

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).

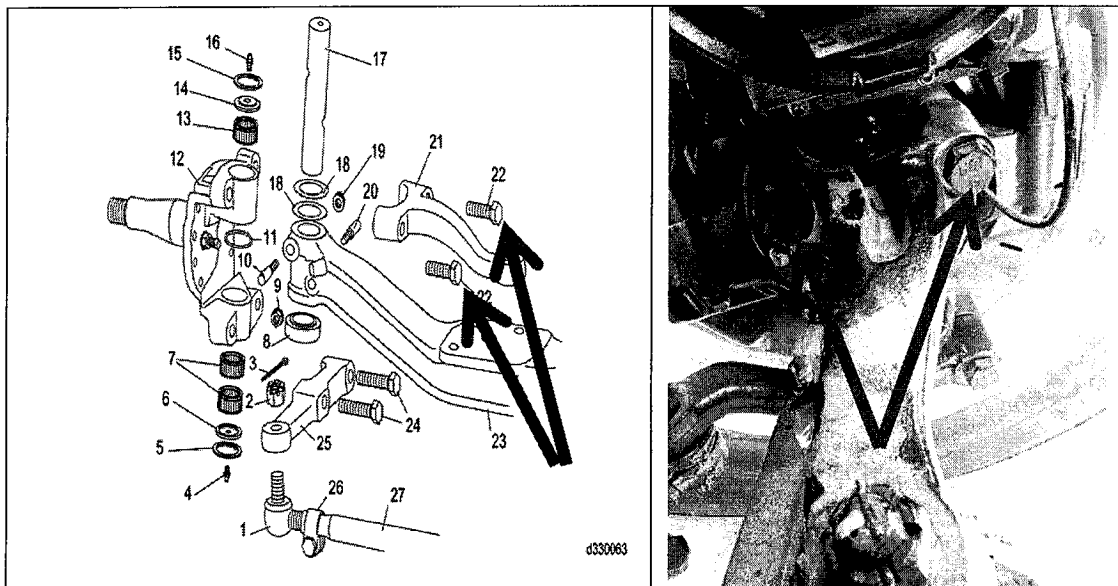


Figure 1 – Steering Arm Capscrew Location

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).

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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.

