

DAIMLER



Daimler Trucks North America
Nasser Zamani
Manager
Compliance and Regulatory Affairs

September 12, 2008

Dan Smith
Associate Administrator for Vehicle Safety
National Highway Traffic Safety Administration
1200 New Jersey Avenue S.E.
Washington D.C. 20590

**Re: Defect Information Report – Supplemental Report No. 4
08V-269, FL-530, SAF Holland ADL Suspension Weld**

Mr. Smith

In accordance with Part 573 of Title 49 of the Code of Federal Regulations, Daimler Trucks North America LLC herewith submits supplemental defect information and copies of documents distributed to only Thomas Built Buses dealers and purchasers.

- (c)(3) **Total number of vehicles potentially affected:** Final population to be submitted a supplemental report
- (c) (8)(ii) **Communications sent to dealers:** mailed September 5, 2008
Communications sent to owners: mailed September 12, 2008
- (c) (10) **Copies of Communications sent to owners and dealers are attached.**

Please contact me if you have any questions.

Sincerely yours,

Nasser Zamani

Cc: Michael Mason, CAL-OSHA
Enclosure
Certified Mail# 7004 2890 0004 1202 0768

A Daimler Company

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Portland OR 97217-7699
503-745-6910 Phone
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Product Recall

To: ALL DEALERS

From: TRACY SAUERBREY – WARRANTY/RECALL DEPARTMENT

Subject: RECALL 08V-269 – SAF Holland ADL Suspension Transverse Beam Weld

Date: September 5, 2008

Enclosed are copies of the customer notification letter and the repair procedure for Recall 08V-269. This recall involves certain HDX models manufactured between July 1, 2007 and October 9, 2007. The transverse beam weld may be improperly located on SAF Holland ADL and ADLSD suspensions allowing the transverse beam to separate from the suspension casting. If the transverse becomes separated from the casting, vehicle stability while cornering could be affected resulting in loss of vehicle control.

This is a universal notification sent to all dealers. You may or may not have customers in your area affected by this recall. If owners in your area are subject to this recall, we have enclosed a printout listing those customers' names and addresses. If there is not a printout enclosed according to our records there are no units in your area involved. **If you have a printout and any of the units on it are still in your possession it is your responsibility to ensure the recall is performed before the unit is delivered to the customer.**

The remedy will consist of inspection to ensure proper placement of weld. If improper location of weld is found the components will be replaced. The labor allowance for the inspection will be .3 (SRT 90-79) and an additional 1.5 hours for replacement if needed (SRT 90-80). You will need to contact SAF-Holland USA, Inc. if a replacement is needed (1-888-396-6501).

Thomas Built Buses has elected to notify all customers directly. Your customers will be contacting you to schedule an appointment for repairs. Reimbursement for parts and labor, (if requested) may be obtained by filing a warranty claim.

If you know of any customers who own or operate a Thomas bus in this recall, whose name and address is NOT listed or is INCORRECTLY listed on the enclosed printout, please promptly notify Thomas Built Buses of that additional information in writing. Thank you for your cooperation and assistance.

A handwritten signature in black ink, appearing to read "Tracy", written over a printed name "Tracy".

Enclosures: Customer Letter Repair Procedure Printout (if applicable)



September 12, 2008

Recall 08V-269

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. SAF Holland, Inc. has determined that a defect which relates to motor vehicle safety exists on certain HDX units manufactured July 1, 2007 through October 9, 2007. These units are identified on the enclosed postcard (Form PSD 304).

The defect involves the transverse beam weld. The transverse beam weld may be improperly located on SAF Holland ADL and ADLSD suspensions allowing the transverse beam to separate from the suspension casting. If the transverse beam becomes separated from the casting, vehicle stability while cornering could be affected resulting in loss of vehicle control.

You should immediately contact your Thomas Built Buses dealer for an appointment to have your vehicle modified. Thomas will remedy this non conformance without charge. The remedy will consist of inspection to ensure proper placement of weld. If improper location of weld is found the components will be replaced. It will take approximately .3 for inspection and an additional 1.5 hours for replacement if needed. To arrange for repairs, contact your local Thomas Built Buses dealer. After the repair is made, please complete each postage paid card separately and return it to Thomas Built Buses to verify completion.

