



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20580

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

FEB 6 2004

Heino Scharf
Director, Product Assurance
Volvo Trucks North America, Inc
P. O. Box 26115
Greensboro, NC 27402-6115

NVS-214gth
PE04-014

Dear Mr. Scharf:

This letter is to inform you that the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) has opened a Preliminary Evaluation (PE04-014) to investigate the potential for certain tractors manufactured by Volvo Truck North America (VTNA) to exhibit unexpected steering resistance or steering "lock-up" at highway speeds.

On December 11, 2003 a fleet operator notified ODI alleging that four vehicle crashes that had occurred in 1998 and 1999 (summarized in Table 1 below) may have been caused by steering "lock-up."

Table 1. List of crashes allegedly associated with steering lock up reported to ODI on December 11, 2003

VIN	Model Year	Date of Occurrence	Location	Description
4VG7DARF6W N747238	1998	April 5, 1998	Deming, NM	VTNA tractor pulled to left and overturned
4VG7DARF9W N747261	1998	May 26, 1998	I-80, Lovelock, NV	VTNA tractor jerked to left, vehicle rolled (?), struck by another passenger car resulting in a fatality.
4VG7DARF4W N747233	1998	May 26, 1998	I-70, New Castle, IND	VTNA tractor "shot" left and rolled, passenger in VTNA tractor injured.
4VG7DERH0X N788243	1999	December 19, 1999	I-80 North Platte, NEB	VTNA driver was crossing bridge (shortly after 8 hr rest) and went to left toward median into oncoming lane crashing head-on into oncoming tractor killing the VTNA driver and two occupants in the oncoming tractor.

Model Years based on VIN analysis.



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The reporting fleet also reported that several of their fleet drivers had reported experiencing steering wheel "lock-up" (without crash) in similar vehicles operated by the fleet.

The reporting fleet further advised ODI that one driver had experienced steering lock-up in a similarly-equipped vehicle and subsequent investigation determined that the turn signal canceller ring had fractured and the pieces had lodged themselves in the steering wheel hub causing high steering resistance.

In June 2002, ODI closed a investigation PE01-041 that addressed "steering lock-ups, pulls or binds" in 1998-2000 VTNA VN-series tractors. PE01-041 was closed because ODI did not find a common issue or trend among the steering complaints investigated. Of the 951 warranty claims for "steering problems" that ODI reviewed in PE01-041, five claims allege that broken plastic parts had been found in the steering wheel hub. One personal injury complaint alleged that, "a piece of plastic lodged inside the steering wheel hub and caused the steering wheel to lock..."

VTNA has advised ODI that turn signal canceller rings identical to the ones installed in the vehicles listed in Table 1 were incorporated as an optional feature installed in only some VTNA tractors and that the subject component is no longer in production.

In order for my staff to evaluate this issue, certain information is requested.

Unless otherwise stated in the text, the following definitions apply to these information requests:

- **Subject vehicles:** all tractors manufactured by Volvo Truck North America ("VTNA") manufactured since 1995 and equipped with a turn signal canceller ring identical or essentially similar to the turn signal canceller ring installed in the VTNA vehicles listed in Table 1 above.
- **Subject components:** the turn signal canceller ring identical or similar to the turn signal canceller ring installed in the VTNA vehicles listed in Table 1 above.
- **Volvo Truck North America ("VTNA"):** all of its past and present officers and employees, whether assigned to its principal offices or any of its field or other locations, including all of its divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee to a consultant) by or under the control of VTNA (including all business units and persons referred to), who are or, in or after 1995 were involved in any way with any of the following related to the alleged defect in the subject vehicles:
 - a. Design, engineering, analysis, modification or production (e.g. quality control);
 - b. Testing, assessment or evaluation;

