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OFFICE OF
DEFECTS INVESTIGATION

Timothy A. Blubaugh
Director
Government Technical Affairs

Freightliner LLC
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November 9, 2005

Ron Medford
Sr. Associate Administrator for Vehicle Safety
National Highway Traffic Safety Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

**Re: Defect Information Report – supplemental information
(FL-452), NHTSA no. 05V-408, ZF Steering Shaft**

Mr. Medford:

In accordance with Part 573 of Title 49 of the Code of Federal Regulations, Freightliner LLC herewith submits supplemental defect information and copies of documents to be distributed to dealers and purchasers.

Please contact me if you have any questions.

Sincerely yours,

Timothy Blubaugh

Cc: Michael Mason, CAL-OSHA
DOSH, Legal Unit
10th Floor
455 Golden Gate Avenue
San Francisco, CA 94102

Enclosure

Certified Mail Article Number:

7003 2260 0001 3403 5879

Section 573.6 Defect Information Report
FL-452, NHTSA no. 05V-408
Supplement No.: 2

November 9, 2005

(c) (1) Manufacturer: FREIGHTLINER LLC
P.O. BOX 3849
Portland, Oregon 97208
(503) 745-5219

(c) (3) Total number of vehicles potentially affected: (Revise to read) 37,029

(c) (9) Communications sent to dealers: to be posted November 16, 2005
Communications sent to owners: to be mailed November 16, 2005



A DaimlerChrysler Company

Freightliner LLC
P.O. Box 4090
Portland, OR 97208-4090
800.547.0712 Phone
503.745.9009 Fax

November 2005
FL452AB
NHTSA #05V-408

Subject: ZF Steering Shaft Assemblies

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.

Freightliner LLC, on behalf of its Freightliner Trucks Division and its wholly owned subsidiaries, Sterling Truck Corporation and Freightliner Custom Chassis Corporation, has decided that a defect which relates to motor vehicle safety exists on specific Freightliner Business Class, Century S/T, Classic/Classic XL, Columbia, Coronado, and FLD vehicles; Sterling L-Line right hand drive vehicles; and Freightliner Custom Chassis XC motorhome chassis manufactured between April 8, 2004, and December 23, 2004, with ZF steering shafts.

The lower yoke on some steering shafts may have been incorrectly machined. The steering shaft splines could push through the lower yoke, allowing the steering wheel to turn without any response, resulting in a loss of steering and possible vehicle crash without prior warning.

A retaining collar will be permanently installed on the steering shaft to prevent the splines from pushing through the yoke.

Repair kits are now available for authorized dealers to order. Contact your authorized dealer to arrange to have your vehicle(s) modified and to assure that parts are available at the dealer. To locate a dealer, search online at www.Freightliner.com or contact the Warranty Campaigns Department for assistance.

When you contact your dealer, refer to campaign number **FL452AB**. Once kit(s) are received at the dealership, the modification should take less than an hour and will be performed at no charge to you.

IMPORTANT: When the recall has been completed, please ensure that a label has been affixed to your vehicle referencing **FL452AB**.

As stated in the terms of your express limited warranty, Freightliner LLC will not pay for any damage caused by failure to properly maintain your vehicle. Freightliner LLC considers the work necessary under this campaign to be proper maintenance and will, therefore, not pay for any damage to your vehicle caused by your failure to have the repairs that are the subject of this campaign performed in a reasonable time.

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, please make sure this notification is immediately forwarded to the lessee.

If you are not able to have the defect remedied without charge and within a reasonable time, which is not longer than 60 days after you tender the vehicle for repair, 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 WarrantyCampaigns@freightliner.com, or the Customer Assistance Center at (800) FTL-HELP or (800) STL-HELP, after normal business hours. You may also wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 400 7th Street S.W., Washington, D.C. 20590; or call the Vehicle Safety Hotline at (888) 327-4236 (TTY: 800-424-9253); or to to <http://www.safercar.gov>. If your vehicle is involved in the Canadian portion, you may wish to notify Transport Canada, ASFAD, Place de Ville Tower C, 330 Sparks Street, Ottawa, ON K1A 0N5, or phone (800) 333-0510.