In addition to being used to verify repair completion, the postcard must be completed and returned if the vehicle does not need repair, if you no longer own the vehicle, or the vehicle identified on the postcard has been exported, stolen, or destroyed/totaled. Federal law requires that any vehicle lessor receiving the recall notice must forward a copy of this notice to the lessee within 10 days.

If you have had your vehicle repaired due to this defect prior to receipt of this notice and you have incurred any costs, you may be eligible for reimbursement. For further information, please contact the Customer Support office at (336) 822-2871, 8 a.m. to 5 p.m. eastern standard time Monday through Friday. To find a dealer in your area please go to www.thomasbus.com.

If the defect is not remedied without charge and within a reasonable time, which is not longer than 80 days after you tender the vehicle for repair, also please contact the Customer Support Office at (336)-889-4871. You may also submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, S.E., Washington, DC 20590, or phone the Vehicle Safety Hotline at 1-888-327-4236 (TTY: 1-800-424-9153) or go to <http://www.safercar.gov>. 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.

Sincerely,

A handwritten signature in cursive script that reads "Tracy Sauerbrey".

Tracy Sauerbrey
Warranty/Recall Department

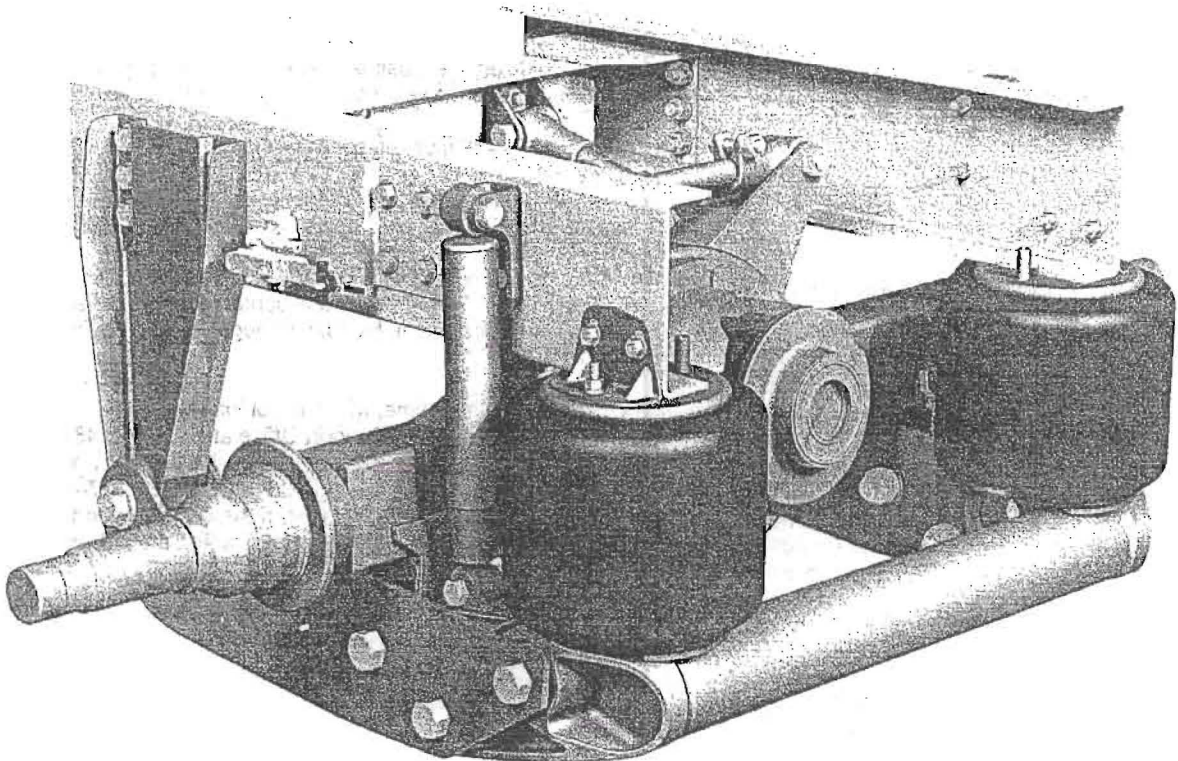
Enclosure



TRANSVERSE BEAM WELD MISLOCATION INSPECTION & INSTALLATION PROCEDURES

ADL Series

Drive-Axle Air-Ride Suspension
Transverse Beam Weld Inspection
& Installation Procedures



NOTES, CAUTIONS, AND WARNINGS

You must read and understand all of the safety procedures presented in this manual before starting any work on the suspension.

