

Ford Motor Company

RECEIVED
NVS-100

*2-44
9/6/05*

SEP -6 A 9 30

James P. Vondale, Director
Automotive Safety Office
Environmental & Safety Engineering

OFFICE OF THE DIRECTOR
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

September 1, 2005

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: PE05-037:NVS-213kmb

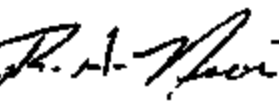
The Ford Motor Company (Ford) response to the agency's July 18, 2005 letter relating to reports of alleged stuck throttle concerns due to the throttle cable in 2002 model year Explorer and Mountaineer vehicles is attached.

While throttle cable concerns that affect the engine idle speed are a source of dissatisfaction to owners, the symptoms associated with this condition (higher idle speed that may require more frequent brake pedal application) are readily noticeable to a driver. These symptoms result from a progressive migration of the inner cable liner that, over time, may result in gradual increases in engine idle speed. The reports indicate that customers typically observe an increased idle speed and/or accelerator pedal effort leading them to have their vehicles serviced. Should the condition remain unrepaired and progress to more elevated idle speeds, the brakes are capable of stopping the vehicle, consistent with the reports that indicate that the vehicle remains controllable and that drivers can bring the vehicles to a safe stop. Further we note that the trend of reports related to the cable appears to be declining.

We have found no allegations of accidents, or even near accidents, in the responsive reports related to the "alleged defect" on vehicles that have been in service, typically, for over four years. Based on our analysis of the reports and information provided in the response, Ford does not believe that the throttle cable in 2002 model year Explorer and Mountaineer vehicles presents an unreasonable risk to the safe operation of the vehicle.

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

Sincerely,



James P. Vondale

Attachment



FORD MOTOR COMPANY (FORD) RESPONSE TO PE-05-037

Ford's response to this Preliminary Evaluation (PE) Information request was prepared pursuant to a diligent 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 aspect of this Preliminary Evaluation.

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, as more fully described in this response. 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 July 25, 2005 telephone conversation, Mr. Kyle Bowker of the agency informed Ford personnel that the scope of Ford's investigation should not include reports that allege "sudden acceleration," pedal misapplication, or malfunction of the cruise control system, to the extent those allegations were identified.

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 July 18, 2005, the date of your inquiry. Ford has searched within the following offices for responsive documents: Environmental and Safety Engineering, Ford Customer Service Division, Quality, Research, Global Core Engineering, Office of the General Counsel, Vehicle Operations, and North American Truck Product Development.

Request 1

State, by model and model year, the number of subject 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:

- a. Vehicle identification number (VIN);
- b. Make;
- c. Model;
- d. Model Year;
- e. Date of manufacture;
- f. Date warranty coverage commenced.; and

- g. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

Provide the table in Microsoft Access 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.

Answer

Ford records indicate that the approximate total number of 2002 Explorer and Mountaineer vehicles equipped with 4.0L SOHC V8 engines and sold in the United States (the 50 states and the District of Columbia) and its protectorates and territories (American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and Virgin Islands) is 492,882.

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

Model	2002 MY
Explorer	449,930
Mountaineer	43,052

We note that this number does not include Right Hand Drive (RHD) vehicles which use a different throttle cable routing versus the Left Hand Drive (LHD) vehicles. RHD vehicles are typically used in special use fleet applications such as the United States Postal Service.

The requested data for each subject vehicle is provided electronically in Appendix A (filename: 2005-09-01 Appendix A) on the enclosed CD.

Request 2

State the number of each of the following, received by Ford, or of which Ford are otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles:

- a. Consumer complaints, including those from fleet operators;
- b. Field reports, including dealer field reports;
- c. Reports involving a crash, injury, or fatality, based on claims against the manufacturer involving a death or injury, notices received by the manufacturer alleging or proving that a death or injury was caused by a possible defect in a subject vehicle, property damage claims, consumer complaints, or field reports;
- d. Property damage claims; and
- e. Third-party arbitration proceedings where Ford is or was a party to the arbitration; and
- f. Lawsuits, both pending and closed, in which Ford is or was a defendant or codefendant.

