#### N202325410 Loss of Power Steering Assist



Release Date: July 2021 Revision: 00

#### Attention:

It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied.

Vehicles involved in this recall were placed on stop delivery March 25, 2021. Once the service procedure contained in this bulletin has been performed on the vehicle, the vehicle is released from stop delivery and the vehicle can be delivered to the customer.

All involved vehicles that are in dealer inventory must be held and not delivered to customers, dealer traded, or used for demonstration purposes until the repair contained in this bulletin has been performed on the vehicle.

		Mode	Model Year		
Make	Model	From	То	RPO	Description
Chevrolet	Colorado	2015	2015		
GMC	Canyon	2015	2015		

Involved vehicles are marked "open" on the Investigate Vehicle History screen in GM Global Warranty Management system. This site should always be checked to confirm vehicle involvement prior to beginning any required inspections and/or repairs.

Condition	General Motors has decided that a defect, which relates to motor vehicle safety, exists in 2015 model
	year Chevrolet Colorado and GMC Canyon vehicles. These vehicles may experience loss of power
	steering assist at startup or while driving due to the potential for a poor electrical connection within the
	steering gear assembly. A poor electrical connection in the affected steering gear assemblies may be
	caused by corrosion of certain connectors within the assemblies, or by damage to these connectors that
	occurred during the supplier's manufacturing process. If loss of connection occurs, power steering assist
	is lost (i.e., the vehicle reverts to manual steer), a malfunction indicator light displays on the instrument
	panel and a chime sounds to inform the driver. If power steering assist is lost, steering control can still
	be maintained but would require an increased steering effort, particularly at lower speeds, increasing the
	risk of a crash.
Correction	Dealers are to replace the steering gear torque sensor cover assembly.

#### **Parts**

Quantity	Part Name	Part No.
1	Torque Sensor Cover Kit	84344239
1 tub fixes	PTFE Grease	19333360 (US)
approx.10		19333361 (CA)
vehicles		, ,
1 tub fixes	Dielectric Synthetic Grease	12377900 (US)
approx.12		10953529 (CA)
vehicles		, ,

Note: The grease is sold in a tub and will service several vehicles and may already be available in your dealer inventory.

**Reminder:** Parts may be removed from Retail Inventory Management (RIM). Dealers should review the affected parts to confirm RIM managed status. Parts may have quantity limiters in effect.

#### **Warranty Information**

Labor		Labor	Trans.	Net
Operation	Description	Time	Type	Item
9105579	Steering Gear Torque Sensor Cover Replacement (Includes front	-	ZFAT	*
	toe alignment)	-		
	2WD	2.6		
	4WD	2.7		
9105828	Customer Reimbursement Approved	-	ZFAT	**
	- For USA and Canada dealers only	N/A		
9105829	Customer Reimbursement Denied – For USA dealers only	N/A	ZFAT	***
9105830	Working Capital Assistance Program Reimbursement – USED	N/A	ZFAT	***
	INVENTORY ONLY			

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Note: To avoid having to "H" route the customer reimbursement / WCAP transaction for approval, it must be submitted prior to the repair transaction.

- \* The amount identified in "Net Item" should represent the actual sum total of the current GMCCA Dealer net price for PTFE and Dielectric grease needed to perform the required repairs, not to exceed \$3.00 USD, \$3.77 CAD.
- \*\* For USA and Canada: Submit the dollar amount reimbursed to the customer in Net/Reimbursement. Submit \$20.00 administrative allowance in Net/Admin Allowance.
- \*\*\* Submit \$10.00 administrative allowance in Net/Admin Allowance.

#### Working Capital Assistance Program (WCAP) Reimbursement – USED INVENTORY ONLY

Note: USA & Canada Only - To avoid having to "H" route the WCAP transaction for approval, it must be submitted prior to the repair transaction.

Important: The WCAP ZSET transaction labor code, 9800068, provided in the dealer message sent on April 13, (USA) or April 08,2021 (Canada), must have been submitted prior to the submittal of the ZFAT transaction labor code or the claim will reject.

\*\*\*\* USA & Canada Dealers Only - For vehicles eligible under the Working Capital Assistance Program, the amount should be submitted in Net Item/Miscellaneous. This amount has been calculated to a daily value for the days that the vehicle was in used dealer inventory and not available for sale. This reimbursement is limited to the number of days from the date of the stop sale/stop delivery order (March 25, 2021) to the date the inspection or repair closed the recall bulletin. (not to exceed 94 days).