Proper tools must be used to perform the maintenance and repair procedures described in this manual. Many of these procedures require special tools.

Failure to use the proper equipment could result in personal injury and/or damage to the suspension.

Safety glasses must be worn at all times when performing the procedures covered in this manual.

Throughout this manual, you will notice the terms "NOTE," "IMPORTANT," "CAUTION" and "WARNING" followed by important product information. So that you may better understand the manual, those terms are as follows:

NOTE: Includes additional information to enable accurate and easy performance of procedures.

IMPORTANT: Includes additional information that if not followed could lead to hindered product performance.

CAUTION Used without the safety alert symbol, indicates a potentially hazardous situation which, if not avoided, may result in property damage.

CAUTION Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

WARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

INTRODUCTION

SAF-HOLLAND has identified the possibility of a weld mislocation occurring in a component of the ADL/ADLSD suspension system. This recall only applies to a small portion of product supplied. This weld mislocation may be easily identified by visual inspection. Please refer to "Inspecting For Mislocated Welds" for instructions on how to determine whether or not your product is affected. If a weld mislocation is discovered, the remainder of the document will assist with the method to replace the defective component.

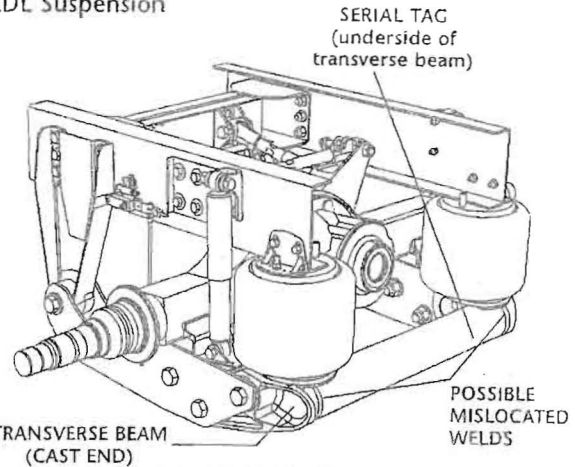
DESCRIPTION OF MISLOCATED WELDS

SAF-HOLLAND's ADL/ADLSD Series drive-axle suspension models may have welds that are mislocated on the transverse beam (FIGURE 1). The mislocation of these welds may diminish the strength of the transverse beam, potentially causing pre-mature failure.

Weld failures may affect vehicle stability while cornering—resulting in loss of vehicle control. Additionally, if a transverse beam drops to the ground it could create sparks which, if not avoided, could cause a fire hazard.

DESCRIPTION OF MISLOCATED WELDS *continued*

FIGURE 1
ADL Suspension

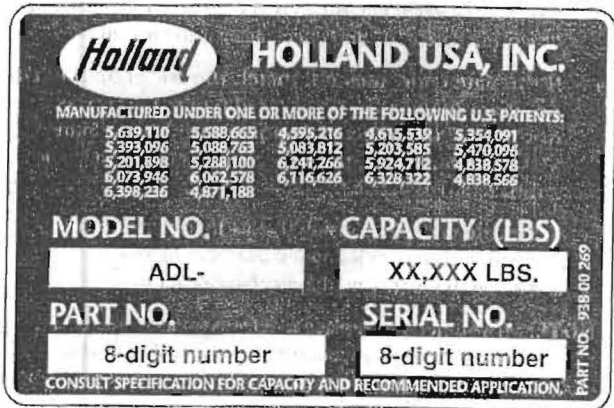


SERIAL NUMBER TAG

Depending upon OEM configuration, the serial number tag may not call out the exact kit or parts list number (FIGURE 2). If so, the vehicle OEM should be able to identify the suspension model and its components using the vehicle's VIN number.

IMPORTANT: Due to some OEMs using several variations of parts, having the exact parts used by the OEM is critical in determining proper replacement components.

