



Recall Bulletin



PRODUCT SAFETY RECALL

SUBJECT: Steering Assembly Bolt Not Properly Torqued

MODELS: 2014 Buick Regal
2014 Cadillac XTS
2014 Chevrolet Camaro, Impala

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 (include a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied.

All involved vehicles that are in dealer inventory (new or used) must be held and not delivered to customers, dealer traded, released to auction, 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** 2014 model year Buick Regal, Cadillac XTS, and Chevrolet Camaro and Impala vehicles. Some of these vehicles may have fasteners that are not torqued to specifications at the interface of the intermediate shaft and the steering gear and/or at the lower control arm to the lower ball joint. If these fasteners are improperly torqued, they could back out and the vehicle could exhibit loss of steering and lead to a crash.

CORRECTION

Dealers are to inspect the joints and verify the torque on the fastener.

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 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

No parts are required.

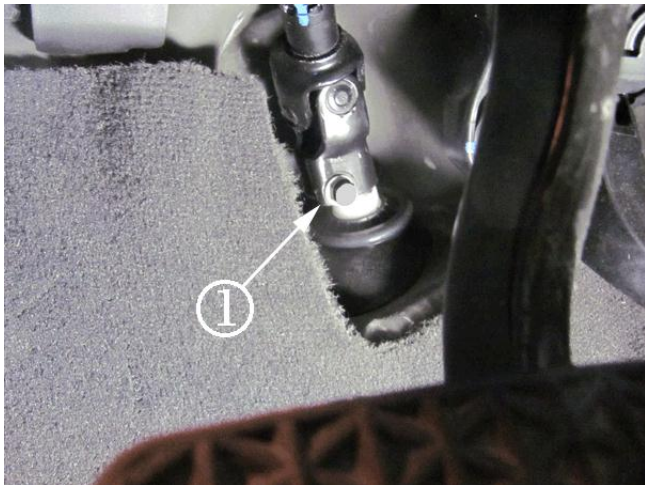
SERVICE PROCEDURE

Note: All vehicles involved in this field action bulletin will require an I-shaft bolt inspection. Refer to *I-shaft Bolt Inspection* in this bulletin to inspect the I-shaft bolt. The following three vehicles, however, will require additional inspections.

- 2G1175S36E9159731 (1 additional inspection)
- 2G61M5S37E9158011 (3 additional inspections)
- 2GEXG6U37E9161659 (1 additional inspection)

I-Shaft Bolt Inspection – All Chevrolet Impala, Buick Regal and Cadillac XTS Vehicles

