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January 27, 2008

Ms. Kathleen C. DeMeter, Director
Office of Defects Investigation Safety Assurance
National Highway Traffic Safety Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

Dear Ms. DeMeter:

Subject: EA05-014: NVS-213swmc

The Ford Motor Company (Ford) response to the agency's December 8, 2005, letter concerning reports of alleged floor carpet interference with accelerator pedal return in 2003-2004 model year Mustang SVT Cobra vehicles is attached.

Based upon inspection of vehicles, Ford has concluded that the concern being investigated is principally related to the unique profile of the accelerator pedal in Cobra vehicles combined with carpet misplacement in 2004 model year vehicles. Further, the condition is more likely to occur in the 2004 model year Cobra vehicles if the pedal arm has been bent. Analysis of complaint data, both in the subject and peer vehicles, supports this conclusion.

The extremely low complaint rate for 2003 model year Cobra Vehicles and for peer vehicles, and the fact that there are few allegations of pedal restriction on a significantly larger population of vehicles, suggests that these vehicles are not experiencing the distinctly different condition occurring on 2004 model year Cobra vehicles.

Although some peer vehicle reports allege an accident, Ford's findings in several of these cases has identified numerous inconsistencies in these reports, either in the customer assertions to NHTSA compared with information they provided to Ford or in the allegations compared with the findings of the servicing dealer or information contained in a police report. Ford also notes that it is not uncommon for a driver involved in an accident in any vehicle to allege some type of malfunction with the vehicle to be the cause. Such assertions may be made to purposely deflect the cause of an accident away from driver error, or may be made in situations where a pedal misapplication is inadvertently involved. As the agency is also aware, improper usage of floor mats has frequently been found to be the cause of some accelerator pedal related complaints on any variety of vehicles.

Ford acknowledges an elevated rate of reports for the 2004 model year Cobra vehicle, and that some of these reports involve unique interaction between the rear pedal surface and the carpet behind the pedal. The report rates for the 2003 Cobra vehicle and the peer 2003-2004 non-Cobra vehicles are significantly lower than the 2004 Cobra and in no way rise to the level of an unreasonable risk of accident or injury. Ford is continuing its review of this matter and will continue to discuss any aspects of this subject with the agency.

If you have any questions concerning this response, please feel free to contact me.

Sincerely,

James P. Vondale

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Attachment

FORD MOTOR COMPANY (FORD) RESPONSE TO EA05-014

Ford's response to this Engineering Analysis (EA) information request was prepared pursuant to a diffigent search for the information requested. While we have employed our best efforts to provide responsive information, the breadth of the agency's request and the requirement that information be provided on an expedited basis make this a difficult task. We nevertheless have made substantial effort to provide thorough and accurate information, and we would be pleased to meet with agency personnel to discuss any espect of this EA.

The scope of Ford's Investigation conducted to-locate responsive information focused on Ford employees most likely to be knowledgeable about the subject matter of this Inquiry and on review of Ford files in which responsive information ordinarily would be expected to be found and to which Ford ordinarily would refer. Ford notes that although electronic information was included within the scope of its search, Ford has not attempted to retrieve from computer storage electronic files that were overwritten or deleted. As the agency is aware, such files generally are unavailable to the computer user even if they still exist and are retrievable through expert means. To the extent that the agency's definition of Ford includes suppliers, contractors and affiliated enterprises for which Ford does not exercise day-to-day operational control, we note that information belonging to such entities ordinarily is not in Ford's possession, custody or control.

Ford has construed this request as pertaining to vehicles manufactured for sale in the United States, its protectorates and territories.

In a December 16, 2005, telephone conversation, Stephen McHenry of the agency informed Ford personnel that peer vehicles are defined as 2003-2004 model year Mustang SVT non-Cobra vehicles, and that Ford should disregard requests pertaining to the 2005 model year Mustang as it is built off of a completely different vehicle platform.

Answers to your specific questions are set forth below. As requested, after each numeric designation, we have set forth verbatim the request for information, followed by our response. Unless otherwise stated, Ford has undertaken to provide responsive documents dated up to and including December 8, 2005, the date of your inquiry. Ford has searched within the following offices for responsive documents: Environmental and Safety Engineering, Ford Customer Service Division, Marketing and Sales Operations, Purchasing, Quality, Office of the General Counsel, Vehicle Operations, North American Car Product Development.

Request 1

State, by model and model year, the number of subject and peer vehicles Ford has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by Ford, state the following:

- Vehicle identification number (VIN);
- b. Model:
- c. Model Year:
- d. Date of manufacture:
- Date warranty coverage commenced; and
- 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 I, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

<u>Answer</u>

Ford submitted data concerning the approximate total number of 2003-2004 MY Ford Mustang SVT Cobra (subject) vehicles sold in its August 24, 2005, response to PE05-038. Ford records indicate that the approximate total number of 2003-2004 model year Ford Mustang SVT non-Cobra (peer) vehicles sold in the United States (the 50 states and the District of Columbia) and its protectorates and territories (American Samos, Guam, Northern Mariana Islands, Puerto Rico, and Virgin Islands) is 260,936.

