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OFFICE
DEFECTS INVESTIGATION

Gary W. Rossow
Director
Government Technical Affairs

November 17, 2000

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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. 00V-357

In accordance with Title 49, Part 573, Freightliner LLC 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 224 782 588

Section 573.5 Defect Information Report

Supplement No.: 2

Date: November 17, 2000

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

(c) (3) Total number of vehicles potentially affected: (Revise to read) 105,837

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

Dealer Notification mailed: 10/6/00

Owner notification mailed: 10/6/00 and 10/7/00

Subject: Business Class Brake Pedal Piston Rod

MODELS AFFECTED: All Freightliner FLN Business Class vehicles manufactured between May 1, 1997 and November 10, 2000, equipped with air brakes.

GENERAL INFORMATION

Freightliner LLC, on behalf of its Freightliner Trucks Division, has determined that a defect which relates to motor vehicle safety exists on the above mentioned vehicles.

There are approximately 134,000 Freightliner Business Class vehicles involved in this campaign.

The brake piston rod that activates the service brakes may bend and fracture, causing a loss of brakes and possible vehicle crash without prior warning.

The modification consists of replacing the brake pedal piston, clevis and plunger with a new design.

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 local Parts Distribution Center.

If your dealership has ordered any vehicle(s) involved in campaign number FL278ABC, a computer listing of the customers and vehicle identification numbers will be enclosed. Please refer to this list when ordering parts for this campaign.

Refer to Table 1 for FL278A replacement kit 25-FL278-000.

25-FL278-000 (Dual Steer Vehicles only)

Campaign Number	Kit Number	Part Description	Part Number	Qty. per Kit	Suggested Wholesale*
FL278A	25-FL278-000	Piston Rod	12-18383-001	1	\$22.82 U.S. \$36.32 CAN
		Brake Valve Plunger	12-18401-000	1	
		Clevis-Link Connector	12-18641-000	1	
		7/16-20 GB Hex Nut	23-08254-004	1	

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

Table 1

Refer to Table 2 for FL278BC replacement kit 25-FL278-001.

Recall Campaign

FREIGHTLINER

LLC

A DaimlerChrysler Company

November 2000
FL278ABC**25-FL276-001**

Campaign Number	Kit Number	Part Description	Part Number	Qty. per Kit	Suggested Wholesale*
FL278BC	25-FL276-001	Piston Rod	12-18383-000	1	\$22.82 U.S. \$36.92 CAN
		Brake Valve Plunger	12-18401-000	1	
		Clevis-Link Connector	12-18841-000	1	
		7/16-20 GB Hex Nut	23-09254-004	1	

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

Table 2

REMOVED PARTS

Please follow 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
FL278ABC	Remove and replace brake pedal piston rod, clevis and plunger	0.6	996-0376A	000-Modifiedx

Table 3

IMPORTANT: When the recall has been completed, clean a spot on the appropriate location of the vehicle and attach a completion sticker (Form W-147) referencing the recall 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 Warranty system. Please reference the following information in QuickClaim:

- Claim type is Recall.
- In the FSDOC field, enter the campaign number and the appropriate condition code (e.g. **FL278A**, **FL278B**, **FL278C**).
- In the Primary Failed Part Number field, enter **25-FL276-000**
- In the Parts field, enter the appropriate kit number(s) as 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 campaign has not been previously completed. Also, it is important to check for a completion sticker prior to performing the recall.

Contact the Warranty Campaigns Department at (800) 547-0712, from 7:00 a.m. to 4:30 p.m. Pacific Time Monday through Friday, or the Customer Assistance Center at (503) 745-7877, 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, and 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.

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 eight (8) calendar years before notice is given.

WARRANTY CAMPAIGNS DEPARTMENT

Recall Campaign

FREIGHTLINER
LLC
A DaimlerChrysler Company

November 2000
FL276ABC

Copy of Letter to Owner

Subject: Business Class Brake Pedal Piston Rod

Dear Freightliner Vehicle 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.

Freightliner LLC, on behalf of its Freightliner Trucks Division has determined that a defect exists on all Freightliner FLN Business Class vehicles manufactured between May 1, 1991 and November 10, 2000, equipped with air brakes.

The brake piston rod that activates the service brakes may bend and fracture, causing a loss of brakes and possible vehicle crash without prior warning.

The modification consists of replacing the brake pedal piston rod, clevis and plunger with a new design.

Repair kits are now available for authorized dealers to order. You should contact your authorized dealer to arrange to have your vehicle(s) modified and to assure that parts are available at the dealer.

When you contact your dealer, refer to campaign number **FL276ABC**. Once kit(s) are received at the dealership, the modification will take approximately 0.8 hour and will be performed at no charge to you.