- c. Consideration, or recognition of potential or actual defects, reporting, record-keeping and information management, (e.g., complaints, field reports, warranty information, part sales), analysis, claims, or lawsuits; or
 - d. Communication to, from or intended for zone representatives, fleets, dealers, or other field locations, including but not limited to people who have the capacity to obtain information from dealers.
- **Alleged defect:** steering wheel resistance, binding, or "lock-up"
 - **Document:** "Document(s)" is used in the broadest sense of the word and shall mean all original written, printed, typed, recorded, or graphic matter whatsoever, however produced or reproduced, of every kind, nature, and description, and all non-identical copies of both sides thereof, including, but not limited to, papers, letters, memoranda, correspondence, communications, electronic mail (e-mail) messages (existing in hard copy and/or in electronic storage), faxes, mailgrams, telegrams, cables, telex messages, notes, annotations, working papers, drafts, minutes, records, audio and video recordings, data, databases, other information bases, summaries, charts, tables, graphics, other visual displays, photographs, statements, interviews, opinions, reports, newspaper articles, studies, analyses, evaluations, interpretations, contracts, agreements, jottings, agendas, bulletins, notices, announcements, instructions, blueprints, drawings, as-builts, changes, manuals, publications, work schedules, journals, statistical data, desk, portable and computer calendars, appointment books, diaries, travel reports, lists, tabulations, computer printouts, data processing program libraries, data processing inputs and outputs, microfilms, microfiches, statements for services, resolutions, financial statements, governmental records, business records, personnel records, work orders, pleadings, discovery in any form, affidavits, motions, responses to discovery, all transcripts, administrative filings and all mechanical, magnetic, photographic and electronic records or recordings of any kind, including any storage media associated with computers, including, but not limited to, information on hard drives, floppy disks, backup tapes, and zip drives, electronic communications, including but not limited to, the Internet and shall include any drafts or revisions pertaining to any of the foregoing, all other things similar to any of the foregoing, however denominated by VTNA, any other data compilations from which information can be obtained, translated if necessary, into a usable form and any other documents. For purposes of this request, any document which contains any note, comment, addition, deletion, insertion, annotation, or otherwise comprises a non-identical copy of another document shall be treated as a separate document subject to production. In all cases where original and any non-identical copies are not available, "document(s)" also means any identical copies of the original and all non-identical copies thereof. Any document, record, graph, chart, film or photograph originally produced in color must be provided in color. Furnish all documents whether verified by the manufacturer or not. If a document is not in the English language, provide both the original document and an English translation of the document.

- **Other Terms:** To the extent that they are used in these information requests, the terms "claim," "consumer complaint," "dealer field report," "field report," "fire," "fleet," "good will," "make," "model," "model year," "notice," "property damage," "property damage claim," "rollover," "type," "warranty," "warranty adjustment," and "warranty claim," whether used in singular or in plural form, have the same meaning as found in 49 CFR 579.4.

In order for my staff to evaluate the alleged defect and determine whether the part 573 Report was filed late, certain information is required. Pursuant to 49 U.S.C. § 30166, please provide numbered responses to the following information requests. When documents are produced, the documents shall be produced in an identified, organized manner that corresponds with the organization of this information request letter (including all individual requests and subparts). When documents are produced and the documents would not, standing alone, be self-explanatory, the production of documents shall be supplemented and accompanied by explanation.

Insofar as VTNA has previously provided a document to ODI, ODI requests that VTNA produce it again within the context of VTNA's response to this request.

Please repeat the applicable request verbatim above each response.

After VTNA's response to each request, identify the source of the information and indicate the last date the information was gathered.

To the extent possible, provide the requested information in Microsoft Access 2000 electronic format.

POPULATION INFORMATION

1. Identify by model and model year the number of tractors that VTNA has manufactured for sale or lease in the United States since January 1, 1995.

Provide the table in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER ONE – TOTAL PRODUCTION DATA."

2. Identify by model and model year the number of subject tractors (equipped with the subject component) that VTNA has manufactured for sale or lease in the United States since January 1, 1995.

Provide the table in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER TWO – SUBJECT POPULATION PRODUCTION DATA."