The number of subject and peer vehicles sold in the United States by model and model year is shown below:

Model	2003 MY	2004 MY
Mustang Cobra	12,973	5,243
Mustang Base-Coupe (P40)	57,520	62,917
Mustang Base-Convertible (P44)	24,542	26,493
Mustang GT-Coupe (P42) (Including Mach 1)	33,825	26,688
Mustang GT-Convertible (P45)	14,819	12,132
Total	145,682	137,477

The requested data for each subject and peer vehicle is provided electronically in Appendix A (filename: 2006-01-27 Appendix A) on the enclosed CD.

Request 2

State the 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:

- Consumer complaints, including those from fleet operators;
- 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. Reports involving a fire, 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;
- e. Property damage claims; and
- f. Third-party arbitration proceedings where Ford is or was a party to the arbitration;
 and
- g. 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 "g," 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 "f" and "g," 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.

Answer

For purposes of identifying reports of incidents that may be related to the alleged defect and any related documents, Ford has gathered "owner reports" and "field reports" maintained by Ford Customer Service Division (FCSD), fleet reports maintained in a Fleet Test Database, and claim and lawsuit information maintained by Ford's Office of the General Counsel (OGC). The agency will note that we are not referencing searches of the Intensified Customer Concern Definition (ICCD) files as the ICCD records are now maintained in Ford owner report files. Therefore, our searches of the owner report files include ICCD records.

Descriptions of the FCSD owner and field report systems and the Fleet Test Database and the criteria used to search each of these are provided electronically in Appendix B (filename: 2006-01-27 Appendix B) on the enclosed CD.

The following categorizations were used in the review of reports located in each of these searches:

Category	Allegation
A1	Allegations of pedal-carpet contact/interference with restriction to pedal return
A2	Allegations of pedal-carpet contact/interference with unspecified pedal restriction
B1	Allegations of pedal/carpet contact, no mention of any pedal movement restriction
B2	Non-specific allegations of accelerator pedal Interference (carpet not specified)

We are providing electronic copies of reports categorized as "B" as "non-specific allegations" for your review bacause of the broad scope of the request. Based on our engineering judgment, the information in these reports is insufficient to support a determination that they pertain to the alleged defect.

Owner Reports: Records Identified in a search of the Master Owner Relations Systems (MORS) database, as described in Appendix B, were reviewed for relevance and categorized in accordance with the categories described above. The number and copies of relevant owner reports identified in this search that may relate to the agency's investigation are provided in the MORS III portion of the electronic database contained in Appendix C1 (filename: 2008-01-27).

Appendix C1) on the enclosed CD. The categorization of each report is identified in the "Category" field.

Ford operates a separate SVT Hotline specifically for SVT vehicle owners. A search of the SVT Hotline database for potentially responsive records was conducted, as described in Appendix B. No additional responsive reports were identified.

When we were able to identify that responsive (i.e., not ambiguous) duplicate owner reports for an alleged incident were received, each of these duplicate reports was marked accordingly and the group counted as one report.

<u>Legal Contacts:</u> Ford is providing in Appendix B a description of Legal Contacts and the activity that is responsible for this information, Litigation Prevention. No additional Legal Contacts were identified that may relate to the subject vehicles.

<u>Fleet Reports</u>: In addition to fleet reports that may be contained in the owner reports or field reports identified in this response, Ford conducted a search of its Fleet Test Database, as described in Appendix B, for reports that may relate to the alleged defect in the subject vehicles. No fleet reports were identified that may relate to the subject vehicles.

<u>Field Reports:</u> Records identified in a search of the Common Quality Indicator System (CQIS) database, as described in Appendix B, were reviewed for relevance and categorized in accordance with the categories described above. The number and copies of relevant field reports identified in this search that may relate to the agency's investigation are provided in the CQIS portion of the electronic database contained in Appendix C1 (filename: 2006-01-27 Appendix C1) on the enclosed CD. The categorization of each report is identified in the "Category" field.

When we were able to identify that responsive duplicate field reports for an alleged incident were received, each of these duplicate reports was marked accordingly, and the group counted as one report. In addition, field reports that are duplicative of owner reports are provided in Appendix C1, but are not included in the report count above.

<u>Unified Database:</u> The Unified Database (UDB) was created to facilitate parts availability by tracking part sales and is not intended as a problem reporting system. However, because a small percentage of the records may contain verbatim comments that could potentially relate to the agency's inquiry, we searched UDB for reports responsive to Request 2 as described in Appendix B. No responsive UDB reports were identified.

<u>VOQ Data</u>: This information request had an attachment that included 38 Vehicle Owner's Questionnaires (VOQs) relating to a subject vehicle; 23 of these VOQ's were supplied in PE05-038. Ford made inquiries of its MORS database for customer contacts, and its CQIS database for field reports concerning the vehicles identified on the VOQs. Ford notes that in some instances, where the VOQ does not contain the VIN or the owner's last name and zip code, it is not possible to query the databases for owner and field reports specifically corresponding to the VOQs. Any reports located on a subject vehicle identified in the VOQs related to the alleged defect are included in the MORS and CQIS portions of the electronic database provided in Appendix C1 and have been identified by a "Y" in the "VOQ Dup" field.

<u>Crash/Injury Incident Claims:</u> For purposes of identifying allegations of accidents or injuries that may have resulted from the alteged defect in the subject vehicles, Ford has reviewed responsive owner and field reports, and lawsuits and claims. Based on a reasonable and

diligent search, Ford located no additional crash or injury incident allegations beyond those Ford identified in response to PE05-038 that appear to relate to the alleged defect.

