



*Jeff*  
2/7/07

Volvo Cars of North America, LLC

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February 5, 2007

Mr. Jeffrey Quandt, Chief  
Vehicle Control Division  
Office of Defects Investigation  
National Highway Traffic Safety Administration  
Room 5326  
400 Seventh Street, S.W.  
Washington, D.C. 20590

NVS-213  
EA06-006

Dear Mr. Quandt:

This letter and its enclosure comprise the partial response of Volvo Cars of North America, LLC (VCNA) to your request for information relating to Engineering Analysis EA06-006. This letter, which will be the first submission, responds to the agency's request numbers 1 through 6 with information that was received by Volvo between December 1, 2005, and November 1, 2006.

In order to respond to request #1, 2, 3, 4, 5, and 6 of EA06-006 Volvo (Volvo Car Corporation and VCNA) in good faith conducted a thorough and diligent search of Volvo systems. Our response is based upon this diligent and thorough search.

As requested, our answer follows a repeat of the question:

1. State, by model and model year, the number of subject vehicles Volvo has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by Volvo, state the following:
  - a. Vehicle identification number (VIN);
  - b. Make;
  - c. Model;
  - d. Model Year;
  - e. Date of manufacture;
  - f. Date warranty coverage commenced; and
  - g. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).
  - h. Whether the vehicle was subject to NHTSA recall number 05V-529.

Provide the table in Microsoft Access 2003, or a compatible format, entitled "PRODUCTION DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

Volvo Response to Request 1:

*The number of "subject vehicles" has remained unchanged since Volvos response to PE05-057. Volvo has copied the information submitted within PE05-057 into the NHTSA supplied Access database added an additional field named "Subject to Recall 05v-529" and indicated with a "Y" if the vehicle was included in this Recall.*

*Detailed information containing the responses to the agency's Request 1a – 1h can be found on the attached CD-ROM in the Microsoft Access database named "Volvo EA06-006" within the table entitled "PopulationData". The following abbreviations are used in the table:*

*DOB = Date of Build*

*WSD = Warranty Start Date*

*When available, the state in which the vehicle was originally sold has been populated.*

Information related to vehicle production is maintained and has been extracted from Volvo's "QW90" database.

2. State the number of each of the following, received by Volvo, or of which Volvo is otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles after December 1, 2005 through November 1, 2006:
  - a. Consumer complaints, including those from fleet operators;
  - b. Field reports, including dealer field reports;
  - c. Reports involving a crash, injury, or fatality, based on claims against the manufacturer involving a death or injury, notices received by the manufacturer alleging or proving that a death or injury was caused by a possible defect in a subject vehicle, property damage claims, consumer complaints, or field reports;
  - d. Reports involving a fire, based on claims against the manufacturer involving a death or injury, notices received by the manufacturer alleging or proving that a death or injury was caused by a possible defect in a subject vehicle, property damage claims, consumer complaints, or field reports;
  - e. Property damage claims; and
  - f. Third-party arbitration proceedings where Volvo is or was a party to the arbitration; and
  - g. Lawsuits, both pending and closed, in which Volvo is or was a defendant or codefendant.

For subparts "a" through "d, / e," state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint).

In addition, for items "c" through "d/e/f/g," provide a summary description of the alleged problem and causal and contributing factors and Volvo's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "d/e/f" and "e/f/g," identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

Volvo Response to Request 2:

*In order to identify reports or incidents which may be related to the alleged defect, Volvo collected information from databases where, in the normal course of business, the information is collected and maintained. Volvo searched these databases for records received between December 1, 2005 and November 1, 2006.*

*Detailed information containing the responses to the agency's Request 2 can be found on the attached CD-ROM in the Microsoft Access database named "Volvo EA06-006" within the table entitled "QuestionTwoData".*

<u>Request</u>	<u>Count</u>
a) Consumer Complaints – "Customer Care"	0
b) Field Reports –	
"TIE" (Manufacturer)	2
"Tech Hotline" (Dealer)	1
c) Reports involving a crash, injury, or fatality based on:	
Claims - involving a death or injury	0
Notices - received by the manufacturer alleging or proving that a Death or Injury was caused by a possible defect in a subject vehicle, property damage claims, consumer complaints, Or field reports:	0
d) Reports involving a fire, based on claims against the manufacturer involving a death or injury, notices received by the manufacturer alleging or proving that a death or injury was caused by a possible defect in a subject vehicle, property damage claims, consumer complaints, or field reports	1
e) Property damage claims	0
f) Third-party arbitration proceedings	0
g) Lawsuits	0

3. Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No.2, state the following information:
- Volvo's file number or other identifier used;
  - The category of the item, as identified in Request No.2 (i.e., consumer complaint, field report, etc.);
  - Vehicle owner or fleet name (and fleet contact person), address, and telephone number;
  - Vehicle's VIN;
  - Vehicle's make, model and model year;
  - Vehicle's mileage at time of incident;
  - Incident date;
  - Report or claim date;
  - Whether a crash is alleged;
  - Whether a fire is alleged;
  - Whether property damage is alleged;
  - Number of alleged injuries, if any; and

- m. Number of alleged fatalities, if any.
- n. Whether an engine stall occurred.
- o. Whether the complaint is related to the: (1) Undertorqued positive battery cable to starter motor fastener; (2) mis-positioned jack handle; or (3) the positive battery cable chafing concern.

Provide this information in Microsoft Access 2003, or a compatible format, entitled "REQUEST NUMBER TWO DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

### Volvo Response to Request 3

*Detailed information containing the responses to the agency's Request 2 can be found on the attached CD-ROM in the Microsoft Access database named "Volvo EA06-006" within the table entitled "QuestionTwoData".*

- 4. Produce copies of all documents related to each item within the scope of Request No.2. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method Volvo used for organizing the documents.