ORIGINAL AND SUBSEQUENT PURCHASERS

3. For each vehicle identified in response to Request No 2, provide a table that identifies
- (a) the vehicle's VIN;
 - (b) the date of manufacture;
 - (c) the original purchaser or lessee;
 - (d) the original purchaser or lessee's address;
 - (e) the original purchaser or lessee's phone number;
 - (f) the original purchaser or lessee's e-mail address, and
 - (g) the date of original sale or lease.

Provide the table in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER THREE – ORIGINAL PURCHASERS/LESSEES OF SUBJECT VEHICLES."

4. For each vehicle identified in response to Request No 2 that was leased and returned to VTNA or re-purchased and re-sold by VTNA, provide a table that identifies the following information as indicated by VTNA records:
- (a) the vehicle's VIN;
 - (b) the most recent purchaser or lessee;
 - (c) the most recent purchaser or lessee's address;
 - (d) the most recent purchaser or lessee's phone number;
 - (e) the most recent purchaser or lessee's e-mail address, and
 - (f) the date of the most recent sale or re-lease of the vehicle.

Provide the table in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER FOUR – SUBSEQUENT OWNERS OF SUBJECT VEHICLES"

COMPLAINT INFORMATION

5. State the number of each of the following, received by VTNA, or of which VTNA is otherwise aware, which relate to, or may relate to, the alleged defect in those subject vehicles equipped with the subject component:
- 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 VTNA involving a death or injury, notices received by VTNA 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 VTNA is or was a party to the arbitration; and,
 - g) Lawsuits, both pending and closed, in which VTNA 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 VTNA'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.

Provide the table in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER FIVE - SUBJECT VEHICLE COMPLAINT INFORMATION."

6. Separately, for each item (complaint, report, claim, notice, or matter) identified in response to Request No. 5 above, state the following information:
 - a) VTNA's file number or other identifier used;
 - b) The category of the item, as identified in Request No. 5 (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 mileage at time of incident;
 - g) Incident date;
 - h) Report or claim date;
 - i) Whether a crash is alleged;
 - j) Whether property damage is alleged;

- k) Number of alleged injuries, if any; and
 - l) Number of alleged fatalities, if any.
7. Produce copies of all documents related to each item within the scope of Request No. 5. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method VTNA used for organizing the documents.

WARRANTY INFORMATION

8. State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by VTNA to date that relate to, or may relate to, the alleged defect in those subject vehicles equipped with the subject component: 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) VTNA'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.

Provide the table in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER EIGHT – SUBJECT VEHICLE WARRANTY INFORMATION."

9. Describe in detail the search criteria used by VTNA to identify the claims identified in response to Request No. 8, 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.

Describe any extended warranty coverage option(s) related to the alleged defect that VTNA 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.

ENGINEERING DRAWINGS, EXEMPLAR COMPONENTS, AND TECHNICAL REPORTS

10. Provide an engineering drawing of the subject component.
11. Provide an engineering drawing that depicts a representative steering wheel assembly and shows the location and position of the turn signal canceller ring as installed in the subject vehicles.
12. Provide a sample of a new, undamaged subject component.
13. Provide a copy of the service instructions that VTNA has published for removing and replacing the turn signal canceller ring for the subject vehicles.
14. Describe all modifications or changes made by, or on behalf of, VTNA in the design, material composition, manufacture, quality control, supply, or installation of the subject component and/or interfacing components and/or changes intended to eliminate or reduce potential interference, binding, or resistance in the steering wheel assembly from the start of production to date, which relate to, or may relate to, the alleged defect in the subject vehicles. For each such modification or change, provide the following information:
 - a) The date or approximate date on which the modification or change was incorporated into vehicle production;
 - b) A detailed description of the modification or change;
 - c) The reason(s) for the modification or change;
 - d) The part numbers (service and engineering) of the original component;
 - e) The part number (service and engineering) of the modified component;
 - f) 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 VTNA is aware of which may be incorporated into vehicle production within the next 120 days.

MANUFACTURER'S INVESTIGATIONS AND EVALUATIONS

15. Provide a copy of all inspection reports conducted by VTNA, VTNA's suppliers, sub-contractors or affiliates on turn signal canceller rings that had been removed from subject vehicles originally equipped with subject component and returned to VTNA.

