



Volvo Cars of North America, LLC

July 2006

TO: US and Canada Dealer Principals, Service Managers, Parts Managers and Sales Managers
RE: Recall R157 Volvo XC90 (MY2003 – MY2006) Outer Tie Rod End May Fracture

Volvo Cars North America, LLC (VCNA) and Volvo Cars of Canada Corp. (VCCC) have decided to have a recall for the following vehicles in the US and Canada. We have notified NHTSA and Transport Canada of these actions:

RECALL R157 Volvo XC90 (MY2003 - 6) Outer Tie Rod End May Fracture

In a certain few vehicles, deformation at high loads may cause loss of clamping force of the outer tie rod (ball joint) and the nut may loosen, which may eventually lead to a fatigue fracture of the outer tie rod (ball joint.) If this occurs, the driver may notice that the vehicle is difficult to maneuver. The remedy is replacement of the outer tie rods (ball joints) with improved outer tie rods (ball joints) using new assembly parameters.

Note: This action affects approximately 108,766 vehicles in the US and 7,069 vehicles in Canada

CONSUMER INQUIRIES:

We are sending you this information before formally launching this Recall to help you prepare for customer inquiries. Please work with your local Volvo Field representative to handle these consumers.

Tips for handling customer inquiries -

- Inform the customer that letters have not yet been sent. Our intention is to mail letters as soon as we have the parts to perform the recall.
- Explain to the customer that postings to NHTSA's and Transport Canada's websites accurately indicate that there will be a recall but NHTSA / Transport Canada posts their information independent of the manufacturer's timing to initiate the recall.

COMMUNICATION:

Volvo Cars of North America and Volvo Cars of Canada Corp. provided defect notification concerning Volvo's recall decisions to NHTSA and Transport Canada on May 3, 2006. NHTSA or Transport Canada may post these to their respective websites. Other websites may soon copy these postings to their own websites and/or publications. It is possible that customers may contact you upon seeing these postings from NHTSA or another publication.

CORRECTIVE ACTION:

Updated repair and claim instructions are attached. Please be advised that current repair instructions may be modified.

PARTS:

We will be doing a parts allocation based on the number of customers notification letters for your facility. The first stage of the staggered customer notification will begin on or about the week of June 12th 2006, this mailing will be approximately 50 percent of the customers involved. A parts allocation will be done prior to the customer mailing, on or about the week of June 5th to support the initial customer return rate. Please set you DMS to "Manual Order" in these part numbers so that you may monitor and limit your orders to actual demand. (see OWNER NOTIFICATION, below.)

OWNER NOTIFICATION:

Vehicle owners will receive letters via first class mail. Due to the large number of involved vehicles, not all letters will be sent at the same time. The letters will request that the owner of the vehicle take their vehicle to an authorized Volvo retailer for remedy.

Volvo appreciates your cooperation in providing quality customer care to those owners of vehicles involved in these upcoming recall actions.

Drive Safely,

Volvo Cars of North America, LLC / Volvo Cars of Canada Corporation

<h1>VOLVO</h1> <h2>Service Manager Bulletin</h2>				TITLE: Recall 157 Outer Tie Rod End May Fracture		GROUP: 64	NO: 157										
				MODEL YEAR 2003-2006 XC90		ISSUING DEPARTMENT: Warranty											
<table border="1"> <tr> <td rowspan="3">Service Person- nel: read and initial.</td> <td>SERVICE MANAGER</td> <td>SERVICE WRITER</td> <td>WARRANTY ADMINISTRATOR</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>				Service Person- nel: read and initial.	SERVICE MANAGER	SERVICE WRITER	WARRANTY ADMINISTRATOR							REFERENCE BULLETINS: TNN# 64-157 PB# 64-157 Supersedes: SMB 64-157 dated 2006-05-31		CAR MARKET: United States, Canada	
					Service Person- nel: read and initial.	SERVICE MANAGER	SERVICE WRITER	WARRANTY ADMINISTRATOR									
DATE: YEAR MONTH DAY 2006 07 21		Page 1 of 3															