For subparts "a" through "d," state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint).

September 1, 2005

In addition, for items "c" through "f," 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 "e" and "f," identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

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 have not referenced searches of the Intensified Customer Concern Definition (ICCD) files as in previous responses to other of the agency's information requests. 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 criteria used to search each of these are provided electronically in Appendix B (filename: 2005-09-01 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	Reports alleging that the throttle fails to return to idle when the driver's foot is removed from accelerator pedal while the vehicle is in motion due to the accelerator cable.
A2	Reports alleging a high idle due to the accelerator cable, where it is unclear if vehicle is in motion.
B	Reports alleging that the throttle sticks or fails to return to idle with no causal part identified or where the throttle cable is replaced with no reason given.

We are providing electronic copies of reports categorized as "B" as "non-specific allegations" for your review because 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.

In a July 25, 2006 telephone conversation, Mr. Kyle Bowker of the agency informed Ford personnel that the scope of Ford's investigation should not include claims clearly attributable to "sudden acceleration," pedal misapplication, or malfunction of the cruise control system, to the extent such allegations were identified. We note that several reports simply state that the "accelerator stuck" for example, with no clarifying information as to the cause of the concern. Though the circumstances associated with many of these reports suggest that the complaint may be related to a "sudden acceleration" or pedal misapplication, as they are alleged to have occurred during low speed maneuvers or in parking lots, we note that customers are not likely to either be aware of or to acknowledge a pedal misapplication to be the cause of the event. Accordingly, we assigned a "B" category to these types of ambiguous reports and are providing them with this response for the agency's review.

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 of relevant owner reports identified in this review is provided in Appendix C (filename: 2005-09-01 Appendix C) on the enclosed CD. Copies of these categorized owner reports are provided in the MORS III portion of the electronic database also contained in Appendix C. 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.

Legal Contacts: 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 responsive (i.e., not ambiguous) owner reports 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 that are related to the responsive owner reports are provided electronically in Appendix D (filename: 2005-09-01_Appendix D) on the enclosed CD.

Fleet Reports: 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 this subject.

Field Reports: 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 of relevant field reports identified in this review is provided in Appendix C on the enclosed CD. Copies of these categorized field reports are provided in the CQIS portion of the electronic database also contained in Appendix C. The categorization of each report is identified in the "Category" field.

Unified Database: 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. The number of reports identified in this review that may relate to the agency's investigation is provided in Appendix C.

VOQ Data: This information request had an attachment that included 15 Vehicle Owner's Questionnaires (VOQs); two of the VOQs appear to relate to the same complaint. Ford made inquiries of its MORS database for customer contacts, and its CQIS database for field reports regarding 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 C 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 have resulted from the alleged defect, Ford has reviewed responsive owner and field

reports, and lawsuits and claims. No reports alleging a crash or injury resulting from the alleged defect in the subject component were identified. Though a few ambiguous reports allege some type of throttle of concern resulting in a vehicle collision, either there is no clarifying information provided with which to evaluate the report, or the circumstances associated with these reports suggest that they are not related to this subject but rather to other concerns such as pedal misapplication, aftermarket floor mats, etc.

Claims, Lawsuits, and Arbitrations: For purposes of identifying incidents that may relate to the alleged 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.

Lawsuits and claims gathered in this manner were reviewed for relevance and categorized in accordance with the categories described above. Ford has also located other lawsuits, claims or consumer breach of warranty lawsuits, each of which is ambiguous as to whether it meets the alleged defect criteria. We have included these lawsuits and claims as "non-specific allegations" for your review because of the broad scope of the request. Based on our engineering judgment, the information in these lawsuits and claims is insufficient to support a determination that they pertain to the alleged defect.

