

FREIGHTLINER
CORPORATION
A DaimlerChrysler Company

RECEIVED

SEP 30 11 09 99

OFFICE
OF DEFECTS INVESTIGATION

DATE: September 30, 1999

Gary W. Rossow
Director
Government Technical Affairs

Freightliner Corporation
4747 N Channel Ave.
Portland, OR 97217
503.736.8682 Phone
503.736.8800 Fax
Gary.Rossow@Freightliner.com

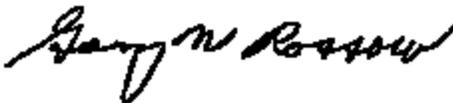
Office of Defects Investigation, Room 5326
National Highway Traffic Safety Administration
400 Seventh St., S.W.
Washington, D.C. 20590

Attn: Jonathan D. White

Subject: Information Report, NHTSA No. 99V-033.003

In accordance with Title 49, Part 573, Freightliner Corporation herewith submits an information report supplying supplemental information and copies of documents distributed to dealers and purchasers.

Sincerely,



Gary W. Rossow

Cc: Michael Mason, CAL-OSHA

Certified Mail No. Z 410 672 846

Section 573.5 Defect Information Report

Supplement No.: 1

Date: September 30, 1999

NHTSA No.: 99V-033.003

(c) (1) Manufacturer: FREIGHTLINER CORPORATION
P.O. BOX 3849
Portland, Oregon 97208
(503) 735-8078

(c) (3) Total number of vehicles potentially affected: (revise to read) 503

(c) (9) Communications sent to dealers and owners:

Owner notification began on 9/22/99 and was completed 9/22/99

(c) (11) Manufacturer's campaign number: FL233



ALLIANCE

A Division of **FREIGHTLINER**
CORPORATION

Recall Bulletin

Recall

September 1999
FL233AB U.S.
FC233AB Canada

ATTENTION:

Subject: FCCC Tie Rod Assemblies

MODELS AFFECTED: Freightliner specific MT35 and MT45 Custom Chassis Step Vans, manufactured between May 2, 1998 and November 11, 1998

GENERAL INFORMATION

It has determined that a defect which relates to motor vehicle safety exists on the above mentioned vehicles.

There are approximately 512 vehicles involved in this campaign.

In the affected assemblies the tie rod end can pull outboard and separate from the tie rod tube. This condition may occur as a result of improper thread engagement between the tie rod threads and the tie rod tube threads. Improper thread engagement and the possibility of insufficient clamp load on the tube clamp present a possible risk to motor vehicle safety. Separation of the tie rod tube could result in loss of steering control. This could, without prior warning, result in a possible vehicle crash.

The modification consists of replacing the tie rod assembly.

WORK INSTRUCTIONS

Please refer to the attached work instructions.

REPLACEMENT PARTS

Replacement kits are now available, and can be obtained by ordering the kit number(s) listed below from your facing Parts Distribution Center.

If your dealership has ordered any vehicle(s) involved in campaign number FL233AB/FC233AB, a computer listing of the customers and vehicle identification numbers will be enclosed. Please refer to this list when ordering parts for this recall.

Refer to Table 1 for replacement kit(s).

25-FL233-000 (Non-UPS vehicles)

Campaign Number	Kit Number	Part Description	Part Number	Qty. per Kit	Wholesale Price*
FL233A/FC233A	25-FL233-000	Tie Rod Assembly	SP 080TR109-2	1	\$201.23 U.S. \$353.96 CAN

* Please charge all Direct Warranty Customers the above listed price for the kit, as they are authorized to perform their own Recall Modifications.

Table 1

Refer to Table for replacement kit(s).



A Division of FREIGHTLINER CORPORATION

Recall

Recall Bulletin

September 1999
FL233AB U.S.
FC233AB Canada

25-FL233-001 (UPS vehicles)

Campaign Number	Kit Number	Part Description	Part Number	Qty. per Kit	Wholesale Price*
FL233B/FC233B	25-FL233-001	Tie Rod Assembly	SP 080TR109-3	1	\$201.23 U.S. \$353.96 CAN

* Please charge all Direct Warranty Customers the above listed price for the kit, as they are authorized to perform their own Recall Modifications.

Table 2

REMOVED PARTS

Please follow the Warranty Failed Parts Tracking shipping instructions for the disposition of all removed parts.

LABOR ALLOWANCE

Refer to Table 3 for labor allowance.

