

SERVICE PROCEDURE

15505R1
JUNE, 2015

SUBJECT: SAFETY RECALL
Spring Brake Chambers on certain CE and RE school bus models built 31 July 2014 thru 20 February 2015 with feature code 04EVK or 04EXM Haldex Life Seal rear brake chambers.

DEFECT DESCRIPTION

A diaphragm in the spring brake chamber may not be seated fully into the pressure plate and may cause internal leakage in the chamber resulting in the parking brake to not fully release and drag. Parking brakes that may not fully release or drag, could potentially overheat and result in a fire which may cause property damage or personal injury.

REASON FOR REVISION

Steps 13 and 17 have changed. Technicians are to save and reuse chamber mounting hex nuts and washers.

MODELS INVOLVED

This Safety Recall involves certain CE and RE school bus models built 31 July 2014 thru 20 February 2015 with feature code 04EVK or 04EXM Haldex Life Seal rear brake chambers.

ELIGIBILITY

This procedure applies **ONLY** to vehicles marked in the International[®] Service PortalSM with Safety Recall 15505. Also complete any other open campaigns listed on the Service Portal at this time.

PARTS INFORMATION

NOTE: The scope of this campaign is narrow in that it only affects 68 vehicles. DO NOT preorder chamber kits for inventory, and only order chamber kits when a customer repair request is confirmed. This will allow chamber kits to be available for each dealer when a customer requests the repair.

NOTE: DO NOT preorder chamber kit P/N 8900256R91 for any other Haldex Chamber Recall except when Fleet Request Tool specifies this P/N for another Haldex Chamber Recall AND customer repair request has been confirmed.

Part Number	Part Description	Quantity
8900256R91	Kit, Brake Chamber	1

8900256R91 kit contains the following parts:

Part Description	Quantity
Brake Chamber	2
Hex Nut	4
Washer	4

SERVICE PROCEDURE

WARNING! TO PREVENT PROPERTY DAMAGE, PERSONAL INJURY, AND / OR DEATH, PARK VEHICLE ON HARD FLAT SURFACE, TURN THE ENGINE OFF, SET THE PARKING BRAKE AND INSTALL WHEEL CHOCKS TO PREVENT THE VEHICLE FROM MOVING IN BOTH DIRECTIONS.

WARNING! TO PREVENT PROPERTY DAMAGE, PERSONAL INJURY, AND / OR DEATH, IF THE VEHICLE MUST BE RAISED, DO NOT WORK UNDER THE VEHICLE SUPPORTED ONLY BY JACKS. JACKS CAN SLIP OR FALL OVER.

WARNING! TO PREVENT PERSONAL INJURY AND / OR DEATH, ALWAYS WEAR SAFE EYE PROTECTION WHEN PERFORMING VEHICLE MAINTENANCE.

WARNING! TO PREVENT PROPERTY DAMAGE, PERSONAL INJURY, AND / OR DEATH, KEEP FLAMES OR SPARKS AWAY FROM VEHICLE AND DO NOT SMOKE WHILE SERVICING THE VEHICLE'S BATTERIES. BATTERIES EXPEL EXPLOSIVE GASES.

1. Park vehicle on flat surface with the wheels straight ahead.
2. Shift the transmission to Park or Neutral and set parking brakes.
3. Install wheel chocks.
4. Verify adequate vehicle air system pressure and move hand valve on dash to release parking brake.
5. Fully cage all spring brake chambers requiring replacement on the vehicle. Refer to Haldex Service Bulletin L55391 for procedures.
6. Move hand valve on dash to set parking brake.



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Figure 1. Life Seal Chamber.

1. Cage bolt
2. Square port (2)



0000364421

Figure 2. Non-Life Seal Chamber.

1. Caging tool mold for non-life seal chamber

NOTE: Only Life Seal spring brake chambers require replacement under this recall.

7. Inspect rear axle brake chambers to determine if they are involved in this campaign by locating the following:
 - A life seal chamber will be equipped with an integrated cage bolt and square ports (Figure 1, Items 1 and 2).
 - A non-life seal chamber will be equipped with a mold (Figure 2, Item 1) used for storing the caging tool.

NOTE: Be sure to label air line to air inlet port marked “Spring” for installation reference.

8. Beginning on driver side of vehicle, note and record orientation of spring brake chamber to chassis. Note and record orientation of air inlet ports on chamber to air system valves.