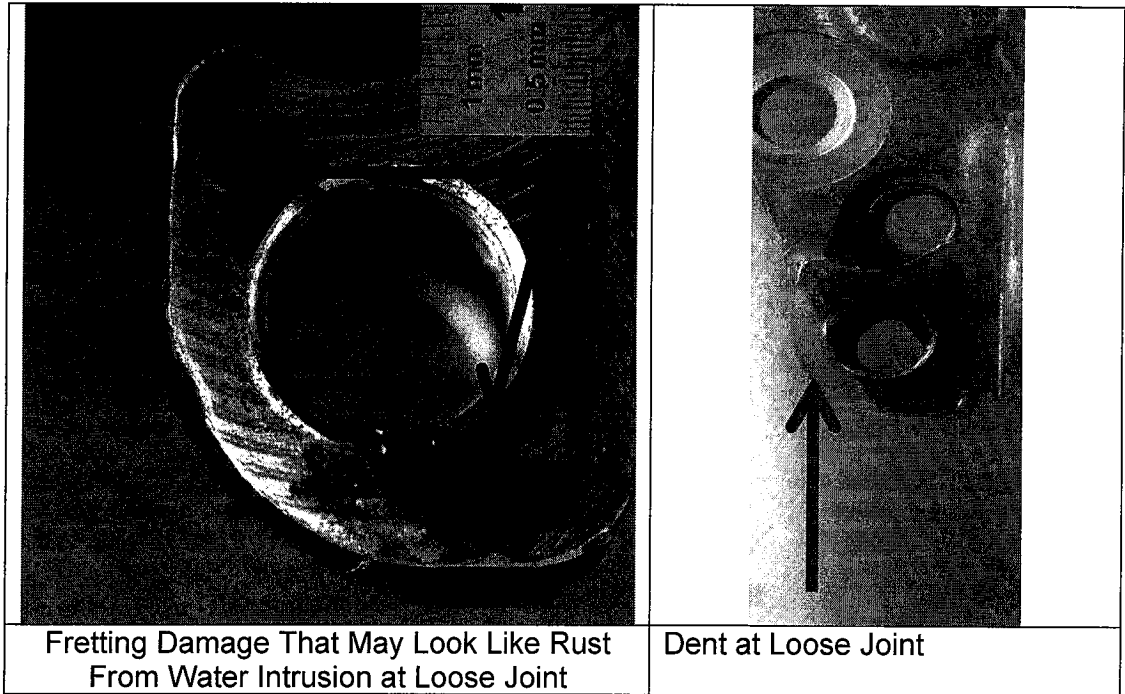


Figure 2 – Damaged Joint Surfaces

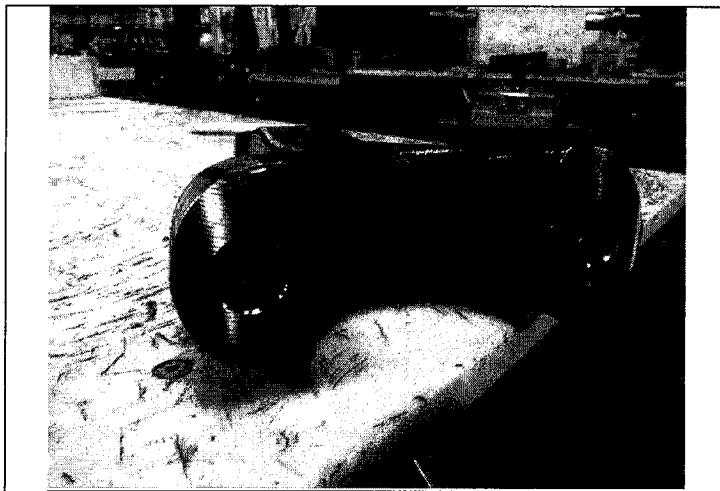


Figure 3 – New (Undamaged) Joint Surface

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 (Use this operation if both capscrews are verified to have proper torque)
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 (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)
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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Labor Code:	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)
Labor:	3.7 Hours (Note an additional SRT for 0.3 Hours Administration Time, SRT 939-6010A, will automatically be system added)
Parts Return:	REQUIRED

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

DETROIT DIESEL
13400 Outer Drive West
Detroit, Michigan 48239-4001

BULLETIN

SAFETY RECALL BULLETIN

November 2015
15R-3 (FL-691)
NHTSA #15V-613
Transport Canada #15-485

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

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.

Replacement of the steering arm capscrews will be required because a previous torque inspection has already been completed. Also, the joint between the steering arm and steering knuckle will need to be inspected for damage, and those parts replaced 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 capscrews replaced. Note that some axles built within this time frame may already have been inspected and/or repaired, and therefore excluded from this Safety Recall.

Replacement of the capscrews will prevent performance issues that may result in customer dissatisfaction.

There are approximately 733 vehicles affected by this Safety Recall.

Vehicles Involved

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

Safety Recall Bulletin 15R3

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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 15R3 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 15R3 has been completed.

Daimler Trucks North America Vehicles

- Check the base label (**Form WAR259**) to see if **Safety Recall 15R3** 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 15R3** 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 15R3**, clean a spot on the base label (**Form WAR259**), write the Safety Recall Number (**15R3**) 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

Replacement of the capscrews is required. If the inspection results require steering arm and steering knuckle replacement, the required parts for this repair are shown below in Table 1.

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

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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.
2. Apply the parking brake, turn off the ignition, chock the rear wheels, disconnect the batteries, and perform any other applicable safety steps.
3. 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). See Figure 1.

