



Recall Bulletin

PRODUCT SAFETY RECALL

SUBJECT: Loss of Steering Assist
MODELS: 2015 Chevrolet Colorado
2015 GMC Canyon

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 January 27, 2016. 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.

CONDITION

General Motors has decided that a defect which relates to motor vehicle safety exists in **certain** 2015 Chevrolet Colorado and GMC Canyon vehicles. These vehicles may experience loss of power steering assist at startup, or while driving, due to a poor electrical connection within the torque-sensor harness connector. If power steering assist is lost or reduced, steering control can still be maintained, but would require an increased steering effort, particularly at lower speeds, which presents a greater risk of a crash.

CORRECTION

Dealers are to replace the steering gear torque sensor cover assembly.

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. 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 recall 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 recall.

PART INFORMATION

Parts required to complete this recall 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.

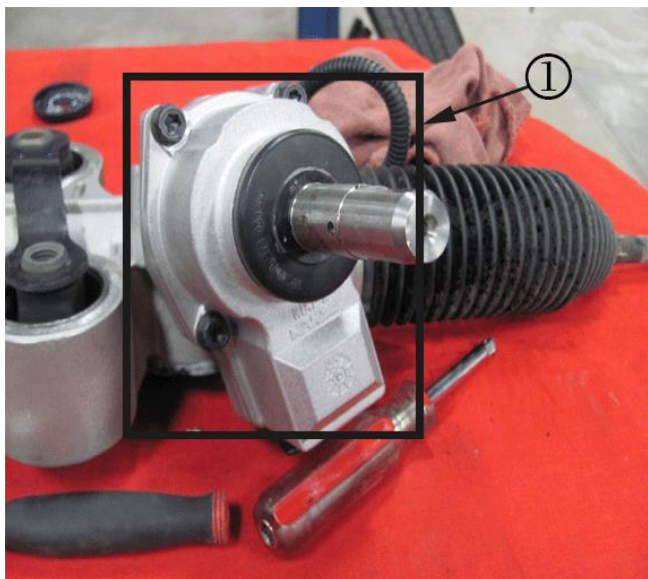
Part Number	Description	Quantity/Vehicle
84057230	Torque Sensor Cover Kit	1
19333360 (US) 19333361 (CA)	PTFE Grease – High Viscosity (1.75 oz)	1 tub fixes approx. 10 vehicles
12377900 (US) 10953529 (CA)	Dielectric Synthetic Grease (2 oz)	1 tub fixes approx. 12 vehicles

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 Resources and then Video on Demand. Once the portal opens, scroll down to 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 / Recall 15595.

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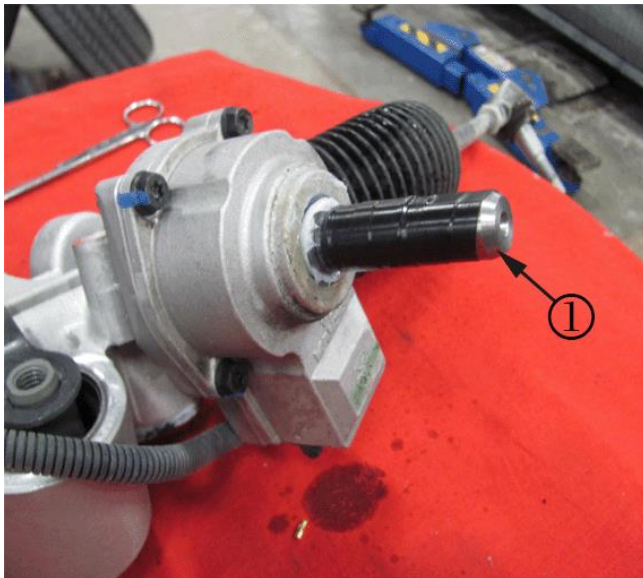
2. Clean the steering gear torque sensor cover area (1) with soap and water using a brush to remove excess dirt.