Claims, Lawsuits, and Arbitrations: For purposes of identifying incidents that may relate to the elleged defect, Ford has gathered claim and lawsuit information maintained by Ford's OGC. Ford's OGC is responsible for handling product liability lawsuits, claims, and consumer breach of warranty lawsuits and arbitrations against the Company. Based on a reasonable and diligent search, Ford located no lawsuits, claims, consumer breach of warranty lawsuits, or arbitrations that appear to relate to the alleged defect in the subject vehicles.

Request 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;
- The category of the item, as identified in Request No, 2 (i.e., consumer complaint, field report, etc.);
- 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;
- Report or claim date;
- Whether a crash is alleged;
- Whether a fire is alleged;
- k. Whether property damage is alleged;
- Number of alleged injuries, if any; and
- m. Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER TWO DATA," See Enclosure 1, Data Collection Disc, for a preformatted table which provides further details regarding this submission.

Answer

Ford is providing owner and field reports in the electronic database contained in Appendix C1 on the enclosed CD in response to Request 2. To the extent information sought in Request 3 is available for owner and field reports, it is provided in the database

Request 4

State the number of each of the following, received by Ford or of which Ford is otherwise aware, which relate to the alleged defect in the peer vehicles.

- Consumer complaints, including those from fleet operators;
- 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. Reports involving a fire, 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;
- e. Property damage claims; and
- Third-party arbitration proceedings where Ford is or was a party to the arbitration;
 and
- g. 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 "g," 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 eignificant underlying facts and evidence. For items "f" and "g," 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.

Answer

For purposes of Identifying reports of incidents that may be related to the the agency's request for peer vehicle information, Ford applied the same search criteria and report categorization as described in Ford's response to Request 2.

Owner Reports: Records identified in a search of the Master Owner Relations Systems (MORS) database, as described in Appendix B, were reviewed for relevance and categorized in accordance with the categories described above. The number and copies of relevant owner reports identified in this search that may relate to the agency's request are provided in the MORS III portion of the electronic database contained in Appendix C2 (filename: 2006-01-27 Appendix C2) on the enclosed CD. The categorization of each report is identified in the "Category" field.

When we were able to identify that responsive (i.e., not ambiguous) duplicate owner reports for an alleged incident were received, each of these duplicate reports was marked accordingly and the group counted as one report. In other cases, certain vehicles may have experienced more than one incident and have more than one report associated with their VINs. These reports have been counted separately.

<u>Legal Contacts</u>: Ford is providing, in Appendix B, a description of Legal Contacts and the activity that is responsible for this information, Litigation Prevention. To the extent that owner reports provided in response to this information request indicate that they are Legal Contacts, Ford has gathered the related files from the Litigation Prevention section. Non-privileged documents for files that were located are provided electronically in Appendix D (filename: 2006-01-27 Appendix D).

<u>Fleet Reports:</u> In addition to fleet reports that may be contained in the owner reports or field reports identified in this response, Ford conducted a search of its Fleet Test Database, as

described in Appendix B, for reports that may relate to the alleged defect in the subject vehicles. No fleet reports that may relate to the agency's request were identified.

<u>Field Reports:</u> Records Identified in a search of the Common Quality Indicator System (CQIS) database, as described in Appendix B, were reviewed for relevance and categorized in accordance with the categories described above. The number and copies of relevant field reports identified in this search that may relate to the agency's request are provided in the CQIS portion of the electronic database contained in Appendix C2 (filename: 2006-01-27 Appendix C2) on the enclosed CD. The categorization of each report is identified in the "Category" field.

When we were able to identify that responsive duplicate field reports for an alleged incident were received, each of these duplicate reports was marked accordingly and the group counted as one report. In other cases, certain vehicles may have experienced more than one incident and have more than one report associated with their VINs. These reports have been counted separately. In addition, field reports that are duplicative of owner reports are provided in Appendix C2 but are not included in that report count.

<u>Unified Database:</u> The Unified Database (UDB) was created to facilitate parts availability by tracking part sales and is not intended as a problem reporting system. However, because a small percentage of the records may contain verbatim comments that could potentially relate to the agency's inquiry, we searched UDB for reports responsive to Request 2 as described in Appendix B. No responsive UDB reports were identified.

<u>VOQ Data</u>: This information request had an attachment that included nine Vehicle Owner's Questionnaires (VOQs) relating to a peer vehicle; two of these were also supplied in PE05-038. Ford made inquiries of its MORS database for customer contacts, and its CQIS database for field reports concerning the vehicles identified on the VOQs. Ford notes that in some instances, where the VOQ does not contain the VIN or the owner's last name and zip code, it is not possible to query the databases for owner and field reports specifically corresponding to the VOQs. Any reports located on a vehicle identified in the VOQs related to the alleged defect are included in the MORS and CQIS portions of the electronic database provided in Appendix C2 and have been identified by a "Y" in the "VOQ Dup" field.

Crash/injury Incident Claims: For purposes of identifying allegations of accidents or injuries that may relate to the agency's request, Ford has reviewed owner and field reports, and lawsuits and claims provided in response to this information request. A summary of the reports identified in this search is being provided electronically as Appendix E (filename: 2006-01-27 Appendix E) on the enclosed CD. Ford is also providing in this appendix copies of related documents, such as police reports, that may provide further information regarding these incidents. Copies of reports related to these allegations are provided in the respective MORS, CQIS, and Analytical Warranty System (AWS) portions of the electronic database provided in Appendix C2. Additional information relating to some of these incidents may be contained in Appendix D in response to Request 4.