UPDATE NOTES: Added new TNN 64-157 dated 2006-07-21

BULLETIN REFERENCE

- A. RECALL CAMPAIGN 157 DESCRIPTION
- B. VEHICLES INVOLVED
- C. PARTS INFORMATION/PARTS RETURN
- D. OWNER NOTIFICATION
- E. VEHICLES IN RETAILER INVENTORY
- F. RETAILER RESPONSIBILITY
- G. CAMPAIGN REIMBURSEMENT PROCEDURES
- H. TECHNICIAN COMPETENCY REQUIREMENT
- I. RETAILER ALLOWANCE

A. RECALL CAMPAIGN 157 DESCRIPTION

In a certain few vehicles, deformation at high loads may cause loss of clamping force of the outer tie rod (ball joint) and the nut may loosen, which may eventually lead to a fatigue fracture of the outer tie rod (ball joint). If this occurs, the driver may notice that the vehicle is difficult to maneuver. The remedy is replacement of the outer tie rods (ball joints) with improved outer tie rods (ball joints) using new assembly parameters.

Note: This action affects approximately 108,766 vehicles in the U.S. and 7,069 vehicles in Canada.

B. VEHICLES INVOLVED

NOTE: RETAILER MUST CONFIRM VEHICLE ELIGIBILITY PRIOR TO BEGINNING REPAIR FOR THIS CAMPAIGN.

"Fixed Right — First Time"



Vehicle eligibility should be confirmed:

- Inquire via VEN or VRC² - Vehicle Warranty where the message "RECALL CAMPAIGN 157 INCOMPLETE" will appear for eligible vehicles.

All vehicles should be checked for any other incomplete recalls or service campaigns or service upgrades. All open Recall, Service Campaign or Service Upgrade repairs should be completed.

RETAILER VEHICLE CAMPAIGN LIST

"A Retailer Campaign List" will be posted on VRC² in the Reports Menu under the Service Tab. This list details all affected vehicles that are on record as being retailed or currently in stock at your facility, and is updated monthly. Vehicle eligibility must be confirmed via VRC² prior to performing this service campaign.

C. PARTS INFORMATION / PARTS RETURN

PART#	DESCRIPTION	QTY
30760806	Ball Joint Kit (Left)	1
30760807	Ball Joint Kit (Right)	1

PARTS RETURN

Parts are not required to be returned for repairs done in accordance with this recall campaign.

D. OWNER NOTIFICATION

In June, Volvo will begin mailing announcement letters directly to the owners of the affected vehicles.

E. VEHICLES IN RETAILER INVENTORY

All vehicles in retailer's inventory and qualifying for this Recall Campaign should be repaired prior to a customer taking possession of the vehicle.

F. RETAILER RESPONSIBILITY

Retailers are to perform this campaign on eligible vehicles regardless of mileage/kilometers or vehicle age. The campaign work covered under Recall Campaign 157 is free of charge to the owner. If a customer presents a recall or service campaign letter for a vehicle that is not found via the VRC² inquiry function, please verify that the letter applies to the customer's vehicle and call the Warranty Assistance Desk at 1-800-807-7712 for instructions. If the Warranty Assistance Desk verifies that the vehicle qualifies for the Recall or Service Campaign, please perform the repair and place the recall or service campaign letter in the customer's file. Under no circumstances should a customer be denied the required service without a confirmation from VCNA/VCCL.

G. CAMPAIGN REIMBURSEMENT PROCEDURES

All claims should be submitted using the SHORT FORM application.

H. TECHNICIAN COMPETENCY REQUIREMENT

The technician competency requirement for this campaign repair is: Level 2.

I. RETAILER ALLOWANCE (SHORT FORM APPLICATION)

Labor reimbursement is effective at time of release and may change in the future.

<u>Claim Type</u>	<u>Repair Code</u>	<u>Repair Description</u>	<u>Labor Time</u>
R66021	02	Replace Tie Rods & Adj Toe-In	1.4

Tech-Net Notes

"Fixed Right – First Time"

Volvo Technicians, Service and Parts Managers

NO: 64-157
DATE: 07-21-2006
MODEL/ YEAR: XC90 2003-2006
CHASSIS: 275 0000001-0233242

NOTE: RETAILER MUST CONFIRM VEHICLE ELIGIBILITY IN VRC2 PRIOR TO BEGINNING RECALL CAMPAIGN REPAIRS.

