

VOLVO

Volvo Trucks North America, Inc.

November 16, 2000

CERTIFIED MAIL - RETURN RECEIPT

Associate Administrator for Enforcement
National Highway Traffic Safety Administration
400 Seventh Street, S.W.
Washington, DC 20590

RE: NHTSA Recall Campaign Number: *00V-246.306*
Volvo Trucks North America, Inc., Recall Number: RVXX0004

Volvo Trucks North America, Inc. of Greensboro, North Carolina, per the requirements of 49 CFR Part 573.5(c)(9), herewith submits a copy of its recall bulletin and owner notice for the subject recall. Mailing of the bulletin and owner notices was started on November 13, 2000 and was completed on November 16, 2000.

Very Truly Yours

C. D. Powell

Charles D. Powell
Recall Administrator

Enclosures (2)

SAFETY RECALL BULLETIN

VOLVO

**SAFETY RECALL RVXX0004
NOVEMBER 2009**

**ATTENTION: SERVICE MANAGERS
PARTS MANAGERS**

SUBJECT: TRW Hydraulic Steering Assist Cylinder Ball-Socket Assembly

SAFETY RECALL INFORMATION:

Volvo Trucks North America, Inc. has decided that a defect relating to motor vehicle safety exists in certain Volvo model vehicles.

The steering assist cylinder ball-socket assembly ball stud may separate from the socket due to premature wear. If this event occurs, increased steering effort will result and a potential for an accident.

VEHICLES AFFECTED:

Certain ACL, WG, WX, WXLL, and WXR model vehicles manufactured by Volvo Trucks North America, Inc. between July 5, 1999, and November 16, 1999.

VEHICLE IDENTIFICATION NUMBERS (VIN):

There are seven hundred and thirty (730) vehicles affected by this recall.

The affected vehicles are within the following VIN ranges.

<u>From</u>	<u>Through</u>
4V2DC2HE8YN231096	4V2HC2HE1YN250784
4V5SC2GG4YN520425	4V5SM2JH1YN520980
4V2DC2HE4YN780245	4V5JC2UE9YN870129

NOTE: To verify or determine if a particular vehicle is affected by this recall (or any other recall), you should consult the Dealer Communication System (WINS). By entering the Vehicle Identification Number into the Vehicle Inquiry (VEHINQ) segment, the screen will display in the upper right hand corner any outstanding recall.

The enclosed "Dealer Listing" identifies the vehicles that were sold or shipped to your dealership. Be sure to check the VEHINQ screen before performing the recall to verify that the recall is still open.

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INSPECTION INSTRUCTIONS:

The inspection consist of looking at the ball socket end cover for certain date codes as identified in the attached TRW Service Bulletin #LNK-116. Ball-sockets bearing any of the listed date codes must be replaced as outlined in the service bulletin.

REPAIR:

The repair consist of replacing those ball-socket assemblies that are stamped with one of the date codes identified in the attached TRW Service Bulletin #LNK-116.

The repair instructions are found in the attached TRW Service Bulletin #LNK-116.

TIME ALLOWANCE:

Inspection:	- 0.3 hour per vehicle
Repair including inspection:	- 0.7 hours per vehicle

RECALL PARTS:

The recall kits are identified as kit "A" or kit "B". The kit code is found to the right of the recall number for each vehicle in the recall: i.e. RVXX0004 "A" or RVXX0004 "AB".

Note: ONLY 3 vehicles in the recall will require both kit "A" and kit "B". All other vehicles will require only kit "A". The serial numbers of the three vehicles requiring both kit A and kit B are 244323, 244324, and 244325.

KIT "A" coded vehicles require one of the following:

Recall Kit Number - 3099334

KIT "AB" coded vehicles require one of the following *plus* one of kit "A":

Recall Kit Number - 3099336

KIT ORDERING PROCEDURES:

Kits for this recall should be ordered through Volvo Trucks North America, Inc. Dealer Communications System on an as required basis only. The following information is required to place an order:

1. Your dealer account number
2. Recall kit number
3. Quantity of kits
4. Order priority: VOR

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The cost of the kit plus 30% dealer mark-up will have to be claimed per the guidelines identified under the heading "Claims for Credit".