Vehicle	Working Capital Assistance Reimbursement Amount		
	USA	Canada	
2015 Chevrolet Colorado	\$7.68	\$8.96	
2015 GMC Canyon	\$7.61	\$8.96	

#### **Service Procedure**

**Note:** A training video is available on the GM Center of Learning web site (centerlearning.com) to aid technicians with this repair. After logging into the website, U.S. dealers should select GM Media Tube. Once the portal opens, use the search box and type in the course number 10215.10D and click on search. The topic begins at approximately the 7:30 mark. In Canada, dealers should access the GM Centre of Learning website, then follow this path:

Resources / Video on Demand / GM Pro Centre of Learning / Service Technical / Recall15595.

1. Remove the electric belt drive rack and pinion steering gear. Refer to Electric Belt Drive Rack and Pinion Steering Gear Replacement (2WD) or Electric Belt Drive Rack and Pinion Steering Gear Replacement (4WD) in SI.

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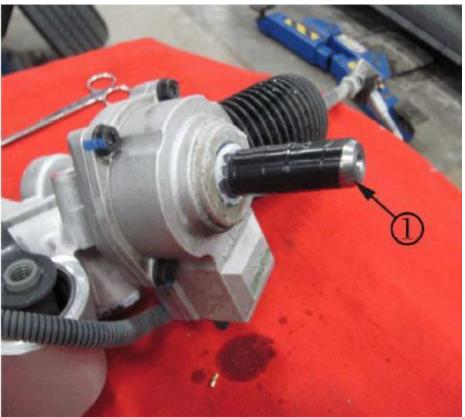
- 2. Clean the steering gear torque sensor cover area (1) with soap and water using a brush to remove excess dirt.
- 3. Use compressed air to dry the steering gear cover area.



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4. Remove the dust seal (1).



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5. Wrap the pinion shaft (1) with a single layer of electrical tape to protect the cover seal and bearing during installation of the new cover.

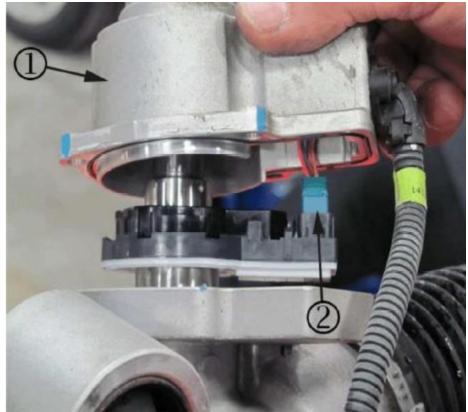
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6. Remove the torque sensor cover bolts (1).



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7. Lift the torque sensor cover (1) up high enough to access the connector (2).

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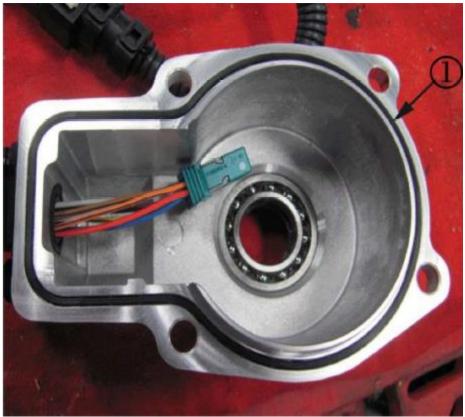
8. Disconnect the torque sensor connector.



- 9. Using a new, uncontaminated shop towel, wipe the pinion shaft and sealing surface (1) in a direction away from the shaft and sealing surface.
- 10. Using compressed air, carefully blow any particles or lint out of the torque sensor cavity and off of the pinion shaft.

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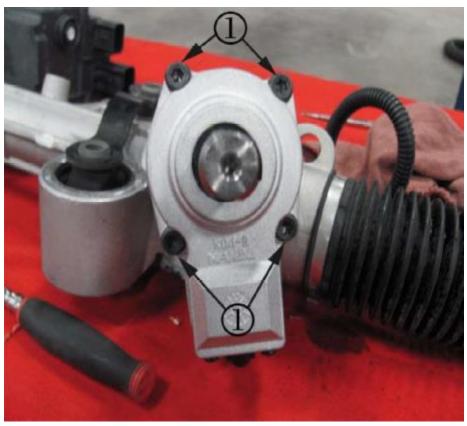
11. Ensure the seal (1) is properly seated in the torque sensor cover.



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- 12. Lower the new torque sensor cover (1) over the pinion shaft and connect the lead connector (2) to the torque sensor. Ensure the connector (2) is fully seated into the torque sensor.
- 13. Avoiding contact with the pinion shaft, lower the cover over the torque sensor and seat the cover to the sealing surface. Ensure cover is properly mated to steering gear with no interference.