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

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

Recall Campaign

November 2005
FL452AB
NHTSA #05V-408

Subject: ZF Steering Shaft Assemblies

Models Affected: Specific Freightliner Business Class, Century S/T, Classic/Classic XL, Columbia, Coronado, and FLD vehicles; Sterling L-Line right hand drive vehicles; and Freightliner Custom Chassis XC motorhome chassis manufactured between April 8, 2004, and December 23, 2004, with ZF steering shafts.

General Information

Freightliner LLC, on behalf of its Freightliner Trucks Division and its wholly owned subsidiaries, Sterling Truck Corporation and Freightliner Custom Chassis Corporation, has decided that a defect which relates to motor vehicle safety exists on the vehicles mentioned above.

There are approximately 40,000 vehicles involved in this campaign.

The lower yoke on some steering shafts may have been incorrectly machined. The steering shaft splines could push through the lower yoke, allowing the steering wheel to turn without any response, resulting in a loss of steering and possible vehicle crash without prior warning.

A retaining collar will be permanently installed on the steering shaft to prevent the splines from pushing through the yoke.

Additional Repairs

Dealers must complete all outstanding recall and field service campaigns prior to the sale or delivery of a vehicle. A Dealer will be liable for any progressive damage that results from its failure to complete campaigns before sale or delivery of a vehicle.

Owners may be liable for any progressive damage that results from its failure to complete campaigns within a reasonable time after receiving notification.

Work Instructions

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

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 our records show your dealership has ordered any vehicles involved in campaign number FL452AB, a list of the customers and vehicle identification numbers will be available on AccessFreightliner.com. Please refer to this list when ordering parts for this recall.

Table 1 - Replacement Kits for FL452AB

Campaign Number	Kit Number	Part Description	Part Number	Qty. per Kit	Suggested Wholesale*
FL452A One Kit per Vehicle	25-FL452-000	ZF Retaining Collar Kit (1 collar and 4 breakaway capscrews)	ZF 7025 671 107	1 kit	\$36.09 U.S. \$70.04CAN
FL452B Two Kits per Vehicle RVs Only		Completion Sticker	WAR260	1 ea	

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

Table 1

Recall Campaign

November 2005
FL452AB
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Removed Parts

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

Labor Allowance

Table 2 - Labor Allowance

Campaign Number	Procedure	Time Allowed (hours)	SRT Code	Damage Code
FL452A All Freightliner & Sterling Models	Install one steering shaft retaining collar	0.1	996-0651A	000-Modifiedx
FL452B FCCC RVs Only	Install two steering shaft retaining collars	0.4	996-0651B	000-Modifiedx

Table 2

IMPORTANT: When the recall has been completed, locate the base completion label in the appropriate location on the vehicle, and attach the red completion sticker provided in the recall kit (Form WAR260). If the vehicle does not have a base completion label, clean a spot on the appropriate location of the vehicle and first attach the base completion label (Form WAR259). If a recall kit is not required or there is no completion sticker in the kit, write the recall number on a blank sticker and attach it to the base completion label.

Claims for Credit

You will be reimbursed for your parts, labor, and handling by submitting your claim through the Warranty system within 30 days of completing this campaign. Please reference the following information in QuickClaim®:

- Claim type is **Recall**.
- In the FTL Authorization field, enter the campaign number and appropriate condition code (**FL452A** or **FL452B**).
- In the Primary Failed Part Number field, enter **25-FL452-000**.
- In the Parts field, enter the appropriate kit number(s) as shown in the Replacement Parts Table. **NOTE:** Vehicles in FL452A require one kit. Vehicles in FL452B require two kits.
- In the Labor field, first enter the appropriate SRT from the Labor Allowance Table. For administrative time, enter SRT 939-0010A for 0.4 hours for RVs or 0.3 hours for all other vehicles.

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

Contact the Warranty Campaigns Department at (800) 547-0712, from 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, Web inquiry at AccessFreightliner.com / Support / Submit an Inquiry, or the Customer Assistance Center at (800) 385-4357, after normal business hours, if you have any questions or need additional information.

