

March 2004

RECEIVED

TO: ALL VOLVO RETAILERS - US
RE: RECALL CAMPAIGN 129

2004 MAR -2 P 14:15

OFFICE OF VOLVO

Volvo Cars North America, LLC (Volvo) has decided that a defect related to motor vehicle safety exists in certain model year 2000 S40 and V40 vehicles. Under certain circumstances, water may enter the electrical brake vacuum pump, causing the pump to not function. This will require more brake force to stop the vehicle. However, this is primarily noticed at cold start. This limited braking power can affect the vehicle's stopping performance.

The corrective action will be to replace the vacuum pump with a new pump of a modified design. This new pump will be placed in a new location to prevent water intrusion.

Recall Campaign 129 affects 34,422 vehicles in the US.

OWNER NOTIFICATION

A notification letter will be sent to the owners of all potentially affected vehicles in three phases.

1. During the week of March 15, 2004 owners with vehicles in the area of the Rutherford National Distribution Center will receive notification letters.
2. During the week of March 22, 2004 owners with vehicles in the area of the Atlanta National Distribution Center will receive notification letters.
3. During the week of March 29, 2004 owners with vehicles in the area of the Ontario California National Distribution Center will receive notification letters.

RETAILER RESPONSIBILITIES

The initial allocation will be sent out in phases starting with retailers serviced out of the Rutherford National Distribution Center, followed by Atlanta National Distribution Center and then Ontario California National Distribution Center.

Retailers must perform this campaign on eligible vehicles regardless of miles/kilometers or vehicle age. All work performed under this Recall Campaign is free of charge to the owner.

In the event that a customer does not have a notification letter, the owner is not to be refused this important campaign work. Your regional representative will follow up to ensure that this campaign is proceeding smoothly.

A complete description of the campaign requirements and claim submission procedures follow. A "Retailer Vehicle Campaign List" will be sent under separate cover identifying the specific vehicles retailed by your facility that are eligible for this campaign. It is the retailer's responsibility to review the details provided in the materials listed below with all involved personnel.

- Service Manager Bulletin 52-129
- Service Bulletin 52-0011
- Parts Bulletin 52-129
- Owner Notification Letter

Your cooperation in completing this important campaign is greatly appreciated.
Drive Safely,

Volvo Cars of North America, LLC

VOLVO				TITLE:		GROUP:	NO:	
				Recall Campaign 129		52	129	
Service Manager Bulletin				Brake Vacuum Pump S40, V40 Mdl. Yr: 2000		ISSUING DEPARTMENT:		
						Warranty		
						CARMARKET:		
						United States		
				REFERENCE BULLETINS:		DATE:		
				Part Bulletin Group 52 No. 129		YEAR	MONTH	DAY
Service Personnel: read and initial.				Service Bulletin Group 52 No. 0011		2004	03	01
								Page 1 of 3
SERVICE MANAGER	SERVICE WRITER	WARRANTY ADMINISTRATOR						

BULLETIN REFERENCE

- A. RECALL CAMPAIGN 129 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 129 DESCRIPTION

Volvo Cars of North America, LLC. (Volvo) has decided that a defect related to motor vehicle safety exists in certain model year 2000 S40 and V40 vehicles. Under certain circumstances, water may enter the electrical brake vacuum pump, causing the pump to not function. This will require more brake force to stop the vehicle. However, this is primarily noticed at cold start. This limited braking power can affect the vehicle's stopping performance. The corrective action will be to replace the vacuum pump with a new pump of a modified design. This new pump will be placed in a new location to prevent water intrusion. This will be performed at no charge. Approximately 34,422 vehicles in the U.S. may be affected.

B. VEHICLES INVOLVED

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

Vehicle eligibility should be confirmed:

- Inquire via VEN or VRC² - Vehicle Warranty where the message "RECALL CAMPAIGN 129 INCOMPLETE" will appear for eligible vehicles.

"Fixed Right — First Time"



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

RETAILER VEHICLE CAMPAIGN LIST

"A Retailer Campaign List" will be posted on VRC² for 75 days from initial launch. This list details all affected vehicles that are on record as being retailed or currently in stock at your facility.