Campaign Number	Procedure	Time Allowed (hours)	SRT Code	Damage Code
FL233AB/FC233AB	Remove and replace tie rod assembly	1.5	996-0205A	000-Modifiedx

Table 3

IMPORTANT: When the modification has been completed, clean a spot on the passenger door jamb and attach a completion sticker (Form W-147), referencing the modification number and date the work was performed.

CLAIMS FOR CREDIT

You will be reimbursed for your parts, labor and handling by submitting your claim through the Alliance Warranty system. Please reference **FL233AB/FC233AB** in the FSDOC field and **25-FL233-000** in the primary failed part number field on each claim. All modification parts used must be listed on the claim as the kit number shown in the Replacement Part Tables.

NOTE: ServicePro®/Service Advisor® must be viewed prior to performing the modification to ensure the vehicle is involved and the modification has not been previously completed. Also, it is important to check for a completion sticker prior to performing the modification.

Freightliner provides the following methods to determine if a vehicle is involved in any campaigns:

1. On-line Service Advisor®
2. On-line ServicePro®
3. Contact the Alliance Recall Department at 1-800-547-0712, from 7:00 a.m. to 3:30 p.m., Pacific Time, or the Alliance Customer Assistance Center at 1-503-735-7877 after normal business hours, if you have any questions or need additional information.

To return excess kit inventory related to this campaign, please submit a Parts Authorization Request (PAR), to the Chicago PDC. All PAR requests must include the original purchase invoice number.

The letter notifying vehicle owners is included for your reference.

Please note that the National Traffic and Motor Vehicle Safety Act as amended (49 USC) requires the owner's vehicle(s) be corrected within a reasonable time after parts are available to you. The act states that failure to repair a vehicle within 60 days after tender for repair shall be prima facie evidence of an unreasonable time. However, circumstances of a particular situation may reduce the 60 day period. Failure to repair a vehicle within a reasonable time can result in either the obligation to (a) replace the vehicle with an identical or reasonably equivalent vehicle,



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without charge, or (b) refund the purchase price in full, less a reasonable allowance for depreciation. The act further prohibits dealers from selling a vehicle unless all outstanding recalls are performed. Also, any lessor is required to send a copy of the recall notification to the lessee.

Finally, the Act states that a remedy need not be provided without charge if the vehicle was bought by the first purchaser more than eight (8) calendar years before notice is given.

ALLIANCE WARRANTY OPERATIONS (RECALL)



A Division of **FREIGHTLINER**
CORPORATION

Recall

Recall Bulletin

September 1999
FL233AB U.S.
FC233AB Canada

Copy of Letter to Owner Subject: FCCC Tie Rod Assemblies

Dear Freightliner Custom Chassis Owner:

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

It has been determined that a defect, which relates to motor vehicle safety, exists on Freightliner specific MT35 and MT45 Custom Chassis Step Vans, manufactured between May 2, 1996 and November 11, 1998.

In the affected assemblies the tie rod end can pull outboard and separate from the tie rod tube. This condition may occur as a result of improper thread engagement between the tie rod threads and the tie rod tube threads. Improper thread engagement plus the possibility of insufficient clamp load on the tube clamp present a possible risk to motor vehicle safety. Separation of the tie rod tube could result in loss of steering control. This could, without prior warning, result in a possible vehicle crash.

The modification consists of replacing the tie rod assembly.

You should immediately contact your Freightliner dealer to arrange to have your vehicle(s) modified. When you contact your dealer, reference campaign number FL233AB/FC233AB. The kits are now available to Freightliner dealers to complete the modification. Please allow approximately 1.5 hours to have this modification completed. This modification will be performed at no charge to you.

IMPORTANT: When the modification has been completed on your vehicle, please ensure that a sticker has been affixed above the center of the driver's door, referencing FL233AB/FC233AB and the date the work was performed.

If you do not own the vehicle that corresponds to the identification number(s) which appear on the Recall Notification, please return the notification to the Alliance Recall Department with any information you can furnish that will assist us in locating the present owner. If you have leased this vehicle, please make sure this notification is immediately forwarded to the lessee.

If you are unable to have the defect remedied without charge and within a reasonable time after you tender the vehicle for repair, please contact the Alliance Recall Department, at 1-800-647-0712, 7:00 a.m. to 3:30 p.m., Pacific Time, or the Alliance Customer Assistance Center, at 1-800-FTL-HELP after normal business hours. You may also wish to notify the Administrator, National Highway Traffic Safety Administration, 400 7th Street S.W., Washington, D.C. 20590, or phone 1-800-424-9393. If your vehicle is involved in the Canadian portion, you may notify the Manager, Recall and Public Compliance, Road and Motor Vehicle Traffic Safety Branch, Transport Canada, Ottawa, Ontario, or phone (613) 993-8861.

