



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

JUL 30 2003

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

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. James Vondale, Director
Automotive Safety Office,
Ford Motor Company
Environmental and Safety Compliance
330 Town Center Drive, Suite 400
Dearborn, MI 48126

NVS-213bby
EA02-025

Dear Mr. Vondale:

As you know, the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) has upgraded its investigation of underhood fires in model year (MY) 1992 through 1997 Ford Town Car/Crown Victoria/Grand Marquis to an Engineering Analysis (EA02-025). This letter is to request additional information to assist us in our investigation.

This office has received 28 additional reports relating to speed control deactivation switch failure or underhood fires with the vehicle parked and the key out of the ignition in MY 1993 through 1997 Ford Crown Victoria, Mercury, Grand Marquis, and Lincoln Town Car vehicles that were not included in recall 99V-124, including 6 alleging speed control deactivation switch failure. A copy of each of the reports is enclosed for your information.

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

- **Subject vehicles:** All MY 1993 through 1997 Ford Crown Victoria, Mercury Grand Marquis, and Lincoln Town Car vehicles that were not included in the subject recall.
- **Subject recall:** NHTSA Recall No. 99V-124 (Ford No. 99S15).
- **Subject components:** All Speed Control Deactivation Switches produced for use in the subject vehicles as original equipment or as replacement parts.
- **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 1991, 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:** Any malfunction of the speed control deactivation switch resulting in loss of the speed control function, melting of switch materials, smoke, fire, or ignition of engine compartment materials or components.
 - **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, any other data compilations from which information can be obtained, translated if necessary, into a usable form and any other documents. For purposes of this request, any document, which contains any note, comment, addition, deletion, insertion, annotation, or otherwise comprises a non-identical copy of another document shall be treated as a separate document subject to production.

In all cases where original and any non-identical copies are not available, "document(s)" also means any identical copies of the original and all non-identical copies thereof. Any document, record, graph, chart, film or photograph originally produced in color must be provided in color. Furnish all documents whether verified by the manufacturer or not. If a document is not in the English language, provide both the original document and an English translation of the document.

- **Other terms:** To the extent that they are used in these information requests, the terms "claim," "consumer complaint," "dealer field report," "field report," "fire," "fleet," "good will," "make," "model," "model year," "notice," "property damage," "property damage claim," "rollover," "type," "warranty," "warranty adjustment," and "warranty claim," whether used in singular or in plural form, have the same meaning as found in 49 CFR 579.4.

In order for my staff to evaluate the alleged defect, certain information is required. 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, 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's response to each request, identify the source of the information and indicate the last date the information was gathered. If requested information is unavailable, so state and provide a brief explanation. Along with your written response, please provide this information in Microsoft Word 2000, or a compatible format, entitled "IR Response." Your responses to Questions 1, 2, 3, 4, 5, and 7 of this letter should be comprehensive and should include records submitted in response to prior submissions to ODI (e.g., RQ01-002).

1. State, by model, model year, cruise control usage, and inclusion in the subject recall the number of MY 1992 through 1997 Crown Victoria, Grand Marquis, and Town Car vehicles Ford has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date Ford, state the following:
 - a. Vehicle identification number (VIN);
 - b. Model;
 - c. Model year;
 - d. Date of manufacture;
 - e. Date warranty coverage commenced;
 - f. Whether the vehicle was included in the subject recall;
 - g. Whether the subject recall repairs have been completed on the vehicle;
 - h. Whether cruise control was installed as original equipment; and

- i. 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 1, Data Collection Disc, for a pre-formatted table designed for this submission.

2. State the total number of each of the following, received by Ford, or of which Ford 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 from any source involving allegations of fire, injury, or fatality;
 - d. Third-party arbitration proceedings where Ford is or was a party to the arbitration; and,
 - e. Lawsuits, both pending and closed, in which Ford is or was a defendant or codefendant.