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14. Install and hand tighten the torque sensor cover bolts (1).

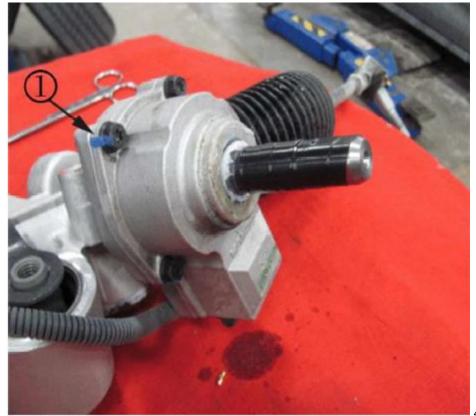
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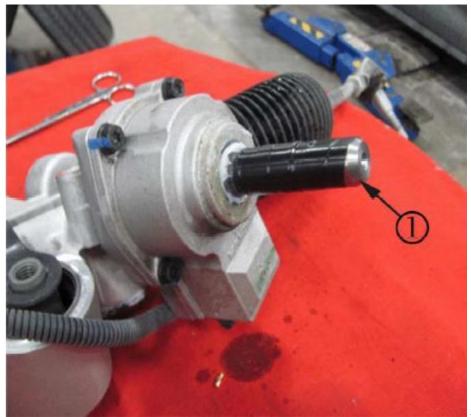
- 15. Using an X pattern, tighten the torque sensor cover bolts to 5 Nm (44 lb. in) on the first pass.
- 16. Using an X pattern, tighten the torque sensor cover bolts to 10 Nm (89 lb. in) on the final pass.



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17. Using a paint pen, mark all 4-torque sensor cover bolts as shown above.



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18. Remove the tape from the pinion shaft (1).



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19. Fill the cavity (1) above the pinion seal using a brush with PTFE Grease High Viscosity.



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20. Install the new dust seal over the pinion shaft and fully seat it on the torque sensor cover. Wipe off any excess grease.



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21. Using a brush, apply dielectric grease to the torque sensor harness connector and Power Steering Control Module (PSCM) terminals.

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- 22. Transfer the harness clip from the original torque sensor cover harness to the new harness and connect the new torque sensor cover harness (2) to the PSCM. Ensure the harness is routed as shown above. If the clip is broken or missing, use a zip tie to secure the harness.
- 23. Install the electric belt drive rack and pinion steering gear. Refer to Electric Belt Drive Rack and Pinion Steering Gear Replacement (2WD) or Electric Belt Drive Rack and Pinion Steering Gear Replacement (4WD) in SI.
- 24. Measure and adjust the front toe. Refer to Wheel Alignment Steering Wheel Angle and/or Front Toe Adjustment in SI.
- 25. Connect a scan tool to the vehicle.
- 26. Using GDS 2, perform a Steering Wheel Angle Sensor Reset and a Steering Wheel Angle Sensor Learn in the Configuration/Reset Functions of the Power Steering Control Module.
- 27. Perform a Vehicle Wide DTC reset after the Steering Wheel Angle Sensor Reset and a Steering Wheel Angle Sensor Learn have successfully completed.
- 28. Disconnect the scan tool.

#### **Dealer Responsibility** – For USA (USA States, Territories, and Possessions)

It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied.

The US National Traffic and Motor Vehicle Safety Act provides that each vehicle that is subject to a recall of this type must be adequately repaired within a reasonable time after the customer has tendered it for repair. A failure to repair within sixty days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within a reasonable time, the customer may be entitled to an identical or reasonably equivalent vehicle at no charge or to a refund of the purchase price less a reasonable allowance for depreciation. To avoid having to provide these burdensome remedies, every effort must be made to promptly schedule an appointment with each customer and to repair their vehicle as soon as possible. In the recall notification letters, customers are told how to contact the US National Highway Traffic Safety Administration if the recall is not completed within a reasonable time.

#### **Dealer Responsibility** – All

All new, used, GM Certified Used, courtesy transportation vehicles, dealer shuttle vehicles, etc. in dealers' possession and subject to this recall <u>must</u> be held and inspected/repaired per the service procedure of this bulletin <u>before</u> customers take possession of these vehicles. Involved vehicles must be held and not delivered to customers, dealer-traded, released to auction, used for demonstration, or any other purpose.

