June 2007

TO: ALL VOLVO RETAILERS
RE: RECALL 181

Volvo Cars of North America, LLC (Volvo) has notified the National Highway Traffic Safety Administration and Transport Canada that we will perform a Voluntary Safety Recall to replace the Fuel Pressure Sensor on certain model year 2003 and 2004 Volvo S60/V70 vehicles.

The fuel pressure sensor (FPS) located on the left side of the fuel rail, may at times transmit incorrect signals regarding the fuel pressure to the Engine Control Module (ECM). If the signal is outside of the pre-programmed allowable limits, a Diagnostic Trouble Code (DTC) may be set and the Check Engine Light (CEL) will come on.

Engine misfire may occur during driving that in turn can reduce the engine torque, in the worst case scenario the engine may stall without warning.

Recall 181 affects approximately 48,300 vehicles in the U.S. and 4,100 in Canada.

OWNER NOTIFICATION

Owner notification is scheduled to begin during the month of June.

RETAILER RESPONSIBILITIES

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

A complete description of the Recall Campaign 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
- Tech Net Note
- Parts Bulletin

Your cooperation in completing this important Recall is greatly appreciated.

Drive Safely,

Volvo Cars of North America, LLC and Volvo Cars of Canada Corporation
Volvo Cars of North America, LLC. (Volvo) has decided that a defect related to motor vehicle safety exists in the fuel pressure sensor of certain model 2003-2004 S60 and V70 vehicles. In certain vehicles, the fuel pressure sensor may crack, sending an incorrect signal to the Electronic Control Module (ECM). When this occurs, the Check Engine Light will illuminate and the vehicle may experience a loss of power, increasing the risk of a crash.

The corrective action will be to replace the fuel pressure sensor with a part of a modified design. Approximately 48,300 vehicles in the U.S. and 4,100 in Canada are affected.

**B. VEHICLES INVOLVED**

**NOTE:** RETAILER MUST CONFIRM VEHICLE ELIGIBILITY PRIOR TO BEGINNING REPAIR FOR THIS CAMPAIGN.
Vehicle eligibility should be confirmed:

- Inquire in VRC² - Vehicle Warranty where the message "RECALL 181 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**

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

**D. OWNER NOTIFICATION**

In late 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 Service 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 181 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 customers 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 only.

**H. TECHNICIAN COMPETENCY REQUIREMENT**

The technician competency requirement for this campaign repair is: Level 1.
I. RETAILER ALLOWANCE (SHORT FORM APPLICATION)

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

<table>
<thead>
<tr>
<th>Campaign Number</th>
<th>Claim Type</th>
<th>Repair Code</th>
<th>Repair Description</th>
<th>Labor Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>181</td>
<td>R27041</td>
<td>02</td>
<td>Replace Fuel Pressure Sensor</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Engine VIN Codes 61 &amp; 64</td>
<td></td>
</tr>
<tr>
<td>181</td>
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<td>Replace Fuel Pressure Sensor</td>
<td>0.3*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Engine VIN Codes 52 &amp; 59</td>
<td></td>
</tr>
</tbody>
</table>

* Engine VIN code 52 labor time is 0.6 hours.
Tech-Net Notes
“Fixed Right – First Time”
Volvo Technicians, Service and Parts Managers

NO: 23-181
DATE: 06-27-2007
MODEL: S60, V70 with engine code 52, 59, 61, 64
M. YEAR: 2003 – 2004
CHASSIS: S60 235112 – 372809
V70 286155 – 404037

NOTE: NOT ALL VEHICLES WITHIN THE CHASSIS LIMITATIONS ABOVE ARE AFFECTED. RETAILER MUST CONFIRM VEHICLE ELIGIBILITY IN VRC² PRIOR TO BEGINNING RECALL REPAIRS.

SUBJECT: Recall 181: Fuel Pressure Sensor

DESCRIPTION:
In certain S60 and V70 cars with engine code 61 and 64 (normally aspirated engines) and engine code 52 and 59 (turbo engines), the fuel pressure sensor may at times transmit an incorrect signal to the Engine Control Module (ECM). If the signal value is outside the allowed limits, Diagnostic Trouble Codes (DTCs) ECM-2600, ECM-2100, ECM-211A, ECM-260A or ECM-261A may be stored and the Check Engine Light (CEL) lit.

