

# SAFETY RECALL BULLETIN

November 2015  
15R-2 (FL-691)  
NHTSA #15V-613  
Transport Canada #15-485

Subject: **Detroit Axle Steering Arm Capscrew Inspection**

## **Issue Involved**

Daimler Trucks North America LLC has decided that a defect that relates to motor vehicle safety exists on specific Freightliner 108SD, 114SD, 122SD, Business Class M2, Cascadia model vehicles and Columbia and Coronado gliders manufactured June 17, 2015, through October 1, 2015, with certain Detroit Axles.

On certain vehicles, the steering arm capscrews that join the steering arm to the knuckle may not have been torqued to specification. Loose steering arm capscrews may result in a loss of steering, increasing the risk of a crash.

Steering arm capscrews will be inspected for correct torque and repaired if necessary.

Correct steering arm capscrew torque became effective with front axles manufactured in Saltillo, Mexico, after September 7, 2015. Any model year 2015 Model 2, Model 3, and Model 5 front axle manufactured in Saltillo, Mexico, between June 29, 2015, and September 7, 2015, will need the steering arm capscrew bolt torque inspected. Note that some axles built within this time frame may already have been inspected and/or repaired, and therefore excluded from this Safety Recall.

Inspection for proper steering arm capscrew torque will prevent performance issues that may result in customer dissatisfaction.

There are approximately 11,621 vehicles affected by this Safety Recall.

## **Vehicles Involved**

A list of vehicles located in your area of responsibility that require this correction is attached.

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The table below gives descriptive information to help identify the affected units:

Front Axle Model Series	Front Axle Model Number	Model Year	Inclusive Front Axle Mfg. Date (From) (To)	Descriptive Information
Model 2	DA-F-8.0-2	2015	June 29, 2015 to September 7, 2015	Manufactured in Saltillo, Mexico
Model 3	DA-F-8.0-3 DA-F-10.0-3 DA-F-12.0-3 DA-F-12.5-3 DA-F-13.0-3 DA-F-13.3-3 DA-F-14.7-3	2015	June 29, 2015 to September 7, 2015	Manufactured in Saltillo, Mexico
Model 5	DA-F-16.0-5 DA-F-18.0-5 DA-F-20.0-5	2015	June 29, 2015 to September 7, 2015	Manufactured in Saltillo, Mexico

### Owner Notification

Detroit Diesel will notify owners of equipment incorporating axles identified with this Safety Recall. A copy of the owner letter that will be used by Detroit Diesel is enclosed with this Safety Recall bulletin.

### Dealer Campaign Responsibility

Detroit Diesel authorized Detroit Axle repair facilities are to service all axles subject to this Safety Recall. Safety Recall 15R2 is to be performed at no charge to owners on all affected axles under the provisions of this Safety Recall.

Please use the appropriate steps, noted below, for indicating that Safety Recall 15R2 has been completed.

### Daimler Trucks North America Vehicles

- Check the base label (**Form WAR259**) to see if **Safety Recall 15R2** has been completed. The base label is usually located on the passenger-side door about 30 cm (12 inches) below the door latch. If **Safety Recall 15R2** has been completed, no further work is needed. If base label is not located on the passenger-side door, please affix label (**Form WAR259**) 30 cm (12 inches) from the door latch.

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- Upon completion of **Safety Recall 15R2**, clean a spot on the base label (**Form WAR259**), write the Safety Recall Number (**15R2**) on a blank, black completion sticker (**Form WAR261**), and attach it to the base label.

### Ordering Information

1. If you do not have the appropriate Form or Labels (DDC\_WAR 259, DDC\_WAR 260, DDC\_WAR 261), they can be ordered from **RR Donnelly** by going to **www.DDCSN.com** and clicking on Literature / Ordering Literature.
2. You can also fax in your order to **(800) 773-1430 – ATTN: Jacqueline**
3. Contact **RR Donnelly** at **(800) 280-4520**.

### Parts Information

**There are no parts required for this Safety Recall unless an under-torque capscrew is discovered.** If the inspection results require capscrew replacement, or capscrew, steering arm and steering knuckle replacement, the required parts for this repair are shown below in Table 1. Note that Detroit expects a low percentage of vehicles to need any kind of parts replacement.