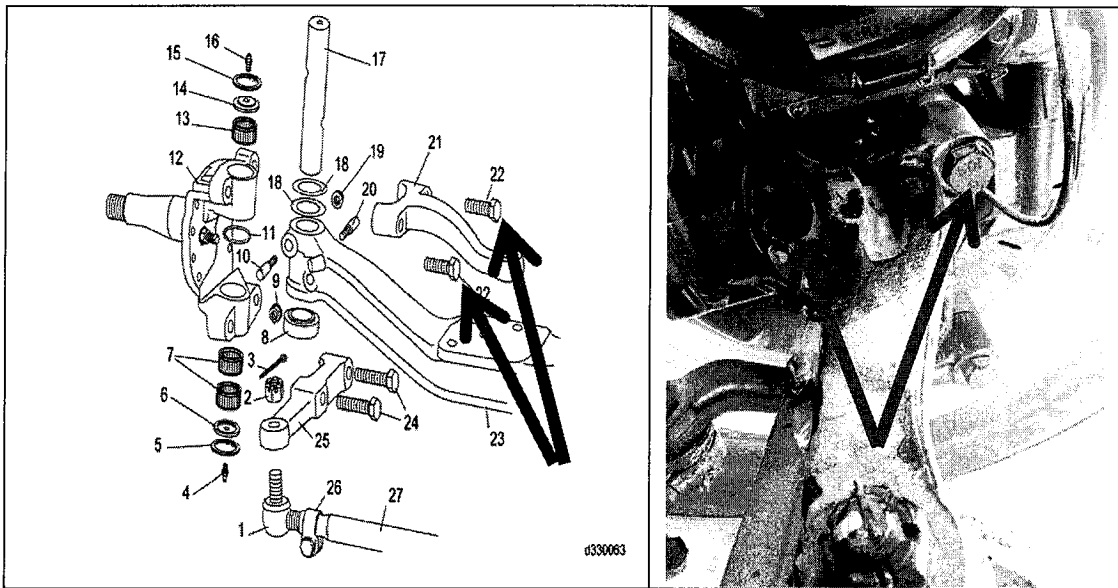


Figure 1 – Steering Arm Capscrew Location

4. 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.