C. PARTS INFORMATION / PARTS RETURN

Part Number	Part Description	Qty
30641411	Vacuum Pump Service Kit	1
30620958	Vacuum Hose	1
1161480	Anti Rust Spray	0.1

The initial parts allocation will be sent out in phases starting with retailers serviced out of the Rutherford National Distribution Center, followed by the Atlanta National Distribution Center and the Ontario California National Distribution center.

PARTS RETURN

Parts are not required to be returned.

D. OWNER NOTIFICATION

Starting the week of March 15th, announcement letters will be mailed directly to the owners of the affected vehicles. The letter will be sent out in phases starting with locations serviced out of the Rutherford National Distribution Center, followed by the Atlanta National Distribution Center and the Ontario California National Distribution center. A copy of the letter is included.

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 129 is free of charge to the owner. In the event that the original announcement letter is lost or misplaced, the owner is not to be refused this important campaign work. Your Aftersales Area Manager will follow up to ensure that this campaign is proceeding smoothly.

G. CAMPAIGN REIMBURSEMENT PROCEDURES

All claims should be submitted using the short form application. A repair code has been established for this repair that will automatically reimburse the retailer for the proper labor and parts amount for each claim.

H. TECHNICIAN COMPETENCY REQUIREMENT

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

I. RETAILER ALLOWANCE

Claim Type	Repair Code	Repair Description	Labor Time	Part Amount
129	02	Additional Pump Brake Vacuum	1.7 hrs	US: \$ 264.93

Vehicles involved: B4204T2 with AW 80-42

Brake vacuum pump, installed at a new position**Background:**

Volvo Cars North America, LLC (Volvo) has decided that a defect related to motor vehicle safety exists in certain model year 2000 S40 and V40 vehicles. Under certain circumstances, water may enter the electrical brake vacuum pump, causing the pump to not function. This will require more brake force to stop the vehicle. However, this is primarily noticed at cold start. This limited braking power can affect the vehicle's stopping performance.

The corrective action will be to replace the vacuum pump with a new pump of a modified design. This new pump will be placed in a new location to prevent water intrusion.

Competence requirement

Volvo Level 2 Technician

Material

Description	Quantity	Part No.
Vacuum pump service kit	1	30641411
Vacuum hose	1	30620956
Anti rust spray	0.1	1161480

"Fixed Right - First Time"

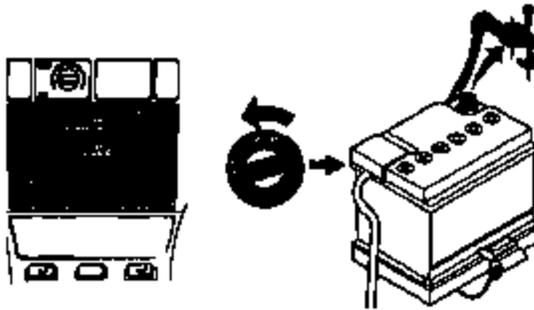
Service personnel: Please circulate, read and initial

Service Manager	Parts Manager	Workshop Manager	Workshop Foreman	Service Technicians						



Vacuum pump

Additional vacuum pump, replacing



14881102

Preparatory work

1

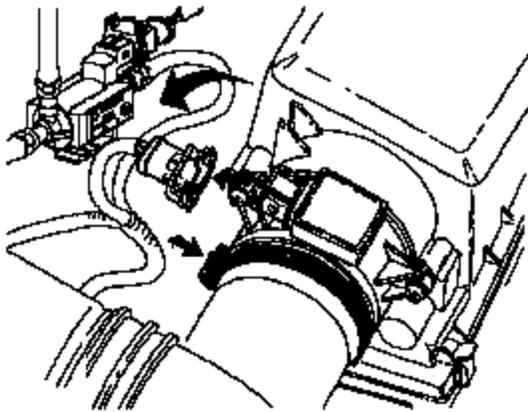
Make a note of the anti-theft radio code.

Switch off the ignition.

Caution! Press down the brake pedal a few times until there is no longer any negative pressure (vacuum) in the brake servo.

Remove:

- the battery negative lead
- the battery positive lead
- the protective cover over the battery
- the battery clamp and the battery.



14881104

Removing the air cleaner (ACL)

2

Remove:

- the connector for the mass air flow (MAF) sensor
- the turbocharger (TC) control valve from the air cleaner (ACL)
- the air inlet hose on the mass air flow (MAF) sensor side
- the 2 mountings for the cable harness from the air cleaner (ACL) housing
- the air intake at inner fender
- the mounting screws
- the air cleaner (ACL).