Model Series	Part Number	Quantity	Description
Model 2 and Model 3	MBA 308676020025	2	Capscrew – M20 x 1.5 x 80mm
Model 5	MBA 308676024003	2	Capscrew – M24 x 2.0 x 90mm
All Models	Reference accessfreightliner.com and PartsPro		Steering Arm
All Models	Reference accessfreightliner.com and PartsPro		Steering Knuckle
All Models	PEX 27010 or locally available equivalent	1	Loctite 277 Red Threadlocker or equivalent

Table 1 – Parts Information

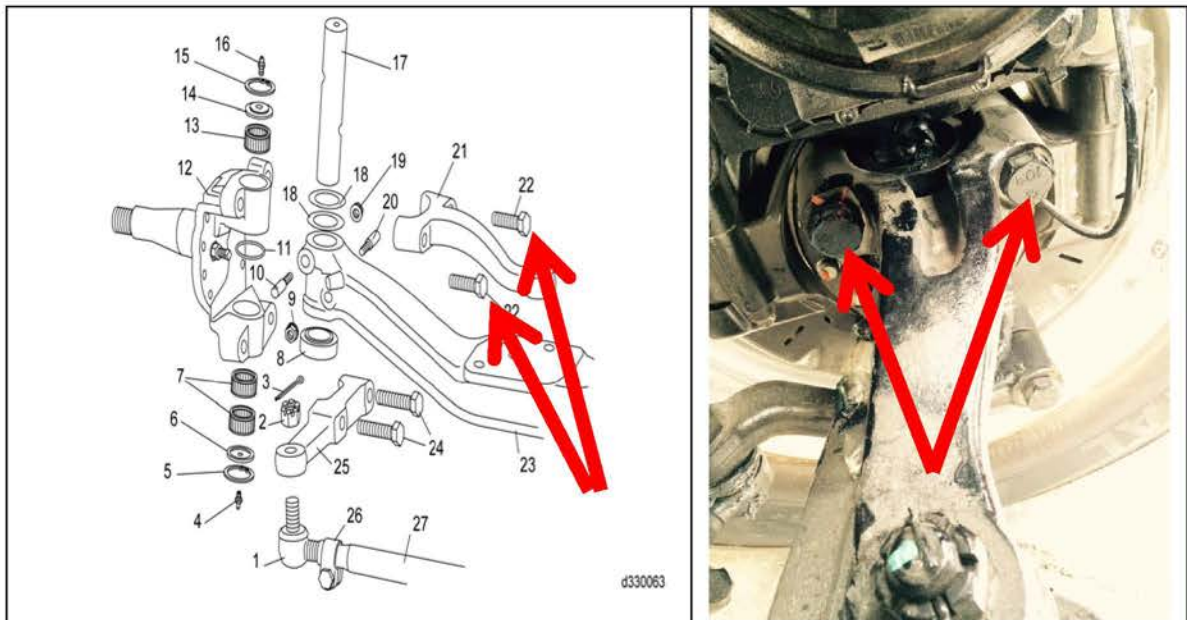
### Corrective Procedure

1. Park the vehicle in the designated repair area and turn the steering wheel all the way to the left to expose the steering arm on the driver's side of the vehicle.

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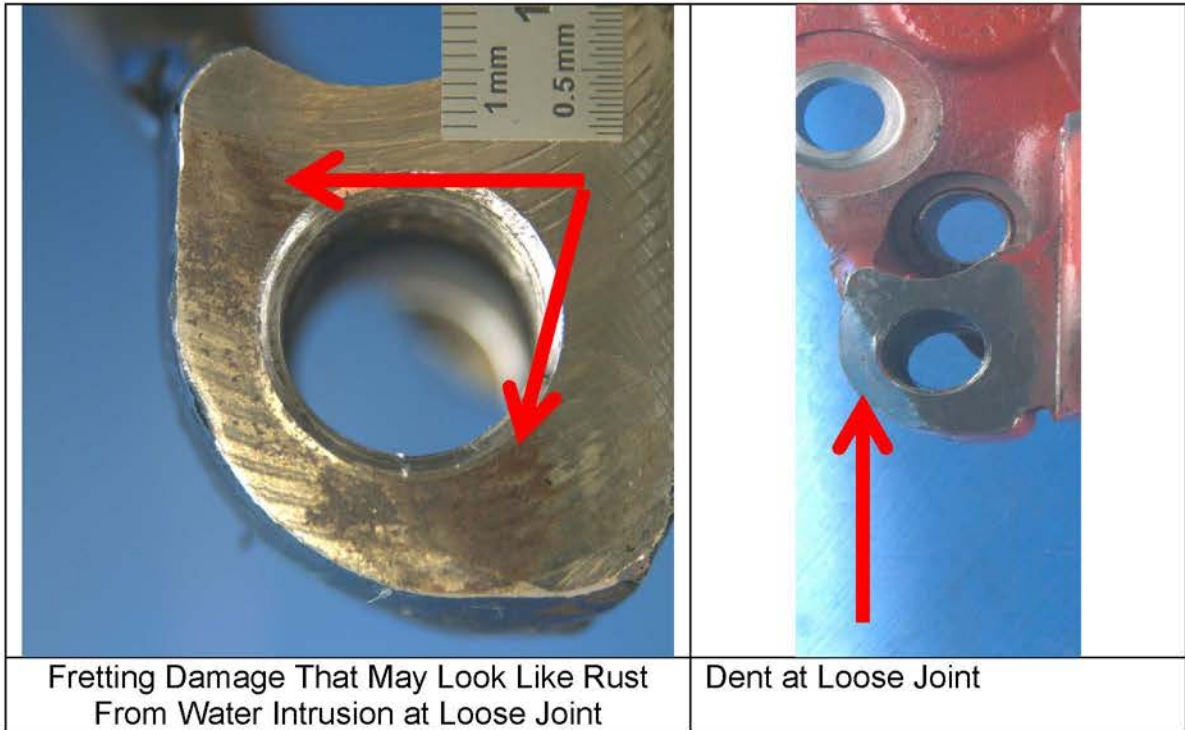
2. Apply the parking brake, turn off the ignition, chock the rear wheels, disconnect the batteries, and perform any other applicable safety steps.
3. Using a suitable torque wrench, check the torque on the two steering arm capscrews. See Figure 1.
  - a. For Model 2 and Model 3 axles with a M20 capscrew, correct torque is 425 lbf-ft (575 Nm).
  - b. For Model 5 axles with a M24 capscrew, correct torque is 664 lbf-ft (900 Nm).