IMPORTANT: When the modification has been completed, please ensure that a sticker has been affixed to your vehicle referencing **FL276ABC** and the date the work was performed.

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 unable to have the defect remedied without charge and within a reasonable time after you tender the vehicle for repair, please contact the Warranty Campaigns Department at (800) 547-0712, 7:00 a.m. to 4:30 p.m. Pacific Time Monday through Friday, or the Customer Assistance Center at (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 (888) 327-4236. 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) 993-9851.

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

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

OWNER INSPECTION

Subject: Business Class Brake Piston Rod Inspection

MODELS AFFECTED: All Freightliner FLN Business Class vehicles manufactured between May 1, 1991 and November 10, 2000, equipped with air brakes.

Customers should immediately inspect their vehicle to determine if the brake piston rod is bent.

WARNING

Do not drive a vehicle with a damaged brake piston rod. To do so could result in brake failure, which could cause personal injury or death, and property damage.

1. Locate the brake piston rod and clevis under the dash, behind the brake pedal assembly. See Fig. 1. The threaded end of the piston rod is installed on the clevis and the other end is inserted in the brake valve plunger (the plunger is enclosed in a rubber boot).
2. Inspect the threaded section of the piston rod where it threads into the jam nut and clevis. See Fig. 2.
 - If the piston rod is bent, take the vehicle out of service and contact your Freightliner dealer for immediate repairs.
 - If the piston rod is not bent, your vehicle is safe to operate but it should be campaigned by a Freightliner dealer as soon as parts are available.

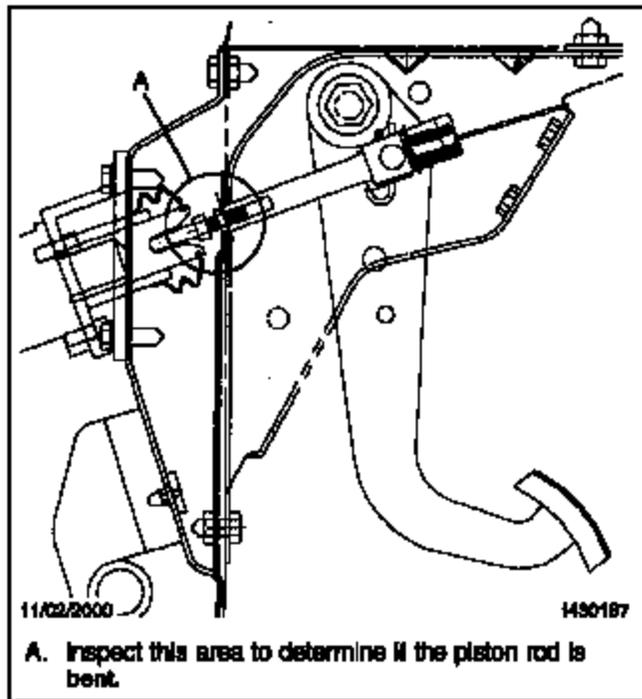


Fig. 1, Piston Rod Installation

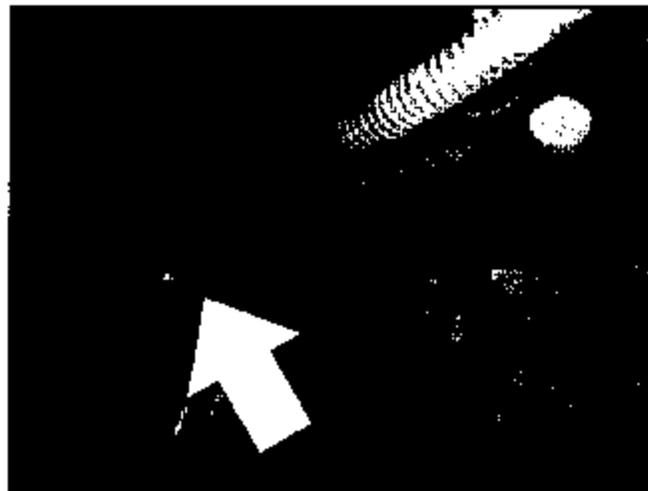


Fig. 2, Inspect the Threaded Section of the Piston Rod (this is an example of a bent rod)

Recall Campaign

FREIGHTLINER
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A DaimlerChrysler Company

