

## **Service Bulletin**

Bulletin No.: 20-NA-156

Date: August, 2022

# **TECHNICAL**

Subject: Rear Axle Clunk

Brand:	Model:	Model Year:		VIN:		Engino	Transmission:
		from	to	from	to	Engine:	mansinission.
Chevrolet	Colorado	2045	2022	-	-	-	-
GMC	Canyon	2015					

Involved Region or Country	North America and Korea	
Condition	Some customers may comment that a clunking noise can be heard from the rear axle area when driving over railroad tracks and/or entering or exiting parking lots and driveways.	
Cause	This condition may be caused by excessive axle shaft end play.	
	With the aid of an assistant, apply the brake pedal while another technician lightly shake the vehicle with a lateral force to the bed of the truck near the tail lamp area.	
Correction	<ul> <li>If a clunk noise still persists while the brake is applied, inspect the leaf spring shackle for excess movement or debris within leaf spring pads. Refer to 17-NA-394: Squeak, Clunking Type Noise Heard From Rear of Vehicle.</li> </ul>	
	<ul> <li>If clunk noise only occurs without the brake pedal applied, continue with this procedure for excessive end play within the rear axle.</li> </ul>	

#### Service Procedure

Perform endplay diagnostics:

- 1. Lift the vehicle.
- 2. Remove the rear wheels. Refer to *Tire and Wheel Removal and Installation* in SI.
- 3. remove the rear calipers. Refer to *Rear Brake Caliper Replacement* in SI.



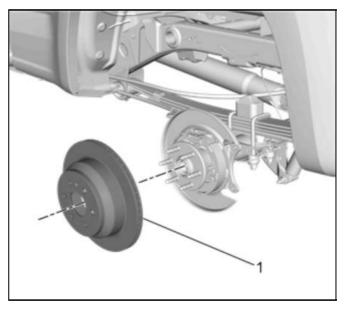
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- 4. Attach dial indicator to be able to measure perpendicular to center of rotor face.
- Push in axle shaft all the way by pushing on the rotor face.
- 6. Zero out dial indicator at this stage.
- Pull axle shaft outward all the way by pulling on the rotor.

- 8. Record endplay measurement.
  - If endplay measurement is at 0.32mm (0.0126") or greater, then service C-locks can be installed without interference (exception detailed below).
    - EXCEPTION If it is a G80 Locking Rear Axle, a C-lock can only be applied on the left hand side if it measures 0.57mm (0.0224) endplay or higher. There must be at least 0.25mm (0.010") of endplay on left had side to not damage locker.
  - If endplay is below 0.32mm (0.0126"), Service C-locks may still be installed, however, if the components (axle shaft and differential) are at the low end of the tolerance, interference may occur.
- 9. Repeat for opposite side.
- 10. Record endplay measurement.

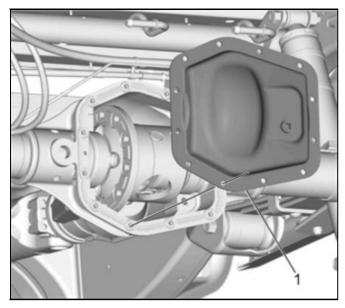
**Note:** You do not need to pull the axle shafts out any further than necessary to remove and replace the C-locks.

⇒ If the endplay has been found out of specifications noted above, proceed to the next step.



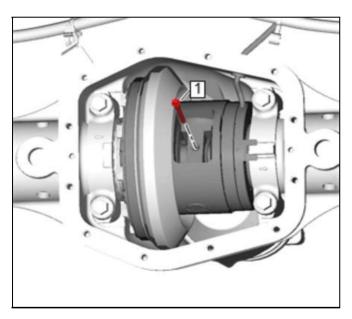
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11. Remove the rear rotors (1). Refer to *Rear Brake Rotor Replacement* in SI.



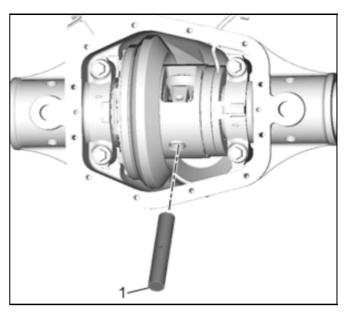
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12. Remove the rear axle housing cover (1). Refer to Rear Axle Housing Cover Replacement in SI.



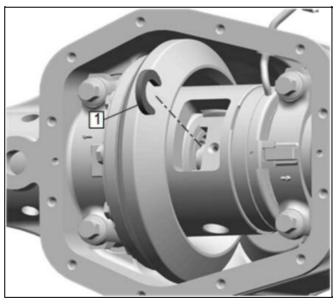
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13. Remove the lock pin bolt (1).



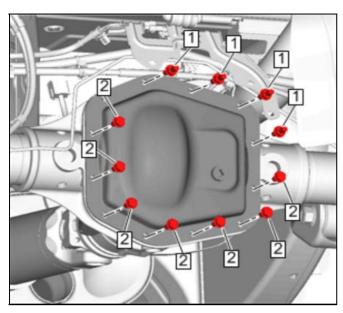
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- 14. Remove the pin shaft (1).
- 15. Using care not to damage the axle seal, push the axle shaft inwards.



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- 16. Remove the C-lock (1) from the rear axle.
- 17. Install new C-locks.
- 18. Install pin shaft.
  - ⇒ Tighten pin lock bolt to specifications. Refer to Fastener Specifications in SI.



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- 19. Install the rear axle housing cover. Refer to Rear Axle Housing Cover Replacement in SI.
  - ⇒ Tighten new cover bolts (1, 2) to specifications. Refer to Fastener Specifications in SI.
- 20. Install the rear brake rotors. Refer to *Rear Brake Rotor Replacement* in SI.
- 21. Install the rear wheels. Refer to *Tire and Wheel Removal and Installation* in SI.
- 22. Lower the vehicle.

#### Reference Information:

- ⇒ The production C-locks have a thickness spec of 5.18mm to 5.26mm (0.204" to 0.207")
- ⇒ Service C-locks has a thickness spec between 5.42mm and 5.50mm (0.213" to .216")

- ⇒ All C-clips may have yellow protective coating
- ⇒ If endplay exceeds 1.05mm (0.0413"), the end play is out of spec. Please refer to Service Information for further drive line diagnostic procedures.

#### **Parts Information**

Causal Part	Description	Part Number	Qty
N/A	LOCK-R/AXL SHF (LCV)	84878620	2
N/A	LOCK-R/AXL SHF (LGZ LWN LFX)	84878619	2
N/A	BOLT, R/AXL HSG CVR	11546720	11 (8 for ZR2)
N/A	BOLT, R/AXL HSG CVR (STUD)	11549349	1 (4 for ZR2)
N/A	NUT, WRG HARN BRKT	11546365	1 (4 for ZR2)
N/A	SAE 75W-90 Axle Lubricant	19352759 (Canada 19352760)	2
N/A	BOLT, R/ CALIPER BRKT	11509377	4

### **Warranty Information**

For vehicles repaired under the Powertrain coverage, use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Labor Operation Description			
3087158*	Diagnose Axle Noise and Replace C-Clips	1.1 hr		
*This is a unique Labor Operation for Bulletin use only.				

Version	3	
	Released November 05, 2020	
Modified	Revised January 27, 2022 - Added the Rear Caliper Bracket Bolts to Parts Information section.	
	Revised August 09, 2022 - Added 2022 to Model Year.	