

U.S. Department of Transportation

National Highway Traffic Safety Administration MAY 1 5 2007

400 Seventh St., S.W. Washington, D.C. 20590

## CERTIFIED MAIL RETURN RECEIPT REQUESTED

Ms. Gay P. Kent GM Product Investigations Mail Code 480-111-E18 Engineering Building 30200 Mound Road Warren, MI 48090-9010 NVS-212.pco PE07-025

## Dear Ms. Kent:

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 (PE07-025) to investigate allegations of towing hitch receiver failures in certain model year (MY) 2002 C/K 2500 series Suburban/Yukon and Silverado/Sierra/Avalanche vehicles manufactured by GM, and to request certain information.

This office has received four owner complaints of hitch receiver failure on the subject vehicles. Specifically, the metal structure and/or welding integrity around the pin box assembly had failed. Two owners allege bending/deformation of the pin box, one owner alleges weld cracks and one owner alleges complete weld failure leading to a separation of the pin box/towed trailer. A list of the four MY 2002 C/K 2500 owner complaints is provided at the end of this letter.

This letter also requests information on other MY C/K 1500/2500 series vehicles equipped with the same hitch receiver as the 2002 C/K 2500 series Suburban/Yukon and Silverado/Sierra/Avalanche vehicles. We have received owner complaints on these vehicles as well although not in proportion to the much greater vehicle population. The other MY C/K 1500/2500 series owner complaints are listed at the end of this letter.

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

- <u>Subject vehicles</u>: all model year (MY) 2002 GM C/K 2500 series Suburban/Yukon and Silverado/Sierra/Avalanche vehicles equipped with the original hitch receiver, manufactured for sale or lease in the United States.
- <u>Subject component</u>: the original equipment manufacturer (OEM) towing hitch receiver mounted to the rear of the subject vehicle.





- Non-subject vehicles: all GMT-800 C/K 1500/2500 series non-subject vehicles equipped with the same basic subject component, manufactured for sale or lease in the United States.
- GM: General Motors 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 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 GM (including all business units and persons previously referred to), who are or, in or after September 1, 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.
- <u>Alleged defect</u>: Failure, tearing, bending or loosening of the hitch receiver. Type of failures include but are not limited to failure of welds of the pin box, metal bending/tearing of the receiver and loosening of bolts holding the hitch receiver to the vehicle frame.
- **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 GM, 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 GM 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 subject condition, certain information is required. Pursuant to 49 U.S.C. § 30166, please provide numbered responses to the following information requests. Insofar as GM has previously provided a document to ODI, GM 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 GM's response to each request, identify the source of the information and indicate the last date the information was gathered.

- 1. State within the body of the response letter and in an electronic spreadsheet, by model, model year, the total number of subject vehicles and non-subject vehicles GM has manufactured for sale or lease in the United States. Separately, for each vehicle manufactured to date by GM, state the following:
  - a. Make;
  - b. Model;
  - c. Model Year;
  - d. Vehicle identification number (VIN);
  - e. Date of manufacture (in "yyyy/mm/dd" date format);

- f. Date warranty coverage commenced (in "yyyy/mm/dd" date format) or "Unsold" if not sold; and
- g. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

In addition, provide within the body of the response letter, a table containing the subject and non-subject vehicles by model, model year, C/K, 1500/2500 series, GVWR, GAWRs, GCWR, and the corresponding hitch rating(s) including the trailer towing capacity and tongue weight (with and without the weight distribution hitch). Describe which of these vehicle towing attributes can be deciphered from within the vehicle's VIN code. Provide this spreadsheet table also in a file in Microsoft Excel, or a compatible format, entitled "VEHICLE TOW RATINGS."

Provide a separate population file for the subject vehicle and for each MY of the non-subject vehicles. Within each MY file, provide a separate population table for each GVWR group in Microsoft Access 2000, or a compatible format, entitled "NON-SJ MY XX PRODUCTION DATA." If there are multiple tow ratings for the same model year/GVWR vehicle, denote them.

- 2. State within the body of the response letter and in an electronic spreadsheet, tables showing the number of each of the following, received by GM, or of which GM is otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicle and each non-subject vehicle MY by GVWR groups:
  - a. Consumer complaints, including those from fleet operators;
  - b. Field reports, including dealer field reports;
  - c. Reports involving a crash/fire, 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 (including own vehicle); and
  - e. Third-party arbitration proceedings where GM is or was a party to the arbitration; and
  - f. Lawsuits, both pending and closed, in which GM 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). Identify reports that have a duplicate with either other mfg reports/claims or with ODI.

In addition, for subparts "d" through "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.

Provide the tables in Microsoft Excel 2000, or a compatible format, entitled "MANUFACTURER REPORT COUNT" with each table separately tabbed.

- 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 for the subject vehicle and each non-subject vehicle MY by GVWR groups:
  - a. GM'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 (in "yyyy/mm/dd" date format);
  - h. Report or claim date (in "yyyy/mm/dd" date format);
  - i. Whether a crash is alleged;
  - j. Whether property damage is alleged;
  - k. Number of alleged injuries, if any;
  - 1. Number of alleged fatalities, if any.

Provide a separate complaint table for the subject vehicle and for each MY of the non-subject vehicle. Provide this information in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER TWO DATA."