November 2000
FL276ABC

WORK INSTRUCTIONS

Subject: Business Class Brake Piston Rod

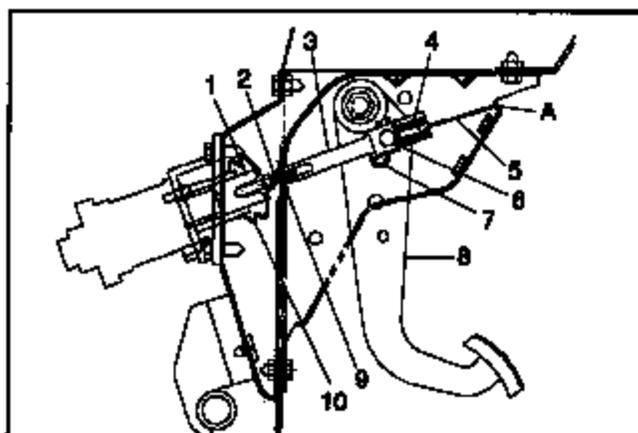
Models Affected: All Freightliner FLN Business Class vehicles manufactured between May 1, 1991 and November 10, 2000, equipped with air brakes.

BRAKE CONTROL ASSEMBLY REPLACEMENT

1. Park the vehicle on a level surface, set the parking brakes, and shut down the engine. Chock the rear tires.
 2. Before starting this procedure, check the door jamb on the passenger's side for a completion label (Form W-147). If a label for FL276 is found, no further work is required.
 3. Under the dash, remove the brake piston rod and clevis from the brake pedal assembly.
 - 3.1 Use a looped wire to remove the hook end of the return spring from the pedal mounting bracket or pedal box. See Fig. 3 for left-hand-drive, Fig. 4 for dual-steer, or Fig. 5 for right-hand-drive vehicles.
 - 3.2 Remove the hitch pin clip from the clevis pin. See Fig. 5.
 - 3.3 Remove the return spring from the right side of the clevis. Save the spring.
- NOTE:** Removing the clevis pin releases a nylon washer. Save the washer.
- 3.4 Remove the clevis pin from the clevis, brake pedal assembly, and brake light switch assembly (left-hand-drive vehicles only). Discard the clevis, piston rod, and jam nut.
 4. Remove the protective boot from the groove in the brake valve plunger. See Fig. 3.
 5. Remove the plunger from the foot valve adaptor and discard.
 6. Lubricate the outer surface and inner piston rod cavity of the new brake valve plunger with a silicone-based grease, such as Dow Corning 55 O-Ring lubricant or Loctite® V-755 O-Ring lubricant.
 7. Install the plunger in the foot valve adaptor with the groove in the plunger toward the inside of the cab. See Fig. 7.
 8. Install the protective boot in the groove in the plunger.
 9. Push the plunger into the adaptor until you feel increased resistance.
 10. Screw the new jam nut all the way onto the new piston rod. Thread the piston rod into the new clevis until it just bottoms out (finger-tight).

Note: The clevis included in the kit may not be identical to those supplied in other kits. There are two versions of the clevis and both are applicable for this repair.

11. Lubricate the sliding surface of the piston rod with a silicone grease. See Fig. 6. Do not grease the threads.
12. Install the new brake control assembly.
 - 12.1 Insert the piston rod straight into the brake valve plunger.
 - 12.2 On left-hand-drive vehicles only, slide the brake light switch assembly over one arm of the clevis. See Fig. 6.
 - 12.3 Align the holes in the clevis with the upper hole in the brake pedal assembly. Make sure the brake light switch assembly (if equipped) is on the left side of the brake pedal assembly.



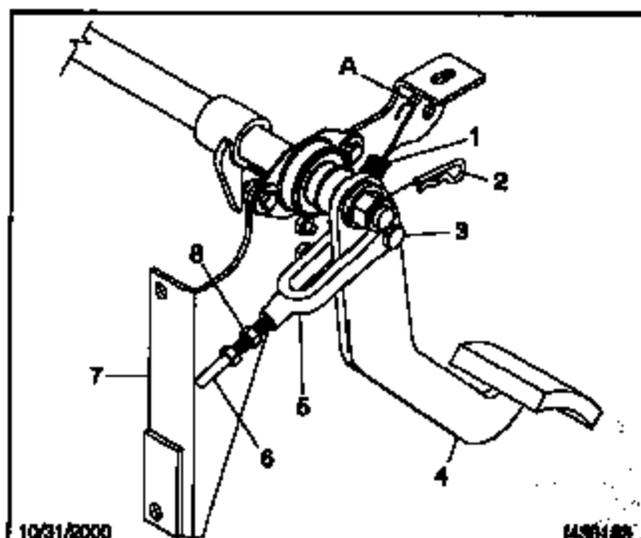
10/31/2000

432184

A. The return spring hooks over the notch in the pedal mounting bracket.

- | | |
|--------------------------------|-------------------------|
| 1. Brake Valve Plunger | 6. Clevis Pin |
| 2. Piston Rod | 7. Hitch Pin Clip |
| 3. Clevis | 8. Brake Pedal Assembly |
| 4. Brake Light Switch Assembly | 9. Jam Nut |
| 5. Return Spring | 10. Boot |