DEALER INVENTORY:

No parts should be required from dealer stock.

REMOVED PARTS:

TRW ball-socket assemblies removed per this recall should be scrapped locally after rendering them unusable for further service.

CLAIMS FOR CREDIT:

Expenses associated with the performance of this recall will be reimbursed based on the guidelines identified in this Bulletin, and by submitting a claim following published instructions in the claim preparation section of the "Warranty Administration Procedures Manual".

NOTE: Claims for a recall repair must be submitted within 2 working days from the repair date.

CLAIM CODING INFORMATION:

Type	- P	
Authorization Number:	- RVXX0004	
Inspection :	- 64329-0-01	0.3 hour per vehicle
Repair and inspection:	- 64329-0-02	0.7 hour per vehicle

OWNER RECALL RESPONSE CARD:

The "Owner Recall Response Card" is to provide the vehicle owner with a convenient way to notify Volvo Trucks North America, Inc. of changes affecting the ownership of the subject vehicle. The owner card is not intended for dealer usage other than to assist you in the preparation of the repair orders necessary to perform the applicable recall on the subject vehicle. Please do not use the card as a way to inform Volvo Trucks North America, Inc. that the vehicle has been inspected or modified. Your WINS on-line system entry is sufficient.

**SAFETY RECALL RVXX0004
NOVEMBER 2000****DEALER RECALL RESPONSIBILITY:**

Dealers are to perform the recall on all vehicles subject to the recall at no charge to the owner regardless of mileage, age of vehicle, or ownership from this time forward. Whenever a vehicle subject to this recall is taken into or is in your vehicle inventory or dealership for service, we strongly recommend you make every effort to perform the recall correction before the vehicle is sold or released to the owner.

IMPORTANT NOTICE:

A copy of the Owner Notice has been included for your reference. Please note that the National Traffic and Motor Vehicle Safety Act requires that the owner's vehicle(s) be corrected within a reasonable time after parts are available to you. The law states that failure to repair a vehicle within sixty (60) day after tender for repair shall be a prima facie evidence of unreasonable time. However, circumstances of a particular situation may reduce the sixty (60) day period. If an owner's vehicle is not repaired within a reasonable time, he or she may be entitled, without charge, to a reasonable equivalent vehicle or refund of the purchase price, less reasonable allowance for depreciation.

Volvo Trucks North America, Inc.
P.O. Box 26115
Greensboro, NC 27102-6115

TRW Automotive Steering & Suspension Systems

Service Bulletin #LNK-116

EDL Socket Replacement (Linear Cylinders) Volvo

Released October, 2000

This TRW Commercial Steering Division service bulletin has been written to help you repair commercial vehicles more efficiently. This bulletin should not replace your manual; you should use them together. These materials are intended for use by properly trained, professional mechanics, NOT "Do-It-Yourselfers". You should not try to diagnose or repair steering problems unless you have been trained, and have the right equipment, tools and know-how to perform the work properly and safely.

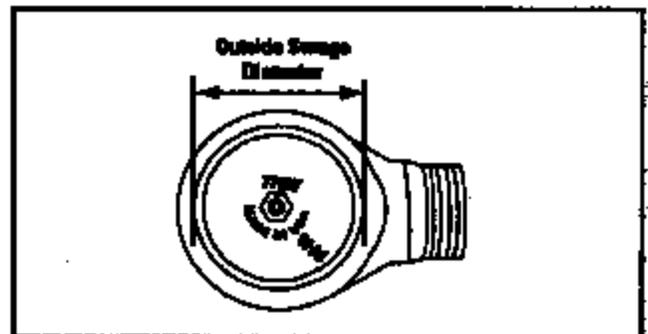
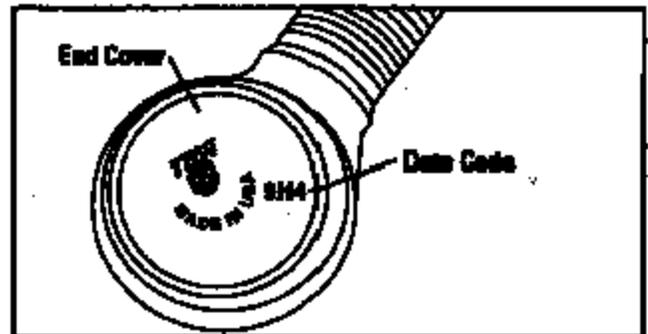
This campaign is limited to certain socket ends