We are providing the requested detailed information, where available, on the responsive and ambiguous lawsuits and claims in our Log of Lawsuits and Claims, as Appendix E1 (filename: 2005-09-01 Appendix E1) on the enclosed CD. The number of relevant lawsuits and claims identified is also provided in this log. To the extent available, copies of complaints, first notices, or MORS reports relating to matters shown on the log are provided in Appendix E2. With regard to these lawsuits and claims, Ford has not undertaken to contact outside law firms to obtain additional documentation.

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;
- 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. Report or claim date;
- i. Whether a crash is alleged;
- j. Whether property damage is alleged;
- k. Number of alleged injuries, if any; and
- l. 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 tiffs submission.

Answer

Ford is providing owner and field reports in the electronic database contained in Appendix C 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. To the extent information sought in Request 3 is available for lawsuits and claims, it is provided in the Log of Lawsuits and Claims in Appendix E1.

Request 4

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

Answer

Ford is providing owner and field reports in the electronic database contained in Appendix C on the enclosed CD in response to Request 2. Copies of complaints, first notices, or MORS reports relating to matters shown on the Log of Lawsuits and Claims (Appendix E1) are provided in Appendix E2. To the extent information sought in Request 4 is available, it is provided in the referenced appendices.

Request 5

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: 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, 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.

Answer

Records identified in a search and review of the AWS database, as described in Appendix B, were reviewed for relevance and categorized as described in the response to Request 2. The number of relevant warranty claims identified in this review is provided in Appendix C on the enclosed CD. Copies of these categorized warranty claims are provided in the AWS portion of the electronic database also contained in Appendix C. 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 Appendix C but are not included in the report count.

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. Requests for such adjustments that were honored are included in the warranty claims provided in Appendix C.

Ford assumes that providing the warranty claims in an electronic database format meets the requirements of this request because the agency can review or order the claims as desired.

Request 6

Describe in detail the search criteria used by Ford to identify the claims identified in response to Request No. 5, including the labor operations, problem codes, part numbers and any other pertinent parameters used. State by option (e.g., engine, transmission, etc), 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) 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.

Answer

Detailed descriptions of the search criteria, including all pertinent parameters, used to identify the claims provided in response to Request 5 are described in Appendix B.

Request 7

Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that Ford has issued to may 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 days.

Answer

For purposes of identifying communications to dealers, zone offices, or field offices pertaining, at least in part, to the throttle failing to return to idle or sticking, 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 OASIS messages, Internal Service Messages, and the Field Review Committee files and the search criteria used are provided in Appendix B.

OASIS Messages: Ford did not identify any TSBs or SSMs related to the alleged defect. We are providing a copy of one TSB that relates to accelerator cable installation in Appendix F (filename: 2005-09-01 Appendix F) on the enclosed CD. Ford notes that this TSB was released to advise of appropriate cable installation and routing due to a change in the construction of the cables used in production and in service concurrent with the introduction of adjustable pedals on the vehicle.

Internal Service Messages: Ford has identified one ISM that relates to the accelerator cable interfering with the accelerator pedal return in the subject vehicles. A copy of the ISM is provided in Appendix F.

Field Review Committee: Ford has identified no field service action communications that may relate to the alleged defect in the subject vehicles.

Request 8

Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to, the alleged defect in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, 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.

Answer

Ford is construing 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 documentation in Appendix I (file: 2005-09-01 Appendix I) on the enclosed CD.

In the interests of ensuring a timely and meaningful submission, Ford is not providing documents identified as containing little substantive information. Examples of the types of documents not being produced are meeting notices, raw data lists (such as part numbers or VINs) without any analytical content, duplicate copies, and draft electronic files for which later versions of the materials are being submitted. Through this method, Ford is seeking to provide the agency with all of the substantive materials in our possession in the timing set forth for our response. We believe our response meets this goal. Should the agency request these types of additional materials, Ford will cooperate with the request.

Ford will be submitting additional responsive documentation as Appendix I with a request for confidentiality under separate cover to the agency's Office of the Chief Counsel pursuant to 49 CFR, Part 512.