Note! Plug off the air inlet hose.

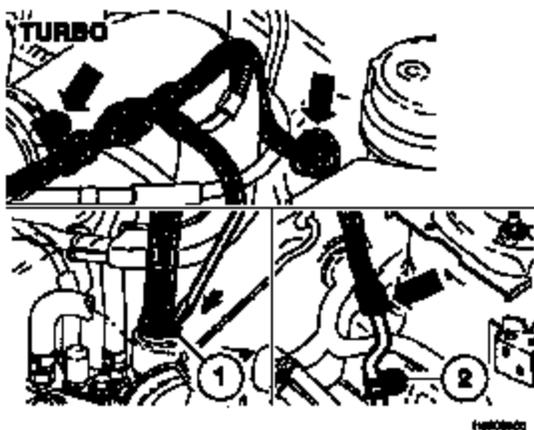
3

Removing the vacuum hose

Note! Clean the area around the vacuum hose terminal before removal.

Remove:

- the connection from the brake servo
- the bolt and clamp from the vacuum hose (will be re-used)
- the protective cover for the throttle housing
- the vacuum hose from the intake manifold by pressing in the locking ring (1) while pulling the vacuum hose out
- the quick-release connector for the vacuum hose to the additional vacuum pump
- the vacuum hose. This will not be re-used
- the bolt (2) from the vacuum pipe on the side member.



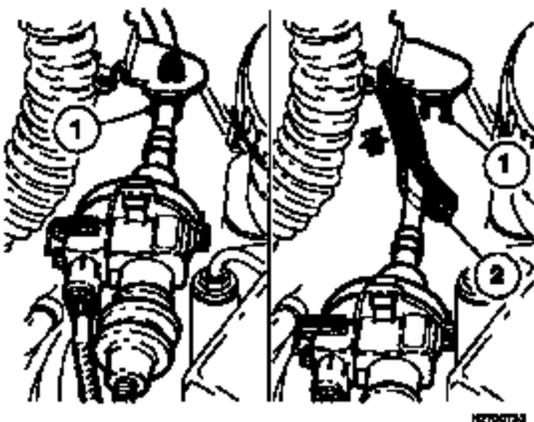
4

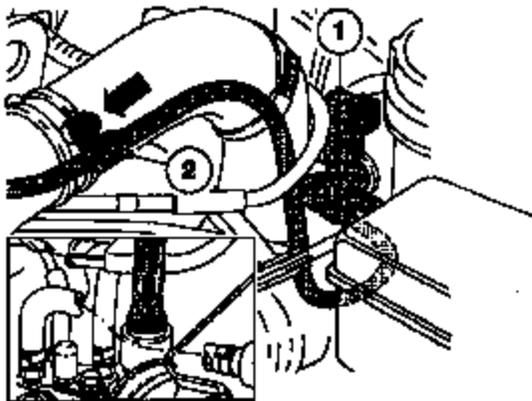
installing the protective sleeve for the throttle cable**Remove:**

- the protective cover from the connector bracket fire wall
- the throttle cable out from the clip (1).

Install:

- the protective sleeve (2) over the throttle cable. Slide the protective sleeve as far as possible towards the firewall
- the throttle cable in the clip (1).





H4200042

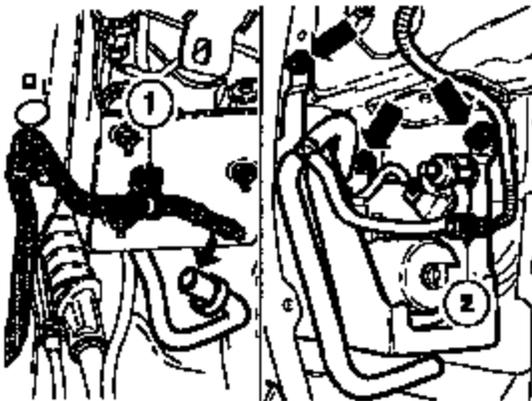
Installing the new vacuum hose

5

Position the vacuum hose between the intake manifold and the brake servo.

