then released. Tipping into the throttle after deceleration can also result in some level of clunk as the driveline is loaded in one direction (coast) then with throttle reapply the driveline gets loaded in the opposite direction (drive). On manual transmission vehicles depressing the clutch while in a deceleration immediately releases load on the driveline and may produce a clunk noise as the driveline unloads.

**Note:** Compare this complaint vehicle to a like vehicle. If the results are the same, this is a normal condition. For additional diagnostic information, refer to the appropriate Service information.

Whenever there are two or more gears interacting with one another, there must be a certain amount of clearance between those gears in order for the gears to operate properly. This clearance or freeplay (also known as lash) can translate into a clunk noise whenever the gear is loaded and unloaded quickly, or whenever the direction of rotation is reversed. The more gears you have in a system, the more freeplay the total system will have.

The clunk noise that owners sometimes hear may be the result of a buildup of freeplay (lash) between the components in the driveline.

For example, the potential for a driveline clunk would be greater in a 4-wheel drive or all-wheel drive vehicle than a 2-wheel drive vehicle. This is because in addition to the freeplay from the rear axle gears, the universal joints, and the transmission (common to both vehicles), the 4-wheel drive transfer case gears (and their associated clearances) add additional freeplay to the driveline.

In service, dealers are discouraged from attempting to repair driveline clunk conditions for the following reasons:

- Comments of driveline clunk are almost never the result of one individual component with excessive lash, but rather the result of the added affect of freeplay (or lash) present in all of the driveline components.  
Because all of the components in the driveline have a certain amount of lash by design, changing driveline components may not result in a satisfactory lash reduction.
- While some owners may find the clunk noise objectionable, this will not adversely affect durability or performance.
- For additional diagnostic information, refer to the appropriate Service 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.



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