



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

SEP 18 2008

1200 New Jersey Avenue SE
Washington, DC 20590

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Timothy LaFon
Manager, Regulatory Affairs Customer Satisfaction
Volvo Trucks North America
7900 National Service Road
Greensboro, NC 27409-6115

NVS-PHK214
PE08-053

Dear Mr. LaFon:

This letter will serve as confirmation that the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) has open a Preliminary Evaluation (PE08-053) concerning the steering drag link on Model Year 2005 Volvo VNL and VN trucks. This investigation is being opened based on reports submitted to ODI from the Federal Motor Carrier Safety Administration (FMCSA) alleging a steering component failures. On August 14th 2008 ODI received two reports from FMCSA alleging two separate crashes involving the separation of the steering drag-link. An ODI investigator was able to contact one of the identified fleets and learned of another drag-link failure which also resulted in a crash and subsequent police report. Reportedly, the primary cause of the third crash was a steering malfunction which caused the vehicle to swerve on the interstate and then went into an embankment, rolling onto its passenger side. A search of our files also revealed a fourth crash allegation, described on a vehicle owner's questionnaire which is attached.

ODI's review of the problem indicates the drag-link fails at the ball/socket assembly where it is attached to the steering arm. In the event of this steering arrangement failing, there is a total loss of steering control.

As part of our investigation and for peer review purposes, we will request information on any other vehicles manufactured by Volvo which utilize the same steering drag linkage as the subject vehicle. In order to evaluate the alleged defect and complete its investigation, ODI is requesting specific information from Volvo.

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

- **Subject vehicles:** all MY 2005 Volvo VNL and VN trucks manufactured for sale or lease in the United States.

- **Peer Vehicles:** all other 2006 Volvo VNL and VN trucks manufactured for sale or lease in the United States, built with the TRW "Service-Free" drag-link installed on Model Year 2005 Volvo VNL and VN trucks.
- **Subject component:** "Service-free" drag-links originally installed on subject vehicles.
- **Volvo Trucks North America:** Volvo and, expand to include foreign parent company where design, engineering and/or manufacturing are undertaken in a foreign country,] all of their past and present officers and employees, whether assigned to their principal offices or any of their field or other locations, including all of their 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 of a consultant) by or under the control of Volvo (including all business units and persons previously referred to), who are or, in or after 1999, 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:** Drag-link failure on a subject vehicle resulting in a loss of steering control.
- **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 Volvo, 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 Volvo 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, certain information is required. Pursuant to 49 U.S.C. § 30166, please provide numbered responses to the following information requests. Insofar as Volvo has previously provided a document to ODI, Volvo may produce it again or identify the document, the document submission to ODI in which it was included and the precise location in that submission where the document is located. 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.

Please repeat the applicable request verbatim above each response. After Volvo's response to each request, identify the source of the information and indicate the last date the information was gathered.

1. State, by model and model year, drag link type ("service-free" vs. serviceable) the number of subject and peer 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).

Provide the table in Microsoft Access 2000, or a compatible format, entitled "PRODUCTION DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

2. By drag link type ("service-free" and serviceable), 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 and peer 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. Property damage claims;
 - e. Third-party arbitration proceedings where Volvo is or was a party to the arbitration; and
 - f. Lawsuits, both pending and closed, in which Volvo is or was a defendant or codefendant.

For subparts "a" through "d" 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 "f" 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

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 mileage at time of incident;
 - g. Incident date;
 - h. Report or claim date;
 - i. Whether a crash is alleged;
 - j. Whether a fire is alleged;
 - k. Whether property damage is alleged;
 - l. Number of alleged injuries, if any; and

m. Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER TWO DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

4. State, by model and model year, and draglink type, 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 and (subject components) for the subject and peer 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. Whether the vehicle was towed to the dealer for the repair (y/n);
- k. Secondary component damage (y/n) - Whether there were coincident repairs to secondary components that can be damaged when a drag-link fracture occurs. For example, repairs to the following components at the same front wheel position as the subject component on or about the same date as the subject component repair (± 2 days): brake rotor, brake hose, body damage, tie rod, etc. (state the specific criteria used by Volvo);
- l. Concern stated by customer; and
- m. Comment, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "WARRANTY DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

5. Describe in detail the search criteria used by Volvo to identify the claims identified in response to Request No. 4, 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 and all labor operations Volvo used to identify vehicles that had been towed and/or vehicles with secondary component damage. 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.

6. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject and peer 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, and state the date on which Volvo plans to issue the communication
7. 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:
 - 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.

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.

8. Describe all modifications or changes made by, or on behalf of, Volvo in the design, material composition, manufacture, quality control, supply, or installation of the subject component, from the start of production to date, which relate to, or may relate to, the alleged defect in the subject and peer 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 number(s) (service and engineering) of the original component;
 - e. The part number(s) (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 Volvo is aware of which may be incorporated into vehicle production within the next 120 days.

9. State the number of each of the following that Volvo has sold that may be used in the subject and/or peer vehicles by component name, part number (both service and engineering/production), model and model year of the vehicle in which it is used and month/year of sale (including the cut-off date for sales, if applicable):
 - a. Subject component (both service free and serviceable drag-link assembly(s) if the subject components are not sold/serviced separately); and
 - b. Any kits that have been released, or developed, by Volvo for use in service repairs to the subject component/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.

10. Provide the following for the subject vehicle:

- a. State the design life for the subject components (serviceable and "service-free");
- b. State the service replacement specification for the subject components;
- c. State the material composition of the subject component;
- d. State the hardness specifications for the ball and housing socket of the subject component;
- e. State the surface finish specification of the ball;
- f. provide a procedure for measuring the end play of the subject component and state the nominal dimensions and design tolerances of the ball and socket arrangement; and
- g. State the frequency and provide a copy of any maintenance and inspection procedure which is recommended by Volvo concerning the steering linkage on subject and peer trucks.

11. By vehicle application (model, model year) identify by part number and manufacturer any drag link installed by Volvo as the standard drag link or as an optional drag link on the subject and peer vehicles. Describe the differences between all drag links listed.
12. Provide the name of the component manufacturer for both subject and peer vehicles. For each manufacturer identified, provide copies of ANY communications (including, but not limited to testing, durability, maintenance requirements, field visits, and engineering changes), that relate or may relate to the alleged defect on the subject and peer vehicles. . Organize all such communications in chronological order and if the provided document is does not identify the individuals in the communications, please provide the name and title of such officials as well as the date of the communication.
13. Furnish Volvo's detailed assessment of the alleged defect in the subject vehicle, 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;
- e. What warnings, if any, the operator and other persons both inside and outside the vehicle would have that the alleged defect was occurring or subject component was malfunctioning; and
- f. The reports included with this inquiry.

This letter is being sent to Volvo 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. Volvo's failure to respond promptly and fully to this letter could subject Volvo 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 \$16,050,000 for a related series of violations, for failing or refusing to perform an act required under 49 U.S.C. § 30166. *See* 49 CFR 578.6 (as amended by 69 Fed. Reg. 57864 (Sept. 28, 2004)). This includes failing to respond to ODI information requests.

If Volvo 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, Volvo does not submit one or more requested documents or items of information in response to this information request, Volvo 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.

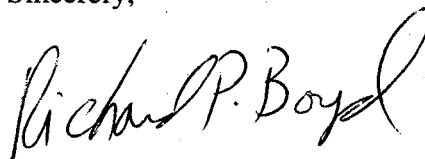
Volvo's response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by November 6, 2008. Please refer to PE08-053 in Volvo's response to this letter. If Volvo finds that it is unable to provide all of the information requested within the time allotted, Volvo must request an extension from me at (202) 366-4933 no later than five business days before the response due date. If Volvo 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 Volvo then has available, even if an extension has been granted.

If Volvo 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, Volvo must submit

supporting information together with the materials that are the subject of the confidentiality request, in accordance with 49 CFR Part 512, as amended (69 Fed. Reg. 21409 et seq; April 21, 2004), to the Office of Chief Counsel (NCC-113), National Highway Traffic Safety Administration, Room 5219, 400 Seventh Street, S.W., Washington, D.C. 20590. Volvo 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 Peter Kivett of my staff at (202) 366-6178

Sincerely,

A handwritten signature in black ink, reading "Richard P. Boyd". The signature is written in a cursive style with a large, looped "R" and "B".

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

Enclosure 1, one CD ROM titled Data Collection Disc containing three files
Enclosure 2, Vehicle Owners Questionnaire