File in Section: 04 - Driveline/Axle

Bulletin No.: 14-04-20-001A

Date: December, 2014

# **INFORMATION**

Subject: Moan from Rear Differential During Low Speed Tight Turn Maneuvers

Models: 2014-2015 Chevrolet Camaro Z/28

This Bulletin has been revised to add the 2015 Model Year and add a Note. Please discard Corporate Bulletin Number 14-04-20-001.

Some customers may comment on a moan coming from the rear end during low speed tight turn maneuvers.

The Chevrolet Z/28 Camaro was designed to be the ultimate track-capable Camaro and has features and equipment that are not shared with other Camaros.

As an example, power is distributed to the rear wheels via a limited-slip differential featuring a helical gear set, rather than traditional clutch packs. The new design enables the driver to apply more power and get through corners faster, by continuously adjusting the torque bias to maximize available traction.

The differential works in unison with Chevrolet's proprietary Performance Traction Management system, which allows drivers to adjust the level of throttle and brake intervention to match their capability and driving environment.

### Adding Friction Modifier to the Rear Differential to Reduce the Moan

This is considered a normal characteristic refer to the information below **ONLY** if the customer desires to reduce the moan.

This can be accomplished with the addition of a friction modifier to the rear differential lube.

**Note:** The customer should be advised that adding the friction modifier will reduce the torque delivery during aggressive cornering.

To add the friction modifier, perform the following actions:

- 1. Raise and support the vehicle. Refer to Lifting and Jacking the vehicle in SI.
- 2. Remove the rear differential fill plug. Refer to > Differential Oil Replacement (218 mm Z/28) in SI.

*Notice:* Prior to adding the limited-slip axle additive, the bottle MUST be shaken vigorously for at least one minute to mix the additive thoroughly, then immediately poured into the differential.

- 3. In the United States, add 2 oz of P/N #88900330 LIMITED SLIP AXLE LUBRICANT ADDITIVE to the differential. In Canada add 59 ml of P/N #992694 ADDITIVE, L/SLIP AXLE LUBRICANT to the differential.
- 4. Test drive the vehicle and apply 3 full lock-to-lock turns in 2nd gear with light throttle application in order to determine if the moan is gone.
  - ⇒ If the moan is still present, add an additional 2 oz (59 ml) and then reevaluate. It is not recommended to add more than a total of 4 oz (118 ml) to the base lubricant.

## **Removing Friction Modifier From the Rear Differential**

It is possible that after adding the friction modifier and driving their vehicle, the customer may become dissatisfied with the vehicle track performance.

- ⇒ If the driver wishes to return the performance to the levels prior to the addition of the friction modifier then perform the following actions:
- 1. Drain the rear differential fluid.

### Notice: Initial noise may return after flush and fill.

2. Flush and fill the rear differential with the proper fluid.

# **Parts Information**

Part Number	Description
88900330	LIMITED SLIP AXLE LUBRICANT ADDITIVE (U.S.)
992694	ADDITIVE, L/SLIP AXLE LUBRICANT (Canada)
88900401	LUBRICANT - REAR DIFFERENTIAL SAE 75W90 (U.S.)
89021678	LUBRICANT - REAR DIFFERENTIAL SAE 75W90 (Canada)