Request 9

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

- a. The date or approximate date on which the modification or change was incorporated into vehicle production;
- b. A detailed description of the modification or change;
- c. The reason(s) for the modification or change;
- d. The part numbers (service and engineering) of the original component;
- e. The part number (service and engineering) of the modified component;
- f. Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;
- g. When the modified component was made available as a service component; and
- h. Whether the modified component can be interchanged with earlier production components.

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

Answer

A table describing changes or modifications made to the throttle cable on the subject vehicles is provided electronically as Appendix G (file: 2005-09-01 Appendix G) on the enclosed CD.

Request 10

Product one of each of the following:

- a. Exemplar samples of each design version of the subject component;
- b. Field return samples of the subject component exhibiting each subject failure mode; and
- c. Any kits that have been released, or developed by Ford for use in service repairs to subject component/assembly which relate, or may relate to the alleged defect in subject vehicles.

Answer

A part purchased from service showing the throttle cable construction in November 2001 is included with this submission and tagged with labels identifying the part number. We are unable to obtain an unused part from the prior design iteration. A field return part requested in (b) is included with this submission and tagged with labels identifying the part number. Ford has released no kits for use in service repairs to the subject component/assembly.

Request 11

State the number of subject components 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 the sale (including the cut-off date for sales, if applicable). For each component part number, provide the supplier's name, address, and appropriate point of contact (name, title, and telephone number). Also, identify by make, model and model year, any other vehicles of which Ford is aware that contain the identical component, whether installed in production or in service, and state the applicable dates of production or service usage.

Answer

As the agency is aware, Ford service parts are sold in the U.S. to authorized Ford and Lincoln-Mercury dealers. Ford has no means by which to determine how many of the parts were actually installed on vehicles, the vehicle model on which a particular part was installed, or the reason that the installation was made.

Ford is identifying in electronic form in Appendix H (file: 2005-09-01_Appendix_H) on the enclosed CD the total number of Ford service replacement throttle cables used on the subject vehicle, that were sold, by calendar month and year of sale, where available.

Request 12

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

- a. The causal or contributory factor(s);
- b. The failure mechanism(s);
- c. The failure mode(s);
- d. The high rate of warranty claim buckle repairs on vehicles built in early-2001;
- e. The risk to motor vehicle safety that it poses;

- f. What warnings, if any, the operator and the other persons both inside and outside the vehicle would have that the alleged defect was occurring or subject component was malfunctioning; and
- g. The reports included with this inquiry.

Answer

Root Cause Analysis

Analysis of field return parts has shown that alleged stuck throttles related to throttle cable concerns are likely caused by an inner liner migration in the throttle cable. The throttle cable for the subject vehicle was designed for the 2002 model year vehicle. The 16 wire conduit construction consists of a Teflon liner, nylon tube extruded over the Teflon, lay wires wrapped around the nylon tube, and a nylon jacket extruded over and around the lay wires.

Investigation indicates the Teflon liner can gradually migrate from the nylon tube because the frictional bond between the surfaces in some circumstances may not be sufficient to retain the Teflon when the accelerator cable is subjected to vehicle noise factors such as actuation variability, vibration, and thermal changes.

When Ford initially became aware of concerns with the accelerator pedal cable, laboratory evaluations were conducted to understand and recreate the conditions that could cause the conditions reported in the field. These evaluations found that combinations of vibration and cold temperature could cause the Teflon liner to migrate a small amount, but that the migration was progressive and overt in nature. The data show that throttle cable repairs generally occur in the northern states (86%) and during colder months (82%) of the year where temperature differences between a cold engine and a warm engine produce the variances in thermal expansion necessary to reproduce the condition.

Report Analysis

The reports identified during Ford's investigation into this subject describe a variety of conditions or symptoms alleged to result in a high idle or a stuck throttle. The majority of the reports simply describe an intermittent sticking throttle or high idle without an allegation that the condition presented any type of concern with vehicle control. Others note that application of the brakes was used to slow the vehicle.