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

ALLIANCE WARRANTY OPERATIONS (RECALL)

Enclosure

September 1999
FL233AB U.S.
FC233AB Canada

Work Instructions

Subject: FCCC Tie Rod Assemblies

MODELS AFFECTED: Freightliner specific MT35 and MT45 Custom Chassis Step Vans, manufactured between May 2, 1996 and November 11, 1998

WORK INSTRUCTIONS

TIE ROD REPLACEMENT

1. Park the vehicle, set the parking brake, then chock the rear tires.
2. Remove the tie rod from the vehicle.
 - 2.1 Remove the cotter pin and the castellated nut from the tie-rod ball stud. See Fig. 1.
 - 2.2 Remove the tie-rod end from the tie-rod arm.
 - 2.3 Repeat the procedure at the other end of the tie rod. Then, remove the tie rod from the vehicle.
3. Install the new tie rod onto the tie rod arms.
4. At one end of the tie rod, install the castellated nut and tighten 80 lbf-ft (108 N-m). Install a new cotter pin through the ball stud and the slot in the castellated nut. If the cotter pin cannot be installed, tighten the nut so the next slot in it lines up with the hole in the ball stud. *Do not back off the nut.*
5. Repeat the procedure at the other end of the tie rod.
6. Go to "Toe-in Checking."

TOE-IN CHECKING

IMPORTANT: You must check the toe-in when you replace a tie rod.

Toe-in is the difference between the measurement taken at the front and rear of the tires. See Fig. 2. The front measurement should be 1/16-inch \pm 1/16-inch (1.6 mm \pm 1.6 mm) less than the rear measurement.

If you use electronic equipment to measure the toe-in, make sure the equipment is correctly calibrated. Follow the manufacturer's instruction. When finished, go to "Toe-in Adjustment," if needed; otherwise, go to the step for installing the completion sticker above the driver's door.

If electronic equipment is not available, use a trammel bar and the following procedure to measure the toe-in.

IMPORTANT: Two people are required for this procedure in order to obtain accurate and precise measurements.

WARNING

Do not work under a vehicle that is supported only by a jack. Jacks can slip, causing the vehicle to fall, which can result in possible serious personal injury.

1. Raise the front axle, and support it with safety stands.
2. Using paint or chalk, whiten the center area of both front tires around their entire circumferences.



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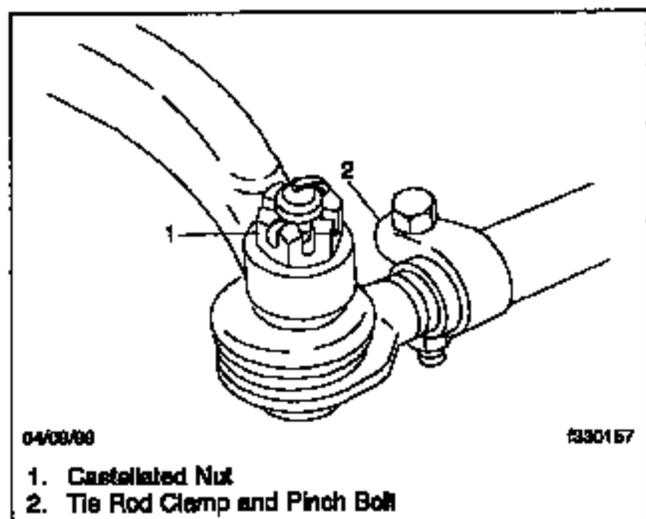


Fig. 1, Tie Rod End

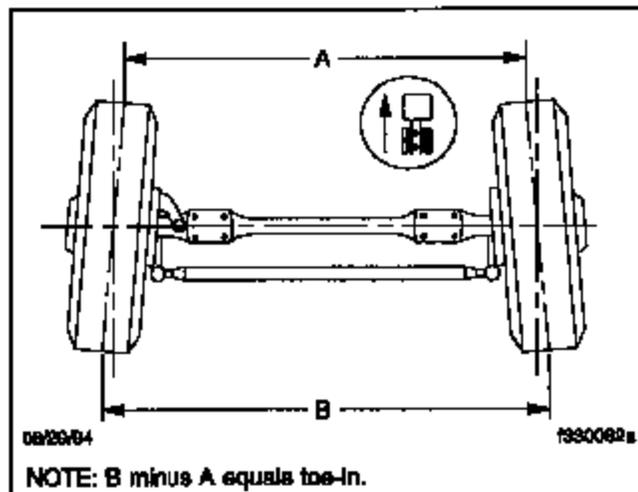


Fig. 2, Wheel Toe-In (overhead view)