1. Move the front driver seat to the full rearward position.

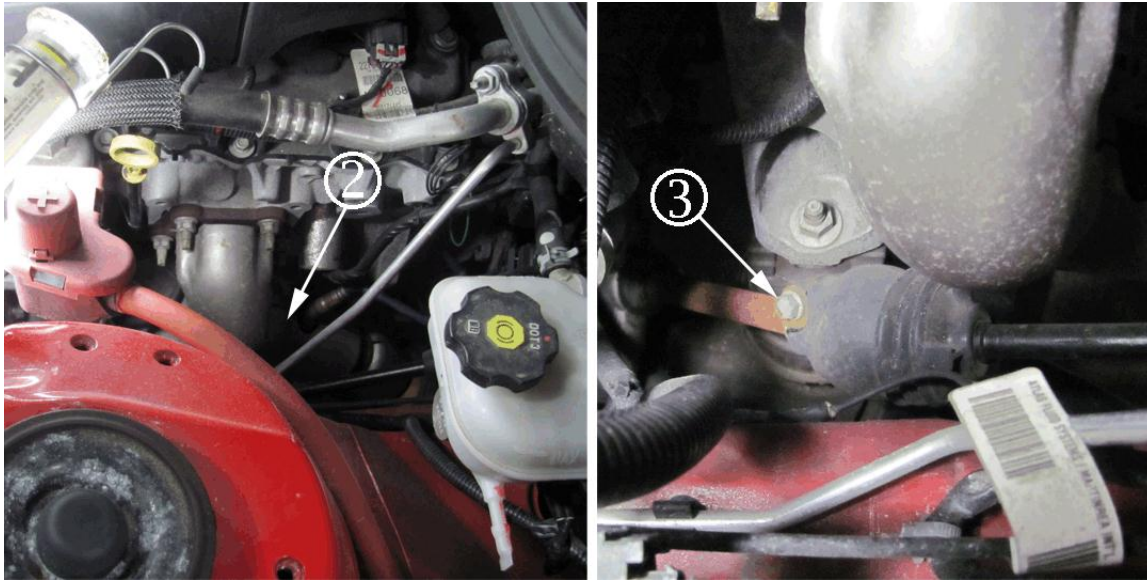


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2. Locate the intermediate steering shaft lower bolt (1).
3. Verify the intermediate steering shaft lower bolt (1) is tightened to a minimum of 26 Nm (19 lb-ft).
 - If the bolt is tightened to 26 Nm (19 lb-ft), no further action is required.
 - If the bolt is NOT tightened to a minimum of 26 Nm (19 lb-ft), tighten the bolt to 34 Nm (25 lb-ft).

I-Shaft Bolt Inspection – Chevrolet Camaro

1. Open the hood.

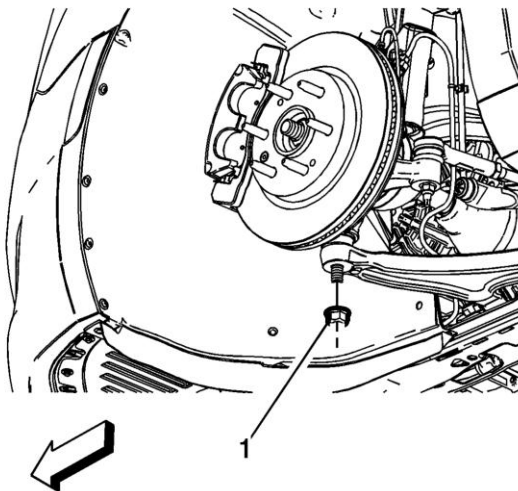


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2. Locate (2) the steering gear pinion bolt (3). The steering gear pinion bolt (3) is located on the driver side of the engine compartment. Refer to photograph.
3. Verify the steering gear pinion bolt (3) is tightened to a minimum of 45 Nm (33 lb-ft).
 - If the bolt is tightened to a minimum 45 Nm (33 lb-ft), no further action is required.
 - If the bolt is NOT tightened to a minimum of 45 Nm (33 lb-ft), tighten the bolt to 50 Nm (37 lb ft).

Cadillac XTS Left Side Steering Knuckle Nut Inspection GNA Suspension: VIN 2GEXG6U37E9161659

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



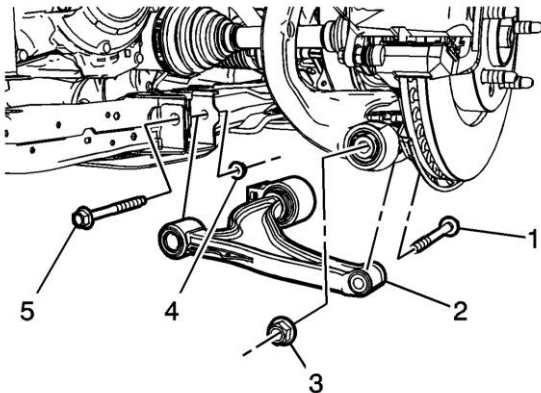
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2. Locate the steering knuckle nut (1). This nut connects the lower control arm and ball joint. Refer to photograph.

3. Inspect the steering knuckle nut (1) using a calibrated torque wrench. Move the nut not more than 5 degrees and note the static torque reading. Verify the steering knuckle nut is tightened to a minimum of 130 Nm (96 lb-ft).
 - If the nut is tightened to a minimum 130 Nm (96 lb-ft), proceed to step 4. No further action is required.
 - If the nut is NOT tightened to a minimum of 130 Nm (96 lb-ft), tighten the nut to 145 Nm (107 lb-ft). Proceed to step 4 after tightening the nut.
4. Lower the vehicle. Refer to *Lifting and Jacking the Vehicle* in SI.