- 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 GM used for organizing the documents for the subject vehicles only.
- 5. State within the body of the response letter and in an electronic spreadsheet, by model, model year and GVWR groups, a total count for all of the following categories of claims, collectively, that have been paid by GM to date that relate to, or may relate to, the alleged defect in the subject vehicle and each non-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. GM's claim number:
- b. Vehicle owner or fleet name (and fleet contact person) and telephone number;
- c. VIN;
- d. Repair date (in "dd/mm/yyyy" date format);
- 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 a separate warranty data table for the subject vehicle and for each MY of the non-subject vehicle. Provide this information in Microsoft Access 2000, or a compatible format, entitled "WARRANTY DATA."

- 6. Describe in detail the search criteria used by GM 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 (including the subject component) offered by GM 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 GM 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 (all issued revisions), that GM 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 GM is planning to issue within the next 120 days.
- 8. Describe all assessments, analyses (PFMEA, FMEA), tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") including all manufacturing and assembly non-conformance reports (scrap rates, rework, in-house/supplier problem resolution and tracking system (PRTS) reports) that relate to, or may relate to, the alleged defect in the subject vehicles and/or the non-subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, GM. 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 the towing option(s) that are available to the owners for which the hitch receiver is installed as original equipment (OEM) on the vehicle including a description of other towing related accessories included in the package. Provide a copy of the owner manual towing section(s) and other available towing literatures that is provided to an owner of an OEM hitch receiver equipped vehicle and any other material that is available to the owner (on request or purchase) concerning towing limits and guides. If the material differs for GVWR groupings, please specify.
- 10. Describe the process used to fabricate the hitch receiver including the material specification, heat treatment and base preparation leading to the final protective paint/coating. If multiple suppliers were used, identify the full name and address for each supplier and provide the means (part number stamping, label etc.) to identify the particular hitch supplier for each unit mounted on the vehicle. If a particular MY, model, GVWR or assembly plant is associated with a particular supplier, please provide the flow path detail.
- 11. Describe the design and any differences in the hitch receiver for the various available hitch ratings used in the GMT-800 C/K 1500/2500 series vehicles for both the subject and non-subject vehicles. In this response, please include any specifications or drawings for the hitch receiver subject vehicle.
- 12. Describe all quality assurance measures (including QS-9000 documentation, job instruction, tool set-up requirements, quality check worksheets, layered audits and metallurgical evaluation) that are taken to ensure a properly welded hitch receiver assembly and/or a properly mounted hitch receiver assembly to the vehicle.
- 13. Describe any stress analysis or finite element analysis performed to ensure that the hitch receiver will meet or exceed the towing rating as specified on the hitch receiver. Illustrate the location of the point of the highest stress area within the hitch receiver and any Factor of Safety established for the hitch receiver. Provide calculation and equation methodology employed to calculate the stresses in the hitch receiver.
- 14. Describe all static, quasi-static, dynamic and field testing performed to ensure that the hitch receiver will meet or exceed the towing rating as specified on the hitch receiver?
- 15. Describe all corrosion related testing to ensure that the final protective coating meets the specification.
- 16. Describe all modifications or changes made by, or on behalf of GM, in the design, material composition, manufacturing, 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 including material specification, heat treatment, additional strengthening of

the pin box area, and/or base surface preparation leading to the final protective paint/coating application. 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 identifiable by MY, date of build or VIN in the production table of Request No. 1;
- b. A detailed description of the modification or change (including dimensional and pin box loading) and its effect on hitch rating
- c. The reason(s) for the modification or change;
- d. The part numbers (service and engineering) of the original component;
- e. The part number (service and engineering) of the modified component;
- f. Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;
- g. When the modified component was made available as a service component; and
- h. Whether the modified component can be interchanged with earlier production components.

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

- 17. Produce one each of the following (note: samples shall be shipped direct to NHTSA-VRTC, see address below):
  - a. Field return sample of a subject vehicle hitch receiver assembly that includes an allegation of weld issue in the pin box area;
  - b. An Exemplar sample of a subject vehicle hitch receiver assembly; and
  - c. An Exemplar sample of a post MY2002 non-subject vehicle hitch receiver assembly containing the reinforced gusset plate in the pin box section.

Bill Collins – PE07-025 NHTSA VRTC Building 60 10820 State Route 347 East Liberty, Ohio 43319

18. State the number of subject component that GM has sold that may be used in the subject vehicles and non-subject vehicle 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). For each component part number, provide the supplier's name, address, and appropriate point of contact (name, title, and telephone number).

## 19. Furnish GM'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) including hitch assembly detachment from the mounting bolts and pin box separation (assuming both the safety chain and emergency brake lock safety link were attached to the holes in the pin box section);
- 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; and
- f. The reports included with this inquiry.

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

GM's response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by June 29, 2007. 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 PE07-025 in GM's response to this letter and in any confidentiality request submitted to the Office of Chief Counsel. If GM finds that it is unable to provide all of the information requested within the time allotted, GM must request an extension from me at (202) 366-5218 no later than five business days before the response due date. If GM 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 GM then has available, even if an extension has been granted.

If GM 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, GM 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. GM 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" 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.

Please send email notification to Peter C. Ong (Peter.Ong@dot.gov) and to ODI\_IRresponse@dot.gov when GM sends its response to this office and indicate whether there is confidential information as part of GM response.

If you have any technical questions concerning this matter, please call Peter C. Ong of my staff at (202) 366-0583.

Sincerely,

Thomas Z. Cooper, Chief Vehicle Integrity Division

Office of Defects Investigation

## **VOO Numbers:**

£									
10139522									
1									

In addition, non-subject vehicle VOQs related to the alleged defect:

566596	757860	756476	753003	10037419	10168762	10167729
10178509	10171247	10181518	10110705	10162206	10142539	10167320