

December 2021

FL888 (D21R7)

NHSTA #21V-369 (Non School)

NHTSA #21V-370 (School Bus)

Transport Canada #2021-304 (Non School)

Transport Canada #2021-325 (School Bus)

**Subject: Tie Rod Clamp (Lock Nut) Over-Crimped
Tie Rod End Clamp Bolts**

Models Affected: 2, 3 & 5 DETROIT™ Front Steer Axles

General Information

Daimler Trucks North America LLC, on behalf of its DETROIT™ Powertrain Division, is initiating Recall Campaign D21R7 to replace the two tie rod end clamp pinch bolts on some model 2, 3 and 5 front steer axles built between December 15, 2020 and April 14, 2021.

Replacement parts from your facing Parts Distribution Center may now be ordered. Refer to “Table 1” for the applicable part or kit number. If our records show that your dealership has ordered any vehicle(s) involved in campaign D21R7, a list of the customers and vehicle identification numbers will be available on DTNAConnect. Please refer to this list when ordering parts for this campaign.

There are approximately 10,095 units affected by Recall Campaign - D21R7.

Travel Time and Mileage

Due to the complexity of this safety-related repair and the tools required, this Campaign does not qualify for travel time and mileage reimbursement. The repairs for this campaign need to be completed at an Authorized DTNA Service Facility.

Work Instructions

Please refer to the attached work instructions. **Prior to performing the recall campaign, check the vehicle for a completion sticker (Form WAR260).**

December 2021

FL888 (D21R7)

NHSTA #21V-369 (Non School)

NHTSA #21V-370 (School Bus)

Transport Canada #2021-304 (Non School)

Transport Canada #2021-325 (School Bus)

Replacement Parts

Table 1 – Replacement Parts for D21R7

Campaign Group	NEW Recall Only Kit Number	Quantity Required
A	25-FL888-001	1
B	25-FL888-002	1
C	25-FL888-003	1
D	25-FL888-004	1
E	25-FL888-005	1
F	25-FL888-006	1
G	25-FL888-007	1
H	25-FL888-008	1
I	25-FL888-009	1
J	25-FL888-010	1
K	25-FL888-011	1
L	25-FL888-012	1
Nut and Bolt Kit (Only used for trucks with less than 5,000 miles)	25-FL888-000	1

Labor Allowance

Table 2 – Labor Allowance for D21R7

Procedure	Time Allowed (hours)	SRT Number	Corrective Action
D21R7			
TIE ROD CLAMP BOLT, R/R, (FL888)	2.0 - 2.2	996-R038A	12-Repair Recall/Campaign
TIE ROD CLAMP AND TIE ROD ASSEMBLY, R/R, (FL888)	3.9 – 4.3	996-R038B	12-Repair Recall/Campaign
TIE ROD ASSEMBLY, R/R, (FL888)	2.0 – 2.1	996-R038C	12-Repair Recall/Campaign

December 2021

FL888 (D21R7)

NHSTA #21V-369 (Non School)

NHTSA #21V-370 (School Bus)

Transport Canada #2021-304 (Non School)

Transport Canada #2021-325 (School Bus)

Claim Reimbursement

You will be reimbursed for your parts, labor, and handling (landed cost for Export Distributors) by submitting your claim through the Warranty system within 30 days of completing this recall. Please reference the following information in OWL.

Claim Type	Recall Campaign
Campaign	D21R7
Component Code	015-004-045
Cause Code	A1 - Campaign
Primary Failed Part	MBA 6803307903
Procedure A¹	
Use ONLY one of the following labor operations.	
Labor Number	996-R038A
Labor Hours	2.0 – 2.2 Hours TIE ROD CLAMP BOLT, R/R, (FL888)
Part Number	Refer to Replacement Parts list and Campaign Group.
Parts Return	SCRAP
Procedure B¹	
Labor Number	996-R038B
Labor Hours	3.9 – 4.3 Hours TIE ROD CLAMP AND TIE ROD ASSEMBLY, R/R, (FL888)
Part Number	Refer to Replacement Parts list and Campaign Group.
Parts Return	SCRAP
Procedure C¹	
Labor Number	996-R038C
Labor Hours	2.0 – 2.1 Hours TIE ROD ASSEMBLY, R/R, (FL888)
Part Number	Refer to Replacement Parts list and Campaign Group.
Parts Return	SCRAP
¹ Administrative time (SRT 939-6010A) for 0.3 hours is automatically added to the claim.	

U.S. and Canadian dealers should contact the Warranty Campaigns Department via Web inquiry at DTNACconnect.com/WSC, if they have any questions or need additional information.

