

SB-10044218-6888

Bulletin No.: 12050 Date: April 2012

# **Program Bulletin**



## **CUSTOMER SATISFACTION PROGRAM**

SUBJECT: Rear Axle Grinding Noise, Vibration - Inspect Rear Axle

MODELS: 2011-2012 Chevrolet Express 2011-2012 Chevrolet Silverado, Suburban 2500 Series 2011-2012 GMC Savana 2011-2012 GMC Sierra, Yukon XL 2500 Series Equipped with a 10.5" Rear Axle

### THIS PROGRAM IS IN EFFECT UNTIL APRIL 30, 2014

#### **CONDITION**

**Certain** 2011-2012 model year Chevrolet Express and GMC Savana vehicles, and Chevrolet Silverado and Suburban, and GMC Sierra and Yukon XL 2500 Series vehicles, all equipped with a 10.5" rear axle, may have a condition in which the rear axle right-hand side bearing adjuster clip and bolt may come loose within the rear axle. If this occurs, a grinding noise and a vehicle vibration would be noticeable when the vehicle is in motion. If the adjustor or bolt punctures the differential cover pan, a fluid leak could develop. If enough fluid were to leak out, the driver may hear increasing noise, additional vehicle vibration, and smell burnt axle lubricant. If the driver ignores these warnings and continues to drive the vehicle, a slow loss of vehicle motion could occur.

#### **CORRECTION**

Dealers are to inspect and, if necessary, repair the rear axle.

#### VEHICLES INVOLVED

All involved vehicles are identified by Vehicle Identification Number on the Investigate Vehicle History screen in GM Global Warranty Management system. Dealership service personnel should always check this site to confirm vehicle involvement prior to beginning any required inspections and/or repairs. It is important to routinely use this tool to verify eligibility because not all similar vehicles may be involved regardless of description or option content.

For dealers with involved vehicles, a listing with involved vehicles containing the complete vehicle identification number, customer name, and address information has been prepared and will be provided to US and Canadian dealers through the GM GlobalConnect Recall Reports, or sent directly to export dealers. Dealers will not have a report available if they have no involved vehicles currently assigned.

The listing may contain customer names and addresses obtained from Motor Vehicle Registration Records. The use of such motor vehicle registration data for any purpose other than follow-up necessary to complete this program is a violation of law in several states/provinces/countries. Accordingly, you are urged to limit the use of this report to the follow-up necessary to complete this program.

#### PART INFORMATION

Parts required to complete this program are to be obtained from General Motors Customer Care and Aftersales (GMCC&A). Please refer to your "involved vehicles listing" before ordering parts. Normal orders should be placed on a DRO = Daily Replenishment Order. In an emergency situation, parts should be ordered on a CSO = Customer Special Order.

| Part Number   | Description                             | Quantity/Vehicle |
|---------------|---|------------------|
| 03977326      | LOCK, DIFF BRG ADJ NUT                  | 1                |
| 26067159      | GASKET, R/AXL HSG CVR                   | 1                |
| 88900401 - US | LUBRICANT, SYNTHETIC MULTI-PURPOSE (SAE | 3                |
| 89021678 - CN | 75W-90)                                 |                  |

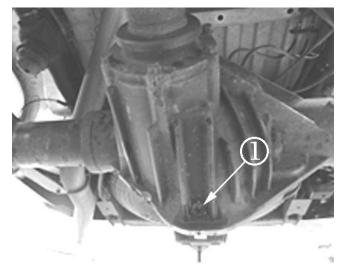
#### Additional Parts Required if Differential is Repaired

<u>Return the drive pinion, ring gear, differential side bearings, and pinion bearings to the Warranty Parts Center (WPC) (U.S. and Canada only)</u>. Please return the parts when you receive the return request from the WPC.

| Part Number | Description                               | Quantity/Vehicle |
|-------------|---|------------------|
| 19210931    | GEAR KIT, DIFF RING & PINION (4.10 RATIO  | 1                |
| 19210704    | GEAR KIT, DIFF RING & PINION (3.73 RATIO) | 1                |
| 19210701    | GEAR KIT, DIFF RING & PINION (3.54 RATIO) | 1                |
| 09436881    | BEARING, DIFF                             | 2                |
| 26064030    | SEAL, DIFF DRV P/GR                       | 1                |
| 07451870    | BEARING, DIFF DRV P/GR PILOT              | 1                |
| 09414917    | 09414917 BEARING, DIFF DRV P/GR OTR       |                  |
| 11515755    | BOLT, HEX,M8X1.25X16                      | 1                |

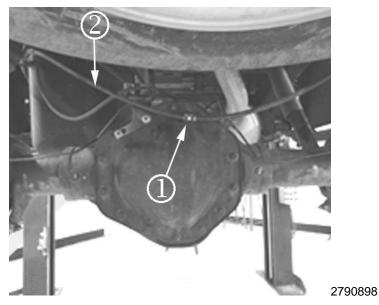
#### SERVICE PROCEDURE

1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle in SI.