16. 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, VTNA. For each such action, provide the following information:
- (a) Action title or identifier;
 - (b) The actual or planned start date;
 - (c) The actual or expected end date;
 - (d) Brief summary of the subject and objective of the action;
 - (e) Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
 - (f) A brief summary of the findings and/or conclusions resulting from the action.
17. Provide a copy of VTNA Quality Journal "614-00014" that addressed the VTNA investigation of "the plastic ring mounted to the steering wheel."
18. Provide a copy of the test procedures that VTNA followed to develop the summary data provided as Exhibit "J" attached to VTNA's April 30, 2002 response to ODI Request for Information under PE01-041, "Steering locks-up, pulls, or binds."

If VTNA does not have a written procedure for this test, provide a short summary that describes the test(s) conducted, the location in the steering wheel assembly that the "jammed insertion pin" had been positioned, the manner in which the pin had been inserted, the manner in which the steering force data was collected, etc.

NOTICES

19. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that VTNA 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 VTNA is planning to issue within the next 120 days.

This letter is being sent to VTNA pursuant to 49 U.S.C. § 30166, which authorizes NHTSA to conduct any investigation that may be necessary to enforce Chapter 301 of Title 49 and to request reports and the production of things. It constitutes a new request for information. VTNA's failure to respond promptly and fully to this letter could subject VTNA to civil penalties pursuant to 49 U.S.C. § 30165 or lead to an action for injunctive relief pursuant to 49 U.S.C. § 30163. (Other remedies and sanctions are available as well.) Please note that maximum civil penalties under 49 U.S.C. § 30165 have increased as a result of the recent enactment of the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act, Public Law No. 106-414 (signed November 1, 2000). Section 5(a) of the

TREAD Act, codified at 49 U.S.C. § 30165(b), provides for civil penalties of up to \$5,000 per day, with a maximum of \$15 million for a related series of violations, for failing or refusing to perform an act required under 49 U.S.C. § 30166. This includes failing to respond to ODI information requests.

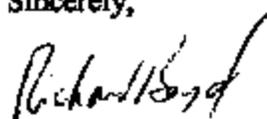
If VTNA cannot respond to any specific request or subpart(s) thereof, please state the reason why it is unable to do so. If on the basis of attorney-client, attorney work product, or other privilege, VTNA does not submit one or more requested documents or items of information in response to this information request, VTNA must provide a privilege log identifying each document or item withheld, and stating the date, subject or title, the name and position of the person(s) from, and the person(s) to whom it was sent, and the name and position of any other recipient (to include all carbon copies or blind carbon copies), the nature of that information or material, and the basis for the claim of privilege and why that privilege applies.

VTNA's response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by March 19, 2004. Please refer to PE04-014 in VTNA's response to this letter. If VTNA finds that it is unable to provide all of the information requested within the time allotted, VTNA must request an extension from me at (202) 366-4933 no later than five business days before the response due date. If VTNA is unable to provide all of the information requested by the original deadline, it must submit a partial response by the original deadline with whatever information VTNA then has available, even if an extension has been granted.

If VTNA claims that any of the information or documents provided in response to this information request constitute confidential commercial material within the meaning of 5 U.S.C. § 552(b)(4), or are protected from disclosure pursuant to 18 U.S.C. § 1905, VTNA must submit supporting information together with the materials that are the subject of the confidentiality request, in accordance with 49 CFR Part 512, to the Office of Chief Counsel (NCC-113), National Highway Traffic Safety Administration, Room 5219, 400 Seventh Street, S.W., Washington, D.C. 20590. VTNA is required to submit two copies of the documents containing allegedly confidential information (except only one copy of blueprints) and one copy of the documents from which information claimed to be confidential has been deleted.

If you have any technical questions concerning this matter, please call Mr. Tom Bowman of my staff at (202) 366-6961.

Sincerely,



Richard Boyd, Chief
Medium & Heavy Duty Vehicle Division
Office of Defects Investigation

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