Daimler Trucks North America LLC

December 2021
FL888 (D21R7)
NHSTA #21V-369 (Non School)
NHTSA #21V-370 (School Bus)
Transport Canada #2021-304 (Non School)
Transport Canada #2021-325 (School Bus)

IMPORTANT SAFETY RECALL

Subject: Tie Rod Clamp (Lock Nut) Over-Crimped Tie Rod End Clamp Bolts Models Affected: 2, 3 & 5 DETROIT™ Front Steer Axles This notice applies to your vehicle

This notice is sent to you in accordance with the requirements the *Motor Vehicle Safety Act*.

Daimler Trucks North America LLC, on behalf of its DETROIT™ Powertrain Division, has decided that a defect, which relates to motor vehicle safety, exists on certain DETROIT™ Model 2, 3 and 5 steer axles manufactured between Dec 15, 2020 through Apr 14, 2021. DTNA is initiating Recall Campaign D21R7 to replace the tie rod assemblies.

The tie rod clamp may be loose due to the supplied lock nuts being over-crimped. This can cause thread galling of the bolt and nut during installation. When galling occurs, it is possible that assembly torque may be achieved but the clamp is still loose. The tie rod clamp being loose could lead to the threaded tie rod ends becoming loose and eventual steering loss if the rod end pulls out of the tie rod, or the tube is broken due to vibration of the loose joint, creating the risk of crash.

Records indicate that your vehicle has one of the affected steering axles.

Please contact an Authorized DTNA Repair Facility and arrange to have the recall campaign performed. The labor time required to perform this replacement is **2.0 – 4.3 hours**. To locate an authorized facility, search online at <https://demanddetroit.com/find-a-dealer>. This service will be completed for you at no additional cost by a DTNA repair facility under the provisions of this notice. You may be liable for any progressive damage that results from your failure to complete the Recall within a reasonable time after receiving notification.

If you no longer own the vehicle that corresponds to the identification number(s) 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.

You must make an appointment with the repair facility, at least two weeks in advance of the actual repair, so the repair facility can stock the replacement part(s) needed to complete this recall campaign. Failure to provide advance notification to the repair facility may result in a delayed repair.

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 an Authorized DTNA 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 repaired vehicle

- What problem occurred, what repair was done, and the date of the repair
- Who repaired the vehicle
- The total cost of the claimed repair expense
- 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 DTNA dealer. Please speak with your authorized DTNA dealer concerning this matter.

If you have questions about this Recall, please contact the Warranty Campaigns Department at (800) 547-0712, 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, e-mail address DTNA.Warranty.Campaigns@Daimler.com. For other concerns, you may contact the Customer Assistance Center at (800) 385-4357. If you have a safety concern relating to this Recall, you may wish to contact Transport Canada – Motor Vehicle Safety at, 80 rue Noel, Gatineau, Quebec J8Z 0A1 or phone (800) 333-0510.

If your dealer fails or is unable to remedy this defect without charge, or within a reasonable amount of time, you may submit a written complaint to:

Administrator
National Highway Traffic Safety Administration
1200 New Jersey AVE SE
Washington, DC 20590

You may also call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY: 1-800-424-9153); or go 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 WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

December 2021

FL888 (D21R7)

NHSTA #21V-369 (Non School)

NHTSA #21V-370 (School Bus)

Transport Canada #2021-304 (Non School)

Transport Canada #2021-325 (School Bus)

Work Instructions

Subject: Tie Rod Clamp (Lock Nut) Over-Crimped Tie Rod End Clamp Bolts

Models Affected: 2, 3 & 5 DETROIT™ Front Steer Axles

Corrective Procedure

Tie Rod Inspection and Mileage Check

1. Check the base label (Form WAR259) for a completion sticker for FL888 (Form WAR260) indicating this work has been completed. For trucks, the base label is usually located on the passenger door about 12 inches (30 cm) below the door latch; for school buses, it is usually located above the driver's window; and for shuttle buses and step vans, it is usually located in the driver's area. If a sticker is present for FL888, no work is required. If there is no sticker present, proceed with the next step.
2. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.
3. Is the vehicle mileage less than 5000 miles?
YES → Go to 'Clamp - Locknut & Bolt Replacement.'
NO → Go to 'Tie Rod Assembly Replacement.'

Clamp – Locknut & Bolt Replacement

1. Remove the bumper. For instructions, refer to **Group 31** of the applicable workshop manual.
2. Remove and discard the tie rod clamp locknuts and bolts on both ends of the tie rod assembly.
3. Install New Locknuts and Bolts.
 - a. Install new bolts into each tie rod cross-tube clamp. **Lock-nut should face rear of vehicle.**

Fig. 4, bolt and locknut orientation

Left picture is left front of axle looking forward standing behind the axle.