<u>Claims, Lawsuits, and Arbitrations</u>: For purposes of identifying incidents that may relate to the agency's request, Ford has gathered claim and lawsuit information maintained by Ford's OGC. Ford's OGC is responsible for handling product liability lawsuits, claims, and consumer breach of warranty lawsuits and arbitrations against the Company.

Based on a reasonable and diligent search, Ford located no lawsuits, claims, consumer breach of warranty lawsuits, or arbitrations that appear to relate to the alleged defect in the subject

vehicles. Further, Ford located no lawsuits, claims or consumer breach of warranty lawsuits that are ambiguous as to whether the meet the alleged defect criteria.

Request 5

Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. 4, state-the following information:

- Ford's file number or other identifier used;
- The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);
- Vehicle owner or fleet name (and fleet contact person), address, and telephone number;
- d. Vehicle's VIN;
- Vehicle's make, model and model year,
- f. Vehicle's mileage at time of incident;
- g. Incident date;
- Report or claim date;
- Whether a crash is alleged:
- j. Whether a fire is alleged;
- k. Whether property damage is alleged;
- Number of alleged injuries, if any; and
- m. Number of alleged fatalities, if any.

Provide the table in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER FOUR DATA. See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

Answer

Ford is providing owner and field reports in the electronic database contained in Appendix C2 on the enclosed CD in response to Request 4. To the extent information sought in Request 5 is available for owner and field reports, it is provided in the database.

Request 6

Produce electronic copies of all documents related to each item within the scope of Request No. 2 and Request No. 4. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method Ford used for organizing the documents.

<u>Answer</u>

Ford is providing subject vehicle owner and fleid reports in the electronic database contained in Appendix C1 on the enclosed CD in response to Request 2.

Ford is providing peer vehicle owner and field reports in the electronic database contained in Appendix C2 on the enclosed CD in response to Request 4. To the extent information sought in Request 2 and 4 is available, it is provided in the referenced appendices.

Request 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, or may relate to, the alleged defect in the subject vehicles and peer 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. Also provide the same information for all vehicles identified in Item 1, including but not limited to non-Cobra Mustangs model years 2003 to 2005 that relate to, or may relate to, the accelerator pedal, pedal shaft, attaching pivot or bushings; the attachment, placement or condition of the carpeting on the floor around the accelerator pedal; any and all additional components that may affect or contribute to the accelerator pedal catching in the carpet.

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

- Ford's claim number:
- Vehicle owner or fleet name (and fleet contact person) and telephone number;
- c. VIN;
- d. Repair date;
- e. Vehicle mileage at time of repair,
- Repairing dealer's or facility's name, telephone number, city and state or ZIP code:
- g. Labor operation number;
- h. Problem code:
- Replacement part number(s) and description(s);
- Concern stated by customer, and
- Comment, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "WARRANTY DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

<u>Answer</u>

Records identified in a search of the AWS database for subject and peer vehicles, as described in Appendix B, were reviewed for relevance and categorized in accordance with the categories described in the response to Request 2. The number and copies of relevant warranty claims on subject vehicles identified in this search that may relate to the agency's Investigation are provided in the AWS portion of the electronic database contained in Appendix C1 (filename: 2006-02-27 Appendix C1) for subject vehicles and in Appendix C2 (filename: 2006-01-27 Appendix C2) for peer vehicles on the enclosed CD. The categorization of each report is identified in the "Category" field.

When we were able to identify that duplicate claims for an alleged incident were received, each of these duplicate claims is marked accordingly and the group is counted as one report. In other cases, certain vehicles may have experienced more than one incident and have more than one claim associated with their VINs. These claims have been counted separately. Warranty claims that are duplicative of owner and field reports are provided in Appendices C1 and C2 but are not indicated in the report count above.

Requests for "goodwill, field or zone adjustments" received by Ford to date that relate to the alleged defect that were not honored, if any, would be included in the MORS reports identified above in response to Request 2. Such claims that were honored are included in the warranty data provided.

If a specific format is requested, Ford assumes that providing the warranty claims in the electronic database format meets the requirements of this request because the agency can review or order the claims as desired.

Request 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.

Answer

Detailed descriptions of the search criteria, including all pertinent parameters, used to identify the claims provided in response to Request 7 are described in Appendix B.

Request 9

Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject and peer 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 Ford is planning to issue within the next 120.

Answer

For purposes of identifying communications to dealers, zone offices, or field offices pertaining, at least in part, to the alleged defect on subject and peer vehicles, Ford has reviewed the following FCSD databases and files: The On-Line Automotive Service Information System (OASIS) containing Technical Service Bulletins (TSBs) and Special Service Messages (SSMs); Internal Service Messages (ISMs) contained in CQIS; and Field Review Committee (FRC) files. We assume this request does not seek information related to electronic communications between Ford and its dealers regarding the order, delivery, or payment for replacement parts, so we have not included these kinds of information in our answer.

A description of Ford's CASIS messages, Internal Service Messages, and the Field Review Committee files and the search criteria used are provided in Appendix B.

<u>QASIS Messages:</u> Ford has not identified any SSMs or TSBs that may relate to the alleged defect in the subject vehicles.

