



OFFICE OF DEFECTS &
INVESTIGATIONS

2013 MAY 21 P 3: 37

Nate Seymour

May 17, 2013

VIA EXPRESS MAIL

Mr. Bruce York, Chief
Medium and Heavy Duty Vehicle Division
Office of Defects Investigation
U.S. Department of Transportation
National Highway Traffic Safety Administration
1200 New Jersey SE
Washington, D.C. 20590

Re: **PE13-005**
NVS- 210njs

Dear Mr. York:

On behalf of Volvo Trucks North America, I am responding to the questions presented in your letter dated March 25, 2013.

Information that is considered to be confidential business information has been removed and sent to NHTSA's Office of Chief Counsel. We have put a place holder where confidential business information has been removed and cited the document name for your reference.

As always, we consider information on our customer's to be confidential. Therefore, any information regarding customer names, addresses and contact information should be blacked out before release to the NHTSA public website.

With Best Regards,

A handwritten signature in dark ink, appearing to read "Tim LaFon", with a long horizontal line extending to the right.

Tim L. LaFon
Director, Regulatory Affairs
Telephone: (336) 393-2233
Fax: (336) 393-2444
Email: timothy.lafon@volvo.com

1. State, by make, model and model year, the number of subject vehicles Volvo has manufactured for sale or lease in the United States. Separately, for each vehicle manufactured to date by Volvo, state the following:
 - a. Vehicle identification number (VIN);
 - b. Make;
 - c. Model;
 - d. Model Year;
 - e. Part number(s) of the subject components installed as original equipment;
 - f. Warranty Registration State;
 - g. Date of manufacture; and
 - h. Date warranty coverage commenced.

Provide the table in Microsoft Excel or Access entitled "PRODUCTION DATA." A preformatted table that provides further details regarding this submission will be emailed to you.

Response: The following production table shows the total number of *subject vehicles* manufactured for sale or lease in the United States.

MODEL	Model Year		Grand Total
	2011	2012	
VNL	9,045	18,948	27,993

The specific details requested are provided in the electronic file named Production Data, which was sent by email.

2. State the number of each of the following received by Volvo, which relate to, or may relate to, the alleged defect in the subject vehicles:
 - 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;
 - 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 "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 “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 “f” and “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.

Response:

Category	Total Number of Reports 2011 Model VNL	Total Number of Reports 2012 Model VNL
a. Consumer complaints	0	0
b. Field Reports	8	5
c. Reports Involving a crash	0	0
d. Property Damage Claims	0	0
e. Third Party Arbitration	0	0
f. Lawsuits	0	0

There have been no reported accidents associated with the alleged defect.

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:
 - a. Volvo’s file number or other identifier used;
 - b. The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);
 - c. Vehicle owner or fleet name (and fleet contact person), address, and telephone number;
 - d. Vehicle’s VIN;
 - e. Vehicle’s make, model and model year;
 - f. Vehicle’s build date;
 - g. Part number(s) of the subject component(s);
 - h. Vehicle’s mileage at time of incident;
 - i. Incident date;
 - j. Report or claim date;
 - k. Whether a crash is alleged;
 - l. Whether a fire is alleged;
 - m. Number of alleged injuries, if any;
 - n. Number of alleged fatalities, if any; and
 - o. Description of what occurred or was reported by the driver/owner.

Provide this information in Microsoft Excel or Access entitled “REQUEST NUMBER TWO DATA.” A pre-formatted table that provides further details regarding this submission will be emailed to you.

Response: The specific details requested are provided in the electronic file named Request Number Two Data.

For item c, owner names, address, and contact numbers are to be considered confidential and are not to be disclosed.

There have been no reported accidents associated with the alleged defect.

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.

Response: Volvo has included the information in the enclosed package in the tab called Question 4 and has organized the information by the report file number.

5. State, by make, model, and model year, 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. Vehicle's make, model and model year;
- e. Vehicle build date;
- f. Part number(s) of the subject component(s);
- g. Repair date;
- h. Vehicle mileage at time of repair;
- i. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
- j. Labor operation number;
- k. Problem code;
- l. Replacement part number(s) and description(s);
- m. Concern stated by customer; and
- n. Comments by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Excel or Access entitled "WARRANTY DATA." A pre-formatted table that provides further details regarding this submission will be emailed to you.

Response: The following table shows a count of the total number of warranty claims; extended warranty claims; claims for goodwill 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, by model and model year on *subject vehicles* manufactured for sale or lease in the United States.

Since there are two alleged defects, one involving the motor and one involving the linkage, two tables have been provided. Furthermore, the table for the linkage has two rows, one for the linkage and one for the wiper arms, as the linkage is assembled by a supplier and the arms are attached to the linkage assembly at Volvo's manufacturing facility.

