



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

1200 New Jersey Avenue, SE  
Washington, DC 20590

**JUN 14 2012**

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

Mr. Vinnie Venugopal, General Manager  
Vehicle Safety and Compliance Liaison Office  
Toyota Motor Engineering and Manufacturing North America, Inc.  
19001 S. Western Ave – Mail Stop: S-104  
Torrance, CA 90501

NVS-213dlr  
PE12-013

Dear Mr. Venugopal:

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 (PE12-013) to investigate allegations of the left or right rear suspension arm assembly No. 1 may fail due to corrosion in MY 2006 - 2008 Toyota RAV4 vehicles manufactured by Toyota Motor Engineering and Manufacturing North America, Inc., and to request certain information.

This office has received seven reports of failure of the left or right rear suspension arm assembly No. 1 due to corrosion in MY 2006 - 2008 Toyota RAV4 vehicles. The reports describe failure of a rear suspension arm assembly No.1 (noted as a 'tie rod' in many of the reports) while driving. Four of the seven reports also describe the driver temporarily losing control of the vehicle when the failure occurred. One complainant noted swerving back and forth over four lanes of an interstate. An electronic image of each VOQ report has been emailed to your office and a reference number list is shown at the end of this letter.

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

- **Subject vehicles:** All MY 2006 - 2008 Toyota RAV4 vehicles manufactured for sale or lease in the United States and federalized territories.
- **Subject component:** All Rear Suspension Arm Assembly No.1 manufactured on the subject vehicles.
- **Toyota:** Toyota Motor Engineering and Manufacturing North America, Inc., Toyota Motor North America, Inc. and Toyota Motor Corporation, 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 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 Toyota (including all business units and persons previously referred to), who are or, in or after January 1, 2003, 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 left or right rear suspension arm assembly No. 1 (also referred to as "tie rods" in consumer reports).
  - **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 Toyota, 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 Toyota 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 Toyota has previously provided a document to ODI, Toyota 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 Toyota'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 Toyota has manufactured for sale or lease in the United States and federalized territories. Separately, for each subject vehicle manufactured to date by Toyota, 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 2003 or 2007, or a compatible format, entitled "PE 12-013 PRODUCTION DATA." See Enclosure for a pre-formatted table which provides further details regarding this submission.

2. State the number of each of the following, received by Toyota, or of which Toyota is otherwise 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 Toyota is or was a party to the arbitration; and
- f. Lawsuits, both pending and closed, in which Toyota 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 Toyota'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. Toyota'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);
  - d. Vehicle owner's address;
  - e. Vehicle owner's telephone number;
  - f. Vehicle's VIN;
  - g. Vehicle's make, model and model year;
  - h. Vehicle's mileage at time of incident;
  - i. Incident date;
  - j. Report or claim date;
  - k. Whether a crash is alleged;
  - l. Whether property damage is alleged;
  - m. Number of alleged injuries, if any; and
  - n. Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2003 or 2007, or a compatible format, entitled "PE12-013 REQUEST NUMBER TWO DATA." See Enclosure for a pre-formatted table which 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 Toyota 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 Toyota to date that relate to, or may relate to, the alleged defect in the subject vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign.

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

- a. Toyota's claim number;
- b. Vehicle owner or fleet name (and fleet contact person);
- c. Vehicle owner's address;
- d. Vehicle owner's telephone number;
- e. VIN;
- f. Repair date;
- g. Vehicle mileage at time of repair;
- h. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
- i. Labor operation number;
- j. Problem code;
- k. Replacement part number(s) and description(s);
- 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 2003 or 2007, or a compatible format, entitled "PE12-013 WARRANTY DATA." See Enclosure for a pre-formatted table which provides further details regarding this submission.

6. Describe in detail the search criteria used by Toyota 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 Toyota 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 Toyota 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. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that Toyota 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 Toyota is planning to issue within the next 120 days.
8. 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, Toyota. 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.

9. Describe all modifications or changes made by, or on behalf of, Toyota 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 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 Toyota is aware of which may be incorporated into vehicle production within the next 120 days.