FIGURE 2
Serial Number Tag



Checking Serial Number Field on Serial Tag

Transverse beam weld mislocations only affect product made between July 2007 and October 2007. The product's serial tag (FIGURE 2) has a 2-letter code in the *serial number field* that describes the manufactured month. The affected codes of manufacture are as follows:

July 2007 - GM	September - 2007 JM
August 2007 - HM	October - 2007 KM

The 2-letter code is in alphabetic order. January=AM thru December=MM skipping letter I. Only the GM-KM are suspect as shown above.

SERIAL NUMBER TAG *continued*

Checking Serial Number Field on Serial Tag *continued*

Depending on the make of your chassis or finished vehicle the VIN number may have been used to identify whether or not an inspection is warranted.

INSPECTING FOR MISLOCATED WELDS

Performing the inspection itself should not take more than 15 minutes.

1. Confirm the VIN number matches instructions provided by your chassis or vehicle manufacturer. Write down the VIN number and save for future reference.
2. Block wheels to prevent the vehicle from rolling while performing inspection.

▲ WARNING Failure to chock tires prior to beginning inspection could allow vehicle rollaway which, if not avoided, could result in death or serious injury.

NOTE: In most cases persons performing the inspection can use a creeper or other means to access the transverse beam at the rear of the vehicle.

NOTE: Use caution if vehicle has been in use as some systems generate heat.

NOTE: Inspections may be made in a service center with a hoist, pit or jacks but are not required for inspection, assuming adequate clearance.

3. Position yourself at the rear of the drive suspension and look for the serial tag using *FIGURE 1* for reference. Write down the date code and check against the list on page 1.
4. If the date code does not match the codes on the list no beam inspection is required (suspension was not part of the affected population). Fill out form XL-AK447 confirming the inspection has been made and return to SAF-HOLLAND.

If the date code does match the list then perform the inspection using the following instructions and figures to assist you in identifying the weld mislocation.

NOTE: If you need to replace a defective transverse beam, use your VIN# to identify the suspension model and its components, specifically the transverse beam assembly. Three Service Repair Kits are available to replace a defective transverse beam (see page 4).

IMPORTANT: There are two weld joints where defects may have occurred on the transverse beam. A joint at each end of the beam connects a cast end to the beam's tube structure (*FIGURE 3*). Welds at these joints are a circular band that go completely around the circumference of the tube (*FIGURE 3 DETAIL A*).

continued

INSPECTING FOR MISLOCATED WELDS *continued*

5. Visually inspect each weld joint at each end of the transverse beam (*FIGURE 3*). YOU MUST REPLACE THE BEAM IF MISLOCATED WELDS ARE PRESENT. DO NOT ATTEMPT TO REPAIR MISLOCATED WELDS. *FIGURES 4* and *5* are close up views of the correct and mislocated weld profiles.