This defect may cause misfire during driving, resulting in reduced engine torque. In the worst case scenario, the engine may stall without warning. In certain traffic conditions this could cause an unsafe situation and possibly a crash.

SERVICE:
Replace the fuel pressure sensor according to the instructions below.

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure sensor (engine code 52, 59)</td>
<td>1</td>
<td>30756097</td>
</tr>
<tr>
<td>Pressure sensor (engine code 61, 64)</td>
<td>1</td>
<td>8699448</td>
</tr>
<tr>
<td>Cable tie</td>
<td>1</td>
<td>983706</td>
</tr>
</tbody>
</table>
1. **Safety precautions for handling fuel**

   **Caution!**

   Avoid ignition sources.

   Use breathing protection when there is a risk of breathing in fuel vapors.

   Use protective gloves to avoid skin contact with fuel.

2. **Draining the fuel system**

   Start the engine.

   Open the cover of the fuse box on the left dashboard end.

   Remove the fuel pump fuse, position 33. See the owner’s manual.

   Let the engine run until it stops.

   Refit the fuse and cover.

   **Note:** There is no need to drain the fuel tank.

3. **Only turbo engines**

   **Engine code 52 only:**
   Remove:
   - the charge air hose over the engine
   - the cover over the intake manifold.

   **Engine code 59 only:**
   Remove the cover over the fuel rail.
4. **Removing the fuel pressure sensor**

**Caution!** Use protective eyewear.

Use compressed air to blow clean around the fuel pressure sensor.

Remove:
- the cable tie
- the connector
- the screw.

5. Position paper under the fuel pressure sensor to catch any gasoline remaining in the fuel rail.

**Hint:** Cut out the bottom of a plastic bottle and place it on the paper.

Remove the fuel pressure sensor.

6. **Installing the fuel pressure sensor**

Lubricate the O-ring of the new fuel pressure sensor using lubricant P/N 1161580.

Install:
- the fuel pressure sensor
- the M5 screw. Tighten to 7 Nm (5.2 lb-ft)
- the cable tie on the fuel pressure sensor
- the connector
- the cable in the cable tie.
Engine code 52 only:
Install:
  – the cover over the intake manifold
  – the charge air hose over the engine

Engine code 59 only:
Install the cover over the fuel rail.

All engines:
Start the engine. Check that the fuel rail does not leak.
Volvo Cars of North America, LLC and Volvo Cars of Canada Corp. have announced a Recall Campaign affecting certain 2003-2004 S60, V70.

It has been decided that a defect related to motor vehicle safety exists in the fuel pressure sensor of certain model 2003-2004 S60 and V70 vehicles.

The corrective action will be to replace the fuel pressure sensor with a part of a modified design.

Approximately 48,300 vehicles in the US and 4,100 vehicles in Canada are affected.

The following part number applies:

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>983706</td>
<td>Cable Tie</td>
<td>1</td>
</tr>
<tr>
<td>30756097</td>
<td>Pressure Sensor, Turbo</td>
<td>1</td>
</tr>
<tr>
<td>8699448 or replacing 30756098</td>
<td>Pressure Sensor, Non-Turbo</td>
<td>1</td>
</tr>
</tbody>
</table>

An initial allocation representing parts for 50% of the affected vehicles in stock, or retailed at your facility will be begin starting the week of June 25, 2007. After this one time allocation you may use normal ordering procedures.

"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.

Note - Please set your DMS to "Manual Order" on this part number so that you may monitor and limit your orders to actual demand.
IMPORTANT RECALL NOTICE

[CAMPAIGN 181: 2003-2004 S60, V70 FUEL PRESSURE SENSOR
SAMPLE OWNER NOTIFICATION LETTER
UNITED STATES]

June 2007

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 fuel pressure sensor of certain model 2003-2004 S60 and V70 vehicles.

In certain vehicles, the fuel pressure sensor may crack, sending an incorrect signal to the Electronic Control Module (ECM). When this occurs, the Check Engine Light will illuminate and the vehicle may experience a loss of power, increasing the risk of a crash.

The corrective action will be to replace the fuel pressure sensor with a part of a modified design.

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 45 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, 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 1 Volvo Drive, Rockleigh, NJ 07647 or phone 1-800-458-1552, Monday through Friday, 8:30 A.M. to 6:00 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 contact the NHTSA Administrator at 1-888-327-4236. The address is 1200 New Jersey Ave SE, 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,

Rich Buchheit
Manager, Customer Support