

November 2004

TO: ALL VOLVO RETAILERS – US AND CANADA
RE: RECALL CAMPAIGN 137: BRAKE VACUUM VALVE/HOSE ASSEMBLY,
INSPECT/REPLACE MY 2004 S40 & V40

Volvo Cars of North America, LLC and Volvo Cars of Canada Ltd. (Volvo) previously launched this as a Service Campaign in June 2004. Our current records show that all vehicles have not had this corrective action performed. Given the nature of this defect, Volvo has decided after further discussions with NHTSA to conduct this action as a safety recall in the US and Canada.

The repair procedure and the campaign number are the same as before.

Volvo has determined in certain 2004 S40 and V40 vehicles, the non-return valve may crack due to a poor weld, causing a vacuum leak. The non-return valve holds residual vacuum in the brake booster and is incorporated in the vacuum valve/hose assembly.

If this occurs, more pedal force may be required to stop the vehicle. This limited braking power can affect the vehicle's stopping performance, increasing the risk of a crash. Also, you may experience a rough engine idle.

The corrective action will be to inspect the date code on the brake vacuum valve/hose assembly non-return valve and if necessary replace the hose (non-return valve is a component of hose). Only brake vacuum valve/hose with affected date codes are to be replaced.

OWNER NOTIFICATION

Owner notification is scheduled to begin the week of November 24, 2004.

Volvo will send recall owner letters to the remaining customers that have not yet had the cars performed by the Service Campaign.

RETAILER RESPONSIBILITIES

Retailers must perform this recall 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 recall work. Your regional representative will follow up to ensure that this recall is proceeding smoothly.

A complete description of the recall requirements and claim submission procedures will follow.

It is the retailer's responsibility to review the details provided in the materials listed below with all involved personnel.

- Service Manager Bulletin 52-137
- Parts Bulletin 52-137 (Updated)
- TNN 52-04 (Updated)
- Owner Notification Letter

Your cooperation in completing this important campaign is greatly appreciated.

Drive Safely,

Volvo Cars of North America, LLC
Volvo Cars Canada Ltd.

| | | | | | | | |
|--|--------------------|---|--|---|---------------------------|---------------------------------|------------|
| <h1>VOLVO</h1> <h2>Service Manager Bulletin</h2> | | | | TITLE: Recall 137 | | GROUP: 52 | NO: 137 |
| | | | | Brake Vacuum Valve / Hose Assembly, Inspect / Replace | | ISSUING DEPARTMENT: Warranty | |
| Model Yr 2004 Model: S40 / V40 | | CARMARKET: United States, Canada | | | | | |
| | | REFERENCE BULLETINS: PB 52-137, TNN 52-04 Supersedes: SMB 00-137 dated 2004-06-30 | | DATE: YEAR MONTH DAY 2004 11 22 | | | |
| Service Person- nel: read and initial. | SERVICE MANAGER | | | SERVICE WRITER | WARRANTY ADMINISTRATOR | Page 1 of 3 | |
| | | | | | | | |

BULLETIN REFERENCE

- A. RECALL 137 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 REQUIREMENTS
- I. RETAILER ALLOWANCE
- J. CUSTOMER REIMBURSEMENT

A. RECALL 137 DESCRIPTION

Volvo Cars of North America, LLC and Volvo Cars of Canada Ltd. (Volvo) previously launched this as a Service Campaign in June 2004. Our current records show that all vehicles have not had this corrective action performed. Given the nature of this defect, Volvo has decided after further discussions with NHTSA to conduct this action as a safety recall in the U.S. and Canada.

The repair procedure and the campaign number are the same as before.

Volvo has determined in certain 2004 S40 and V40 vehicles, the non-return valve may crack due to a poor weld, causing a vacuum leak. The non-return valve holds residual vacuum in the brake booster and is incorporated in the vacuum valve/hose assembly.

If this occurs, more pedal force may be required to stop the vehicle. This limited braking power can affect the vehicle's stopping performance, increasing the risk of a crash. Also, you may experience a rough engine idle.