Fig. 3, Piston Rod Installation, Left-Hand Drive



10/31/2000

432184

A. The return spring hooks into the upper hole on the pedal mounting bracket.

- | | |
|-------------------------|---------------------------|
| 1. Return Spring | 5. Clevis |
| 2. Hitch Pin Clip | 6. Piston Rod |
| 3. Clevis Pin | 7. Pedal Mounting Bracket |
| 4. Brake Pedal Assembly | 8. Jam Nut |

Fig. 4, Piston Rod Installation, Dual Steer

- 12.4 Insert the clevis pin from the left through the brake light switch (if equipped), clevis, brake pedal assembly, and nylon washer. See Fig. 6. Make sure the washer is between the brake pedal and the right arm of the clevis.
- 12.5 Slide the return spring onto the right end of the clevis pin and secure with the hitch pin clip.
- 12.6 Attach a looped wire to the hook on the return spring and stretch the spring until it can be hooked into the applicable position on the pedal mounting bracket or pedal box.
13. Adjust the piston rod.
 - 13.1 With the brake pedal held up against its stop, manually turn the piston rod out of the clevis until it just bottoms in the plunger. Do not preload the plunger.
 - 13.2 Check the pedal free-play. There should be no pedal free-play and no brake valve preloading.
 - 13.3 When the piston rod is adjusted correctly, place a wrench on the piston rod to keep it from turning and tighten the jam nut 31 lbf-ft (42 N-m).
 - 13.4 Check the pedal free-play again and readjust the piston rod, if needed.
14. Remove the chocks from the tires.

⚠ WARNING

Do not operate the vehicle until the brakes have been checked for proper operation. To do so could result in inadequate or no braking ability, which could cause personal injury or death, and property damage.

Recall Campaign

November 2000
FL278ABC

FREIGHTLINER
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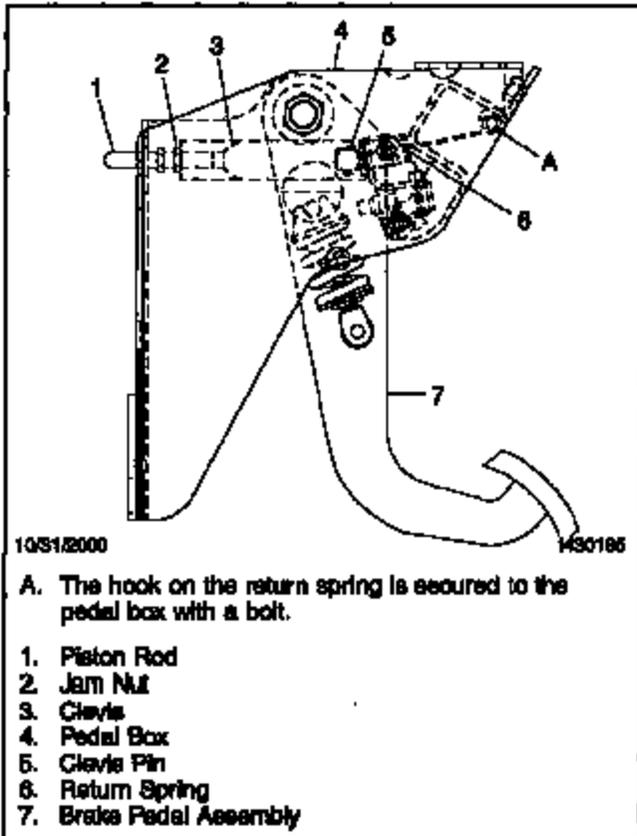