FIGURE 3
Rear View of Suspension Transverse Beam

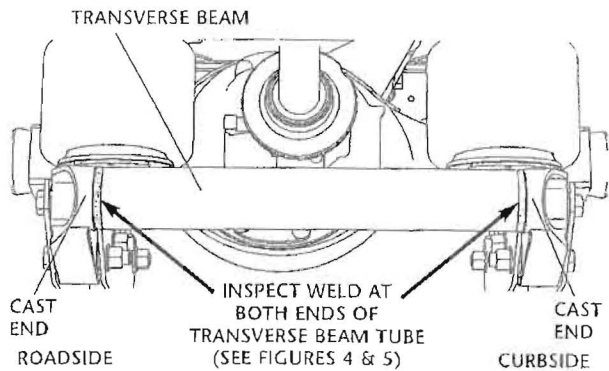


FIGURE 3 DETAIL A
View of Beam Weld From Underneath Suspension

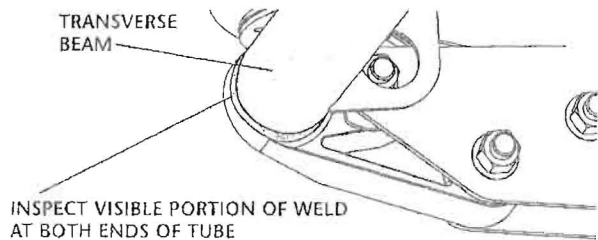


FIGURE 4
Profile View - Correct Weld

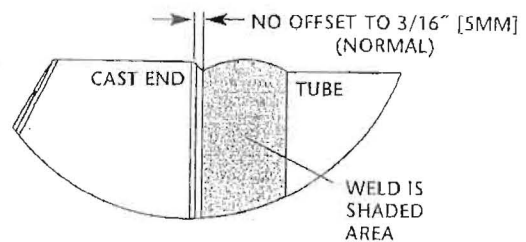
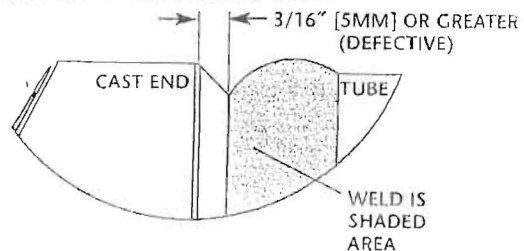
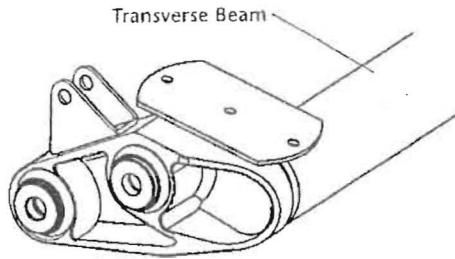


FIGURE 5
Profile View - Mislocated Weld



SERVICE REPAIR KITS

NOTE: Each Service Repair Kit contains new hardware to replace transverse beam.



NOTE: Reuse equalizing beam plates, debris shields and C-washers.

NOTE: Fastener kit components are in table below.

T-Beam Connection Kit (Beam 905 47 733)

FASTENER KIT - 481 00 499

ITEM	PART NO.	DESCRIPTION	QTY.
1	905 47 733	Transverse Beam Assembly	1
2	330 05 386	Fastener Kit	1

T-Beam Connection Kit (Beam 905 47 813)

FASTENER KIT - 481 00 500

ITEM	PART NO.	DESCRIPTION	QTY.
1	905 47 813	Transverse Beam Assembly	1
2	330 05 386	Fastener Kit	1

T-Beam Connection Kit (Beam 905 48 443)

FASTENER KIT - 481 00 501

ITEM	PART NO.	DESCRIPTION	QTY.
1	905 48 443	Transverse Beam Assembly	1
2	330 05 386	Fastener Kit	1

FASTENER KIT (INCLUDED IN T-BEAM KIT)

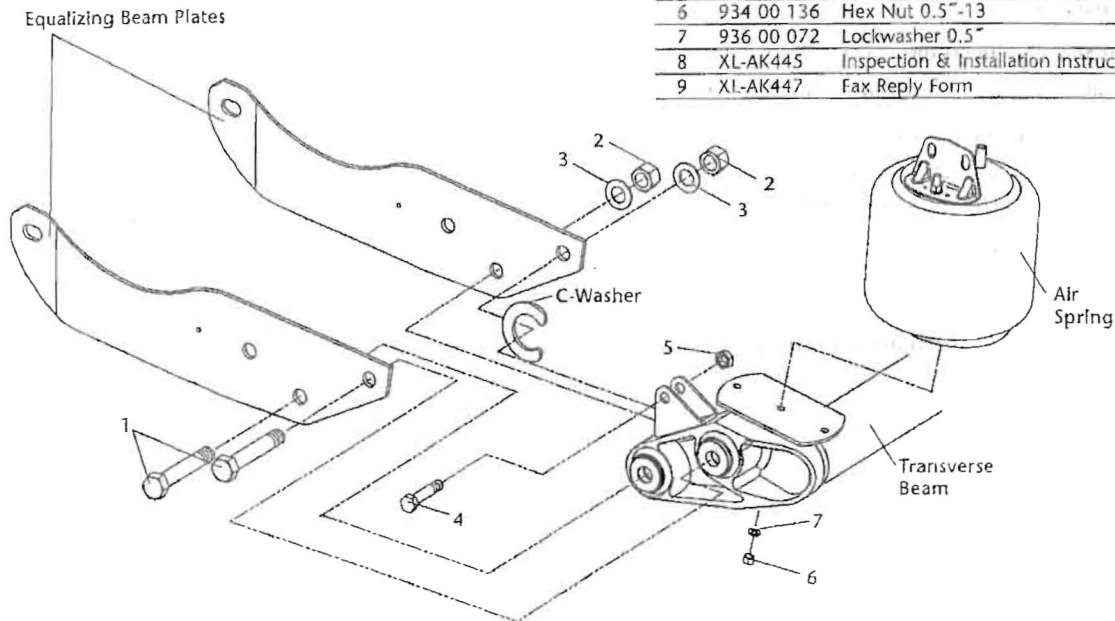
NOTE: Each Fastener Kit contains enough parts to repair both sides of the suspension.