Internal Service Messages: Ford has not identified any ISM's that relate to the subject of the agency's request, other than ISM 04-07-054 provided in its August 24, 2005, response to PE05-038.

<u>Field Review Committee</u>: Ford has not identified any field service action communications that may relate to the alleged defect in the subject vehicles.

Request 10

Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to, the alleged defect in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Ford. Provide the same information for all vehicles identified in Item 1, including but not limited to non-Cobra Mustangs model years 2003 to 2005. For each such action, provide the following information:

- Action title or identifier;
- b. The actual or planned start date;
- The actual or expected end date;
- Brief summary of the subject and objective of the action;
- Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
- 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.

<u>Answer</u>

Ford is constraing this request broadly and providing not only studies, surveys, and investigations related to the alleged defect, but also notes, correspondence, and other communications that were located pursuant to a diligent search for the requested information. Ford is providing the responsive non-confidential Ford electronic documentation in Appendix F1 (filename: 2006-01-27 Appendix F1) and hard copy information in Appendix F2. Ford understands this request to exclude documents created by Ford's Automotive Safety Office for the purposes of responding to PE05-038.

To the extent that the information requested is available, it is included in the documents provided. If the agency should have questions concerning any of the documents, please advise.

Ford is submitting additional responsive documents that are considered confidential as Appendix 6 with a request for confidentiality under separate cover to the agency's Office of the Chief Counsel pursuant to 49 CFR, Part 512.

Request 11

Describe all modifications or changes made by, or on behalf of, Ford in the design, material composition, manufacture, quality control, supply, or installation of the subject components, 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:

- The date or approximate date on which the modification or change was incorporated into vehicle production;
- A detailed description of the modification or change;
- The reason(s) for the modification or change;
- The part numbers (service and engineering) of the original component;
- 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
- Whether the modified component can be interchanged with earlier production components.

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

<u>Answer</u>

Since its August 24, 2005, response to PE05-038, Ford located information regarding a change at the tier-two supplier of the accelerator pedal assembly. A table containing information regarding this change is provided electronically as Appendix H (filename: 2006-01-27 Appendix H) on the enclosed CD. No other information beyond that provided in PE05-038 response was located.

Request 12

Provide the following information regarding the accelerator pedal assemblies in the subject and peer vehicles:

- Copies of all engineering standards, specifications, design guidelines, and similar documents concerning accelerator pedal assembly durability, strength, deflection, deformation and floor clearance;
- b. Provide a plot of accelerator pedal position vs. pedal force;
- State the maximum force that the subject accelerator pedal assembly is designed to withstand without deforming;
- State the maximum side-to-side deflection of the accelerator pedal assembly;
- Copies of all documents containing test data related to the documents and/or requirements cited in 12.a through 12.d;
- f. Describe all sources of pedal return energy and provide a plot of return force vs. pedal position for the full range of pedal positions.
- g. Provide a diagram of Area A and Zone B as cited in communication from William Ireland to Scott Ellison on September 29, 2003 detailed on Ford's PE05-038 response page 0077; and
- State all differences between the subject vehicles and peer vehicles in any of the information provided in 12.a through 12.g.

Answer

In a December 16, 2005, telephone conversation, Stephen McHenry of the agency instructed Ford to disregard questions 12a) through 12g).

Three versions of the accelerator pedal assembly were released for 2003 and 2004 model year Mustang vehicles. All assembles used a common attaching bracket, pivot, pivot bushings, and

pedal arm. The assemblies differed only in the configuration of the pedal pad. The Cobra package was distinguished by use of a pedal pad that positioned the upper surface of the pedal further from the arm assembly and closer to that of the brake pedal pad surface. This configuration is intended to facilitate heal/toe operation. The two pedal pads used for base Mustang, GT and Mach 1 trim level vehicles had identical pedal pad surface locations, but approximately 10 mm closer to the arm versus the Cobra pedal pad. Profile views of these pedal pads are provided in Appendix L for your review.

Request 13

Provide copies of any and all photographs related to Report No. 4IWDB016 of September 23, 2004.

Answer

Ford searched its CQIS database for any photographs or additional information relating to this report. No photographs or additional information relating to this report were found.

Request 14

Provide copies of all documents related to Internal Service Message ISM Article Number 04-07-054. State the number of service repairs completed per the Instructions of ISM 04-07-054 and provide a list of vehicles that received these repairs by VfN.

Answer

Ford has not identified any additional documents relating to this ISM. The engineer involved in the development and issuance of this ISM stated that the ISM was developed following Ford's technical hottine personners receipt of comments from a few technicians seeking advice relating to carpet fit on a few Mustang vehicles in which wide open throttle operation could not be achieved. It is not uncommon for ISMs such as this to be written based on receipt of just a few contacts from the field. As a consequence, ISMs may encompass a broader range of vehicles than may actually be expected to exhibit the particular characteristic, and are simply intended to assist hotline personnel in providing recommendations for potential solutions. When this ISM was written, no attempt was made to better define the vehicle population potentially affected by this characteristic.

Ford's technical hotline personnel typically track the number of times a particular ISM recommendation is provided to a technician seeking assistance. Ford records indicate that the ISM recommendation has been provided 18 times to service technicians as a potential remedy to their concern. A table containing the corresponding VIN information is provided electronically in Appendix I (filename: 2008-01-27 Appendix I) on the enclosed CD. Corresponding responsive and ambiguous reports are provided in the electronic databases contained in Appendix C1 (filename: 2008-01-27 Appendix C1) for subject vehicles and in Appendix C2 (filename: 2006-01-27 Appendix C2) for peer vehicles on the enclosed CD.