SUBJECT Recall 157 Outer Tie Rod End May Fracture.
REFERENCE: VIDA, SMB 64-157, PB 64-157

**THIS TNN SUPERSEDES TNN 64-157 DATED 05-31-06.
THE ALIGNMENT STATEMENT ON PAGE 3 HAS BEEN CLARIFIED.
PLEASE UPDATE YOUR FILES.**

DESCRIPTION:

In a certain few vehicles, deformation at high loads may cause loss of clamping force of the outer tie rod (ball joint) and the nut may loosen, which may eventually lead to a fatigue fracture of the outer tie rod (ball joint). If this occurs, the driver may notice that the vehicle is difficult to maneuver. The remedy is replacement of the outer tie rods (ball joints) with improved outer tie rods (ball joints) using new assembly parameters.

SERVICE:

Replace the outer tie rods following the instructions below.

Note! It is critical that the proper torque is achieved when installing the outer tie rods; only hand tools may be used. Do not use impact tools when installing the outer tie rod!

Note: Current replacement instructions in VIDA have incorrect tightening information.

1.

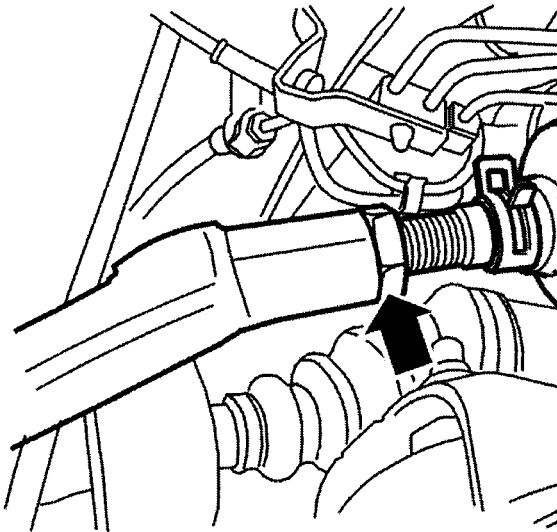
Remove:

- the wheel
 - the outer tie rod from the spindle.
-
-

2.

Remove:

- the jam nut.
- the outer tie rod

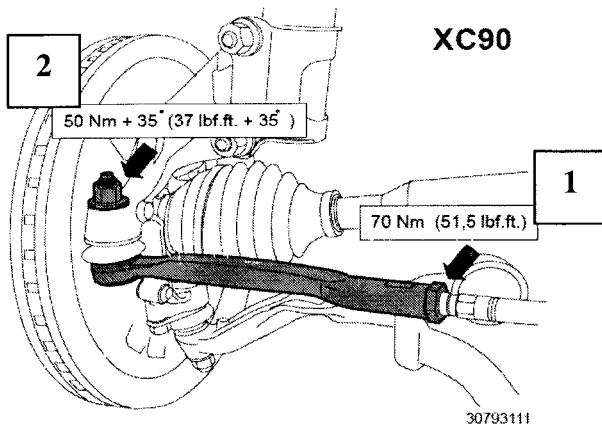


3.

Installing the outer tie rod

Install:

- the outer tie rod on the steering gear **1**. Torque the jam nut to 70 Nm (51.5 ft/lb).
 - The outer tie rod on the wheel spindle **2**. Use a wrench to counterhold the shaft, and tighten to 50 Nm + angle torque to 35° (37 ft/lb + angle torque to 35°).
-
-



Note! It is critical that the proper torque is achieved when installing the outer tie rods; **only hand tools may be used.** Do not use impact tools when installing the outer tie rod!

Install:

- the wheel. see VIDA: Installing wheels

Alignment:

- set up test equipment; check and if necessary adjust rear toe angle; check and adjust front toe angle.
- See VIDA: Wheel alignment, checking / adjusting for service procedure.
- See Service Bulletin 60-5500, "Wheel Angle Specifications", for toe specifications.

