



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

FEB 25 2008

1200 New Jersey Avenue SE
Washington, DC 20590

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. David Hobson
TRW Commercial Steering Sys.
800 Heath Street
P.O. Box 60
Lafayette, IN 47904

NVS-214bby
PE08-009

Dear Mr. Hobson:

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 (PE08-009) to investigate allegations that power steering pumps manufactured by TRW have been failing in 2004 and 2005 Model Year (MY) Freightliner Century and X-Line model vehicles. Power steering pump failures can reduce steering assist potentially leading to difficulty controlling the vehicle and a crash resulting in injury or death.

A Freightliner Technical Service Bulletin (FSB 46-38) titled Reduced Steering Assist from TRW Power Steering Pumps was identified that that describes how to diagnose the cause of reduced power steering assist on the subject vehicles. The TSB instructs the technician on how to determine if the power steering pump is the cause of the reduced steering assist and if so, how to repair or replace the pump.

ODI considers failures of the steering pumps resulting in reduction of steering assist on a motor vehicle to be a safety related issue. The fact this office considers steering pump failure and increased steering effort to be a safety related issue is evidenced by our history of investigating these types of defects. A table identifying the investigations and recalls that the ODI has opened or received, that relate to defects possibly resulting in increased steering effort as a result of steering component failure, has been attached for your review. This table also identifies the recalls that resulted from the investigation.

To assist us with our investigation, ODI is requesting certain information from TRW Commercial Steering Systems.

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

- **Subject Vehicles:** All MY 2004 through 2005 Freightliner Century and X-Line model vehicles.



- **Subject Component:** All power steering pumps that are the subject of the Technical Service Bulletin FSB 46-38 Reduced Steering Assist from TRW Power Steering Pumps manufactured by TRW Commercial Steering Systems and installed on the subject vehicles.
- **Subject TSB:** Freightliner Technical Service Bulletin (FSB 46-38) titled Reduced Steering Assist from TRW Power Steering Pumps.
- **TRW:** TRW Commercial Steering Systems, 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 of a consultant) by or under the control of TRW Commercial Steering Systems (including all business units and persons previously referred to), who are or, in or after 1996, were involved in any way with any of the following related to the alleged defect on the subject component used in the subject vehicles:
 - a. Design, engineering, analysis, modification or production (e.g. quality control) of subject components;
 - b. Testing, assessment or evaluation of subject components;
 - 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.
- **Alleged defect:** Any failure of the subject component that results in the reduction of power steering assist as described in the subject TSB.
- **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 TRW, 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, certain information is required. 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.

Please repeat the applicable request verbatim above each response. After TRW response to each request, identify the source of the information and indicate the last date the information was gathered. If requested information is unavailable, so state and provide a brief explanation. Along with your written response, please provide this information in Microsoft Word 2000, or a compatible format, entitled "IR Response."

1. Provide a listing of all power steering pumps manufactured by TRW for use in the subject vehicles as either original equipment or as a replacement parts for the original equipment. Provide this listing by part number, vehicle applications (by make, model, and model years), number produced for original equipment installation (by month/year), and number produced for sale as service replacement parts (by month/year).

Provide this information in Microsoft Access, or a compatible electronic format, entitled "REQUEST NUMBER ONE DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table designed for this submission.

2. Identify any kits that have been released, or developed, by TRW or Freightliner for use in service repairs to the subject component. State the number of kits that TRW has sold by component name, part number (both service and engineering/production), power steering pump model number(s) that the kit is designed for use on, 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*):

Provide this information in Microsoft Access, or a compatible electronic format, entitled "REQUEST NUMBER TWO DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table designed for this submission.

3. Provide copies of all engineering standards and specifications relating to the subject component.
4. Describe, and provide copies of all documents relating to, all design verification and validation tests of the subject components.
5. Describe, and provide copies of all documents relating to, all inspections, tests, and other analyses of subject components returned from vehicles serviced under the subject TSB. Provide a listing of all such pumps that were inspected, tested, evaluated, or assessed by stating the vehicle's VIN, recall repair date, mileage at the recall repair date, pump part number, part serial number (identifying marking), part date of build, and anomalies detected.
6. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries, returned part analyses, assessments and/or evaluations (collectively, "actions"), that relate to, or may relate to, the alleged defect in any of the subject components, that have been conducted, are being conducted, are planned, or are being planned by, or for, TRW. For each such action, provide the following information:
 - a. Vehicle make, model, and model year for which the subject component was or may be used;
 - b. Action title or identifier;
 - c. The actual or planned start date;
 - d. The actual or expected end date;
 - e. Brief summary of the subject and objective of the action;
 - f. Engineering group(s)/supplier(s) responsible for designing and for conducting the action;
 - g. Total number of such parts returned/analyzed, and a description of how they were analyzed;
 - h. Reason for specific component analysis;
 - i. Any and all material showing the frequencies of failed components as a function of service life or mileage;
 - j. A brief summary of the findings and/or conclusions resulting from the action; and

- k. 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.
7. Describe all modifications or changes made by, or on behalf of, TRW 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 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 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.
 8. Provide copies of all documents relating to all communications between TRW and Freightliner regarding the alleged defect in the subject component or the subject TSB. Organize the document copies in chronological order.
 9. Provide copies of all documents transmitted internally within TRW that relate to the alleged defect in the subject component or the subject TSB.
 10. Provide an electronic summary, in a format compatible with Microsoft Excel 2000, of each claim of which TRW is aware of, regardless of whether the claim is against TRW, related to the alleged defect in the subject component. For each such claim, include the following information in the summary:
 - a. Vehicle owner name, address, and telephone number;
 - b. Vehicle model, model year, and identification number (VIN);
 - c. Incident date and vehicle mileage;
 - d. Summary of the claim and evidence provided to support the claim of switch failure; and
 - e. TRWs' assessment of the claim.
 11. Furnish TRWs' assessment of the alleged defect in the subject component, including:
 - a. An assessment of the failure mechanism;
 - b. An assessment of the estimated service life of the subject component.
 - c. An assessment of the design factors that may influence the performance of the subject component;

- d. An assessment of the manufacturing factors that may influence the performance of the subject component;
- e. An assessment of the vehicle assembly factors that may influence the performance of the subject component; and
- f. An assessment of the use factors that may influence the performance of the subject component.

Please be as specific as possible in your answers and provide engineering explanations for how various factors affect the switch durability.

12. Provide the name and contact information of a TRW representative that can answer technical questions concerning the subject of this letter.
13. Produce electronic copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject components, that TRW 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 TRW is planning to issue within the next 120 days.

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

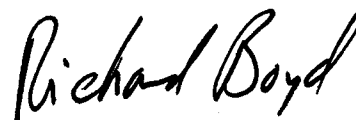
TRW response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by **April 1, 2008**. Please refer to **PE09-009** in TRW response to this letter. If TRW finds that it is unable to provide all of the information requested within the time allotted, TRW must request an extension from Mr. Richard Boyd at (202) 366-4933 no later than five business days before the response due date. If TRW 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 TRW then has available, even if an extension has been granted.

If TRW 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, TRW 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-110), National Highway Traffic Safety Administration, Room W41-227, 1200 New Jersey Avenue, S.E., Washington, D.C. 20590. TRW 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 Bruce York of my staff at (202) 366-6938.

Sincerely,

A handwritten signature in black ink that reads "Richard Boyd". The signature is written in a cursive style with a large, prominent "R" and "B".

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

Enclosure 1, one CD ROM titled Data Collection Disc containing one files