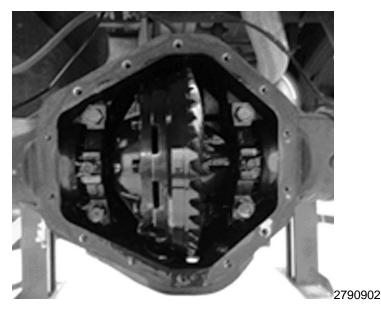


- 2. Remove the rear axle drain plug (1).
- 3. Drain the lubricant into a suitable container.

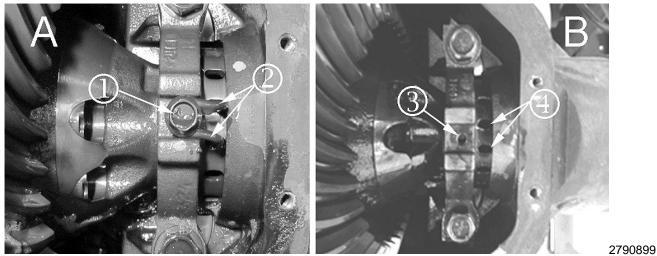


- 4. Remove the park brake cable (2) from the center clip (1) on the axle and push the cable over the spare tire to ensure it is out of the work area.
- 5. Remove the caliper brake line from the clip and push the brake line gently toward the front of vehicle to ensure it is out of the work area.
- 6. Remove nuts holding the caliper line bracket to cover pan.
- 7. Gently remove the caliper line bracket and push it up and away from the cover pan face.
- 8. Remove the brake line clip bolt and the caliper brake line clip bolt.





9. Remove the remaining cover pan bolts and remove the rear axle cover. Do NOT discard the bolts.



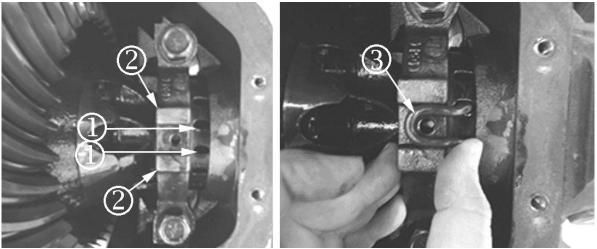
Adjuster Bolt (1) and (2) Clip Present. (B) Adjuster Bolt and Clip Not Present (3) and (4).

- 10. Determine if the passenger side (right) adjuster bolt (1) and clip (2) are present.
  - If the passenger side adjuster bolt and clip are present (A), remove the adjuster bolt and clip. Discard only the clip. Refer to illustration. Proceed to Step 11.

Page 5

**Note:** Return the drive pinion, ring gear, differential side bearings, and pinion bearings to the Warranty Parts Center (U.S. and Canada only). Please return the parts when you receive the return request from the WPC.

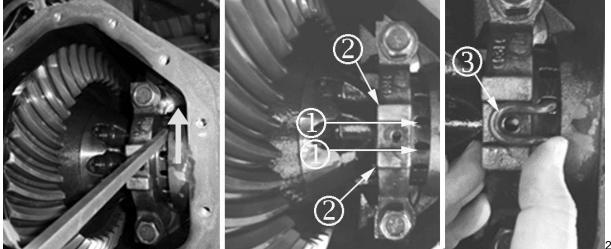
• If the passenger side adjuster bolt and clip are NOT present (B), replace the drive pinion, ring gear, differential side bearings, adjuster bolt and adjuster clip. Refer to *Differential Replacement (10.5 Inch Axle)* in SI. Proceed to Step 14 after replacing the drive pinion, ring gear, pinion bearings and differential side bearings. Refer to illustration.



2790908

Visually inspect the adjuster nut slot alignment (1) and then use a new adjuster clip (3) to verify slot alignment. The adjuster clip (3) must be seated between the cap bolt ribs (2) and into the adjuster nut holes as shown in illustration.