3. Use compressed air to dry the steering gear cover area.



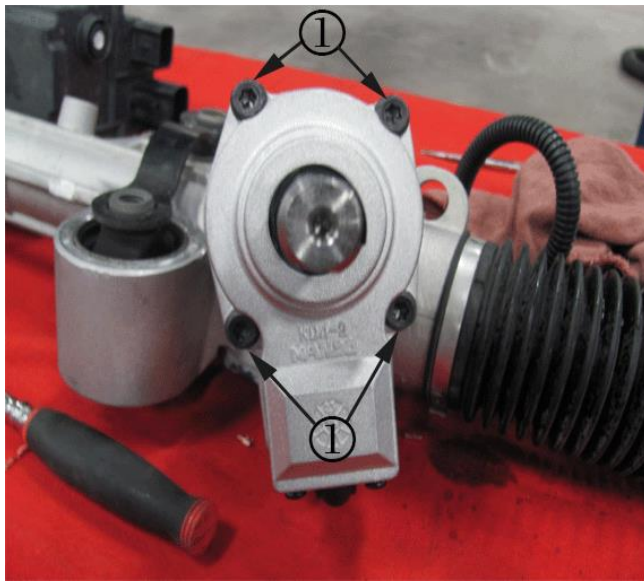
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4. Remove the dust seal (1).



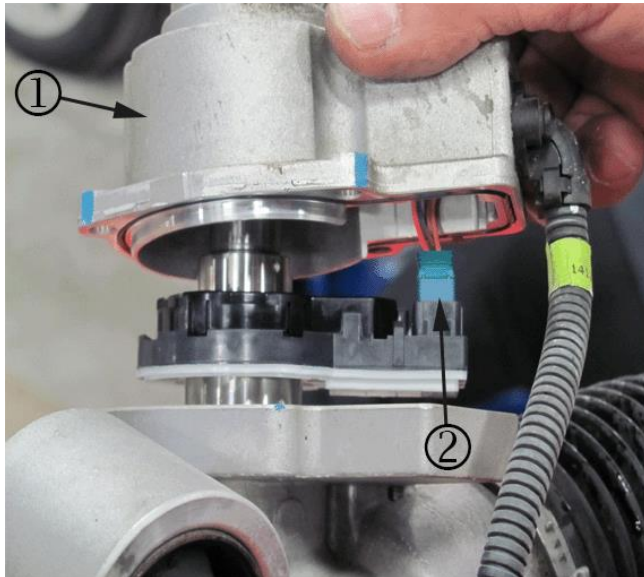
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5. Wrap the pinion shaft (1) with a single layer of electrical tape to protect the cover seal and bearing during installation of the new cover.



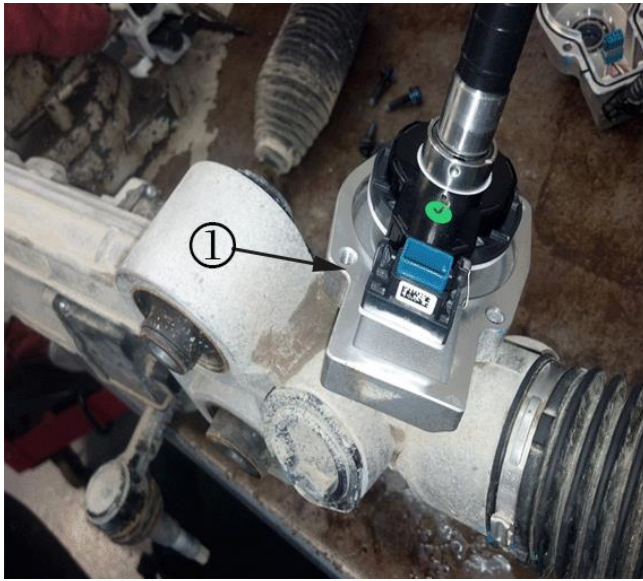
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6. Remove the torque sensor cover bolts (1).