Fig. 5, Piston Rod Installation, Right-Hand Drive

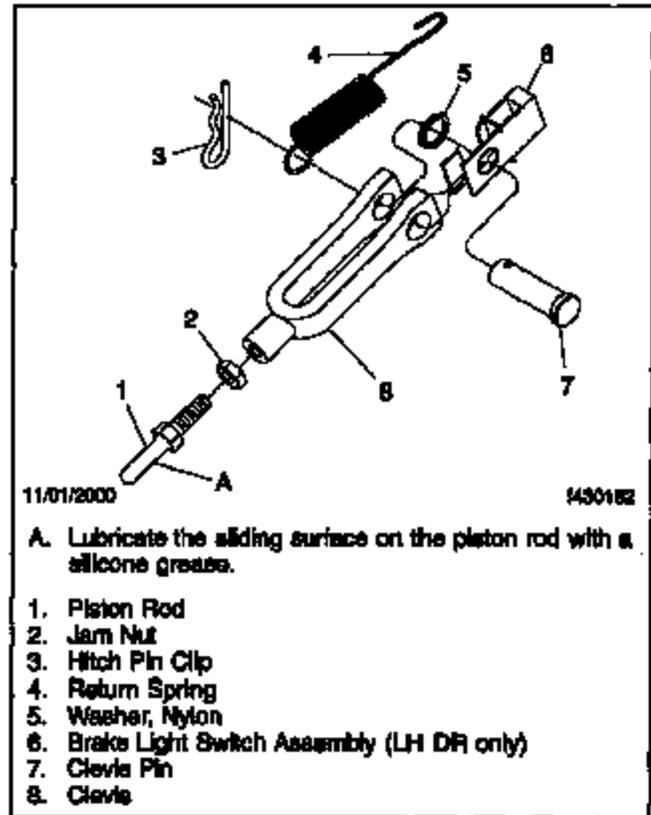


Fig. 6, Brake Control Assembly

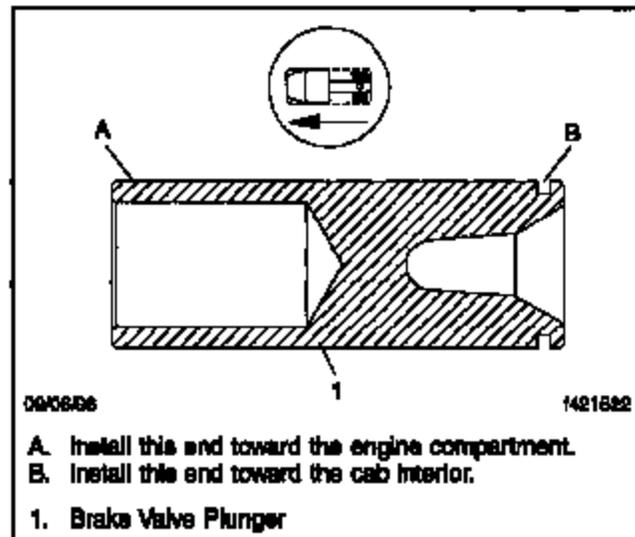


Fig. 7, Brake Valve Plunger Installation

15. Before you put the vehicle in service, check for proper brake operation in a safe area.

15.1 Drive the vehicle slowly, then apply and release the brakes several times to check for proper operation.

- 16.2 Perform several low-speed stops to ensure correct parts replacement and full vehicle control.
18. Enter the recall number and the date the work is performed on a completion label (Form W-147). Clean an area on the passenger's door jamb about 18 inches (450 mm) above the handle and attach the label.

FREIGHTLINER
LLC

A DaimlerChrysler Company

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warrantyoperations@freightliner.com

REF# 00-086R
February 18, 2001

00V-357

IMPORTANT RECALL INFORMATION

**TO: ALL FREIGHTLINER DEALERS - U.S. AND CANADA
ALL DSMs and RSMs - U.S. AND CANADA**

**SUBJECT: RECALL FL276 - BUSINESS CLASS BRAKE PEDAL PISTON RODS
REVISED WORK INSTRUCTIONS**

This notice is being sent to advise you of steps added to the work instructions of the subject recall. A revised bulletin will be mailed shortly.

After "removing the chocks from the tires":

*Before you place the vehicle into service, check for proper brake operation in a safe area.

- Drive the vehicle slowly, then apply and release the brakes several times to check for proper operation.
- Perform several low speed stops to ensure correct parts replacement and full vehicle control.

*Check for proper brake light operation.

- If the brake lights do not operate properly (they do not come on at all or remain on when the service brakes are not engaged), remove the clevis (part number 12-18395-000).
- Destroy and discard the clevis, order and install a new clevis.
- If a new clevis is required, file a separate replacement parts claim (In addition to the recall claim for FL276).

PFI is 25-FL276-001
Part number is 12-18395-000
In the comments field refer to FL276ABC
SRT is 996-0376A for .6 hours

If a customer contacts you after the recall has been performed because they are experiencing difficulty with the operation of the brake lights, ask the customer to return to your dealership to have the clevis replaced. File this as a replacement parts claim with the information noted above.

If you have questions, please call the Warranty Campaigns Department at (800) 547-0712 from 7:30 a.m. through 4:30 p.m. Pacific Time, Monday through Friday.

WARRANTY CAMPAIGNS DEPARTMENT