Cadillac XTS Left Side Steering Knuckle Nut Inspection GNB Suspension: VIN 2G61M5S37E9158011

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

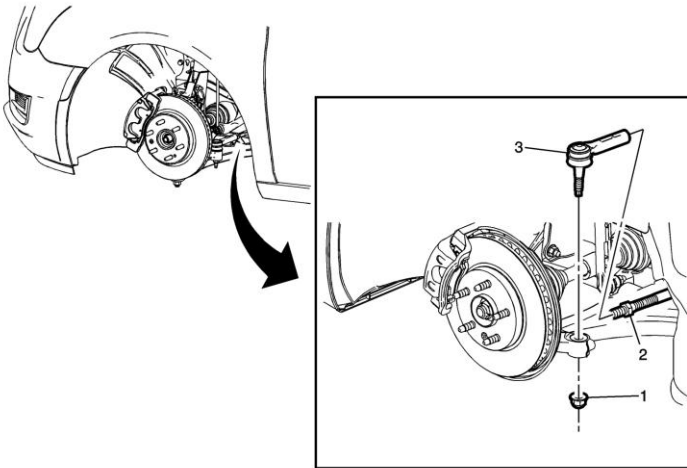


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2. Locate the steering knuckle nut (3). This nut connects the lower control arm and ball joint. Refer to photograph.
3. Inspect the steering knuckle nut (3) using a calibrated torque wrench. Move the nut not more than 5 degrees and note the static torque reading. Verify the steering knuckle nut is tightened to a minimum of 120 Nm (89 lb-ft).
 - If the nut is tightened to a minimum 120 Nm (89 lb-ft), proceed to step 4. No further action is required.
 - If the nut is NOT tightened to a minimum of 120 Nm (89 lb-ft), tighten the bolt to 115 Nm (85 lb ft) + 120 degrees. Proceed to *Cadillac XTS Left Side Tie Rod Nut Inspection: VIN 2G61M5S37E9158011* in this bulletin, after tightening the nut.

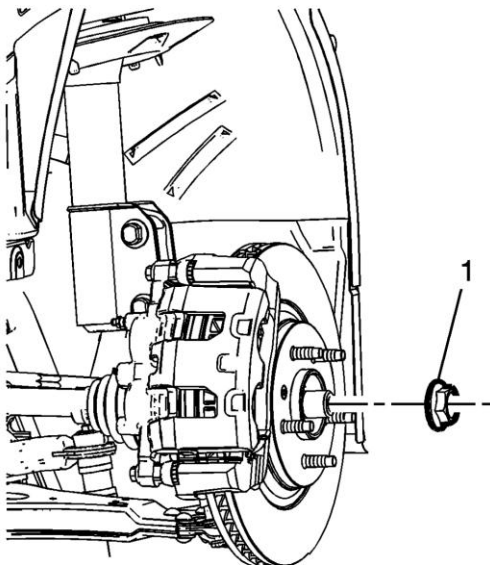
Cadillac XTS Left Side Tie Rod Nut Inspection: VIN 2G61M5S37E9158011

1. Remove the front tire and wheel assembly. Refer to *Tire and Wheel Removal and Installation in SI*.



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2. Locate the tie rod nut (1).
3. Inspect the tie rod nut (1) using a calibrated torque wrench. Move the nut not more than 5 degrees and note the static torque reading. Verify the tie rod nut is tightened to a minimum of 36 Nm (27 lb-ft).
 - If the nut is tightened to a minimum 36 Nm (27 lb-ft), proceed to steps 5 and 6. No further action is required.
 - If the nut is NOT tightened to a minimum of 36 Nm (27 lb-ft), tighten the bolt to 35 Nm (26 lb -ft) + 30 degrees. Proceed to *Cadillac XTS Front Wheel Hub Nut: VIN 2G61M5S37E9158011* in this bulletin after tightening the nut.

Cadillac XTS Front Wheel Hub Nut: VIN 2G61M5S37E9158011

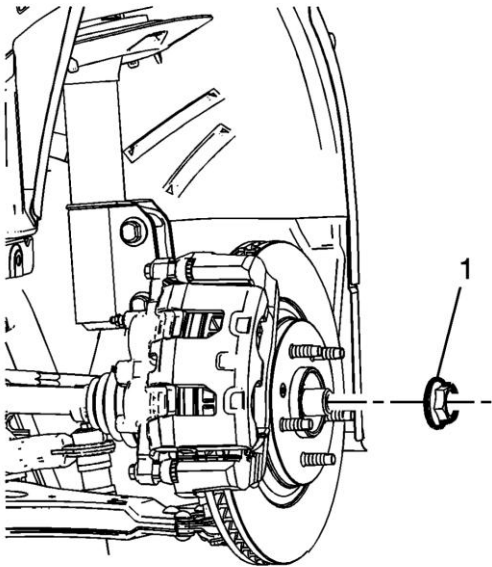
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1. Locate the front wheel hub nut (1).