NOTE: Reuse equalizing beam plates, debris shields and C-washers.

Fastener Kit in Transverse Beam Assembly Kit

FASTENER KIT - 330 05 386

ITEM	PART NO.	DESCRIPTION	QTY.
1	930 04 529	Hex Head Cap Screw 1.13"-7x7 GR 8	4
2	934 00 506	Hex Lock Nut 1.125"-7 GR C	4
3	936 00 174	Washer Flat Narrow 1.12"	8
4	930 03 605	Hex Hd. Cap Screw 0.75"-10x3.75" GR 8 2	2
5	934 00 494	Hex Lock Nut 0.75"-10 GR C	2
6	934 00 136	Hex Nut 0.5"-13	2
7	936 00 072	Lockwasher 0.5"	2
8	XL-AK445	Inspection & Installation Instructions	1
9	XL-AK447	Fax Reply Form	1



TRANSVERSE BEAM REPLACEMENT INSTRUCTIONS

Time and Materials

SAF-HOLLAND recommends a maximum of 1.5 hours per axle for transverse beam replacement procedure.

The transverse beam replacement procedure requires using the following tools:

1. Torque Wrench - minimum 900 ft. lb. capacity
2. Torque Wrench Extension (for leverage)
3. Sockets - 1-1/8", 3/4" and 1/2".

Transverse Beam Replacement

1. The vehicle must be on a level floor and unloaded. Block the front tires to prevent the vehicle from rolling forward or backward.

NOTE: Before disassembling suspension, determine ride height by using the "Ride Height" procedure on page 6; write down number for future reference.

WARNING Failure to chock tires prior to beginning maintenance could allow vehicle rollaway which, if not avoided, could result in death or serious injury.

2. Jack up the rear of the vehicle using jack points and procedure provided in vehicle maintenance manual.
3. Support the frame with jack stands.

WARNING Failure to properly support suspension during maintenance may allow suspension to fall which, if not avoided, could result in death or serious injury.

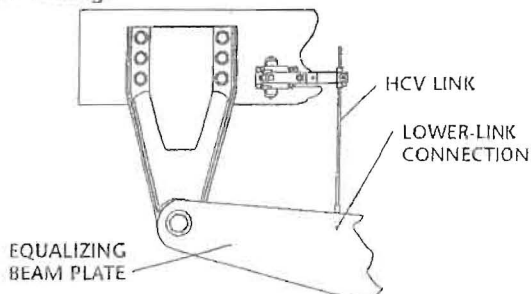
4. Remove the tires.
5. Using a floor jack, support the axle at the axle bowl.
6. Using another floor jack, support the transverse beam.
7. Exhaust air from the suspension system by:

- Height Control Valve - disconnect the link from lower connection (FIGURE 6) and pull down on the link, or

NOTE: SAF-HOLLAND recommends referring to the manufacturer's Height Control Valve Manual for the correct procedure.

- Disconnect air supply line from the air spring.

FIGURE 6
HCV Linkage



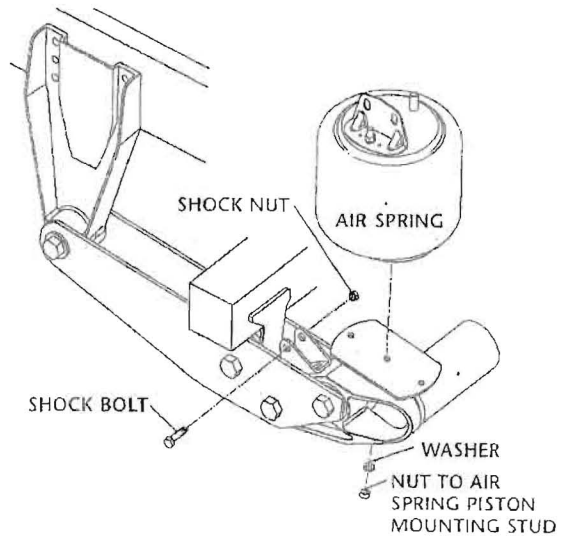
Transverse Beam Replacement *continued*

NOTE: If air spring has a leak and is deflated, Step 7 still must be performed.