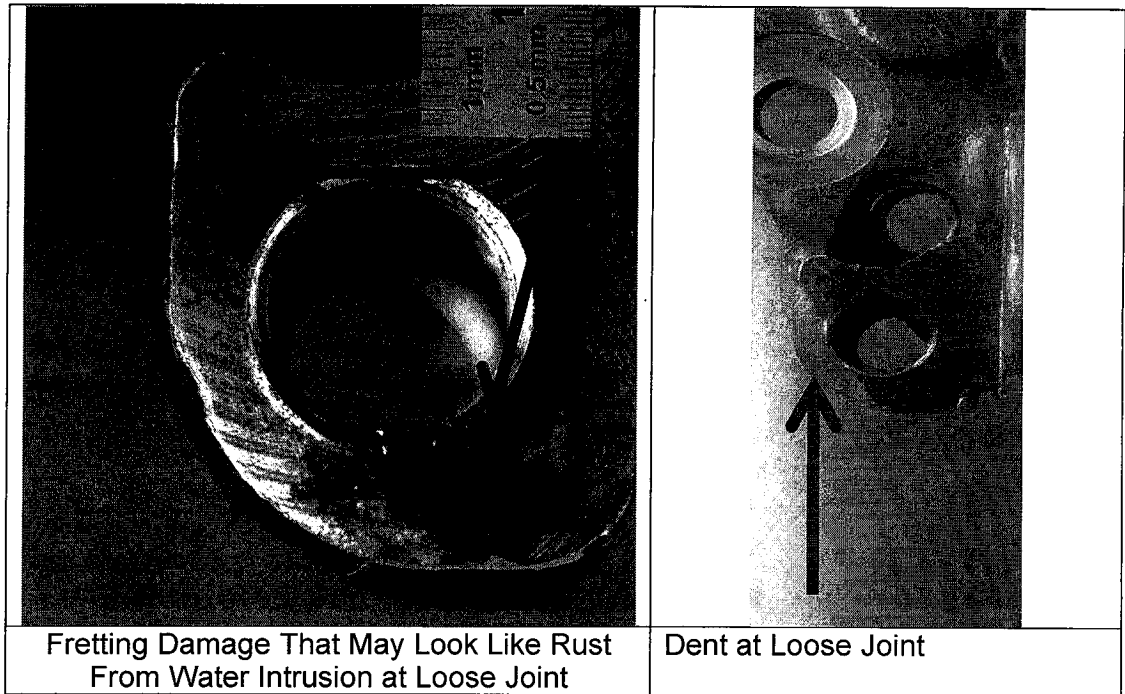


Figure 2 – Damaged Joint Surfaces



Figure 3 – New (Undamaged) Joint Surface

5. Are the joint surfaces of either the steering arm or steering knuckle damaged?
 - a. If Yes, then proceed to step 6.
 - b. If No, then proceed to step 8.

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6. **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).
7. **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).
8. **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).
9. Repairs are complete.

Warranty Information

NOTE

There are two labor codes listed below, use only one 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:	15R3
Fault Type:	ZZ
Primary Failed Part:	Model 2 and 3: MBA 308676020025 Model 5: MBA 308676024003
Labor Code:	R15R3A Capscrew Replacement (Use this operation if the capscrews are removed and replaced and there is no steering arm or knuckle surface damage observed)
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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Claim Type:	04
Modification:	15R3
Fault Type:	ZZ
Primary Failed Part:	Model 2 and 3: MBA 308676020025 Model 5: MBA 308676024003
Labor Code:	R15R3B Capscrew Replacement And Steering Arm/Steering Knuckle Replacement (Use this operation if the capscrews are removed and replaced and the steering knuckle or steering arm surface damage is observed requiring capscrew and steering arm and knuckle replacement)
Labor:	3.7 Hours (Note an additional SRT for 0.3 Hours Administration Time, SRT 939-6010A, will automatically be system added)
Parts Return:	REQUIRED

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

DETROIT DIESEL
13400 Outer Drive West
Detroit, Michigan 48239-4001

BULLETIN

Daimler Trucks North America LLC

Daimler Trucks North America LLC

Detroit Diesel Corporation
13400 Outer Drive, West
Detroit, MI 48239-4001
313.592.5000 Telephone

November 2015
15R2 and 15R3 (FL691)
NHTSA #15V-613

IMPORTANT SAFETY RECALL **This notice applies to your vehicle(s)**

Subject: Detroit Axle Steering Arm Capscrews

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

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 capscrews that join the steering arm to the knuckle may not have been torqued to specification. Loose capscrews may result in a loss of steering, increasing the risk of a crash – **15R2 applies to these vehicles.**
- On certain vehicles, the capscrews that join the steering arm to the knuckle were not torqued to specification. Loose capscrews may result in a loss of steering, increasing the risk of a crash - **15R3 applies to these vehicles.**

Your dealer will know the specific work instruction that applies to your vehicle.

Capscrews will be inspected for correct torque and repaired if necessary.

Please contact an authorized Detroit Diesel Authorized Repair Facility to arrange to have the Recall performed and to ensure that parts are available at the dealership. To locate an authorized dealer, search online at www.detroitdiesel.com/locations/default.aspx. The Recall will take approximately one and a half hours and will be performed at no charge to you.

You may be liable for any progressive damage that results from your failure to complete the Recall within a reasonable time after receiving notification.

IMPORTANT: Upon completion of Safety Recall 15R2 or 15R3 check the base label which is located on the passenger side door, approximately 12 inches (30 cm) below the door latch, to ensure that a label has been affixed to your vehicle referencing **15R2 or 15R3.**

If you do not own the vehicle that corresponds to the identification number(s) which appears on the Recall Notification, please return the notification to the Warranty Campaigns Department with any information you can furnish that will assist us in locating the present owner. If you have leased this vehicle, Federal law requires that you forward this notice to the lessee within 10 days. If you are a subsequent stage manufacturer, Federal law requires that you forward this notice to your distributors and retail outlets within five working days.