The corrective action will consist of inspecting, and if necessary, replacing the vacuum hose. This will be performed at no charge.

"Fixed Right — First Time"



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B. VEHICLES INVOLVED

Approximately 1,630 vehicles in the U.S. and 60 vehicles in Canada may be affected.

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

Vehicle eligibility should be confirmed:

- Inquire via VEN or VRC² - Vehicle Warranty where the message "RECALL 137 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 or 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. This report is only current at time of launch and vehicle eligibility must be confirmed via VRC².

C. PARTS INFORMATION / PARTS RETURN

| Part Number | Part Description | Qty Req |
|-------------|---------------------------------|---------|
| 30620958 | BrakeVacuum Valve/Hose Assembly | 1 |

PARTS RETURN**D. OWNER NOTIFICATION**

During the week of November 21st, an announcement letter will be mailed directly to the owners of the affected vehicles. A copy of the letter is included.

E. VEHICLES IN RETAILER INVENTORY

All vehicles in retailer's inventory and qualifying for this Recall 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 work covered under Recall 137 is free of charge to the owner.

Your Aftersales Market Manager will follow up to ensure that this recall campaign is proceeding smoothly.

G. CAMPAIGN REIMBURSEMENT PROCEDURES

Separate claims for each repair must be submitted using the short form application. A repair code is established that will automatically reimburse the retailer for the proper labor and parts amount for each claim.

H. TECHNICIAN COMPETENCY REQUIREMENTS

The technician competency requirement for this campaign repair is: LEVEL 1.

I. RETAILER ALLOWANCE

Parts and labor reimbursement amounts are effective at time of release and may change in the future. An individual Short Form claim must be submitted.

| <u>Claim Type</u> | <u>Repair Code</u> | <u>Repair Description</u> | <u>Labor Time</u> | <u>Part U.S.</u> | <u>Part Canada</u> |
|-------------------|--------------------|--------------------------------|-------------------|------------------|--------------------|
| 137 | 02 | INSPECT & REPLACE VALVE & HOSE | 0.3 | \$86.02 | 127.23 |
| 137 | 03 | INSPECT ONLY | 0.1 | | |

J. CUSTOMER REIMBURSEMENT

Please follow the instructions as outlined in the Warranty Policy and Procedures Manual chapter 6, page 6.4.

Tech-Net Notes

"Fixed Right – First Time"

Volvo Technicians, Service and Parts Managers

NO: 52 - 04
DATE: 11/22/04
MODEL: S/V 40
M. YEAR: 2004
CHASSIS: 069532 – 089717 (NOTE: RETAILERS MUST CONFIRM VEHICLE ELIGIBILITY)
SUBJECT: Recall Campaign 137: Brake Vacuum Valve/Hose Assembly, Inspect/Replace
REFERENCE: SMB 52-137, PB 52-137, VADIS

This Tech Note supersedes the previous TNN 52-04 dated 6-30-04. Please update your files.

DESCRIPTION: Volvo Cars of North America, LLC and Volvo Cars Canada Ltd. (Volvo) have determined in certain 2004 S40 and V40 vehicles, the non-return valve may crack due to a poor weld, causing a vacuum leak. The non-return valve holds residual vacuum in the brake booster and is incorporated in the vacuum valve/hose assembly.

If this occurs, more pedal force may be required to stop the vehicle. This limited braking power can affect the vehicle's stopping performance, increasing the risk of a crash. Also, you may experience a rough engine idle.

| Material | Quantity | Part No. |
|-------------|----------|----------|
| Service kit | 1 | 30620958 |

SERVICE:

1.

Checking the date code on the brake vacuum valve

Disconnect the connector.
Read and note the date code.

Note: If the code is not visible, proceed to step 2.