**Figure 1 – Steering Arm Capscrew Location**

4. Are the capscrews at the correct torque?
  - a. If Yes, then no further work is needed.
  - b. If No, then proceed to step 5.
5. Remove the two steering arm capscrews, and remove the steering arm.  
**Reference** section “Dissassembly of the Steering Knuckle” in the Front Axles chapter of the *Detroit Axles Manual* (DDC-SVC-MAN-0141).

6. Inspect the joint surface between the steering arm and steering knuckle for signs of fretting, dents, or other damage from the loose capscrew(s). See Figure 2 for examples of damaged parts, and Figure 3 for an example of a new part.



**Figure 2 – Damaged Joint Surfaces**



**Figure 3 – New (Undamaged) Joint Surface**

7. Are the joint surfaces of either the steering arm or steering knuckle damaged?
  - a. If Yes, then proceed to step 8.
  - b. If No, then proceed to step 10.

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8. **Remove the steering arm and steering knuckle.** Reference section "Dissassembly of the Steering Knuckle" in the Front Axles chapter of the *Detroit Axles Manual* (DDC-SVC-MAN-0141).
9. **Install a new steering arm and new steering knuckle.** Reference section "Assembly of the Steering Knuckle" in the Front Axles chapter of the *Detroit Axles Manual* (DDC-SVC-MAN-0141).
10. **Install two new steering arm capscrews.** Reference section "Assembly of the Steering Knuckle" in the Front Axles chapter of the *Detroit Axles Manual* (DDC-SVC-MAN-0141).
11. Repairs are complete.

### Warranty Information

#### **NOTE**

**There are 3 labor codes listed below, use only 1 of these codes depending on the repair necessary. Also note that an additional SRT, 939-6010A, for Administration time .3 hour, will automatically be system added .**

**Be sure to file the claim to Detroit Diesel using the front axle serial number**

Claim Type:	04
Modification:	15R2
Fault Type:	ZZ
Primary Failed Part:	Model 2 and 3: MBA 308676020025 Model 5: MBA 308676024003
Labor Code:	R15R2A Capscrew Torque Inspection Only <b>(Use this operation if both capscrews are verified to have proper torque)</b>
Labor:	0.5 Hours (Note an additional SRT for 0.3 Hours Administration Time, SRT 939-6010A, will automatically be system added)
Labor Code:	R15R2B Capscrew Torque Inspection And Capscrew Replacement <b>(Use this operation if either capscrew is found to be under-torqued and the capscrews are removed and replaced and there is no steering arm or knuckle surface damage observed)</b>
Labor:	0.8 Hours (Note an additional SRT for 0.3 Hours Administration Time, SRT 939-6010A, will automatically be system added)
Parts Return:	NONE

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<b>Labor Code:</b>	<b>R15R2C Capscrew Torque Inspection, Capscrew Replacement, And Steering Arm/Steering Knuckle Replacement (Use this operation if either capscrew is found to be under-torqued and capscrews are removed and steering knuckle or steering arm surface damage is observed requiring capscrews and steering arm and knuckle replacement)</b>
<b>Labor:</b>	<b>3.7 Hours (Note an additional SRT for 0.3 Hours Administration Time, SRT 939-6010A, will automatically be system added)</b>
<b>Parts Return:</b>	<b>REQUIRED</b>

Please contact the Detroit™ Customer Support Center at 855-253-0427 or email [csc@daimler.com](mailto:csc@daimler.com) if you have any questions.

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**BULLETIN**