Request 15

Provide copies of all documents relating to warranty return analyses of subject components that may relate to the alleged defect.

Answer

Ford does not require dealers to return subject components when replaced as part of a warranty repair. Accordingly, parts were not generally available to Ford for analysis of any parts associated with repairs potentially related to this subject.

As part of its review of the vehicle associated with VOQ #10128903, Ford did retrieve the accelerator pedal assembly and carpet from the vehicle for further analysis. Documents relating to Ford's observations are provided electronically in Appendix F (filename: 2006-01-27 Appendix F) on the enclosed CD. Ford notes that analysis of the pedal assembly consisted of a material evaluation of the pedal arm and it was found to be within specification. A visual assessment of the carpet prior to its removal from the vehicle found a larger than expected gap between the carpet and dash panel directly behind the accelerator pedal. A dimensional analysis was conducted on the carpet following its removal from the vehicle and it was found to be within specification.

Request 16

Provide a list of subject vehicles, by VIN, in which Ford determined that there was deformation of the accelerator pedal assembly. For each such vehicle, describe the deformation (location and amount of deformation), provide Ford's assessment of how the deformation occurred and state its relevance to the alleged defect.

Answer

Ford searched its warranty claim, field report, and customer comptaint databases for reports on subject vehicles that provide some type of indication that the accelerator pedal assembly was bent. A table containing the corresponding VIN information for reports found in this search to relate to this request is provided electronically in Appendix J (filename: 2006-01-27 Appendix J) on the enclosed CD. Though the agency requested that Ford describe the deformation and provide an assessment of how the deformation occurred, Ford notes that no information beyond the descriptions provided in the corresponding reports is available from which to develop any such further assessment. As a consequence, Ford is unable to provide an assessment on the location, amount, or cause of the deformation corresponding to these reports. Certain reports may contain assessments from servicing dealers, such as a service technician's comments in CQIS report 4KVFH013 that customer abuse may account for the condition identified in the field report.

On October 11, 2005, Ford and the agency reviewed the vehicle listed in VOQ #10128903. During the course of the review, the distance between the surface of the brake pedal and the accelerator pedal was measured for both the accelerator pedal in the vehicle at the time of the visit (current pedal) and a newly installed service part. Based on these measurements, the current accelerator pedal was found to be deformed approximately 30 mm towards the surface of the dash panel. This indicates that the accelerator pedal arm was overloaded to the point of permanent deformation.

Such overload deformation of an accelerator pedal could result in the pedal assembly position nearer to the tunnel area or rear dash panel area of the vehicle where the pedal could come into contact with the carpet during its sweep. This condition would be unlikely to result in an inability of the pedal to return completely to its nominal position without significant and continuous overloading and deformation. Further observations regarding this condition and its relevance to

the potential for the carpet to catch the pedal and restrict its return is further discussed in Ford's response to Request 18.

Request 17

Produce one of each of the following:

- Accelerator pedal assemblies for each of the following if different part numbers

 where parts are interchangeable between models and model years, indicate
 and label:
 - i) Mustang Cobra MY 2004;
 - il) Mustang model P42 MY 2004;
 - iii) Mustang model P40 MY 2004; and
 - iv) Mustang model T80 MY 2005.
- Owner's manual for MY 2004 Mustang Cobra
- Copies of all marketing, sales and promotional materials, including print, video and audio for the subject vehicles; and
- Any kits that have been released or developed, by ford for use in service repairs
 to the subject components in the subject and/or peer vehicles.

Answer

In a December 16, 2005, telephone conversation, Stephen McHenry of the agency informed Ford personnel that peer vehicles are defined as 2003-2004 model year Mustang SVT non-Cobra vehicles. In this conversation he also instructed Ford to disregard question 17c.

As a result, Ford is providing one of each of the three unique accelerator pedal assemblies released for 2003-2004 model year Mustang vehicles. The part numbers and usage are summarized in the table below.

Part Number	Usage
F4ZC-9726-AB	Mustang Base & GT
3R33-9726-AA	Mustang GT Appearance Package/Mach 1
3R3V-9726-AA	Mustang SVT Cobra

A copy of the Owner's Manual for the 2004 Mustang and SVT Cobra Supplement are provided in Appendix K (filename: 2006-01-27 Appendix K) on the enclosed CD.

As of the date of this inquiry, Ford has not released or developed any kits for use in service repairs for the subject components in the subject or peer vehicles other than the service replacement components typically available for these and other Ford vehicles, including the accelerator pedal assembly and carpet.

Request 18

Furnish Ford's assessment of the alleged defect in the subject vehicle, including:

 All causal factors, in order of significance, contributing to incidents of floor carpet interference with the accelerator pedal return in the subject vehicles;

- The range of "stuck" throttle positions that have resulted from the alleged defect in the subject vehicles;
- The effect of the driver's floor carpet becoming detached at the transmission turnet and encroaching into the pedal clearance zones upon accelerator pedal assembly operation;
- d. The cause(s) of accelerator pedal assembly deformation in the subject vehicles;
- The force(s) required to cause the accelerator pedal assembly deformation discussed in 18.d;
- f. The effectiveness of the ISM 04-07-054 procedure in the vehicles in which it has been used;
- g. A comparison of the incident/fallure rates related to the alleged defect, plotted by time in service, between the subject vehicles and each population of peer vehicles by model and model year.
- An assessment of all design, manufacturing and usage differences between the subject and peer vehicles relating to the alleged defect; and
- The reports included with this inquiry.