10. Produce the following:
  - a. One exemplar sample of each design version of the subject component;
  - b. Two field return samples of the subject component exhibiting the subject failure mode; and
  - c. Any kits that have been released, or developed, by Toyota for use in service repairs to the subject component/assembly which relate, or may relate, to the alleged defect in the subject vehicles.
11. Produce a detailed graphical representation of the rear suspension in the subject vehicles not limited to but including:

- a. Toyota's nomenclature for each rear suspension component; and
- b. Toyota's nomenclature for the sub components that comprise the rear suspension arm No. 1 assembly.

12. Provide the following information regarding the subject components:

- a. All design and process FMEAs (Failure Mode Effects Analysis) or like documents related to the subject components highlighting the portion of the FMEAs related to corrosion;
- b. Describe all potential paths for water and other foreign material to enter the rear suspension arm No.1 and state where the water or other foreign material might collect or settle within the subject component;
- c. Describe the corrosion protection system for the subject components (internal and external), including all minimum thickness specifications for anti-corrosion protection systems and designed drainage features;
- d. Describe the stress distribution in the subject components in the following conditions, including all finite element analyses conducted by or for Toyota in both curb weight and GVWR conditions: (1) static condition; (2) steady-state driving; (3) while cornering; and (4) full jounce;
- e. Describe the conditions of vehicle loading and driving dynamics that produce the greatest loads/stresses in the subject components and state the approximate locations and magnitudes of the loads/stresses;
- f. Using a diagram or photograph of the subject component, show the typical progression of corrosion;
- g. State the capacity, or yield strength, of the subject component for the load condition identified in 12.f for a new components with no corrosion damage;
- h. Describe all requirements for salt-spray and other durability tests related to corrosion resistance in the subject components; and
- i. Provide copies of all documents related to 12.a – 12.i

13. Give Toyota's assessment of the geographic distribution of failure risk based on failure rates and trend, field surveys or other data used by Toyota to measure corrosion patterns in the United States in the subject components.

14. State the number of each of the following that Toyota has sold 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 component;
- b. Any kits that have been released, or developed, by Toyota for use in service repairs to the subject component/assembly.

15. 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 Toyota is aware that contain the identical component,

including other Toyota RAV4 model years, whether installed in production or in service, and state the applicable dates of production or service usage.

16. Furnish Toyota'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 that it poses;
  - e. What warnings, if any, the operator and the other persons both inside and outside the vehicle would have that the alleged defect was occurring or subject component was malfunctioning;
  - f. The effect on vehicle control while driving at residential speeds (e.g. speeds  $\leq$  35 mph), highway speeds (e.g. speeds  $\geq$  40 mph) including cornering maneuvers;
  - g. Any vehicle or component inspections performed by or for Toyota; and
  - h. Each of the reports included with this inquiry.

This letter is being sent to Toyota 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. Toyota's failure to respond promptly and fully to this letter could subject Toyota 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.) 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 Toyota 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, Toyota does not submit one or more requested documents or items of information in response to this information request, Toyota 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.

Toyota's response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by August 3, 2012. **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 PE12-013 in Toyota's response to this letter and in any confidentiality request submitted to the Office of Chief Counsel. If Toyota finds that it is unable to provide all of the information requested within the time allotted, Toyota must request an extension from me at (202) 366-5207 no later than five business days before the response due date. If Toyota 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 Toyota then has available, even if an extension has been granted.

If Toyota 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, Toyota 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-111), National Highway Traffic Safety Administration, Room W41-227, 1200 New Jersey Avenue, S.E., Washington, D.C. 20590. Toyota 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](mailto:derek.rinehardt@dot.gov)) and to [ODI\\_IRresponse@dot.gov](mailto:ODI_IRresponse@dot.gov) when Toyota sends its response to this office and indicate whether there is confidential information as part of Toyota response.

If you have any technical questions concerning this matter, please call Derek Rinehardt of my staff at (202) 366-5207.

Sincerely,



Jeffrey I. Quandt, Chief  
Vehicle Controls Division  
Office of Defects Investigation

Enclosure

one CD ROM titled Data Collection Disc containing 4 files:

PE12-013 Production Data  
PE12-013 Request Number Two Data  
PE12-013 Warranty Data  
PE12-013 Associated VOQs