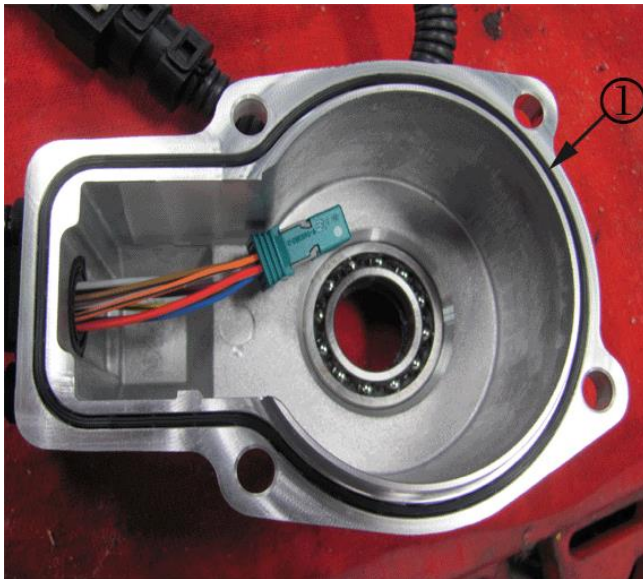
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7. Lift the torque sensor cover (1) up high enough to access the connector (2).
8. Disconnect the torque sensor connector.



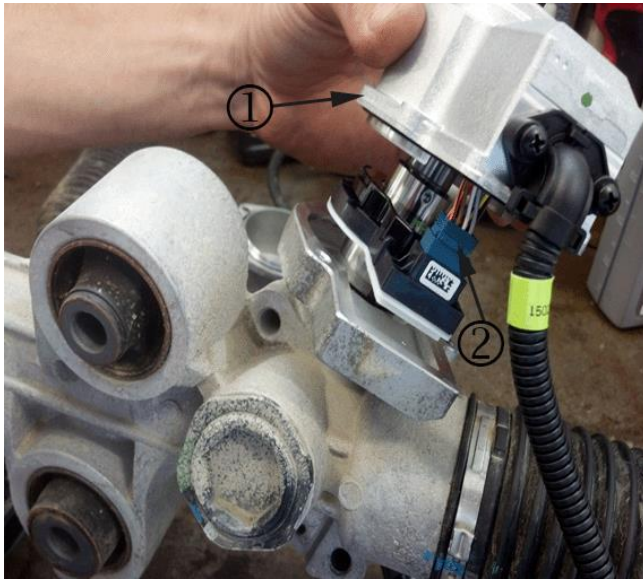
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9. Using a new, uncontaminated shop towel, wipe the pinion shaft and sealing surface (1) in a direction away from the shaft and sealing surface.
10. Using compressed air, carefully blow any particles or lint out of the torque sensor cavity and off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



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



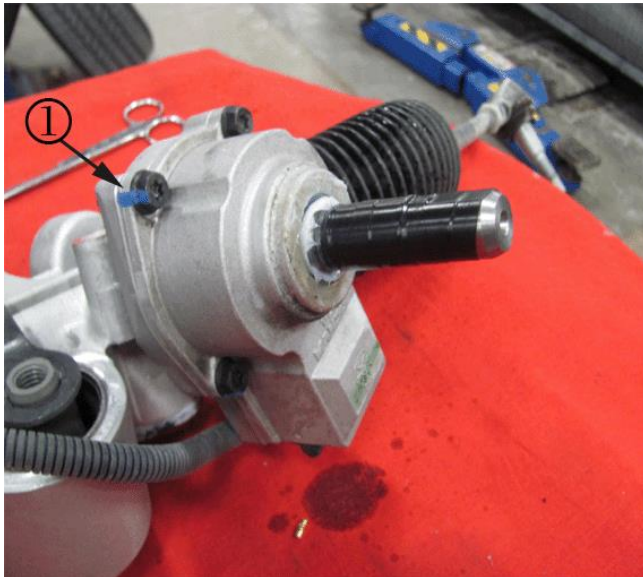
12. Lower the new torque sensor cover (1) over the pinion shaft and connect the lead connector (2) to the torque sensor. Ensure the connector (2) is fully seated into the torque sensor.
13. Avoiding contact with the pinion shaft, lower the cover over the torque sensor and seat the cover to the sealing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