<u>Answer</u>

Based upon inspection of vehicles, Ford has concluded that the concern being investigated is principally related to the unique accelerator pedal pad in Cobra vehicles combined with carpet misplacement in 2004 model year vehicles. Further, the condition is more likely to occur in the 2004 model year Cobra vehicles if the pedal arm has been bent. Analysis of compliant data, both in the subject and peer vehicles supports this conclusion.

Vehicle Reviews

In September 2005, Ford conducted an employee vehicle clinic of 2003-2004 model year Mustang vehicles, including base Mustang, GT, Mach 1, and Cobra vehicles. The purpose of the clinic was to review the accelerator pedal package, including carpet fit and pedal clearances in the foot well area, and potential interactions. Following are observations based on review of the 27 vehicles inspected during the clinic:

- Carpet fit variation was noted in several of the 2004 model year Cobra and non-Cobra
 vehicles, including separation beyond design intent between the carpet and dash panel
 directly behind the pedal package, as well as misalignment of the carpet along the
 transmission tunnel in many of the vehicles.
- Carpet fit for 2003 model year vahicles was found to be much more consistent and secure.
- Carpet contact with the accelerator pedal was noted in some vehicles either along the
 transmission tunnel or at the lower surface of the pedal pad, though none of the 27
 vehicles exhibited any restriction to accelerator pedal movement either towards wide open
 throttle or back to an idle position as a result of any contact with the carpet.
- Customers have installed a variety of aftermarket floor mats in their Mustangs. Some of these floor mats were in positions that resulted in contact between the accelerator pedal and floor mat.

In October 2005, Ford engineers, in conjunction with the agency, inspected the 2004 model year Cobra vehicle identified in VOQ #10128903 focusing on the pedals and carpet. This customer had demonstrated via video how the vehicle's accelerator pedal could be positioned to be retained by a cutout in the carpet directly behind the accelerator pedal in a wide open throttle condition. Ford's inspection of this vehicle found greater than expected separation between the carpet and the dash panel in the area directly behind the accelerator pedal. The carpeting was

found to "catch" the pedal when the pedal pad's rear surface moved into a v-shaped cutout in the carpet through the pedal's articulation to wide open throttle. Further review found the accelerator pedal arm in this vehicle to be deformed approximately 30 mm rearward toward the dash panel and toward this carpet cutout area. Following installation of a new accelerator pedal assembly and carpet in this vehicle, the condition could not be reproduced.

Accelerator Pedal Differences Between Cobra and Non-Cobra Vehicles

Three versions of the accelerator pedal assembly were released for 2003 and 2004 model year Mustang vehicles. All assemblies used a common attaching bracket, pivot, pivot bushings, and pedal arm. The assemblies differed only in the configuration of the pedal pad. The Cobra pedal pad incorporates a standoff that causes the upper surface of the pedal to be positioned further from the arm assembly and closer to that of the brake pedal pad surface to facilitate heal/toe operation. The two pedal pads used for base Mustang, GT, and Mach 1 trim level vehicles position the upper surface of the pedal closer to the arm assembly. The distinctly different side profile of these pedal assemblies is evident in the pedals provided to the agency in response to Request 17.

Analysis of the "sweep" profiles of these pedal-assemblies as they are articulated from an idle to a wide open throttle position also demonstrates differences between the Cobra pedal and other Mustano pedals. The rear surface of the Cobra pedal, specifically, where the pad attaches to the arm, is typically the first contact of the padal with the carpet, whereas the bottom of the pedal pad surface is typically the first part of the contact for the non-Cobra pedals. It is the Interaction of this pedal attachment with the notch in the carpet directly behind the pedal that was observed in the review of the VOQ complaint vehicle in October as described above. Conversely, as the pedals used on the base, GT, and Mach 1 vehicles are "swept" through their articulation to wide open throttle, the lower edge of the base pedal pad is most likely to provide initial and primary contact with carpeting rather than the rear attachment simply due to the pedal's distinctly lower profile. This configuration tends to push the carpet away from any potential contact points between the carpet and pedal arm. Though the pedal pad/arm attachment mechanism is the same for both Cobra and non-Cobra pedais, the profile of the non-Cobra pedals significantly reduces the likelihood of carpeting becoming caught underneath and behind the attachment area of this particular pedal even in the event of pedal contact with the carpet. Photographs from Ford's vehicle clinic depicting these distinctly different conditions. are provided in Appendix L (filename: 2006-01-27 Appendix L) for the agency's review.

Ford's analysis finds that an accelerator pedal arm in its nominal position is not expected to contact even somewhat mis-positioned carpeting. A number of reports that describe accelerator pedal contact with carpeting indicate that a bent pedal arm has been found to contribute to the condition. We note that pedal overload can adversely affect positioning of the pedal and could potentially move the assembly closer to the transmission tunnel or dash panel, increasing the opportunity for carpet contact. Though a change in the tier-two supplier of the accelerator pedal arm was made in the fall of 2003, Ford has no reason to believe that this had any effect on either the material properties or the performance characteristics of the pedal arm assembly. In fact, analysis of the assembly from the 2004 medel year Cobra vehicle identified in VOQ #10128903 found the arm to be within material specification.