For subparts "a" through "e," 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 "e," provide a summary description of the alleged problem and causal and contributing factors and Ford's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "d" and "e", 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 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. Incident state;
 - i. Report or claim date;
 - j. Whether a fire is alleged;
 - k. Number of alleged injuries, if any;
 - l. Number of alleged fatalities, if any;
 - m. Ford component and system codes;
 - n. Complaint summary;
 - o. Consumer comments; and
 - p. Ford's assessment of the allegation.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER TWO DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table designed for this submission.

4. State the number of reports from any source (e.g., complaints, field reports, subrogation claims, lawsuits) received by Ford, or of which Ford is otherwise aware, which relate to non-crash related underhood fires in the subject vehicles. Provide this information by model, model year, cruise control usage, and whether the fire initiated when the engine was running or stopped.
5. Provide the following information for each record counted in your response to Request No. 4:
 - a. Ford'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, subrogation claim, lawsuit, etc.);
 - c. Vehicle owner or fleet name (and fleet contact person), address, and telephone number;
 - d. Vehicle VIN;
 - e. Make, model and model year;
 - f. Vehicle incident mileage;
 - g. Incident date;
 - h. Incident state;
 - i. Report or claim date;
 - j. The quadrant of the engine compartment where the fire started (left rear, left front, right rear, right front);
 - k. Whether the incident occurred with the engine running or stopped;
 - l. Whether or not Ford received a subrogation claim regarding the incident (Y/N);
 - m. The alleged cause of the fire;
 - n. Complaint summary;
 - o. Consumer comments; and
 - p. Ford's assessment of the allegation and cause of the fire.
6. Produce copies of all documents related to each item within the scopes of Requests Nos. 2 and 4 that have not previously been submitted by Ford. Organize the documents separately by request number and category (i.e., consumer complaints, field reports, etc.) and describe the method Ford used for organizing the documents.
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 to date that relate to the subject component 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. Ford's claim number;

- 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, 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 1, Data Collection Disc, for a pre-formatted table designed for this submission.

8. Describe in detail the search criteria used by Ford 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 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) related to the alleged defect that Ford 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 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 manufacturer's short name 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 or any of the subject components installed in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Ford. 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. State the number of each of the following that Ford 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 components; and
 - b. Any kits that have been released, or developed, by Ford for use in service repairs to the subject component/assembly.

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 is aware that contain the same base part number (9F924) component, whether installed in production or in service, and state the applicable dates of production or service usage.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER NINE DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table designed for this submission.

12. Furnish copies of the design, test, and quality assurance specifications and drawings for the subject components, including Ford engineering specification ES-F2VC-9F924-AA.
13. Provide the peak operating and hot soak temperatures in the area of the subject component on each of the model year subject vehicles. Describe the effects on performance to the Kapton diaphragm of being exposed to 286°F for an extended period of time.
14. Provide copies of all documents relating to Failure Mode and Effects Analyses of the subject components. Provide Pareto analyses of the relative proportions of each causal factor in the total number of subject component failures represented by: (a) warranty claims data; and (b) part sales data.
15. Describe how the manufacturing process difficulties referenced in Ford's December 5, 2001 response to the RQ01-002 Information Request letter relate to the embrittlement of the Kapton diaphragm or contamination of the switch cavity identified as a potential root cause in the June 10, 1999 Field Service Action Evaluation Paper.
16. Describe all design, process, and use factors that may contribute to: (a) brittle failure of the Kapton diaphragms; and, (b) contamination of the switch cavity; as mentioned in the June 10, 1999 Field Service Action Evaluation Paper submitted in Ford's response to RQ01-002. Provide Ford's assessment of why the process, referenced in the June 10, 1999 Field Service Action Evaluation Paper (ES-F2VC-9F924-AA), intended to prevent these failure modes may not have been effective.