VOLVO for life,
 Volvo Cars of North America, LLC
 Technical Service

Please circulate, read and initial: _____ Svc Mgr _____ Parts Mgr _____ Shop Foreman

_____ TECHS

_____ Warranty Administrator _____ S. Advisors

SUBJECT Recall Campaign 157 Outer Tie Rod / Ball Joint MY 2003-2006 XC90				GROUP 64		NO 157	
				MARKET United States, Canada		PAGE 1 of 1	
COPY TO / CIRCULATIONS (PLEASE INITIAL)							
GENERAL MGR	PARTS MGR	SERVICE MGR	SALES MGR	DATE	YEAR	MONTH	DAY
				2006	05	31	

Reference Bulletin SMB 64-157, TNN 64-157

Volvo Cars of North America, LLC (Volvo) and Volvo Cars of Canada Corp. (Volvo) has determined that in certain MY2003-2006 XC90 vehicles, deformation at high loads may cause loss of clamping force of the outer tie rod (ball joint) and the nut may loosen, which may eventually lead to a fatigue fracture of the outer tie rod (ball joint). If this occurs, the driver may notice that the vehicle is difficult to maneuver.

The remedy is replacement of the outer tie rods (ball joints) with improved outer tie rods (ball joints) using new assembly parameters.

Recall Campaign 157 affects approximately 108,700 vehicles in the U.S and 7,000 in CND.

The following part numbers apply:

Part Number	Description	Qty
30760806	Tie Rod (ball joint) LH	1
30760807	Tie Rod (ball joint) RH	1

We will be doing a parts allocation based on the number of customer notification letters for your facility. The first stage of the staggered customer notification will begin on or about the week of June 12th, 2006. This mailing will be approximately 50 percent of the customers involved. A parts allocation will be done prior to the customer mailing, on or about the week of June 5th to support the initial customer return rate. Please set your DMS to "Manual Order" in these part numbers so that you may monitor and limit your orders to actual demand.

"Fixed Right — First Time"



IMPORTANT RECALL NOTICE

[RECALL 157: OUTER TIE ROD END MAY FRACTURE, XC90 (MY 2003-MY 2006
SAMPLE OWNER NOTIFICATION LETTER
UNITED STATES]

June 2006

Dear Volvo Owner:

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

The reason for this campaign:

Volvo Cars of North America, LLC. (Volvo) has decided that a defect related to motor vehicle safety exists in the outer tie rods of certain model year 2003, 2004, 2005 and 2006 XC90 vehicles.

In a certain vehicles, the outer tie rod may deform due to heavy loads, causing the tie rod nut to loosen. Over time, the deformation may lead to a fatigue fracture of the outer tie rod. If this occurs, the driver may notice that the vehicle is difficult to maneuver, which could result in a crash.

The corrective action will be to replace the outer tie rods with parts of a modified design.

What you need to do:

Please call your authorized Volvo retailer as soon as possible to schedule an appointment to have this campaign performed. This procedure will be completed at no cost and will take approximately 90 minutes. Due to service scheduling, your Volvo retailer may require your vehicle for a longer period of time.

If you have previously had this repair performed on your vehicle, whether you paid for it or not, you must schedule an appointment with your authorized Volvo retailer for the replacement of the tie rods with parts of a modified design. If you previously paid to have this corrective action performed, your authorized Volvo retailer will honor your receipt with a refund. Please contact the Service Department for details.

Please contact:

If you have any questions, please contact your Volvo retailer. If your retailer is unable to answer your questions, please contact Volvo Customer Care Center at 7 Volvo Drive, Rockleigh, NJ 07647 or phone 1-800-458-1552, Monday through Friday, 8:30 A.M. to 7:00 P.M. Eastern Time. You may also e-mail us at customercare@volvoforlife.com.

We have advised the National Highway Traffic Safety Administration (NHTSA) that we are conducting this recall. If you are unable to have this procedure performed without charge and within a reasonable period of time, you may call the toll-free Vehicle Safety Hotline 1-888-327-4236 (TTY: 1-800-424-9153); go to <http://www.safercar.gov>; or contact the NHTSA Administrator at 400 Seventh Street SW, Washington, DC 20590.

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days. Lessor means a person or entity that is the owner, as reflected on the vehicle title, of any five or more leased vehicles.

Your safety and continued satisfaction with your Volvo and the Volvo organization are very important to us. We apologize for any inconvenience this may cause and we appreciate your cooperation in arranging to have this important service completed as quickly as possible.

Sincerely,

Eunice Stern
Manager, Customer Care