



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

JAN 3 2008

1200 New Jersey Avenue SE  
Washington, DC 20590

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Mr. James Vondale, Director  
Automotive Safety Office, Environmental and Safety Compliance  
Land Rover North America c/o Ford Motor Company  
Fairlane Plaza South  
330 Town Center Drive, Suite 500  
Dearborn, MI 48126

NVS-213dlr  
EA07-012

Dear Mr. Vondale:

This letter is to inform you that the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) has opened an Engineering Analysis (EA07-012) to investigate allegations of front differential and/or front driveshaft failure in model year (MY) 2003 through 2005 Range Rover vehicles manufactured by Land Rover North America (Land Rover), a company held by Ford Motor Company (Ford), and to request certain information.

This office has received 64 Vehicle Owner Questionnaires (VOQs) from consumers alleging failure of the front differential and/or the front driveshaft in MY 2003 through 2005 Range Rover vehicles. The VOQs describe a loss of power to the drive wheels as a result of the failure of the front differential and/or front driveshaft. A copy of each of these reports is enclosed for your information.

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

- **Subject vehicles:** all MY 2003 through 2005 Land Rover Range Rover vehicles manufactured for sale or lease in the United States.
- **Subject components:** all front axle differentials and front driveshafts manufactured for use as original equipment or service parts on the subject vehicles.
- **Customer Service Campaigns H121 and SB121:** customer satisfaction campaigns developed and implemented by Land Rover and Ford to inspect the front differential alignment (H121) and to inspect, repair, and align the front differential (SB121).
- **Ford:** Ford Motor Company, 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



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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 Ford (including all business units and persons previously referred to), who are or, in or after January 1, 2000 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.

- **Land Rover:** Land Rover North America, 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 Land Rover (including all business units and persons previously referred to), who are or, in or after January 1, 2000 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:** failure of the front axle differential and/or front driveshaft.
- **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 Ford and Land Rover, 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 or not verified by Ford or Land Rover. 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," "manufacturer," "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 Ford has previously provided a document to ODI on behalf of Land Rover, Ford 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 Ford and Land Rover'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, the number of subject vehicles Land Rover has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by Land Rover, 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, Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

2. State the number of each of the following, received by Ford or Land Rover, or of which either company is aware 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. Property damage claims; and
  - e. Third-party arbitration proceedings where Ford or Land Rover is or was a party to the arbitration; and
  - f. Lawsuits, both pending and closed, in which Ford or Land Rover 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 Ford's and Land Rover's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "e" and "f" 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.

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. Ford's and Land Rover'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, a CD ROM, for a pre-formatted table that provides further details regarding this submission.

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 Ford and Land Rover used for organizing the documents.
5. State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by Ford or Land Rover to date that relate, or may relate to, 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.

For purposes of this question, this request excludes any services rendered by Land Rover and its representatives involving Customer Satisfaction Campaigns H121 (Front Differential Alignment Check) and SB121 (Front Differential Inspection and Adjustment).

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

- a. The claim number used by Ford and the claim number used by Land Rover;
- 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 this information in Microsoft Access 2000, or a compatible format, entitled "WARRANTY DATA." See Enclosure, a CD ROM, for a pre-formatted table that provides further details regarding this submission.

6. Describe in detail the search criteria used by Ford and Land Rover 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 Ford and Land Rover 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 Ford or Land Rover 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.
7. State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by Ford or Land Rover to date that 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 on that vehicle.

For purposes of this question, this request includes only services rendered by Land Rover and its representatives involving Customer Satisfaction Campaigns H121 (Front Differential Alignment Check) and SB121 (Front Differential Inspection and Adjustment).

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

- a. The file number used by Ford and the file number used by Land Rover;
- 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 this information in Microsoft Access 2000, or a compatible format, entitled "CUSTOMER SATISFACTION CAMPAIGN DATA." See Enclosure, a CD ROM, for a pre-formatted table that provides further details regarding this submission.

For each vehicle identified in response to this section, state whether Customer Satisfaction Campaigns H121 (Front Differential Alignment Check) and SB121 (Front Differential

Inspection and Adjustment) were completed on the vehicle and specify the date when each campaign was performed.

8. Describe in detail the search criteria used by Ford and Land Rover to identify the claims identified in response to Request No. 7, 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 Ford and Land Rover 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 Ford and Land Rover 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.
9. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that Ford and Land Rover 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 either Ford or Land Rover is planning to issue within the next 120 days.
10. 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, Land Rover. 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.

11. Describe all modifications or changes made by, or on behalf of, Land Rover 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 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.

For items "a" through "c" above, provide the information in a Microsoft Excel Worksheet.

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

12. State the number of each of the following that were sold by Ford and Land Rover that may be used in the subject 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 components; and
  - b. Any kits that have been released, or developed, by Ford, Land Rover, or by another party working on either Ford or Land Rover's behalf for use in service repairs to the subject components.

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 Ford or Land Rover are aware that contain the identical component, whether installed in production or in service, and state the applicable dates of production or service usage.