- 11. Inspect the adjuster nut slot location in reference to the cap bolt ribs (2).
  - If the adjuster nut slots are aligned (1) as shown in illustration, no adjustment is required. Proceed to Step 13.
  - If the adjuster nut slots do NOT align, proceed to Step 12.



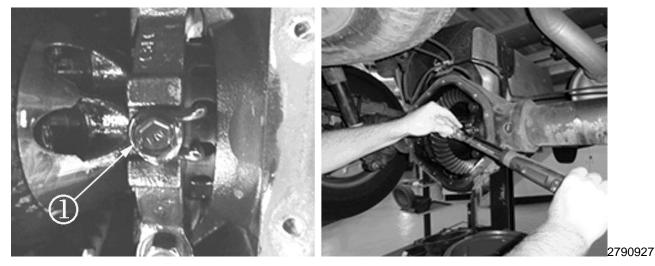
2790914

**Caution:** If indexing the adjuster is required, the adjustment direction is critical. The passenger side adjuster MUST be rotated in an upper direction to the nearest slot. If an upper direction is NOT used, bearing preload is lost.

12. Using J-24429 spanner (or equivalent) in the adjuster nut slot (1), rotate the adjuster nut enough to center the clip between the cap bolt ribs. Only rotate the adjuster nut in an upward direction.

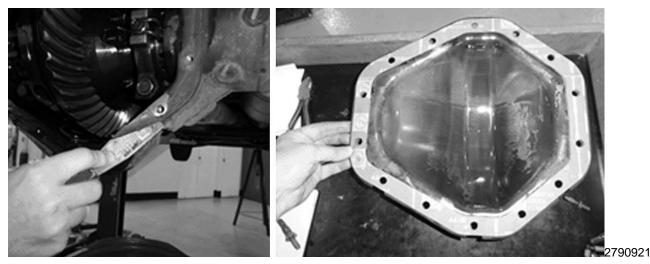
**Caution:** To avoid damaging the differential, ensure the adjuster clip is aligned properly BEFORE installing the adjuster bolt and clip.

13. Use a new adjuster clip (3) to verify alignment. The adjuster clip (3) must be seated between the cap bolt ribs (2) and into the adjuster nut slots as shown in illustration.



**Note:** If a differential replacement is required, a new bolt and a new adjuster clip are required. If a differential replacement is NOT required, only a new adjuster clip is required.

- 14. Install a new adjuster clip and the bolt removed in Step 10 (1). Hand-tighten the bolt.
- 15. Tighten the bolt to 27 Nm (20 lb-ft).
- 16. Using a torque wrench, ensure that the driver side (left) adjuster clip and bolt are tightened to **27 Nm (20 lb-ft).**



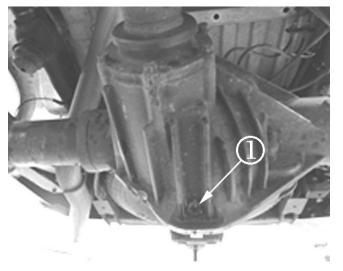
- 17. Remove old rear axle cover gasket material from rear axle housing and rear axle cover. Ensure both surfaces are clean.
- 18. Apply Loctite 272 to the threads of all of the cover pan bolts.





2790896

- 19. Install cover on the axle.
  - 19.1 Align a new cover pan gasket on the cover pan face.
  - 19.2 Hand start two cover pan bolts to help keep the cover pan gasket aligned.
  - 19.3 Put the park brake line clip and caliper brake line clip in position.
  - 19.4 Install the remaining cover pan bolts.
  - 19.5 Tighten the cover pan bolts to **40 Nm (30 lb-ft).**
- 20. Insert park brake cable and caliper brake line back into clips.
- 21. Ensure the drain plug is clean. Remove any foreign material from the plug.



2790893

- 22. Install drain plug.
- 23. Tighten drain plug to 33 Nm (24 lb-ft).
- 24. Remove fill plug.
- 25. Fill axle with synthetic lube until the lube starts to come out of the fill plug hole.

#### 26. Insert the fill plug.

#### 27. Tighten the fill plug to 60 Nm (44 lb-ft).

#### COURTESY TRANSPORTATION – For US and Canada

The General Motors Courtesy Transportation program is intended to minimize customer inconvenience when a vehicle requires a repair that is covered by the New Vehicle Limited Warranties. The availability of courtesy transportation to customers whose vehicles are within the warranty coverage period and involved in a product program is very important in maintaining customer satisfaction. Dealers are to ensure that these customers understand that shuttle service or some other form of courtesy transportation is available and will be provided at no charge. Dealers should refer to the General Motors Service Policies and Procedures Manual for Courtesy Transportation guidelines.