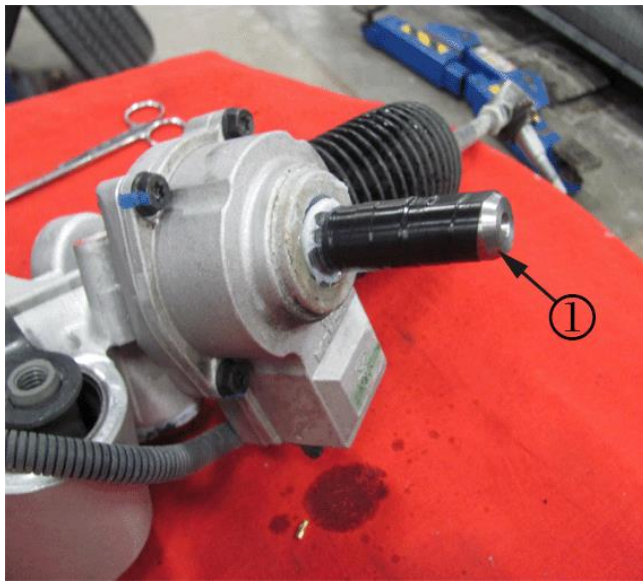
14. Install and hand tighten the torque sensor cover bolts (1).



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.



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



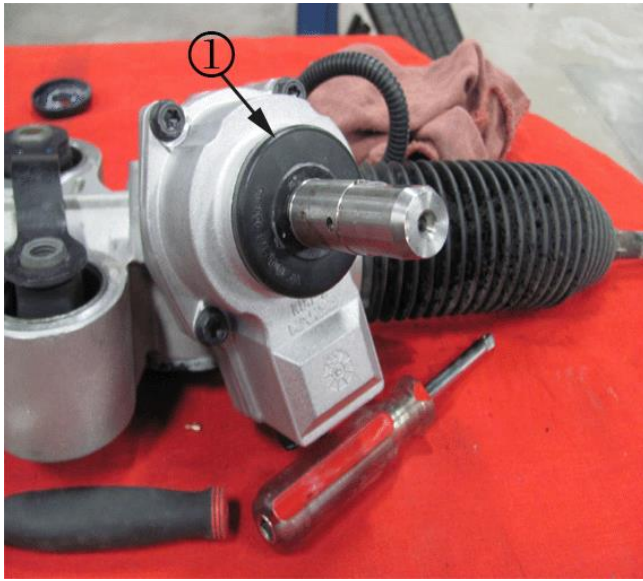
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18. Remove the tape from the pinion shaft (1).