17. Describe, and provide copies of all documents relating to, all returned part analyses of subject components recovered by or for Ford from vehicles covered by the subject recall, both before and after Ford began its campaign. Include in your description the total number of such parts returned, the number analyzed, the criteria for selecting parts for analysis, a description of how they were analyzed, a summary of the results of the analyses, the number of analyzed switches with leaking Kapton diaphragms, and a description of any and all analyses of Kapton seals removed from returned components. Include any and all material showing the frequencies of failed switches or leaking diaphragms as functions of service life or mileage.
18. State whether Ford has ever conducted, or is aware of, any returned part analyses in subject vehicles produced after the subject recall range. If so, provide the same information requested in Request No. 17 regarding any such analyses.
19. Coordinate with Mr. Bruce York of my staff to arrange the collection of speed control deactivation switches from subject vehicles that are replaced for any reason over the next 60 days.
20. Furnish Ford's assessment of the alleged defect in the subject vehicles, including a detailed comparison of the alleged defect in the subject vehicles and the condition addressed by the subject recall. Include in your assessment the following information:
 - a. Provide updates of the graphs showing non-crash related underhood fire incidence, for both engine ON and engine OFF, by vehicle production month that were included in Ford's 14-D reports related to the subject recall. In the updated graphs, show the data for one model year of production before the subject recall production range, the recall production range, and the production range of the subject vehicles. Include in the graphs the number of events that include symptoms associated with the alleged defect condition and also vehicle production implementation date information regarding all design or manufacturing process changes that Ford considers relevant to the alleged defect condition.
 - b. Identify all differences in design, manufacturing, or use conditions between the subject recall population and subsequent production vehicles that may influence: (1) seal integrity of the Kapton diaphragms; (2) the aging/durability of the Kapton diaphragms; (3) failure frequencies of the Kapton diaphragms; and (4) the risk of fire in a switch with a failed/leaking Kapton diaphragm.
 - c. Provide Ford's assessment of the failure rates of the subject components at the following service intervals: (1) 36-months; (2) 60-months; and (3) 96-months. Include in this assessment a review of warranty and complaint data at these intervals, as well as a discussion of how Ford reconciles part sales data with the failure estimates at each interval. Regarding the latter, provide a summary of *all* information concerning the subject component from the UDB system over the last three years binned by failure mode (include "Burned/Melted," "Internal Leak," "Internal Short," and "Unknown" in the failure mode categories).
 - d. Provide Ford's assessment of the relative contribution of Kapton diaphragm failures to the total number of subject component failures, including how this changes over the

- service life of the parts (e.g., state whether it is considered a greater contributor later in life than it is early in life).
- e. Provide Ford's assessment of the risk of non-crash related underhood fire in each of the subject models as a function of time in comparison to other medium to large-sized passenger cars at similar ages. Include separate assessments of key "OFF" fires and fires that occur when the engine is running (or shortly after the engine is turned "OFF").
 - f. Provide Ford's assessment of the relative contribution of the subject component to the incidence of non-crash related underhood fires in the subject models over the service life of each subject model and state the bases for those assessments.

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 \$5,000 per day, with a maximum of \$15 million for a related series of violations, for failing or refusing to perform an act required under 49 U.S.C. § 30166. 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.

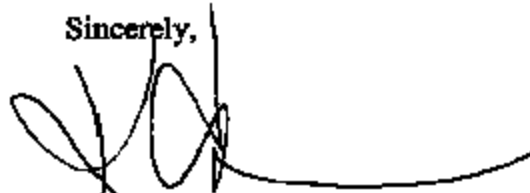
Ford's response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by September 26, 2003. Please refer to EA02-025 in Ford's response to this letter. If Ford finds that it is unable to provide all of the information requested within the time allotted, Ford must request an extension from Mr. Jeffrey L. Quandt 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, 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.

If you have any technical questions concerning this matter, please call Bruce York of my staff at (202) 366-6938.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kathleen C. DeMeter', with a long horizontal flourish extending to the right.

**Kathleen C. DeMeter, Director
Office of Defects Investigation
Enforcement**

Enclosure 1, One CD ROM titled Data Collection Disc containing three files
Enclosure 2, Twenty-Six consumer complaints