



Service Bulletin

File in Section: 05 - Brakes

Bulletin No.: 12-05-23-001

Date: December, 2012

TECHNICAL

Subject: Pulsation or Vibration Felt in Steering Wheel During Moderate Brake Apply at Highway Speeds

Models: 2013 Cadillac XTS Limo (RPO V4U, W30) Hearse (RPO B9Q) Armored Car (RPO B05) Models

Condition

Some customers may comment on a pulsation or vibration mostly concentrated in the steering wheel during downhill descent as specifically described. This condition will most often begin as an increasing rumbling noise coming from the underbody or the front of the vehicle. This condition may also be exhibited in mountainous regions.

Note: Use care to ensure the following diagnosis and repair are only attempted if the conditions and concern match those listed, and if the concern can be duplicated under the same conditions.

This condition occurs ONLY under the following conditions:

- When the brake is applied at a moderate rate, while driving at highway speeds of 80 km/h (50 mph) or more.
- The condition starts as the brakes get hot (during application).
- Typically a rumbling noise will be heard first, building in intensity, followed by increasing pulsation, or vibration, felt in the steering wheel, then typically felt in the floor panel.

Cause

This condition may be caused by interaction between the front brake lining material and the front brake rotors.

Correction

Important: DO NOT attempt any repairs on the vehicle until you verify the specific condition is present by following the steps below:

1. Warm up the vehicle by driving approximately 8 km (5 mi).
2. Drive the vehicle at highway speed, where possible. Make sure that the brakes are not heated prior to the observation.
3. With a speed limit of 64 km/h (40 mph) or greater, with the side windows down, while in Drive, apply the brakes naturally, only as needed, to maintain the speed limit. Observe for noise, followed by pulsation/vibration, as the brakes are warmed up by brake application.

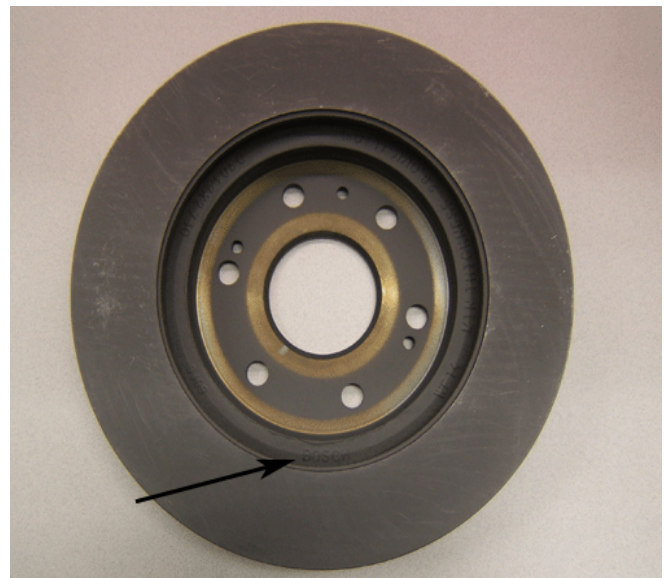
Note: If the front pad kit listed is used to correct any condition other than the condition described in this bulletin, **the vehicle could experience higher mileage corrosion-induced brake pulsation.**

If the condition described **HAS NOT** been verified, or if the condition observed **IS NOT** most noticeable through the steering wheel, the observed condition may have a different cause, such as a tire/wheel or rear brake issue, etc. Refer to SI for any further related diagnostics.

If the condition described has been verified, and if the condition is most noticeable through the steering wheel, and if the condition was not present when brakes were not warmed up, typically for initial brake apply, perform the following inspection and repair.

Important:

- It is critical to use the proper OEM brake rotors. Use of Non-OEM rotors may prevent the condition from being corrected long term.
 - If Non-OEM rotors are identified, these rotors are **NOT** covered under the GM New Vehicle Limited Warranty.
1. Inspect the front brake rotors to ensure that they are OEM rotors.
 - Remove the brake rotor from the vehicle.



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- Inspect the back side of the rotor for the Bosch Logo. If the Bosch logo **IS NOT** present, replace with OEM GM rotors, P/N 25819670.
2. Inspect the front brake rotors for Assembled Lateral Runout (LRO) and thickness variation. Follow SI procedures.
 3. Inspect the front brake rotors for minimum thickness. Follow SI procedures.
 4. If the rotors are within specifications, **DO NOT** refinish or replace the rotors.
 5. If the rotors are out of specifications, refinish the rotors on a qualified lathe, or replace the rotors as appropriate. Follow SI procedures.

Note: To prevent a noise concern, follow the brake pad insulator preparation and seating instructions as referenced in Front Brake Pad Replacement (1500) in SI.

6. Install the specified front pad kit, GM P/N 25910432. Follow SI procedures.
7. Ensure that the condition has been eliminated under the same conditions.

Parts Information

Part Number	Description
25910432	Pad Kit, Front Disc Brake
25819670	Rotor, Front Brake

Warranty Information

For vehicles repaired under warranty, use:

Note: H9745 includes time for road testing and for removal of 1 rotor to inspect for OEM markings.

Labor Operation	Description	Labor Time
H9745*	Pads, Disc Brake-Front – R&R Or Replace & Diagnose	1.2 hrs
Add	To Refinish Rotor - One	0.3 hr
Add	To Refinish Rotor - Both	0.6 hr
Add	To Replace Rotor - One	0.1 hr
Add	To Replace Rotor - Both	0.3 hr
*This is a unique labor operation for bulletin use only. It will not be published in the Labor Time Guide.		