	Model Year	
MODEL VNL	2011	2012
Wiper Motor	613	866

	Model Year	
MODEL VNL	2011	2012
Wiper Linkage	55	35
Wiper Arm	222	119

Note: The numbers included above are cumulative and include multiple causal factors including electrical and mechanical. The numbers do not represent one causal factor and therefore should not be perceived as being associated with one causal factor.

The specific details requested are provided in the electronic file named Warranty Data (note there are three tabs in the workbook).

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.

Response: For the *subject vehicles*, all warranty claims were identified by function group 363, Cleaner, as a first step.

Further refinement was done by looking at the part numbers and function group descriptions within the 363 group to identify function group codes and part numbers that relate to the subject of the NHTSA Inquiry. After this further refinement, all remaining claims were read to determine relevance to the NHTSA Inquiry, which resulted in identification of the reported claims that may be related. The claims were also placed into three categories, Wiper Motor, Wiper Linkage, and Wiper Arms.

7. State, by make, model and model year, the terms of the vehicle warranty coverage offered by Volvo on the subject vehicles relative to the subject components. Describe any extended warranty coverage option(s) that Volvo offered for the subject vehicles and state by make, model, and model year, the number of vehicles that are covered under each such extended warranty

Response: The standard warranty period for the windshield wiper system, excluding the wiper blades, is 12 months, or 100,000 miles, or 3,250 operating hours, whichever comes first. Premium Coverage may be purchased to increase the period up to 5 years or 500,000 miles.

8. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the subject components in the subject vehicles, that Volvo has issued to any dealers, regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but

is not limited to, bulletins, advisories, informational documents, training documents, or other documents or communications, with the exception of standard shop manuals. Also include the latest draft copy of any communication that Volvo is planning to issue within the next 120 days.

Response: Volvo has not released any documents that apply to the *subject vehicles*.

9. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to, the alleged defect in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Volvo. For each such action, provide the following information:
- Action title or identifier;
 - The actual or planned start date;
 - The actual or expected end date;
 - Brief summary of the subject and objective of the action;
 - Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
 - A brief summary of the findings and/or conclusions resulting from the action.

For each action identified, provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents chronologically by action.

Response: Volvo has included the information in the enclosed package in the tab named Question 9 and has organized the information by the action title or identifier.

10. Provide a list of all model and model year vehicles manufactured by Volvo that are equipped with the same or substantially similar subject components.

Response: Volvo has included the information in the enclosed package in the tab named Question 12.

11. Describe all modifications or changes made whether or not by, or on behalf of, Volvo in the design, material composition, manufacture, quality control, supply, or installation of the subject components. For each such modification or change, provide the following information:
- The date or approximate date on which the modification or change was incorporated into vehicle production;
 - A detailed description of the modification or change;
 - The reason(s) for the modification or change;
 - The part number(s) (service and engineering) of the original component;
 - The part number(s) (service and engineering) of the modified component;
 - Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;

- g. When the modified component was made available as a service component; and
- h. Whether the modified component can be interchanged with earlier production components.

Also, provide the above information for any modification or change that Volvo is aware of which may be incorporated into vehicle production within the next 120 days.

Response: Some changes were made in processes by Commercial Vehicle Group Inc. in 2010 to improve quality of the motor. This information is contained in question 9.

12. State the number of each of the following that Volvo has sold that may be used in the subject vehicles by component name, part number (both service and engineering/production), make, model and model year of the vehicle in which it is used and month/year of sale:
- a. Subject components; and
 - b. Any kits that have been released, or developed, for use in service repairs to the subject components/assembly

For each component part number, provide the supplier's name, address, and appropriate point of contact (name, title, and telephone number). Also identify by make, model and model year, any other vehicles of which Volvo is aware that contain the identical component, whether installed in production or in service, and state the applicable dates of production or service usage.

Response: Volvo has included the information in the enclosed package in the tab named Question 12.

13. Furnish Volvo's assessment of the alleged defect in the subject vehicles, including:
- a. The causal or contributory factor(s);
 - b. The failure mechanism(s);
 - c. The failure mode(s);
 - d. The risk to motor vehicle safety that it poses;
 - and e. What warnings, if any, the operator would have.

Response: Volvo is still evaluating the information. There appears to have been an issue in regards to the manufacturing of the gear that is molded around the wiper motor output shaft; however, the data suggests that this may be limited to certain periods and that it does not affect the entire population of motors used by Volvo. Volvo and its supplier are working with a 3rd party test and analysis group to further evaluate this condition (see information in question 9).

The data suggests that there was an issue with attaching the wiper arms to the linkage, but not the linkage to the motor. Volvo is performing further analysis on this data.

Volvo is working to complete these evaluations as quickly as possible and hopes to have the evaluation completed by mid to late June 2013. At this time, Volvo will take appropriate actions, if required, to address the affected wiper motor systems.