

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

L. W. Camp, Director  
Automotive Safety and Engineering Standards Office  
Ford Motor Company  
Fairlane Plaza South, Suite 400  
330 Town Center Drive  
Dearborn, MI 48126

NSA-11jdw  
SQ99-005

Dear Mr. Camp:

The Office of Defects Investigation (ODI) is conducting a review of a service bulletin, Article No. 91-20-8, initiated by the Ford Motor Company (Ford) to address excessive brake pedal travel or brake pedal fade upon brake application, for all 1989 through 1991 E-250, E-350, F-250, and F-350 vehicles. Dealers were to replace the aluminum pistons with phenolic pistons to remedy the problem. In addition, on February 28, 1992, Ford initiated a safety recall of approximately 467,000 1988 through 1991 model year Ford F-Series light trucks with Gross Vehicle Weight Ratings (GVWR) over 8,500 pounds. Ford reported that prolonged hard braking when the vehicle is operated at or near the GVWR, or Gross Combination Weight Rating (GCWR) when towing a trailer, reduces brake effectiveness due to overheating of the front brakes and can result in longer than normal stopping distances and a low brake pedal. Dealers were to install snap-in insulators that attach to each of the front brake caliper pistons.

ODI is concerned that while Ford recalled the F-Series light trucks with high GVWR or high GCWR, the similar E-Series vehicles were not included. It also appears that based on the defect described in Ford's Defect Information Report for safety recall 92V-026, that Ford's Article 91-20-8 should have been conducted as a safety recall. Overheating of the front brakes, which is at the root of each of these matters, causes the brake fluid to boil, resulting in low brake pedal and extended stopping distances. ODI has received 68 reports of alleged front brake fade in 1988 through 1991 model E-350 series van and van-cutaway vehicles resulting in 2 reported crashes, 2 fires, and 15 injuries. A copy of each of these reports is enclosed for your information. The purpose of this letter is to obtain certain information on the alleged front brake fade in these E-350 vehicles.

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

- **Subject vehicles**: all 1988 through 1991 model year E350 van and van-cutaway chassis vehicles.
- **Ford**: the 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 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 1988, 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.
- **Article 91-20-8**: the service article issued by Ford entitled, "Brakes-Excessive Pedal Travel or Fade-Trucks Built Prior to 5/1/91" and assigned Ford Article No. 91-20-8. The vehicles involved are identified only as "LIGHT TRUCKS: 1980-91 E-250, E-350, F-250, F-350." The article issue was identified as: "Excessive brake pedal travel or brake pedal fade may occur during application when heavily loaded, on steep downhill grades. This may be caused by the brake caliper piston." Dealers were instructed to replace both brake caliper pistons with new phenolic pistons, after ensuring that all the service manual diagnostic procedures and subsequent adjustments did not correct the problem. This matter was apparently assigned an Oasis code 301000.
- **Safety recall 92V-026**: the safety recall filed by Ford in the Defect Information Report dated February 28, 1992, involving approximately 467,000 1988-1991 model year Ford F-Series trucks with GVWR over 8,500 lbs., that were built at the Kansas City Assembly, Twin Cities Assembly, Michigan Truck, and Ontario Truck Plants from August 4, 1987, through May 29, 1991. According to the report, "The vehicles included in this action are all F-250 and F-350 models equipped with 7.3L Diesel and 7.5L EFI engines and all over 8,500 lb. GVWR F-250 and F-350 4x4 models equipped with 5.8L EFI engines." After prolonged hard braking when these vehicles were being operated at or near the GVWR, or the GCWR when towing, brake effectiveness can diminish due to overheating of the front brakes. This can result in longer than normal stopping distances and a low brake pedal. Ford reported that "This condition is

believed to occur primarily when operating in hilly or mountainous terrain with long steep grades.” Ford also noted that vehicle overloading, misadjusted or poorly maintained brakes, driving with the driver’s foot resting on the brake pedal, and descending long steep grades without down-shifting contribute to the condition. The remedy for these vehicles was the installation of snap-in insulators that attached to the front brake caliper pistons. In addition, those vehicles equipped with the 7.5L engine will have insulation installed on the engine compartment brake lines. This recall was the subject of ODI’s EA91-044. (Ford’s recall 92S44)

- **Alleged defect:** the failure, malfunction, or other unsatisfactory performance of the front brake assemblies, and all components thereof, which can result in overheating of the front brake hydraulic brake fluid, front brake fade, loss of front brake effectiveness, excessive brake pedal travel or brake pedal fade upon application of the brakes. This is to include all occurrences-- whether the vehicle is heavily loaded or not, and regardless of the inclination of the roadway.
- **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 nonidentical 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, 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 nonidentical 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.

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. Please repeat the applicable request verbatim above each response. After Ford's response to each request, identify the source of the information and indicate the last date the source updated the information prior to the preparation of the response. Insofar as Ford has previously provided a document to ODI, Ford may either 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. Previously submitted complaints and field reports in EA91-044 do not need to be provided. When documents are produced, the documents shall be produced in an identified, organized manner that corresponds with the Information Request letter (including the 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.

If Ford cannot respond to any specific request or subpart thereof, please state the reason why it is unable to do so. If Ford claims that any document or other information or material responsive to any of the following items need not be provided to NHTSA because it is privileged or the work product of an attorney, separately by information request number, for each document or other information or material, state the nature of that information or material and identify any document in which it is found by date, subject or title, name and position of the person from, and the person to whom it was sent, and the name and position of any other recipient. Ford must also describe the basis for the claim, and explain why Ford believes it applies.

1. Furnish the following information pertaining to the ten largest purchasers of the 1988-1991 E-350 series vans:
  - a. state the primary purpose of the purchased vans, whether for recreational or commercial usage;
  - b. number of units sold to each purchaser;

Additionally, provide copies of all documents associated in any manner with items a through c, above.

2. Provide a summary incident table of all known or reported incidents pertaining to the alleged defect in the subject vehicles, identifying the owner's name, city, state, and telephone; vehicle line, model year, VIN, and build date; the date of the incident (the date of the report if the incident date is unknown), mileage at the time of the incident, symptom codes, Ford's comments, causal component, program type, and the dealer name, city, and state. The table should be arranged in ascending order alphabetically according to the vehicle owner's (private or commercial) last name. If Ford has developed or is developing a

similar table which contains additional information, please include that additional information in Ford's response. In addition, provide a copy of the table in electronic form, either in Lotus or Excel format.

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 make reports to NHTSA. 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.

Ford's response to this letter, in duplicate, must be submitted to this office by **July 21, 1999**. Please include in Ford's response the identification codes referenced on page one of this letter. 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) 366-5226 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 Ford has received an extension.

If Ford considers any portion of its response to be confidential information, 49 CFR Part 512, "Confidential Business Information," requires that Ford submit two copies of those document(s) 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, to the Office of Chief Counsel, National Highway Traffic Safety Administration, Room 5219 (NCC-30), 400 Seventh Street, SW, Washington, D.C. 20590. In addition, Ford must provide supporting information for the request for confidential treatment in accordance with part 512.4(b) and (e) and include the name, address, and telephone number of a representative to receive a response from the Chief Counsel.

If you have any technical questions concerning this matter, please call or contact me by fax at (202) 366-7882.

Sincerely,

Jonathan D. White, Chief  
Recall Analysis Division  
Office of Defects Investigation

Enclosures:  
68 consumer complaints  
NHTSA:ODI:NSA

NSA-11:JWhite:kjs:65227: December 22, 2008  
cc: NSA-11 subj/chron  
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