If you have paid to have this recall condition corrected prior to this notice, you may be eligible to receive reimbursement. Requests for reimbursement may include parts and labor. Reimbursement may be limited to the amount the repair would have cost if completed by a Detroit Authorized Repair Facility.

The following documentation must be presented to your dealer for consideration for reimbursement. Please provide original or clear copies of all receipts, invoices, and repair orders that show:

- The name and address of the person who paid for the repair.
- The Vehicle Identification Number (VIN) of the vehicle that was repaired.
- What problem occurred, what repair was done, when the repair was done.
- Who repaired the vehicle.
- The total cost of the repair expense that is being claimed.
- Proof of payment for the repair (such as the front and back of a cancelled check or a credit card receipt).

Reimbursement will be made by check from your Detroit Diesel dealer. Please speak with your Detroit Diesel authorized dealer concerning this matter.

If you have questions about this Recall, please contact the **Detroit Diesel Customer Support Center**, 13400 Outer Drive West, Detroit, MI 48239, or call **(800) 445-1980 (Eastern Standard Time)**. **Detroit Diesel's Customer Support Center is open 24 Hours / 7 Days a Week**. If you are not able to have the defect remedied without charge and within a reasonable time, you may wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; or call the Vehicle Safety Hotline at (888) 327-4236 (TTY: 800-424-9153); or to <http://www.safercar.gov>.

We regret any inconvenience this action may cause but feel certain you understand our interest in motor vehicle safety.

DETROIT DIESEL WARRANTY CAMPAIGNS DEPARTMENT
Enclosure

Daimler Trucks North America LLC

Daimler Trucks North America LLC

Detroit Diesel Corporation
13400 Outer Drive, West
Detroit, MI 48239-4001
313.592.5000 Telephone

November 2015
15R2 and 15R3 (FL691)
Transport Canada #15-485

Subject: Detroit Axle Steering Arm Capscrews

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

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 capscrews that join the steering arm to the knuckle may not have been torqued to specification. Loose capscrews may result in a loss of steering, increasing the risk of a crash – **15R2 applies to these vehicles.**
- On certain vehicles, the capscrews that join the steering arm to the knuckle were not torqued to specification. Loose capscrews may result in a loss of steering, increasing the risk of a crash - **15R3 applies to these vehicles.**

Your dealer will know the specific work instruction that applies to your vehicle.

Capscrews will be inspected for correct torque and repaired if necessary.

Please contact an authorized Detroit Diesel Authorized Repair Facility to arrange to have the Recall performed and to ensure that parts are available at the dealership. To locate an authorized dealer, search online at www.detroitdiesel.com/locations/default.aspx. The Recall will take approximately one and a half hours and will be performed at no charge to you.

You may be liable for any progressive damage that results from your failure to complete the Recall within a reasonable time after receiving notification.

IMPORTANT: Upon completion of Safety Recall 15R2 or 15R3 check the base label which is located on the passenger side door, approximately 12 inches (30 cm) below the door latch, to ensure that a label has been affixed to your vehicle referencing **15R2 or 15R3.**

If you do not own the vehicle that corresponds to the identification number(s) which appears on the Recall Notification, please return the notification to the Warranty Campaigns Department with any information you can furnish that will assist us in locating the present owner. If you have leased this vehicle, Federal law requires that you forward this notice to the lessee within 10 days. If you are a subsequent stage manufacturer, Federal law requires that you forward this notice to your distributors and retail outlets within five working days.

If you have questions about this Recall, please contact the **Detroit Diesel Customer Support Center**, 13400 Outer Drive West, Detroit, MI 48239, or call **(800) 445-1980 (Eastern Standard Time)**. **Detroit Diesel's Customer Support Center is open 24 Hours / 7 Days a Week.**

We regret any inconvenience this action may cause but feel certain you understand our interest in motor vehicle safety.

DETROIT DIESEL WARRANTY CAMPAIGNS DEPARTMENT
Enclosure