To return excess kit inventory related to this campaign, U.S. dealers must submit a Parts Authorization Return (PAR) to the Memphis PDC. Canadian dealers must submit a PAR to their facing PDC. All kits must be in resalable condition. PAR requests must include the original purchase invoice number.

The letter notifying vehicle owners is included for your reference.

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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, 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 ten (10) calendar years before notice is given.

Recall Campaign



November 2005
FL452AB
NHTSA #05V-408

Copy of Letter to Owner Subject: ZF Steering Shaft Assemblies

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.

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A retaining collar will be permanently installed on the steering shaft to prevent the splines from pushing through the yoke.

Repair kits are now available for authorized dealers to order. Contact your authorized dealer to arrange to have your vehicle(s) modified and to assure that parts are available at the dealer. To locate a dealer, search online at www.Freightliner.com or contact the Warranty Campaigns Department for assistance.

When you contact your dealer, refer to campaign number **FL452AB**. Once kit(s) are received at the dealership, the modification should take less than an hour and will be performed at no charge to you.

IMPORTANT: When the recall has been completed, please ensure that a label has been affixed to your vehicle referencing **FL452AB**.

As stated in the terms of your express limited warranty, Freightliner LLC will not pay for any damage caused by failure to properly maintain your vehicle. Freightliner LLC considers the work necessary under this campaign to be proper maintenance and will, therefore, not pay for any damage to your vehicle caused by your failure to have the repairs that are the subject of this campaign performed in a reasonable time.

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, please make sure this notification is immediately forwarded to the lessee.

If you are not able to have the defect remedied without charge and within a reasonable time, which is not longer than 60 days after you tender the vehicle for repair, 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 WarrantyCampaigns@freightliner.com, or the Customer Assistance Center at (800) FTL-HELP or (800) STL-HELP, after normal business hours. You may also wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 400 7th Street S.W., Washington, D.C. 20590; or call the Vehicle Safety Hotline at (888) 327-4236 (TTY: 800-424-9253); or to to <http://www.safercar.gov>. If your vehicle is involved in the Canadian portion, you may wish to notify Transport Canada, ASFAD, Place de Ville Tower C, 330 Sparks Street, Ottawa, ON K1A 0N5, or phone (800) 333-0510.

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

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

Work Instructions

Subject: ZF Steering Shaft Assemblies

Models Affected: Specific Freightliner Business Class, Century S/T, Classic/Classic XL, Columbia, Coronado, and FLD vehicles; Sterling L-Line right hand drive vehicles; and Freightliner Custom Chassis XC motorhome chassis manufactured between April 8, 2004, and December 23, 2004, with ZF steering shafts.

Clamp Installation — Freightliner Vehicles

NOTE: Use one recall kit.

1. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.
2. Check the base label (Form WAR259) on the vehicle for a completion sticker for FL452 (Form WAR260) indicating that this work has been completed. The base label is usually located on the passenger door jamb about 12 inches (30 cm) below the door latch. If a completion sticker for FL452 is found, no further work is needed. Remove the chocks from the tires. If a completion sticker is not found, proceed to the next step.
3. Open the hood.
4. Using a cloth to remove all dirt and grease, clean the steering shaft approximately 5 inches (127 mm) above the U-joint yoke assembly nearest the steering gear. See **Fig. 1**.
5. Install the clamp from the kit on the steering shaft, with the claws extending over the U-joint yoke. See **Fig. 2**.

IMPORTANT: Do not use air or power tools to install the capscrews on the clamp. Only a socket wrench should be used.

6. Apply Loctite® 277 to the threads of the four tamper-proof capscrews from the kit. Install them on the clamp and hand tighten them in an X pattern, tightening them to 15 to 20 lbf-ft (20 to 27 N·m). Repeat the same pattern, and tighten the capscrews to 30 lbf-ft (40 N·m), or until the heads break away. (The head of the capscrew is designed to break away after the correct torque is applied.)
7. Clean a spot on the base label (Form WAR259). The base label is usually located on the passenger-side door about 12 inches (30 cm) below the door latch. Attach the completion sticker for recall FL452 (Form WAR260) from the kit to the base label.
8. Close the hood and remove the chocks from the tires.