Install:

- the vacuum hose in the manifold. Check the locking by pulling on the vacuum hose
- the vacuum hose control valve (1) in the brake servo
- the clamp (2) and bolt on the vacuum hose. Tighten to 6 Nm



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Removing the complete additional vacuum pump assembly

6

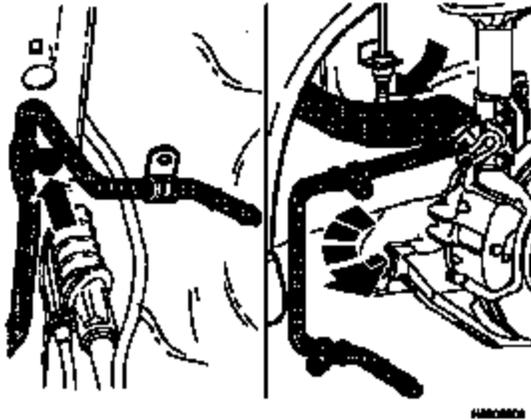
Remove:

- the left front wheel
- the front fender liner. Bend the fender liner backwards
- the vacuum hose from the vacuum pipe
- the clamp (1) from the vacuum pipe
- the connector (2)
- the three mounting screws
- the vacuum pump assembly. This vacuum pump assembly will not be re-used.

Route the wiring and connector (2) via the existing inner fender hole into the engine compartment.

7

Removing the vacuum pipe from the side member



Remove:

- the clamp from the vacuum pipe at the side member
- the vacuum pipe.

Note! The vacuum pipe must be bent before it can be removed. This vacuum pipe will not be re-used.

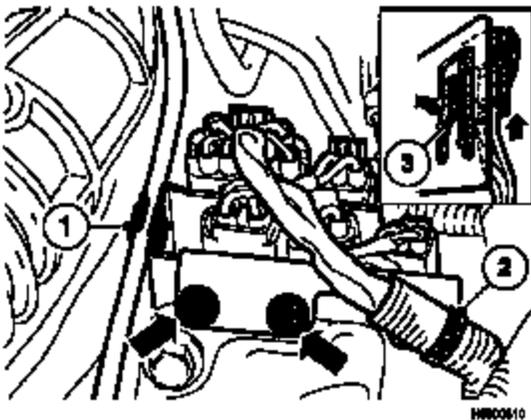
Clean the vacuum pipe and pump assembly screw positions. Apply rust proofing agent, P/N 1161460.

Install:

- the front fender liner
- the left front wheel.

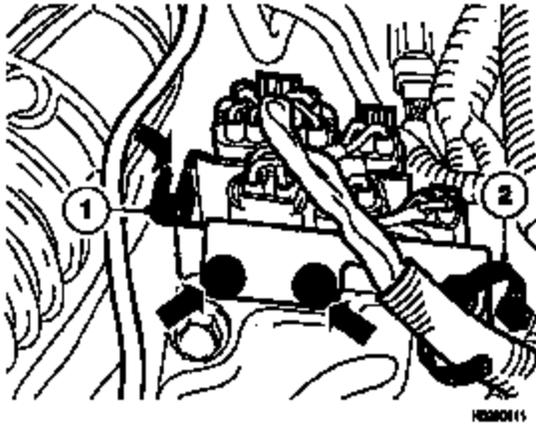
8

Removing the connector bracket from the transmission (to lower the position of the connectors)



Remove:

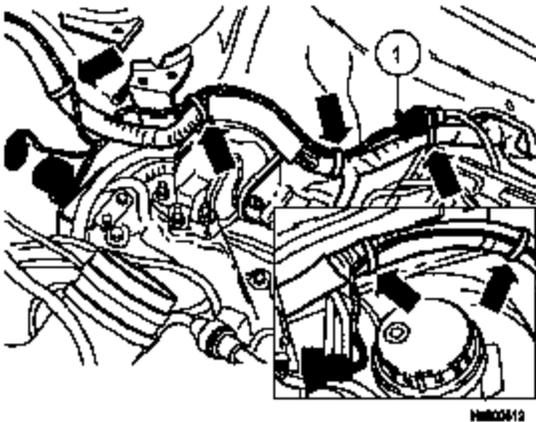
- the shifting cable out off the clip (1)
- the clip (1) from the bracket
- the upper tie strap (2) from the cable harness
- the two mounting screws
- the connectors by lifting the catches (3) and slide it from the bracket. Note the position of the connectors on the bracket
- the bracket and remove at the side the cable harness.