All GM Certified Used vehicles currently in the dealers' inventory within the Certified Pre-Owned Inventory System (CPOIS) will be de-certified and must be held and remedied per the service procedure in this bulletin. Upon submitting an accepted/paid warranty transaction in the Global Warranty Management (GWM) system, the vehicle can be re-certified for sale within the CPOIS system, or once again be used in the CTP program.

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Dealers are to service all vehicles subject to this recall at no charge to customers, regardless of mileage, age of vehicle, or ownership, from this time forward.

Customers who have recently purchased vehicles sold from your vehicle inventory, and for which there is no customer information indicated on the dealer 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. Recall 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 field action enters your vehicle inventory you must take the steps necessary to ensure the program correction has been made before selling the vehicle. In addition, for vehicles entering your facility for service, you are required to ensure the customer is aware of the open field action and make every reasonable effort to implement the program correction as set forth in this bulletin prior to releasing the vehicle.

#### **Dealer Reports**

For dealers with involved vehicles, a listing has been prepared and will be available through GM GlobalConnect Maxis Field Action Reports or sent directly to export dealers. The Inventory tab of the dealer reports will contain VINs that apply to this recall. This information is intended to assist dealers with the **PROMPT COMPLETION** of these vehicles. The Customer In-Service tab will contain customer names and addresses from Motor Vehicle Registration Records. The use of such motor vehicle registration data for any purpose other than follow-up necessary to complete this recall may be a violation of law in several states.

#### **Customer Notification**

USA & Canada - General Motors will notify customers of this recall on their vehicle (see copy of customer letter included with this bulletin).

#### **Customer Reimbursement**

Customer requests for reimbursement of previously paid repairs to correct the condition described in the bulletin can be submitted at any time to the dealer. See General Motors Service Policies and Procedures Manual, Product Field Action Customer Reimbursement Procedure (USA & Canada) or local Policies and Procedures, for details.

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# IMPORTANT SAFETY RECALL

August 2021

This notice applies to your vehicle, VIN	
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Dear General Motors Customer:

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act.

General Motors has decided that a defect, which relates to motor vehicle safety, exists in certain 2015 model year Chevrolet Colorado and GMC Canyon vehicles. As a result, GM is conducting a safety recall. We apologize for this inconvenience. However, we are concerned about your safety and continued satisfaction with our products.

#### IMPORTANT

- Your vehicle is involved in GM safety recall N202325410.
- Schedule an appointment with your GM dealer.
- This service will be performed for you at **no charge**.

# Why is your vehicle being recalled?

These vehicles may experience loss of power steering assist at startup or while driving due to the potential for a poor electrical connection within the steering gear assembly. A poor electrical connection in the affected steering gear assemblies may be caused by corrosion of certain connectors within the assemblies, or by damage to these connectors that occurred during the supplier's manufacturing process. If loss of connection occurs, power steering assist is lost (i.e., the vehicle reverts to manual steer), a malfunction indicator light displays on the instrument panel and a chime sounds to inform the driver. If power steering assist is lost, steering control can still be maintained but would require an increased steering effort, particularly at lower speeds, increasing the risk of a crash.

#### What will we do?

Your GM dealer will replace the steering gear torque sensor cover assembly. This service will be performed for you at no charge. Because of service scheduling requirements, it is likely that your dealer will need your vehicle longer than the actual service correction time of approximately three hours.

# What should you do?

You should contact your GM dealer to arrange a service appointment as soon as possible.

# Did you already pay for this repair?

Even though you may have previously had repairs for this condition, you will still need to take your vehicle to your dealer for additional repairs. If you have already paid for repairs for the recall condition, please complete the enclosed reimbursement form and present it to your dealer with all required documents. Working with your dealer will expedite your request, however, if this is not convenient, you may mail the completed reimbursement form and all required documents to Reimbursement Department, PO Box 33170, Detroit, MI 48232-5170.

# Do you have questions?

If you have 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 (TTY)
Chevrolet	1-800-630-2438	1-800-833-2438
GMC	1-866-996-9463	1-800-462-8583
Puerto Rico – English	1-800-496-9992	
Puerto Rico – Español	1-800-496-9993	
Virgin Islands	1-800-496-9994	

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If after contacting your dealer and the Customer Assistance Center, you are still not satisfied we have done our best to remedy this condition without charge and within a reasonable time, you may wish to write the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE, Washington, DC 20590, or call the toll-free Vehicle Safety Hotline at 1.888.327.4236 (TTY 1.800.424.9153), or go to http://www.safercar.gov. The National Highway Traffic Safety Administration Campaign ID Number for this recall is 21V213.

Federal regulation requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

Regina A. Carto Vice President Global Product Safety and Systems

Enclosure

GM Recall: N202325410