Clamp Installation — FCCC XC Motorhome Chassis

NOTE: Use two recall kits.

1. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.
2. Before starting the modification procedure, check the base label (form WAR259) on the vehicle for a completion label for FL452 (Form WAR260) indicating that this work has been completed. The base label is usually located on the front wall under the dash. If a completion sticker for FL452 is found, no further work is needed. Remove the chocks from the tires. If a completion sticker is not found, proceed to the next step.
3. Using a cloth to remove all dirt and grease, clean the lower steering shaft approximately 5 inches (127 mm) above the U-joint yoke nearest the steering gear. See **Fig. 3** and **Fig. 4**.
4. On the lower-steering-shaft end nearest the steering gear, install a clamp from a kit with the claws extending over the U-joint yoke. See **Fig. 5**.

Recall Campaign

FREIGHTLINER[®]
LLC
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November 2005
FL452AB
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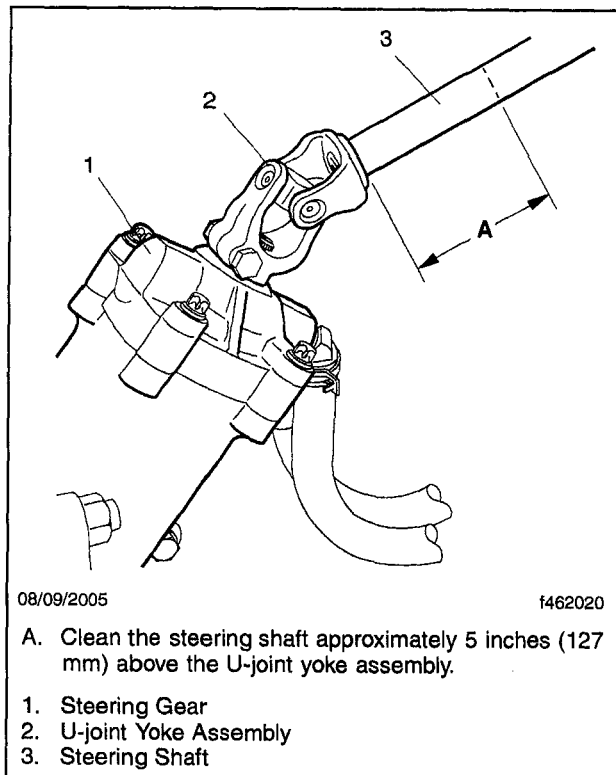


Fig. 1, Cleaning of the Steering Shaft on a Freightliner Vehicle

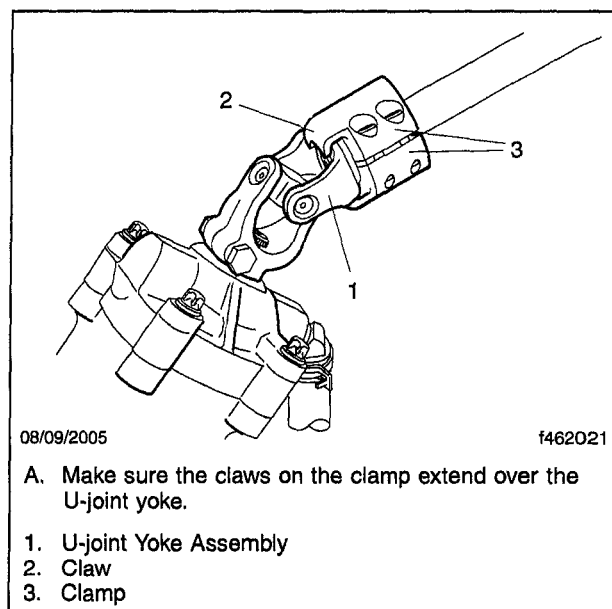


Fig. 2, Clamp Installation on the Steering Shaft (Freightliner Vehicle Installation Shown)

IMPORTANT: Do not use air or power tools to install the capscrews on the clamp. Only a socket wrench should be used.