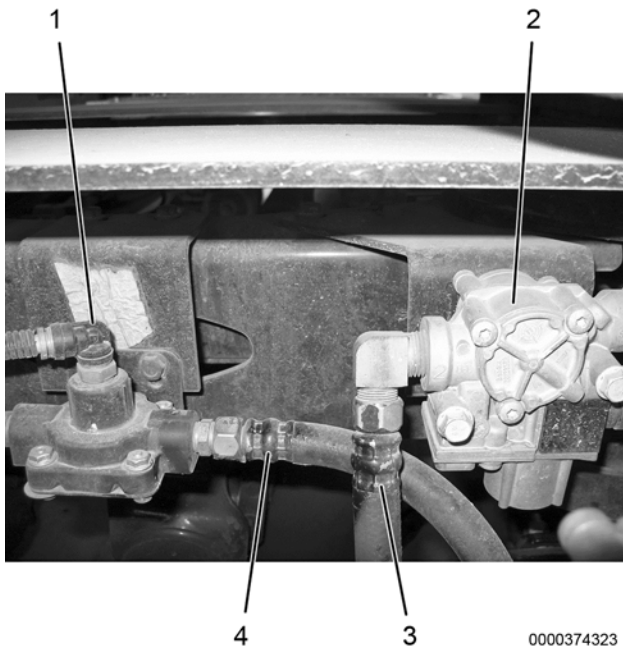
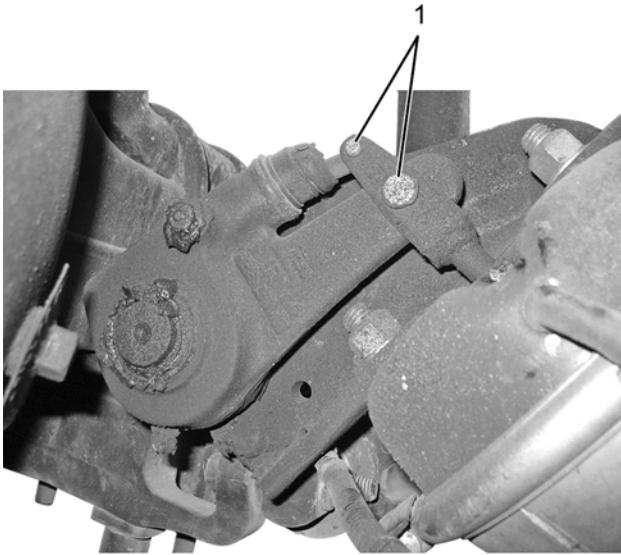


Figure 3. Air System Valves.

1. Quick release valve
 2. ABS modulator valve
 3. Chamber service brake hose
 4. Chamber spring brake hose
9. Disconnect chamber spring brake hose (Figure 3, Item 4) from quick release valve (Figure 3, Item 1).
10. Disconnect chamber service brake hose (Figure 3, Item 3) from ABS modulator valve (Figure 3, Item 2).



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Figure 4. Clevis Pins.

1. Clevis pin (2)

NOTE: There may only be one clevis pin and clip equipped, dependent on the type of slack adjuster the vehicle is equipped with.

NOTE: Save clevis pins and clips for reuse.

11. Remove two clips and clevis pins (Figure 4, Item 1) from yoke.
12. Adjust slack adjuster nut until slack adjuster is free from spring brake chamber yoke.

NOTE: Save chamber mounting hex nuts and washers for reuse.

13. Remove two spring chamber mounting hex nuts from spring brake assembly, and remove spring brake chamber assembly from chassis.
14. Remove spring brake and service brake hoses from spring brake chamber assembly.
15. Apply thread sealant to brake hose threads on both hoses.

NOTE: If the replacement chamber is not caged, it must be caged prior to installing the chamber.

NOTE: DO NOT use an impact wrench to tighten retaining nuts to brake chambers.

16. Select new spring brake chamber that matches orientation to chassis, and air inlet ports to brake system valves previously noted and recorded in Step 8. Install spring brake and service brake hoses to their appropriate ports.
17. Install spring brake chamber onto chassis while properly aligning the position of the chamber to the chassis and the air inlet ports with the brake system valves as noted in Step 8. Install two washers and hex nuts (previously removed) onto spring brake chamber assembly. Tighten nuts to 145 - 175 lb-ft (197 - 237 N·m).
18. Adjust slack adjuster until aligned with spring brake chamber yoke.