CAUTION Failure to completely exhaust air springs prior to removal may result in unexpected air spring movement which, if not avoided, may result in minor or moderate injury.

8. Disconnect the shock absorbers and air springs at their lower connections (FIGURE 7).

FIGURE 7
Air Spring and Shock Lower Connections

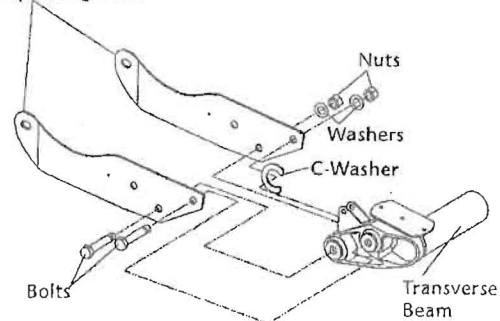


9. Remove the transverse beam connection hardware on both sides (FIGURE 8).

NOTE: Note position and orientation of "C-washers" as they will be reused.

FIGURE 8
Transverse Beam Replacement

Equalizing Beam Plates



NOTE: Reuse equalizing beam plates, debris shields (FIGURE 9) and C-washers. Equalizing Beam Plates are shown in exploded view form in FIGURE 8 to better illustrate the location of the fasteners to the transverse beam bushings. It is not necessary to separate the blades to remove and install the transverse beam.

continued

continued

TRANSVERSE BEAM REPLACEMENT INSTRUCTIONS

continued

Transverse Beam Replacement *continued*

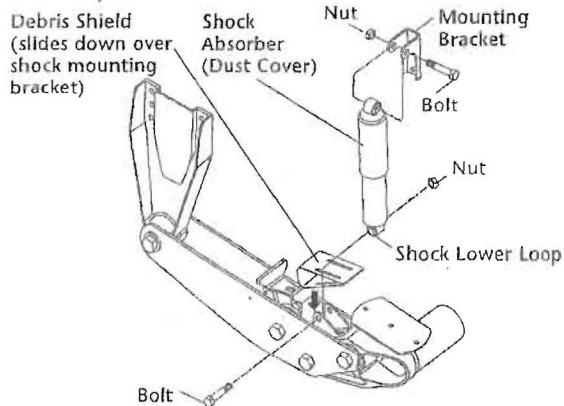
- Using the floor jack, support and lower the transverse beam to remove it from the ADL equalizing beam plates.

NOTE: The axle adapter hardware connecting the equalizing beam plates to the axle adapter may need to be loosened on both sides.

- Raise the transverse beam assembly to its original position. Reassemble the new and existing hardware, and torque all the transverse beam nuts (see Torque Specifications on page 7).
- Reconnect the shocks and debris shields (FIGURE 9), air springs, and height control valve link, and torque all hardware (see Torque Specifications on page 7).

FIGURE 9

Shock Replacement



- Remove the floor jack supporting the axle bowl.
- Reinstall the tires. Remove jack stands, lower vehicle, and remove floor jack supporting the transverse beam.
- Increase suspension air system reservoir pressure in excess of 100 psig (6.9 bars). Check for leaks. All air springs should inflate and locate suspension at proper ride height.

CAUTION While vehicle air system pressure capabilities may be in excess of 120 psig (8.3 bars), the air spring pressure must not be set above 100 psig (6.9 bars) or the rubber air spring can tear or fracture.

- Check ride height to make sure it is within $\pm 0.25"$ (6mm) of specification determined in Step 1 of this procedure.
- If ride height adjustment is necessary, refer to "Suspension Adjustment Instructions" (this page) for adjustment procedure.
- For safety considerations the defective transverse beam must be destroyed so it can no longer be used. Fill out the enclosed form (XL-AK447 is in fastener kit) with requested information, following form instructions.

IMPORTANT: SAF-HOLLAND will not pay for claim if this step is not followed.

SUSPENSION ADJUSTMENT INSTRUCTIONS

NOTE: Before determining ride height, you should have access to the HCV adjustment procedure.