5. Apply Loctite[®] 277 to the threads of four tamper-proof capscrews. Install them on the clamp and hand tighten them in an X pattern, tightening them to 15 to 20 lbf·ft (20 to 27 N·m). Repeat the same pattern, and tighten the capscrews to 30 lbf·ft (40 N·m), or until the heads break away. (The head of the capscrew is designed to break away after the correct torque is applied.)
6. Using a cloth to remove all dirt and grease, clean the upper steering shaft approximately 5 inches (127 mm) above the U-joint yoke nearest the bevel box. See **Fig. 3**.
7. On the upper-steering-shaft end nearest the bevel box, install the clamp from a kit so that the claws extend over the U-joint yoke. See **Fig. 5**.

IMPORTANT: Do not use air or power tools to install the capscrews on the clamp. Only a socket wrench should be used.

8. Apply Loctite[®] 277 to the threads of the four tamper-proof capscrews from the kit. Install them on the clamp and hand tighten them in an X pattern, tightening them to 15 to 20 lbf·ft (20 to 27 N·m). Repeat the same pattern, and tighten the capscrews to 30 lbf·ft (40 N·m), or until the heads break away. (The head of the capscrew is designed to break away after the correct torque is applied.)
9. Clean a spot on the base label (form WAR259). The base label is usually located on the front wall under the dash. Attach a completion sticker for recall FL452 (Form WAR260) from one of the kits to the base label. Discard the extra completion sticker.
10. Remove the chocks from the tires.

Recall Campaign

November 2005
FL452AB
NHTSA #05V-408

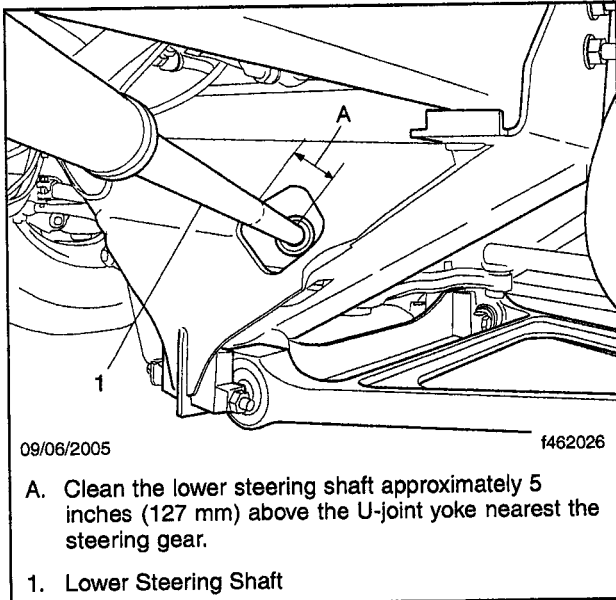


Fig. 4, Cleaning of the Lower Steering Shaft on an FCCC XC Motorhome Chassis

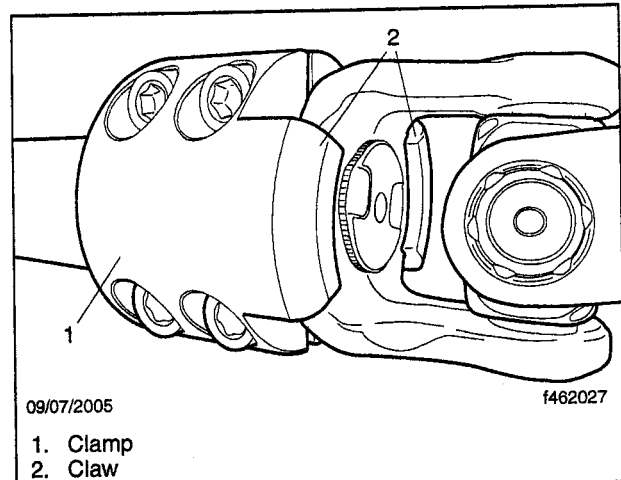


Fig. 5, Clamp Installation on the Steering Shaft (FCCC XC Motorhome Chassis Installation Shown)