Installing the new connector bracket on the transmission

Install:

- the connectors on the bracket in their original positions and check the locking
- the cable harness tie strap on the side
- the bracket on the transmission. Tighten to 10 Nm
- the clip (1) for the shifting cable
- the shifting cable in the clip (1)
- the new tie strap (2) and cable harness.



Installing the extra cable harness

Remove:

- the relay/fuse box from the bracket
- the rear clamp from the cable harness.

Move the relay/fuse box to one side.

Position the connector (1) at the front. Route the new cable harness over the engine compartment cable harness.

Connect the connector (1) to the connector from the old vacuum pump.

Use tie straps to clamp the wiring as illustrated.

Note! Ensure that the cable harness is not trapped or in contact with moving components or sharp edges.

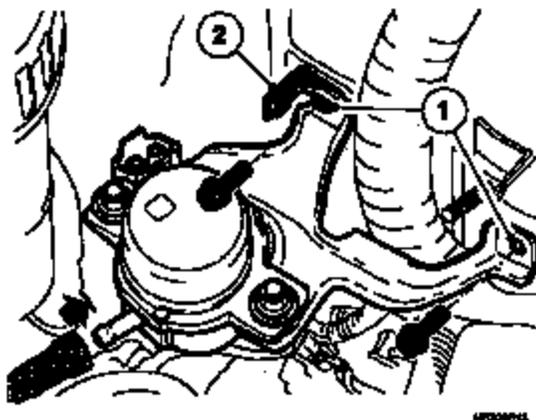
11

Installing a new additional vacuum pump and bracket

Note! Check that the existing nuts (1) are in good assembly conditions.

Position the vacuum pump bracket and relay bracket (2) on the inner fender by two screws. Tighten to 21 Nm.

Press the quick release connector of the vacuum hose on the vacuum pump. Check the locking.



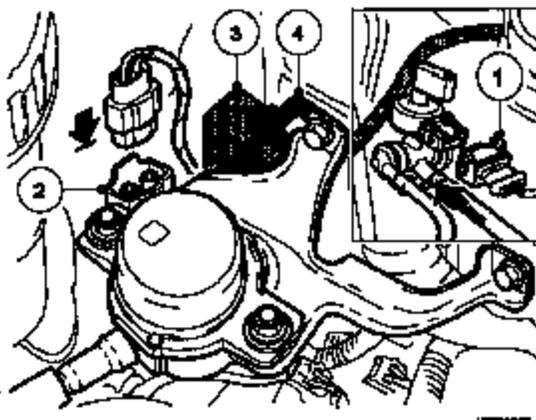
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12

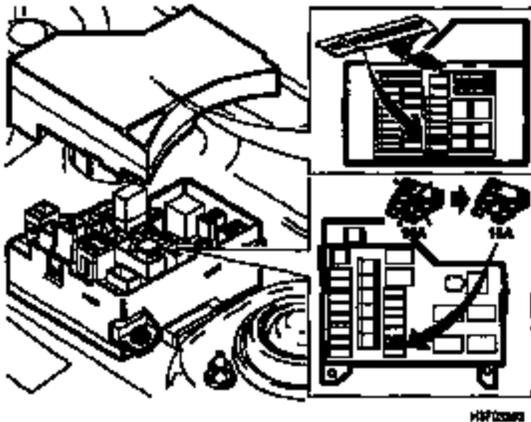
Installing the new cable harness and relay**Connect:**

- the connector (1) to the vacuum hose control valve on the brake servo
- the extra cable harness connector (2) to the vacuum pump
- the relay (3) to the connector on the extra cable harness.

Install the relay (3) on the bracket (4). Tighten to 6 Nm.



6200007



H372382

13

Installing the relay/fuse box

Reinstall the relay/fuse box.
 Replace fuse no. 22 (10 A) with the 15 A fuse.
 Clean the area where the label will be applied. Install the label on the inside of the cover.
 Reinstall the cover on the fuse box.

14

Installing components

Notes! Do not connect the battery negative lead.

Install:

- the air cleaner (ACL)
- the protective cover for the throttle housing
- the protective cover from the connector bracket fire wall
- the battery and battery clamp
- the protective cover over the battery
- the battery positive lead.

15

Connecting the battery and checking function

Turn the ignition to position II.

Warning! Ensure that no one is in the car when the battery is connected.

- Connect the battery negative lead.
- Re-enter the radio code.
- Set the car clock to the correct time.