Right picture is right front of the axle standing slightly behind the axle and looking up from underneath the axle.

- b. Ensure clamp locating rib remains centered over the tie rod cross-tube detents. See Fig 5. Failure to engage the clamp centering rib with tie rod cross-tube may result in a loose tie rod end despite reaching appropriate torque on the locknut/bolt assembly.

December 2021

FL888 (D21R7)

NHSTA #21V-369 (Non School)

NHTSA #21V-370 (School Bus)

Transport Canada #2021-304 (Non School)

Transport Canada #2021-325 (School Bus)

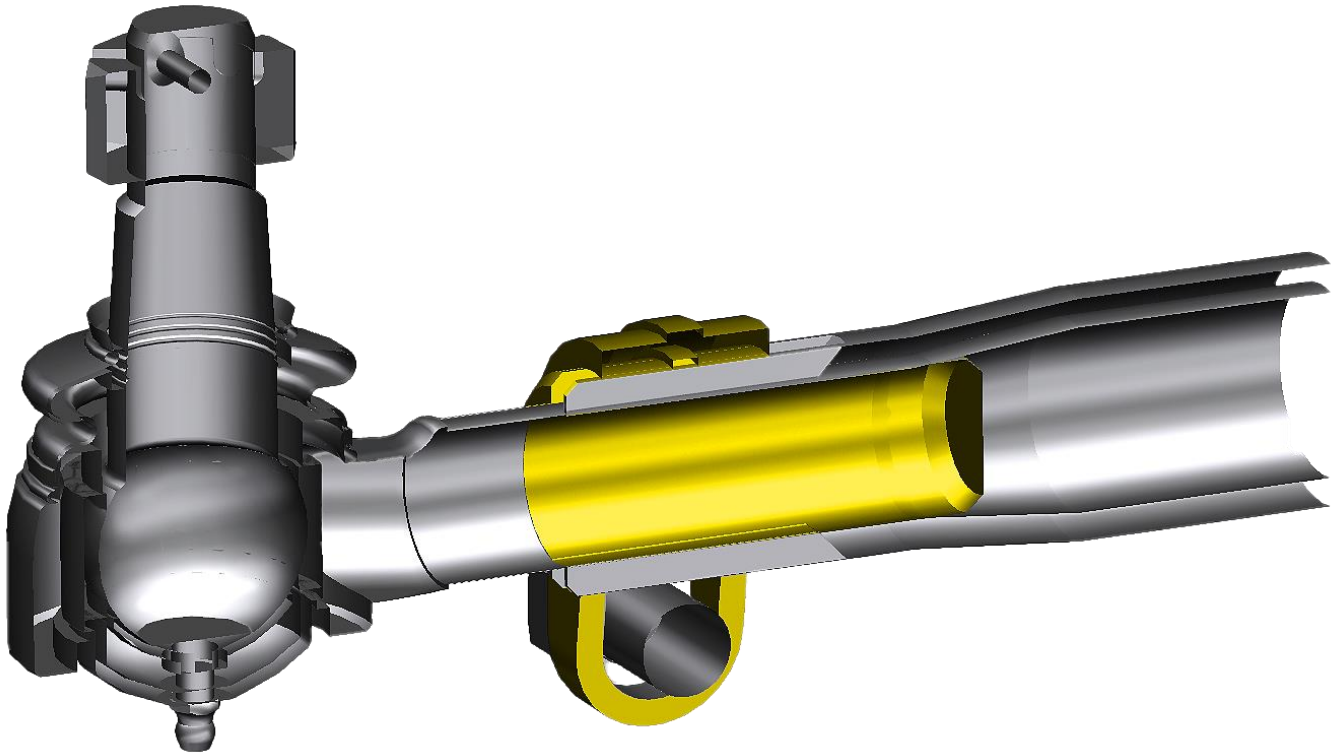


Fig. 5, Clamp rib should engage onto detents to align clamp position

December 2021

FL888 (D21R7)

NHSTA #21V-369 (Non School)

NHTSA #21V-370 (School Bus)

Transport Canada #2021-304 (Non School)

Transport Canada #2021-325 (School Bus)

- c. Threaded tie rod end should also extend into the tube beyond the cut/slot and clamp positioned like below. See Fig 6.