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



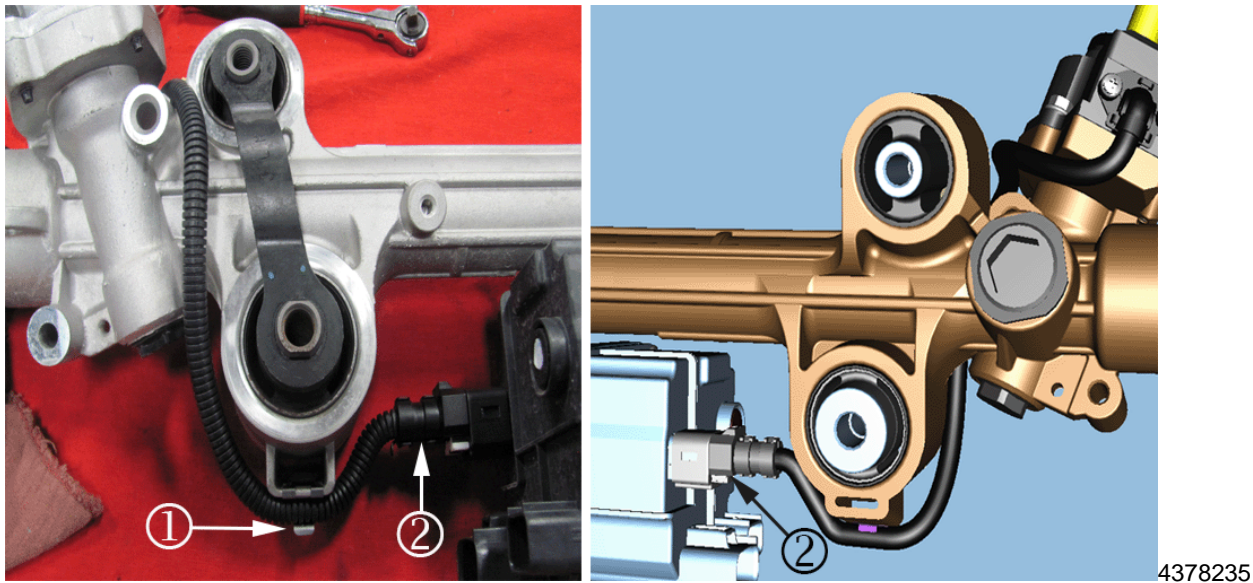
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20. Install the new dust seal over the pinion shaft and fully seat it on the torque sensor cover. Wipe off any excess grease.



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



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.
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 on 4WD vehicles only. 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.

FLOOR PLAN REIMBURSEMENT

Dealers in possession of vehicles included in the Stop Delivery are eligible for reimbursement of floor plan expense upon completion of this recall. This reimbursement is limited to the number of days from the Stop Delivery message to receipt of the recall parts and/or repair procedures. Floor plan reimbursement beyond these dates is not allowed. The amount of reimbursement should be charged as a net amount expense using the recall labor operation provided.

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. All transactions should be submitted as a ZFAT transaction type, unless noted otherwise.

Note: *To avoid having to "H" route the floor plan transaction for approval, it must be submitted prior to the repair transaction.*

Labor Code	Description	Labor Time	Net Item
9102008	Torque Sensor Cover Replacement Add: Wheel Alignment - Steering Wheel Angle and/or Front Toe Adjustment (4WD Only)	2.0 0.7	*
9102022	Floor Plan Reimbursement	N/A	**

* The amount identified in "Net Item" should represent the actual sum total of the current GMCC&A dealer net price for PTFE Grease – High Viscosity and Dielectric Synthetic Grease needed to perform the required repairs, not to exceed \$2.82 USD, \$3.55 CAD, plus applicable Mark-Up or Landed Cost (for Export).

** The amount identified in "Net Item" should represent the product of the vehicle's average daily interest rate (see table below) multiplied by the actual number of days the vehicle was in dealer inventory and not available for sale. This reimbursement is limited to the number of days from the date of the stop delivery message (January 27, 2016) to the date the repair is completed and the vehicle is ready for sale (not to exceed 18 days):

Vehicle	US Reimbursement Amount	Canadian Reimbursement Amount
2015 Chevrolet Colorado	\$ 3.94	\$4.63
2015 GMC Canyon	\$ 4.18	\$4.46

CUSTOMER NOTIFICATION – For US and Canada

General Motors will notify customers of this recall on their vehicle in the near future.

DEALER RECALL RESPONSIBILITY – For US

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 RECALL RESPONSIBILITY – All

All new, used, GM Certified Used, courtesy transportation vehicles, dealer shuttle vehicles, etc. in dealers' possession and subject to this recall must be held and inspected/repaired per the service procedure of this bulletin before 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.

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. 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 recall enters your vehicle inventory, or is in your dealership for service in the future, you must take the steps necessary to be sure the recall correction has been made before selling or releasing the vehicle.