- Position a scribe or pointed instrument against the whitened part of one tire. Rotate the tire. The scribe must be held firmly in place so that a single straight line is scribed all the way around the tire. Repeat for the other tire.
- If available, put a floating radius gauge under each tire. Then lower the vehicle and remove the lock pins from the radius gauge plates to allow the front tires to return to the normal operating position.
If floating radius gauges are not available, lower the vehicle to the floor, then remove the chocks from the rear tires. Move the vehicle forward 12 to 15 feet (3.8 to 4.6 m). This will neutralize the suspension. Check the rear tires.
- Set the pointer on the scale end of the trammel bar to zero and lock the pointer in place.
- Position the trammel bar at the rear of the front tires so the pointer on the scale that was set to zero is centered on the scribed line on one of the tires.
- Adjust the pointer on the opposite end of the trammel bar so it lines up with the scribed line on the other tire. Lock the pointer in place.
- Remove the trammel bar from the rear of the tires. Then position it at the front of the tires so the pointer on the end without the scale is centered on the scribed line on the tire. See Fig. 3.
- Loosen the pointer on the scale end of the trammel bar, and center it on the scribed line of the tire. Then lock the pointer in place.
- Read the toe-in measurement on the trammel bar scale. If the measurement is $1/16$ -inch \pm $1/16$ -inch (1.6 mm \pm 1.6 mm), go to the next step.
If the toe-in is not correct, go to "Toe-In Adjustment."
- Clean a spot above the center of the driver's door and attach a completion sticker (Form W-147). The sticker should reference the recall number and the date the work is done.
- Remove the chocks from the rear tires.

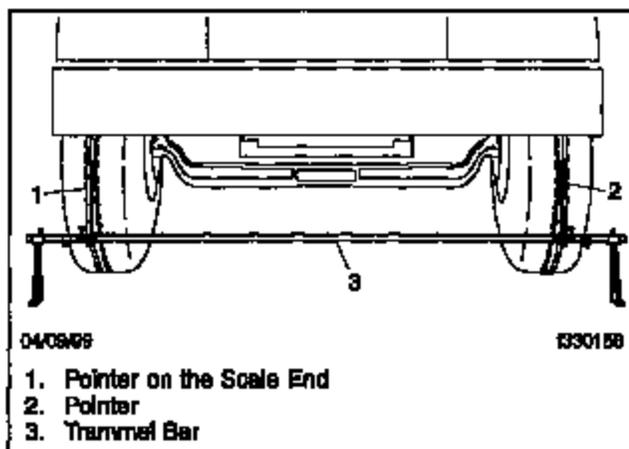


Fig. 3, Trammel Bar Positioning

TOE-IN ADJUSTMENT

1. Loosen the tie-rod clamp pinch bolts. See Fig. 1.
2. Set the pointer on the scale end of the trammel bar to read 1/16-inch (1.6 mm) toe-in. Lock the pointer in place.
3. Position the trammel bar at the front of the tires. Make sure the pointer at the opposite end (without the scale) of the bar is centered on the scribed line of the tire.
4. Adjust the length of the tie rod by turning the tie-rod tube. Adjust the tie-rod length so the pointer on the scale end of the trammel bar is centered on the scribe line of the tire.
5. If the vehicle is equipped with power steering, turn on the engine. Turn the steering wheel left and right to center the steering linkage.
6. Make sure the front tires are straight ahead. Shut down the engine, if applicable.
7. Check the toe-in measurement again.

If the toe-in is not correct, repeat the procedure until it is.

▲ WARNING

Before you tighten the tie-rod clamp pinch bolts, check that they will clear the axle beam at the full-left and full-right steering positions. Failure to do so could result in damage to the pinch bolts or restriction in the steering linkage movement. This could cause an accident resulting in property damage or serious personal injury.

8. Check the clearance of the tie-rod clamp pinch bolts at the full-left and full-right steering positions. If needed, rotate the tie-rod clamps so the pinch bolts have the correct clearance.
9. When the toe-in is 1/16-inch \pm 1/16-inch (1.6 mm \pm 1.6 mm), and the clearance between the pinch bolts and the axle beam is correct, tighten the pinch bolts on the tie-rod clamps 70 to 85 lbf-ft (95 to 115 N-m).
10. Clean a spot above the center of the driver's door and attach a completion sticker (Form W-147). The sticker should reference the recall number and the date the work is done.
11. Remove the chocks from the rear tires.