IF The chassis number of the truck is on the list identified by the OE manufacturer,

AND The date code on either socket end is any of the following: 9G1, 9G2, 9G3, 9G4, 9H1, 9H2, 9H3, 9H4, 9H5, 9J1, 9J2, 9J3 OR 9J4

AND The socket is a "20 size" socket. To identify the size: measure the outside swage diameter. A 20 size socket will measure approx. 1 7/8". (24 size sockets measure 2 1/8", and are not part of this campaign.)

THEN Replace the identified socket end using this bulletin.



NOTE: Only 20 size sockets are subject to this campaign. Make sure you are servicing the correct size socket.

NOTE: Any socket with "DL" stamped into the end cover is a different design, and IS NOT part of this campaign.

Socket Replacement for Linear Cylinders

1. Remove the cylinder connection to the steering arm.
2. Remove the cylinder connection to the frame.
3. Clean the tapered holes with a clean cloth.

Steering Arm End

4. Count the number of threads exposed on the socket end of the cylinder.
5. Mark the clamp orientation on the socket tube.
6. Hold the piston rod in position using a wrench on the machined flat. Unscrew the socket from the piston rod.

CAUTION Do not allow the piston rod to rotate freely while removing the socket end. Doing so could damage the internal cylinder seals.

7. Install the new socket end, and adjust until the same number of threads are exposed as in step 4.

WARNING Do not adjust the socket end to a position where you can see the end of the piston rod threads through the slot in the tube. If the end of the rod is visible, corrosion may occur in the tube weakening the components.

Frame Bracket End

8. Count the number of threads exposed on the frame bracket end of the cylinder.
9. Mark the clamp orientation on the tube of the cylinder.
10. Unscrew the socket from the tube. Use a pipe wrench if necessary, being careful not to deform the tube.

11. Install the new socket end, and adjust until the same number of threads are exposed as in step 8.

WARNING Do not adjust the socket end to a position where you can see the end of the piston rod threads through the slot in the tube. If the end of the rod is visible, corrosion may occur in the tube weakening the components.

Reinstallation

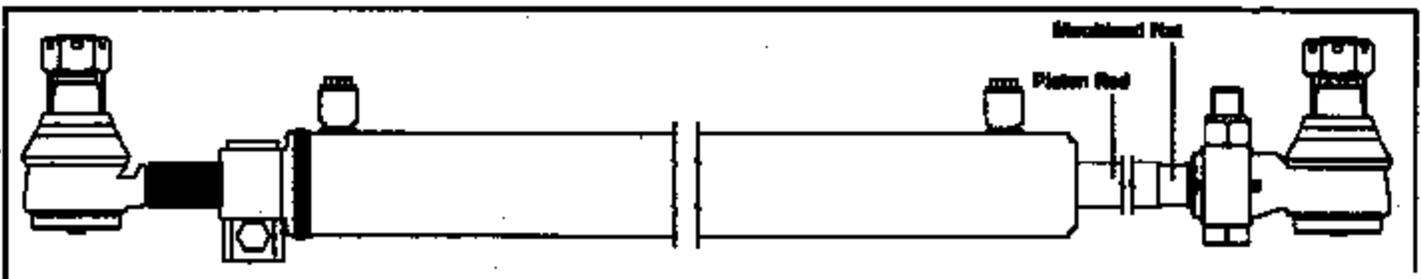
12. Reconnect the cylinder to the frame bracket. Torque the nut to the manufacturer's specifications. Install the cotter pin.
13. Position the clamp on the frame bracket end with the mark you made in step 8. Tighten the clamp and torque to vehicle manufacturer's specifications.

WARNING If the clamp is tack-welded, do not remove the tack weld. If the tack weld is removed, clamping force will not be enough to keep the socket threads stationary. Loss of steering control will result.