Carpeting Differences

Carpeting used in Mustang vehicles did not differ by trim level for base, GT, Mach 1, or Cobra vehicles for either the 2003 or 2004 model years. The carpet used in Mustang vehicles physically differed only for convertible versus non-convertible vehicles. However, it is noted that a new carpeting assembly was introduced at the Dearborn Assembly Plant for all 2004 model year Mustang vehicles beginning with production in October 2003. Based on review of

complaint data as further discussed below, Ford believes that carpet fit variation in the driver foot well area increased coincidentally with this change.

2003 vs. 2004 Model Year Cobra Vehicles

Ford's review and analysis of the reports identified in Ford's investigation into this subject finds an elevated complaint rate for Cobrs vehicles produced in the 2004 model year compared to 2003 model year Cobrs vehicles. In addition to these complaint rate differences, Ford believes the nature of the complaints also differs for 2003 versus 2004 model year Cobrs vehicles. The vast majority of allegations that indicate an accelerator pedal "caught" or "stuck to" the carpeting relate to 2004 model year Cobrs vehicles, with significantly fewer allegations relating to the 2003 model year Cobrs whose production volume was nearly 2.5 times higher than the 2004 model. Ford believes the principle reason for these differences to be a carpeting change that was introduced at Dearborn Assembly early in the 2004 model year combined with the design of the Cobrs accelerator pedal. This carpeting change was found to result in less than desired carpet fit characteristics in 2004 model year vehicles, including the area around the driver foot well. This characteristic was observed in Ford's vehicle clinic further described below.

2004 Model Year Cobra vs. Peer Non-Cobra Vehicles

Ford's review and analysis of reports also finds an elevated rate of complaints for the 2004 model year Cobra when compared with complaint rates for peer 2003 and 2004 model year non-Cobra vehicles. In fact, complaint rates for those peer vehicles is substantially below the rate for 2003 cobra vehicles. While allegations of accelerator pedals contacting the carpet in non-Cobra vehicles have been found, few are alleged to have caused a catch condition resulting in vehicle control concerns. Ford contacted servicing technicians regarding many of these reports to further understand the nature of the reports and found through these discussions that most compleints on non-Cobra vehicles relate to carpet fit along the transmission tunnel, or to accelerator pedal contact with carpet either along the tunnel or at the lower surface of the pedal pad. Very few of these reports allege that the condition results in restriction of pedal return to idle. Rather the condition was characterized either as a nuisance or as progressive deterioration of a cosmetic condition. The assertions expressed in these reports on non-Cobra vehicles are consistent with Ford's observations during its vehicle clinic. This is In contrast to 2004 model year Cobra complaints that allege pedal restriction in a wide open throttle condition related to contact between the rear surface of the accelerator pedal and the carpeting directly behind the pedal on 2004 model year Cobra vehicles. Though similar carpet fit variation is found in peer 2004 model year non-Coora vehicles. Ford believes the unique profile of the Cobra accelerator pedal design causes the rear of this pedal pad to be more susceptible to a catch condition with mis-positioned carpet directly behind the pedal.

The agency requested a comparison of the Incident/failure rates related to the alleged defect, plotted by time in service (TIS), between the subject vehicles and each population of peer vehicles by model and model year. In response to the agency's request, we are providing a chart containing report counts plotted by time in service for both subject and peer vehicles electronically in Appendix M (filename: 2006-01-27 Appendix M).

Conclusion

Review of vehicles and analysis of the materials collected and reviewed in response to this request clearly suggests that the elevated rate of reports pertaining to the 2004 model year Cobra results collectively from the carpet change at the beginning of the 2004 model year



coupled with the unique profile of the Cobra accelerator pedal. This is based on thorough review of both the nature and rate of reports for the subject and peer vehicles.

The extremely low rate of peer vehicle reports and the fact that there are few allegations of pedal restriction on a significantly larger population of vehicles suggests that these peer vehicles are not experiencing the distinctly different condition that was observed on the 2004 Cobra jointly reviewed by Ford and NHTSA.

Although some peer vehicle reports allege an accident, Ford's findings in several of these cases has identified numerous inconsistencies in these reports, either in the customer assertions to NHTSA compared with Information they provided to Ford or in the allegations compared with the findings of the servicing dealer or information contained in a police report. Ford also notes that it is not uncommon for a driver involved in an accident in any vehicle to allege some type of malfunction with the vehicle to be the cause. Such assertions may be made to purposely deflect the cause of an accident away from driver error, or may be made in situations where a pedal misapplication is inadvertently involved. As the agency is also aware, improper usage of floor mats has frequently been found to be the cause of some accelerator pedal related complaints on any variety of vehicles.

Ford acknowledges the elevated rate of reports for the 2004 model year Cobra vehicle, and that some of these reports involve unique interaction between the rear pedal surface and the carpet behind the pedal. The report rates for the 2003 Cobra vehicle and the peer 2003-2004 non-Cobra vehicles are significantly lower than the 2004 Cobra vehicle and in no way rise to the level of an unreasonable risk of accident or injury. Ford is continuing its review of this matter and will continue to discuss any aspects of this subject with the agency.