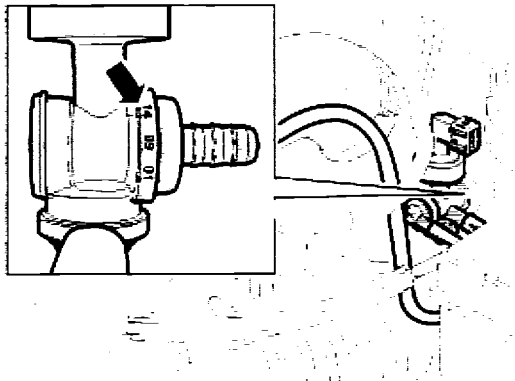
If the date code is one of the following:

29 08 03
01 09 03
02 09 03
03 09 03

then proceed to step 3.

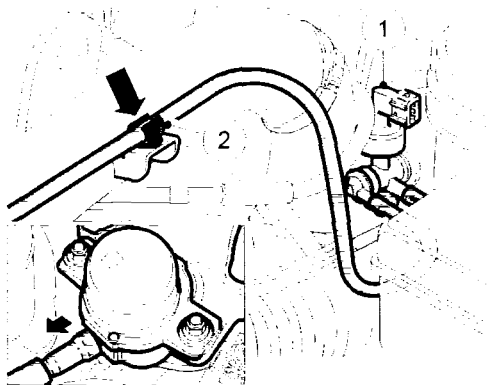
If the date code is not on the list above, the vacuum valve is functioning correctly and does not need to be replaced.

Connect the connector to the brake vacuum valve.



H520058

2.



Removing the vacuum valve

Perform this step only if the date code is not visible without removing the vacuum valve. Before starting work: Press down the brake pedal until there is no negative pressure (vacuum) in the brake servo.

Note! Clean the area around the terminal for the vacuum hose.

Remove:

- the quick-release connector for the vacuum hose on the additional vacuum pump
- turbocharged engines: the vacuum hose from the clip (2) and from the brake servo
- the connection from the brake servo.

Read the date code on the brake vacuum valve. If necessary, move the valve upwards at an angle to make the digits more visible. If the date code is one of the following:

29 08 03

01 09 03

02 09 03

03 09 03

then proceed to step 3.

If the date code is not on the list above, the vacuum valve is functioning correctly and does not need to be replaced.

Install the brake vacuum valve (1) in the brake servo.

Hint: Apply a little white vaseline or soap to the connection at the brake servo.

Install:

- the vacuum hose in the clip (2)
- the quick-release connector for the vacuum hose connection by pressing it onto the additional vacuum pump. Check the connection
- the connector (1) on the brake vacuum valve.

Proceed to step 5.

H520059

Removing the vacuum hose

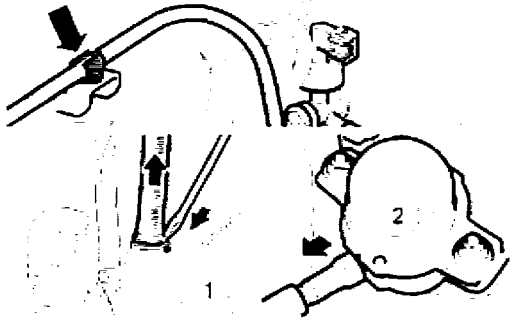
Before starting work: Press down the brake pedal until there is no negative pressure (vacuum) in the brake servo.

Note! Clean the area around the terminal for the vacuum hose.

Remove:

- the quick-release connector (2) for the vacuum hose on the additional vacuum pump
- the connection to the brake servo
- the vacuum hose out of the clip
- the vacuum hose for the intake manifold by pressing the lock washer (1) while pulling the vacuum hose out.

The vacuum hose must not be reused.



H520056

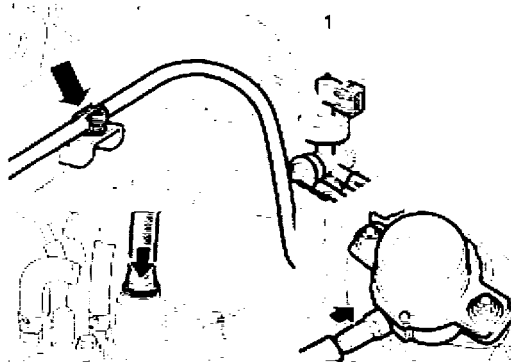
Installing the brake vacuum hose

Position the new brake vacuum hose.
Install the brake vacuum valve.