14. Reconnect the cylinder to the steering arm. Torque the nut to the manufacturer's specifications. Install the cotter pin.
15. Position the clamp on the steering arm end with the mark you made in step 5. Tighten the clamp and torque to 40-60 lb-ft.

WARNING If the clamp is tack-welded, do not remove the tack weld. If the tack weld is removed, clamping force will not be enough to keep the socket threads stationary. Loss of steering control will result.

16. Lubricate sockets through a grease zerk until you can see clean grease purging out of the seals.



SAFETY RECALL NOTICE

VOLVO

**SAFETY RECALL RVXX0004
NOVEMBER 2000**

Dear Volvo Truck Owner:

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

Volvo Trucks North America, Inc. has decided that a defect that relates to motor vehicle safety exists in certain ACL, WG, WX, WXLL, and WXR model vehicles built between July 5, 1999, and November 16, 1999.

- SAFETY DEFECT:** The steering assist cylinder ball-socket assembly ball stud, may separate from the socket due to premature wear.
- POTENTIAL RISK:** If this event occurs, steering assist will be lost, resulting in increased steering effort without warning and a potential for vehicle accident.
- PRECAUTION YOU CAN TAKE:** There are no precautions you can take other than having a Volvo truck dealer replace the suspect TRW ball-socket assembly.
- REPAIR:** At no charge to you regardless of your vehicle's age or mileage, a Volvo truck dealer will inspect the ball-socket and replace where required.
- TIME REQUIRED FOR THE REPAIR:** The labor time required to repair your vehicle is about 45 minutes to 1 hour.
- WHAT YOU SHOULD DO:** Volvo Trucks North America, Inc. urges you to immediately contact a Volvo truck dealer for a service appointment to have your vehicle inspected and if required repaired. At the same time you are scheduling your service appointment, you will need to tell the dealer the recall kit code assigned to your vehicle. The recall kit code for your vehicle is found to the right of the recall number printed on the "Owner Response Card" i.e. RVXX0004 A, or RVXX004 AB.
In order for the dealer to have the correct parts for your vehicle, you must tell him the recall part code. Parts are currently available for shipment to the dealer scheduling your service appointment.

**NOTICE REGARDING
LEASED VEHICLES:**

If you are a Lessor of vehicles subject to this Notice, you have an obligation under Federal Law to provide a copy of this Notice to all Lessees within 10 days of your receipt of this Notice. Further, you must maintain a record which identifies the Lessee(s) to whom you send a copy of this letter, the date you send this letter, and the Vehicle Identification Number(s) of the vehicle(s) that you have leased to that Lessee. For purposes of this Notice, the term Lessor means: a person or entity that is the owner, as reflected on the vehicle's title, of any five or more leased vehicles (as defined in 49 CFR Section 577.4), as of the date of notification by the manufacturer of the existence of a safety-related defect or non-compliance with a Federal Motor Vehicle Safety Standard in one or more of the leased motor vehicles.

**OWNER RECALL
RESPONSE CARD:**

The enclosed "Owner Recall Response Card" identifies your vehicle. Presentation of this card to your dealer will assist in the processing of your vehicle in the shortest time possible. If you do not own, have sold or have traded the vehicle identified, please let us know by completing, and signing the postage-paid Card and returning it to Volvo Trucks North America, Inc. so we can update our records.

ASSISTANCE:

If your vehicle has not been modified within a reasonable time after delivering it to the dealer on the agreed-upon date, please contact:

Volvo Trucks North America, Inc.

Recall Department

P.O. Box 26115

Greensboro, NC 27402-6115

or call our toll-free number: 1-800-528-6586. You may also submit a complaint to the Administrator, National Highway Safety Administration, 400 Seventh Street, S.W., Washington DC 20590 or call the toll-free Auto Safety Hot Line at 1-800-424-9393. Washington, DC area residents may call 202-366-0123.

We regret any inconvenience this recall may cause, but hope you will share in our concern for your safety and satisfaction with your vehicle.

Sincerely,
Volvo Trucks North America, Inc.