13. Provide Land Rover's analyses of the following:
  - a. Failure rates for the subject components at 1, 2 and 3 years in service; and
  - b. Using Weibull analysis or other appropriate statistical modeling method, the projected failure rates for the subject components at 6 and 10 years in service.

Provide a detailed explanation of the methods and assumptions used to perform these analyses and provide copies of all statistical modeling input data and results.

14. Using the listing of VOQs, Ford-supplied consumer complaints and warranty claims provided in the enclosed Microsoft Excel File Attachment titled "EA07-012 Park Complaints", provide Ford and Land Rover's assessment of the alleged defect in the subject vehicles regarding allegations that a) the vehicle continues to move with the gearshift indicator showing the vehicle is in the Park position and b) the vehicle cannot be shifted into Park.



15. What is the engineering basis for the operation of the differential system used in the subject vehicles? Please include in your response an explanation of why the system inhibits power from being supplied to the rear wheels when the alleged defect occurs.
16. What was the engineering basis for selecting the specific configuration of the front differential and front driveshaft used in vehicles manufactured after the subject vehicles? In responding to this question, please explain why Land Rover decided to include a flexible coupling between the front differential and driveshaft in vehicles manufactured after MY 2005.
17. Please provide Ford and Land Rover's assessment of the incident depicted in Issue Id # 3386982, which is contained in Attachment "2007-06-08 Appendix C-JLRCCED.xls" to Ford's PE IR response letter (alleging that a rear impact occurred after a front differential or driveshaft failure) and identify the basis for this view.
18. Furnish Ford and Land Rover's 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 posed by the alleged defect;
  - e. The percentage of failures occurring at speeds of 40 miles per hour or above;
  - f. What symptoms, if any, the operator and the other persons both inside and outside the vehicle would notice indicating that the alleged defect was occurring or subject component was malfunctioning;
  - g. The average time that elapses between when symptoms involving the subject components first become noticeable to the operator and when the alleged failure occurs and the basis for that assessment;
  - h. The instructions and/or signals (such as lights or sounds), if any, given to the operator by the vehicle (e.g., through warning lights or other means) after the alleged defect has manifested itself;
  - i. Ford and Land Rover's assessment of the effectiveness of Customer Satisfaction Campaigns H121 (Front Differential Alignment Check) and SB121 (Front Differential Inspection and Adjustment) in preventing reoccurrences of the alleged defect and the basis for that assessment;
  - j. The reports included with this inquiry; and
  - k. With respect to items "a" through "h" and Ford's analyses responding to Request #11, the risk to motor vehicle safety posed by the alleged defect.

This letter is being sent to Ford 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. Ford's failure to respond promptly and fully to this letter could subject Ford 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 \$6,000 per day, with a maximum of \$16,375,000 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 71 Fed. Reg. 28279 (May 16, 2006)). This includes failing to respond to ODI information requests.

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

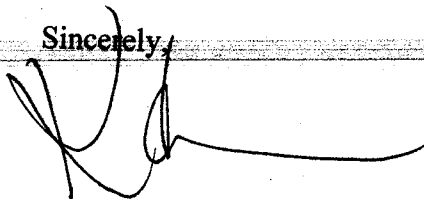
Ford's response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by February 28, 2008. **All business confidential information must be submitted directly to the Office of Chief Counsel as described in the following paragraph and should not be sent to this office.** In addition do not submit any business confidential information in the body of the letter submitted to this office. Please refer to EA07-012 in Ford's response to this letter and in any confidentiality request submitted to the Office of Chief Counsel. If Ford finds that it is unable to provide all of the information requested within the time allotted, Ford must request an extension from me at (202) 366-5207 no later than five business days before the response due date. If Ford 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 Ford then has available, even if an extension has been granted.

If Ford 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, Ford 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 to the Office of Chief Counsel (NCC-113), National Highway Traffic Safety Administration, Room 5219, 400 Seventh Street, S.W., Washington, D.C. 20590. Ford 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.** Please remember that the word "CONFIDENTIAL BUSINESS INFORMATION" must appear at the top of each page containing information claimed to be confidential, and the information must be clearly identified in accordance with 5 U.S.C. § 512.6. If you submit a request for confidentiality for all or part of your response to this IR that is in an electronic format (e.g., CD-ROM), your request and associated submission must conform to the new requirements in NHTSA's Confidential Business Information Rule regarding submissions in electronic formats (49 CFR 512.6(c)). See Federal Register, volume 72, page 59434 (October 19, 2007).

Please send email notification to Derek Rinehardt (derek.rinehardt@dot.gov) and to ODI\_IRresponse@dot.gov when Ford sends its response to this office and indicate whether there is confidential information as part of Ford response.

If you have any technical questions concerning this matter, please call Derek Rinehardt of my staff at (202) 366-3642.

Sincerely,



Kathleen C. DeMeter, Director  
Office of Defects Investigation  
Enforcement

Enclosure, one CD ROM titled Data Collection Disc containing five files  
PRODUCTIONDATA.mdb  
REQUEST NUMBER TWO DATA.mdb  
CUSTOMER SATISFACTION DATA.mdb  
WARRANTYDATA.mdb  
EA07-012 Park Complaints.xls