#### WARRANTY TRANSACTION INFORMATION

Submit a transaction using the table below.

| Labor<br>Code | Description   | Labor<br>Time |
|---------------|---|---------------|
| V2559         | Inspect Differential & Replace Clip (lock) Only       | 0.7           |
| V2560         | Inspect & Repair Differential                         | 5.0           |
|               | Add: Recondition Differential Case - Non Limited Slip | 0.3           |
|               | Add: Recondition Differential Case - Limited Slip     | 1.4           |

#### CUSTOMER NOTIFICATION – For US and Canada

General Motors will notify customers of this program on their vehicle (see copy of customer letter included with this bulletin).

#### CUSTOMER NOTIFICATION – For Export

Letters will be sent to known owners of record located within areas covered by the US National Traffic and Motor Vehicle Safety Act. For owners outside these areas, dealers should notify customers using the attached sample letter.

#### DEALER PROGRAM RESPONSIBILITY

All unsold new vehicles in dealers' possession and subject to this program <u>must</u> be held and inspected/repaired per the service procedure of this program bulletin <u>before</u> customers take possession of these vehicles.

Dealers are to service all vehicles subject to this program at no charge to customers, regardless of mileage, age of vehicle, or ownership, through April 30, 2014.

Customers who have recently purchased vehicles sold from your vehicle inventory, and for which there is no customer information indicated on the involved vehicle listing, are to be contacted by the dealer. Arrangements are to be made to make the required correction according to the instructions contained in this bulletin. A copy of the customer letter is provided

in this bulletin for your use in contacting customers. Program follow-up cards should not be used for this purpose, since the customer may not as yet have received the notification letter.

In summary, whenever a vehicle subject to this program enters your vehicle inventory, or is in your facility for service through April 30, 2014, you must take the steps necessary to be sure the program correction has been made before selling or releasing the vehicle.

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 tools, equipment, safety instructions, and know-how to do a job properly and safely. If a condition is described, <u>DO NOT</u> assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your dealer for information on whether your vehicle may benefit from the information.



May 2012

Dear General Motors Customer:

We have learned that your 2011 or 2012 model year Chevrolet Express, Silverado, Suburban, or GMC Savana, Sierra, Yukon XL vehicle, equipped with a 10.5 inch rear axle, may have a condition in which the rear axle right-hand side bearing adjuster clip and bolt may come loose within the rear axle. If this occurs, a grinding noise and a vehicle vibration would be noticeable when the vehicle is in motion. If the adjustor or bolt punctures the differential cover pan, a fluid leak could develop. If enough fluid were to leak out, you may hear increasing noise, additional vehicle vibration, and smell burnt axle lubricant. If these warnings are ignored and the vehicle continues to be driven, a slow loss of vehicle motion could occur.

Your satisfaction with your GM vehicle is very important to us, so we are announcing a program to prevent this condition or, if it has occurred, to fix it.

What We Will Do: Your GM dealer will inspect and, if necessary, repair the rear axle. This service will be performed for you at **no charge until April 30, 2014**. After that, any applicable warranty will apply.

**What You Should Do:** To limit any possible inconvenience, we recommend that you contact your dealer as soon as possible to schedule an appointment for this repair. By scheduling an appointment, your dealer can ensure that any necessary parts will be available on your scheduled appointment date.

If you have any questions or concerns that your dealer is unable to resolve, please contact the appropriate Customer Assistance Center at the number listed below.

| Division              | Number         | Text Telephones<br>(TTY) |
|-----------------------|----------------|--------------------------|
| Chevrolet             | 1-800-222-1020 | 1-800-833-2438           |
| GMC                   | 1-800-462-8782 | 1-888-889-2438           |
| Guam                  | 65-6267-1752   |                          |
| Puerto Rico – English | 1-800-496-9992 |                          |
| Puerto Rico – Español | 1-800-496-9993 |                          |
| Virgin Islands        | 1-800-496-9994 |                          |

**Courtesy Transportation:** If your vehicle is within the New Vehicle Limited Warranty, your dealer may provide you with shuttle service or some other form of courtesy transportation while your vehicle is at the dealership for this repair. Please refer to your Owner Manual and your dealer for details on Courtesy Transportation.

We sincerely regret any inconvenience or concern that this situation may cause you. We want you to know that we will do our best, throughout your ownership experience, to ensure that your GM vehicle provides you many miles of enjoyable driving.

Jim Moloney General Director, Customer and Relationship Services