NOTE: There may only be one clevis pin and clip equipped, dependent on the type of slack adjuster the vehicle is equipped with.

19. Install previously removed clevis pins (Figure 4, Item 1) and clips.
20. Adjust brake shoe to drum clearance by referring to slack adjuster manufacturer's procedures.
21. Install chamber service brake hose (Figure 3, Item 3) to ABS modulator valve (Figure 3, Item 2).
22. Install chamber spring brake hose (Figure 3, Item 4) to quick release valve (Figure 3, Item 1).
23. Verify adequate vehicle air system pressure and move hand valve on dash to release parking brake.
24. Uncage all newly installed spring brake chambers according to the chamber manufacturer's procedures.
25. Move hand valve on dash to set parking brake.
26. Remove wheel chocks.
27. Properly tag and store any brake chambers that have been replaced.

END OF SERVICE PROCEDURE

LABOR INFORMATION

Operation Number	Description	Time
A40-15505-1	Replace Chambers, One Axle	1.6 hrs

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with this campaign must be marked with a CTS-1075 Campaign Identification Label.

Complete the label and attach on a clean surface next to the vehicle identification number (VIN) plate.

DO NOT REMOVE
INTERNATIONAL
Campaign No.
VIN
Eng.#
COMPLETED
Service Location Code #
DO NOT REMOVE

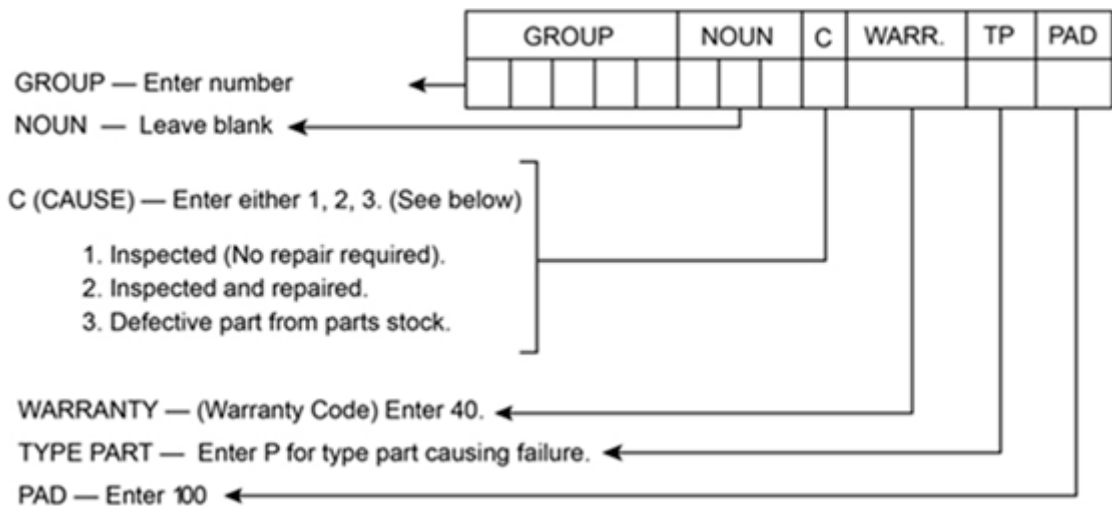
ADMINISTRATIVE / DEALER RESPONSIBILITIES

WARRANTY CLAIMS

Warranty claim expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Safety Recall 15505.

It is important that the coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Policy Manual, Section 7.1.8.

As with all claim submissions, items acquired locally must be submitted in the "Other Charges" tab. The cost of any bulk items (such as a bag of cable tie straps, roll of wire, barrel of oil, or tube of silicone) should be prorated for the cost of the individual pieces / amount used during each repair.



UNITED STATES AND POSSESSIONS

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle that is subject to a vehicle recall campaign must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within 60 days after a tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within 60 days, the owner may be entitled to replacement with an identical or reasonable equivalent vehicle at no charge, or to a refund of the purchase price less a reasonable allowance for depreciation.

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records,

and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

CANADA

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

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EXPORT

Export Distributors should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your distributor location.

Export Distributors are to submit warranty claims in the usual manner making reference to this recall number.

Export Distributors are expected to provide full cooperation and follow-up with respect to this important subject matter. If you have any questions or need further assistance, please contact the Regional Service Manager at your regional office.

NAVISTAR, INC.