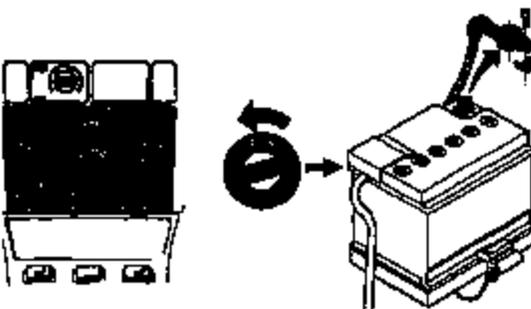
Function test:

Turn the ignition off, press down the brake pedal a few times until there is no longer any negative pressure (vacuum) in the brake servo.

Turn the ignition key to position II and listen for the operation of the additional vacuum pump. The vacuum pump stops after a short time.

Start the engine and let it idle.

Press down the brake pedal a few times and check whether the additional vacuum pump starts working.



H40110

VOLVO

Nothing can replace them.

Parts Bulletin

SUBJECT Recall - 129 MY 2000 S/V 40 Brake Vacuum Pump				GROUP 52	NO 129
COPY TO / CIRCULATIONS (PLEASE INITIAL)				MARKET United States	PAGE 1 of 1
GENERAL MGR	PARTS MGR	SERVICE MGR	SALES MGR	DATE	YEAR 2004
					MONTH 03
					DAY 01

Volvo Cars of North America, LLC has decided that a defect related to motor vehicle safety exists in certain model year 2000 S/V40. Under certain circumstances, water may enter the electrical brake vacuum pump, causing the pump to not function. This will require more brake force to stop the vehicle. However, this is primarily noticed at cold start. This limited braking power can affect the vehicle's stopping performance.

The corrective action will be to replace the vacuum pump with a pump of modified design. This new pump will be placed in a new location to prevent water intrusion.

Approximately 34,422 vehicles in the U.S. may be affected.

The following part numbers apply:

Part Number	Description	Qty
30641411	Vacuum pump service kit	1.0
30620958	Vacuum Hose	1.0
1161480	Anti rust spray	0.1

The initial allocation will be sent out in phases starting with retailers serviced out of the Rutherford National Distribution Center, followed by Atlanta National Distribution Center and then Ontario California National Distribution center.

These initial allocations of the Vacuum Pump Service Kit, Vacuum hose and a single container of anti rust spray, representing 50% of the vehicles retailed or in stock at your retail facility will be made starting on or about the week of March 1st, 2004 with complete allocation in all distribution centers on or about week of March 26th, 2004. After this one time allocation you may order additional quantities using normal ordering procedure.

"Fixed Right — First Time"



Printed in USA on recycled paper containing a minimum of 50% wastepaper and 10% post-consumer waste.
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IMPORTANT RECALL NOTICE

**[RECALL 129: BRAKE VACUUM PUMP
SAMPLE OWNER NOTIFICATION LETTER
UNITED STATES]**

March 2004

Dear Volvo Customer:

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 North America, LLC (Volvo) has decided that a defect related to motor vehicle safety exists in certain model year 2000 S40 and V40 vehicles. Under certain circumstances, water may enter the electrical brake vacuum pump, causing the pump to not function. This will require more brake force to stop the vehicle. However, this is primarily noticed at cold start. This limited braking power can affect the vehicle's stopping performance, increasing the risk of a crash.

The corrective action will be to replace the vacuum pump with a new pump of a modified design. This new pump will be placed in a new location to prevent water intrusion. This will be performed at no charge.

What you need to do:

Please call your authorized Volvo retailer as soon as possible to schedule an appointment. This procedure will be completed at no cost and will take approximately 2 hours. Due to service scheduling, your Volvo retailer may require your vehicle for a longer period of time.

If you previously paid to have this corrective action performed, Volvo will honor your receipt with a refund. Please contact your Volvo retailer 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 at 7 Volvo Drive Rockleigh, New Jersey 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@volvocars.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 contact the NHTSA Auto Safety Hotline at 1-888-327-4236. The address is 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

Please note: According to Insurance Institute for Highway Safety President Brian O'Neill, "It is very important that owners of vehicles in which safety-related problems have been identified take those vehicles back to dealerships as soon as they receive notice of a recall or service campaign. Such notices should not be ignored or taken lightly. There is just no reason to drive around in a vehicle with a safety-related defect."