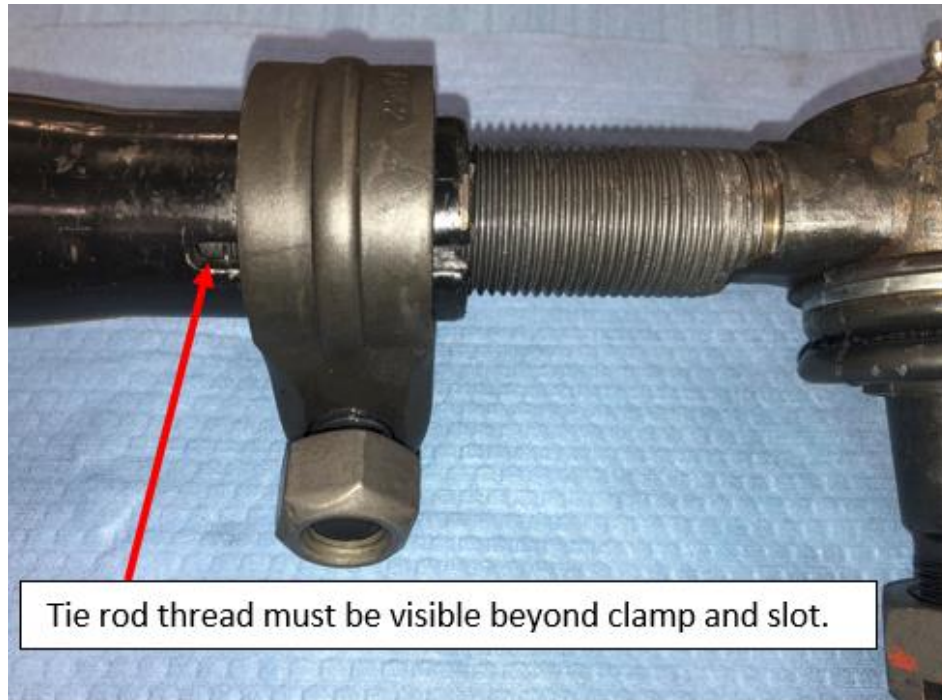


Fig. 6, Clamp Position and Tie Rod Thread Engagement

- d. Using a torque wrench on the nut and box wrench on the bolt, tighten the lock-nuts on both ends of the tie rod assembly. Tighten the lock-nut to 109 N·m (80 lb·ft).
4. Perform a full truck alignment. For instructions, refer to **Group 33** of the applicable workshop manual.
 5. Is the front wheel toe-in aligned per specifications?
YES → Go to the next step.
NO → Go to **'Tie Rod Assembly Replacement.'**
 6. Install the bumper. For instructions, refer to **Group 31** of the applicable workshop manual.
 7. See **Completion Stickers** for final step to certify work.

Tie Rod Assembly Replacement

1. If not already removed, remove the bumper. For instructions, refer to **Group 31** of the applicable workshop manual.
2. Remove the cotter pin from the tie rod end at both sides of the vehicle.
3. Remove the tie rod end castle nut at both sides of the vehicle.
4. Using a Tiger Tool tie rod end remover, or a similar, remove the tie rod end from the tie rod arm at the driver's side of the vehicle.

December 2021

FL888 (D21R7)

NHSTA #21V-369 (Non School)

NHTSA #21V-370 (School Bus)

Transport Canada #2021-304 (Non School)

Transport Canada #2021-325 (School Bus)

5. Using a Tiger Tool tie rod end remover, or a similar, remove the tie rod end from the tie rod arm at the passenger side of the vehicle.
6. Remove the old tie rod assembly from under the vehicle.
7. Remove the castle nut and plastic protective cover from both ends of the new tie rod assembly.
8. At one side of the vehicle, install the tie rod end into the spindle. Install a new castle nut and hand tighten the nut.
9. Adjust the tie rod until the other end of it can be installed into the spindle at the other end of the vehicle. Install the other tie rod end into the spindle. Install a new castle nut and hand tighten the nut.
10. Tighten the castle nuts 163 to 230 N·m (120 to 170 lb-ft). If the cotter pin hole in the tie rod end stud is not aligned with any of the castle nut slots, further turn the castle nut a maximum of one-sixth of a turn to align it.
11. Install a new cotter pin in the tie rod end stud and castle nut. Ensure the tangs are bent properly.
12. Perform a full truck alignment. For instructions, refer to **Group 33** of the applicable workshop manual.
13. Install the bumper. For instructions, refer to **Group 31** of the applicable workshop manual.
14. See **Completion Stickers** for final step to certify work.

Completion Stickers

- Upon completion of Recall Campaign **FL888 (D21R7)**, clean a spot on the base label (Form WAR259), write the Recall Campaign Number **FL888 (D21R7)** on a blank, completion sticker (Form WAR260), and attach the completion sticker to the base label.
- Label ordering info: DTNAConnect > Services and Reference > Publications & Warranty Supplies > Warranty