### Volvo Response to Request 4:

*Detailed information containing the responses to the agency's Request 4 can be found on the attached CD-ROM in folder named "Question 4 – Volvo Response". Each category (i.e., Consumer Complaints, Field reports, etc.) has its own subfolder containing related information*

- 5. State, by model and model year, since December 1,2005 through November 1,2006, a total count for all of the following categories of claims, collectively, that have been paid by Volvo to date that relate to, or may relate to, the alleged defect in the subject vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign.

Separately, for each such claim, state the following information:

- a. Volvo's claim number;
- b. Vehicle owner or fleet name (and fleet contact person) and telephone number;
- c. VIN;
- d. Repair date;
- e. Vehicle mileage at time of repair;
- f. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
- g. Labor operation number;
- h. Problem code;
- i. Replacement part number(s) and description(s);
- j. Concern stated by customer; and
- k. Comment, if any, by dealer/technician relating to claim and/or repair.

1. Whether the claim is related to the: (1) Undertorqued positive battery cable to starter motor fastener; (2) mis-positioned jack handle; or (3) the positive battery cable chafing concern.

Provide this information in Microsoft Access 2003, or a compatible format, entitled "WARRANTY DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

Volvo Response to Question 5:

*Detailed information containing the responses to the agency's Request 5 can be found on the attached CD-ROM in the Microsoft Access database named "Volvo EA06-006" within the table entitled "WarrantyData". Fields have been added to this table indicating the responses to Question 5L.*

6. Describe in detail the search criteria used by Volvo to identify the claims identified in response to Request No.5, including the labor operations, problem codes, part numbers and any other pertinent parameters used. Provide a list of all labor operations, labor operation descriptions, problem codes, and problem code descriptions applicable to the alleged defect in the subject vehicles. State, by make and model year, the terms of the new vehicle warranty coverage offered by Volvo on the subject vehicles (i.e., the number of months and mileage for which coverage is provided and the vehicle systems that are covered). Describe any extended warranty coverage option(s) that Volvo offered for the subject vehicles and state by option, model, and model year, the number of vehicles that are covered under each such extended warranty.

Volvo Response to Request 6:

*In order to identify related information to the agency's Request No. 5, Volvo utilized a symptom based search of our Warranty data system which is based on a text mining approach.*

*The following criterion was used to create this query; a manual review was then performed on the result to identify records that matched the "Subject component" and "Alleged Defect":*

<i>make</i>	<i>Volvo;</i>
<i>model year</i>	<i>2005;</i>
<i>vehicle line</i>	<i>XC90;</i>
<i>date</i>	<i>2005-12-01; 2006-11-01;</i>
<i>source system key</i>	<i>VOLVO Warranty;</i>
<i>category</i>	<i>electrical;</i>
<i>level1</i>	<i>start-charge; wiring;</i>
<i>symptoms</i>	<i>burned out ; burrs/sharp edges ; circuit-open; circuit-poor contact/poor ground; circuit-shortcd; damage-burned component (not fire); damage-chafed/excessive wear; damage-cracked/fractured/split; damage-cut/torn/frayed ; damage-grooved/scored; damage-insulation/wire damage;</i>

	<i>damage-melted; damage-pinched/crimped; damage-punctured (not tire);  damage-terminal/connector; damage-threads stripped/crossthreaded; engine  power-loss of power; engine power-stall; fire; function-shuts off; improperly  routed; loose; overheat; smoke;</i>

## *New Car Limited Warranty – U.S.*

### **PARAMETERS/WARRANTY COVERAGE**

*The Volvo New Car Limited Warranty-U.S. applies to new Volvo passenger cars used for non-commercial purposes (i.e., personal/family use). The vehicle must have been originally invoiced and wholesaled by Volvo Cars of North America, Inc., and registered and normally operated in any of the 50 states of the U.S..*

### **NEW VEHICLES**

#### **Coverage**

4 years/50,000 miles/80,000 Kilometers, whichever occurs first

#### **Warranty Start Date**

*The warranty starts on the date the vehicle is sold /delivered to the first retail purchaser or put into service. Any remaining portion of the warranty is fully transferable to subsequent owners free of charge.*

### **RETAILER DEMONSTRATOR VEHICLES**

#### **Coverage**

Vehicles placed into retailer demonstrator or loaner service will receive the remainder of the New Car Limited Warranty period when retailed.

*It is the selling retailer's responsibility to advise the first retail purchaser of the date the demonstrator was placed into service and the remaining New Car Warranty coverage.*

#### **Warranty Start Date**

While used as a retailer demonstrator or loaner vehicle, the applicable New Car Warranty begins only if the retailer registers the vehicle with Volvo. If a demonstrator vehicle is not registered, warranty claims cannot be processed for credit.

**COMMERCIAL VEHICLES  
Coverage**

Vehicles used for commercial purposes (i.e., taxi, police, etc.) are covered during the New Car Limited Warranty for one (1) year or 15,000 miles/24,000 kilometers, whichever occurs first. However, all other warranties applicable (i.e., Seat belt/SRS, Emission, etc.) to the model year vehicles also apply to commercial vehicles.

If you have any questions, please do not hesitate to contact me, or Adam Kopstein of my Staff.

Sincerely yours,

VOLVO CARS OF NORTH AMERICA, LLC  
Customer Service

A handwritten signature in cursive script that reads "William Shapiro". The signature is written in black ink and is positioned above the printed name and title.

William Shapiro, P.E.  
Manager, Regulatory and Product Compliance

Enclosure: CD-ROM