Hint: Apply a little white vaseline or soap to the connection at the brake servo.

Install:

- the vacuum hose in the intake manifold. Check the locking by pulling the vacuum hose
- the brake vacuum valve (1) in the brake servo
- the vacuum hose in the existing clip
- the quick-release connector for the vacuum hose connection by pressing it onto the additional vacuum pump. Check the locking
- the connector (1) on the brake vacuum valve
- non turbocharged engines: the protective cover for the throttle body (TB).



H520057

Checking the function

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.

Note – If the pump fails to start, fault trace as per VADIS.

Start the engine and let it idle.

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

Note – If the Pump continues to run while the engine is running please fault trace as per VADIS.

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

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

_____ TECHS

_____ Shop Foreman _____ Warranty Administrator



Nothing can replace them.

Parts Bulletin

| | | | | | | | |
|---|-----------|-------------|-----------|--|-------------|-----------------------|-----------|
| SUBJECT Recall Campaign 137: Brake Vacuum Valve/Hose Assembly MY 04 S/V40 | | | | GROUP 52 | | NO 137 | |
| | | | | 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 |
| | | | | | 2004 | 11 | 22 |

Supersedes Parts Bulletin 52 -137 dated June 2004

Reference - SMB 52-137 dated Nov. 2004 and TNN 52 - 04 dated Nov. 2004

Volvo Cars of North America LLC. and Volvo Cars of Canada Ltd. (Volvo) have determined in certain 2004 S40 and V40 vehicles, the non-return valve may crack due to a poor weld, causing a vacuum leak. The non-return valve holds residual vacuum in the brake booster and is incorporated in the vacuum valve/hose assembly.

If this occurs, more pedal force may be required to stop the vehicle. This limited braking power can affect the vehicle's stopping performance, increasing the risk of a crash. Also, you may experience a rough engine idle.

The corrective action will be to inspect the date code on the brake vacuum valve/hose assembly non-return valve and if necessary replace the hose (non-return valve is a component of hose). Only brake vacuum valve/hose with affected date codes are to be replaced.

Affected date codes: (see TNN 52-04 for details of date code location)

29 08 03
01 09 03
02 09 03
03 09 03

Approximately 1,630 vehicles in the US and 60 vehicles in Canada may be affected.

The following part number applies:

| Part Number | Description | Qty |
|-------------|----------------------------------|-----|
| 30620958 | Brake vacuum valve/hose assembly | 1 |

Note: Since this is a re-launch of SC 137 as a recall we will not be allocating any parts for this recall. Please check your DMS inventory before placing any orders for additional stock. Retailer sales history indicates a large volume of parts already at your retail facility. Affected brake vacuum valve/hose assemblies were only used in vehicle production.

A complete Vehicle Campaign List will be posted on VRC² in the Reports Menu under Service Tab. This list details all affected vehicles that are on record as being retailed or currently in stock at your facility. This report is only current at time of launch and vehicle eligibility must be confirmed via VRC².

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IMPORTANT RECALL NOTICE

**[RECALL CAMPAIGN 137: BRAKE VACUUM VALVE/HOSE
ASSEMBLY, INSPECT/REPLACE MY 2004 S40/V40
SAMPLE OWNER NOTIFICATION LETTER
UNITED STATES]**

November 2004

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 which relates to motor vehicle safety exists in certain 2004 S40 and V40 vehicles.

In certain cases, the non-return valve may crack due to a poor weld, causing a vacuum leak. The non-return valve holds residual vacuum in the brake booster and is incorporated in the vacuum valve/hose assembly.

If this occurs, more pedal force may be required to stop the vehicle. This limited braking power can affect the vehicle's stopping performance, increasing the risk of a crash. Also, you may experience a rough engine idle.

The corrective action will consist of inspecting, and if necessary, replacing the vacuum hose. 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 should take approximately 30 minutes. 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 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. Or email us at customer care@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 Administrator 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.

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."