2. Inspect the front wheel hub nut (1) using a calibrated torque wrench. Move the nut not more than 5 degrees and note the static torque reading. Verify the front wheel hub nut is tightened to a minimum of 225 Nm (166 lb-ft).
 - If the nut is tightened to a minimum 225 Nm (166 lb-ft), proceed to steps 5 and 6. No further action is required.
 - If the nut is NOT tightened to a minimum of 225 Nm (166 lb-ft), tighten the bolt to 225 Nm (166 lb-ft). Proceed to steps 5 and 6 after tightening the nut.
3. Install the front tire and wheel assembly. Refer to *Tire and Wheel Removal and Installation* in SI.
4. Lower the vehicle. Refer to *Lifting and Jacking the Vehicle* in SI.

Chevrolet Impala Front Wheel Hub Nut: VIN 2G1175S36E9159731

1. Raise and support the vehicle. Refer to *Lifting and Jacking the Vehicle* in SI.
2. Remove the front tire and wheel assembly. Refer to *Tire and Wheel Removal and Installation* in SI.



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3. Locate the front wheel hub nut (1).
4. Inspect the front wheel hub nut (1) using a calibrated torque wrench. Move the nut not more than 5 degrees and note the static torque reading. Verify the front wheel hub nut is tightened to a minimum of 225 Nm (166 lb-ft).
 - If the nut is tightened to a minimum 225 Nm (166 lb-ft), proceed to steps 5 and 6. No further action is required.
 - If the nut is NOT tightened to a minimum of 225 Nm (166 lb-ft), tighten the nut to 225 Nm (166 lb-ft). Proceed to steps 5 and 6 after tightening the nut.
5. Install the front tire and wheel assembly. Refer to *Tire and Wheel Removal and Installation* in SI.
6. Lower the vehicle. Refer to *Lifting and Jacking the Vehicle* in SI.

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.

Labor Code	Description	Labor Time
9100691	Inspect I-Shaft Bolt Torque – No Further Action Req'd (N/A for VIN 2G1175S36E9159731, 2G61M5S37E9158011 and 2GEXG6U37E9161659)	0.2
9100692	Inspect & Tighten I-Shaft Bolt Torque (N/A for VIN 2G1175S36E9159731, 2G61M5S37E9158011 and 2GEXG6U37E9161659)	0.3
9100693	VIN 2G61M5S37E9158011- Inspect I-Shaft Bolt, Steering Knuckle Nut, Tie Rod Nut & Wheel Nut Torque– No Further Action Req'd	0.9
9100694	VIN 2G61M5S37E9158011- Inspect & Tighten I-Shaft Bolt, Steering Knuckle Nut, Tie Rod Nut, &/or Wheel Nut	1.0-1.3*
9100695	VIN 2G1175S36E9159731 - Inspect I-Shaft Bolt & Wheel Hub Nut – No Further Action Req'd	0.6
9100696	VIN 2G1175S36E9159731 – Inspect & Tighten I-Shaft Bolt &/or Wheel Hub Nut	0.7-0.8*
9100697	VIN 2GEXG6U37E9161659 – Inspect I-Shaft Bolt & Steering Knuckle Torque – No Further Action Req'd	0.5
9100698	VIN 2GEXG6U37E9161659 – Inspect & Tighten I-Shaft Bolt &/or Steering Knuckle Torque	0.6-0.7*

* Labor time submitted should be the inspection time plus 0.1 hours for each joint that required tightening.

CUSTOMER NOTIFICATION – For US and Canada

General Motors will notify customers of this recall on their vehicle.

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.

DEALER RECALL RESPONSIBILITY – For US and Export (US 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 RECALL RESPONSIBILITY – All

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

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.