Ride Height

- Before beginning to check the ride height, park the vehicle on a level floor. Block the front tires to prevent the vehicle from rolling forward or backward.

WARNING Failure to chock tires prior to beginning maintenance could allow vehicle rollaway which, if not avoided, could result in death or serious injury.

- Pressurize the air system with a constant supply of air in excess of 100 psig (6.9 bars). All air springs should inflate and locate suspension at proper ride height.

IMPORTANT: Slight adjustments to suspension ride height can be obtained by adjusting the HCV. Use ride height value for Step 1, "Transverse Beam Replacement Instructions"—page 5.

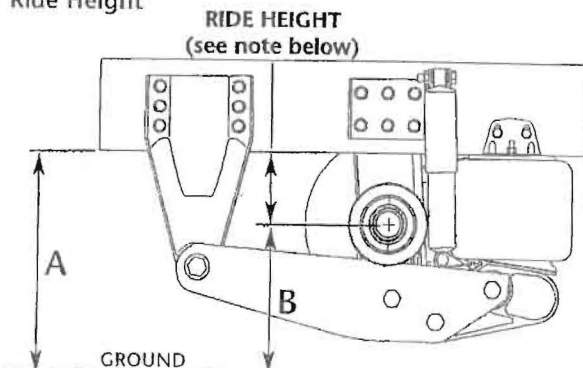
- If ride height is not within $\pm 0.25"$ (6mm) of the specified ride height, adjust the height control valve in accordance with the instructions in Height Control Valve Manual or the OEM's manual. To accurately measure ride height, perform steps 4 - 6 (FIGURE 9).
- Measure the distance from the bottom of the frame rail to the ground (FIGURE 9).
- Measure the distance from the center of the wheel to the ground (FIGURE 9).
- To determine ride height, subtract the value measured in step 5 from the value measured in step 4.

EXAMPLE: The bottom of the frame rail to the ground measures $______"$ ($______$ mm) (A); the center of the wheel to the ground measures $______"$ ($______$ mm) (B).

A - B = RIDE HEIGHT, therefore:
 $______"$ minus $______"$ = $______"$ ($______$ mm)
 RIDE HEIGHT is $______"$ ($______$ mm)

- If ride height is out of specification, see the Height Control Valve manual for instructions on how to adjust (see page 7 for Haldex website but other manufacturers' equipment may apply).

FIGURE 9
Ride Height



SUSPENSION ADJUSTMENT INSTRUCTIONS *continued*

Ride Height *continued*

For Haldex HCV Valve installation information see document number I31231 at http://www.hbsna.com/en/Technical_Literature/

TORQUE SPECIFICATIONS

TORQUE SPECIFICATIONS

SIZE	ITEM	ADL TORQUE SPECIFICATIONS*	
		FT. LBS	NM
1/2" and 3/4"	Air Spring Nuts	30-35	41-48
3/4"	Shock Absorber	250-280	340-380
1 1/8"	Transv. Beam Nuts	800-850	1085-1153

***NOTE:** Torque specifications listed above are with clean lubricated threads.

IMPORTANT: Use of special lubricants with friction modifiers, such as Anti-Seize or Never-Seize, without written approval from Holland Engineering, will void warranty and could lead to over torquing of fasteners or other component issues.

General Information

1. The torque specifications listed throughout the manual are applied to the nut, not the bolt.
2. Torque specifications: \pm 5% tolerance.
3. Lubricated Vs. Non-Lubricated Threads:

The torque specifications stated are for lubricated fasteners. Holland defines lubricated vs non-lubricated as follows:

Lubricateda bolted connection, such as the pivot bolt/nut arrangement, that has a lubricant—like motor oil—pre-applied or applied to the thread surfaces, providing a lower torque requirement for a predetermined clampload.

Non-Lubricateda bolted connection, either new or in service, that has little or no lubricant on the thread surfaces. Typically, this applies to bolted connections that have been in service for a certain length of time where the original protective coating has evaporated or deteriorated due to environmental exposure. Thus, a "non-lube" torque specification is commonly required for in-service torque check or retorquing procedures. A "non-lube" specification could be required for new installations if the pivot bolt has seen sufficient shelf life to allow for evaporation and deterioration of the protective coating.



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