Several conditions were found to be causes of high idle complaints, including improper floor mat usage or foreign debris in the throttle body as noted by dealer technicians in some of the reports, throttle plate performance, EGR performance, IAC performance, and improper pedal application. In some cases technicians simply replaced a throttle cable to address a customer's complaint without noting a specific concern with the part. We note that throttle cables may be replaced for a variety of reasons, including complaints of pedal vibration, pedal or instrument panel noise, cable breakage, unsmooth or high application effort, or simply the inability of a technician to identify any other potential cause for a customer's complaint. Review of the warranty claims found that in many cases technicians were unable to diagnose or duplicate a customer's concern. We believe that concerns specific to the accelerator cable would not be intermittent in nature and would likely be readily apparent to an experienced service technician.

Many of the reports identified in our investigation into this subject allege a stuck throttle but provide no further information in the report that could be used to determine whether the cable was in fact the cause for the concern. Though these reports have been provided as ambiguous

allegations because of the broad scope of this request, we note that many describe circumstances that would suggest misapplication of the accelerator and brake pedals. Reports we believe to be inconsistent with cable issues and more consistent with pedal misapplication include those that allege the concern is intermittent in nature, those that occur solely during low speed maneuvers or in a parking lot, or those that occur while accelerating from a stop. Because owners who have a concern with the throttle control system are not likely to be specific as to a cause of concern, we believe an analysis of warranty claims is most appropriate. Of the 492,982 subject vehicles in service for an average of approximately four years, Ford identified 454 warranty claims relating specifically to the subject component. Forty-two (or 9.2% of those 454 claims) allege that the concern took place while driving. No accidents or injuries were alleged to have occurred in any of the 454 warranty claims, suggesting that the characteristic was easily identifiable by the driver. Although sales data indicate that service replacements of the throttle cable are increasing, reports that relate specifically to the subject of this inquiry appear to be declining.

Analysis of the repair data also indicates that the report rate appears to peak between 13 and 24 months of service. The vehicles in the subject population are now approaching 48 months of service. We believe that a large percentage of vehicles have now passed this peak time in service.

Vehicle Owner Questionnaire (VOQ) Review

The agency provided 15 VOQs related to the subject vehicles and alleged defect. One of the VOQs (ODI number 785584) appears to be duplicative of a second VOQ (ODI number 8016313), and three of the VOQs did not have VIN numbers, making it difficult to investigate these reports any further. In an analysis of the VOQs, Ford believes that six are potentially related to this subject defect due to the fact that the throttle cable was specifically called out in each of the VOQs as being the causal part. The other eight VOQs, including those without a VIN, contain allegations that are inconsistent with symptoms or conditions that would result from a stuck throttle cable. In two of the vehicles (ODI numbers 10105451 and 10022480), the customer states that the pedal jammed to the floor and that the operator physically had to pull the pedal back up, indicating a potential issue with the pedal being jammed onto the carpet or a mat. If the cable was bound, lifting the pedal up would not free it due to the manner in which the cable operates. Another vehicle (ODI number 10023580) states that the pedal "popped" up on its own after being allegedly stuck, which is inconsistent with a throttle cable issue. For two vehicles (ODI numbers 10057381 and 745584), the dealership was unable to verify any issue with the vehicle, which is inconsistent with a stuck throttle due to a cable concern. For the only VOQ that alleges an accident the customer states, in a related owner report, that the vehicle "started to speed up rapidly," which appears to allege a sudden acceleration rather than a high idle caused by the cable. As previously stated, reports inconsistent with cable issues could be those that allege that the defect is intermittent in nature, found during low speed maneuvers or in a parking lot, or occur while accelerating from a stop. As illustrated by one of the VOQs, concerns with the cable are easy to diagnose by isolating the cable from both the accelerator pedal and the throttle body, or by visual inspection of the cable during which the inner liner protrusion out of the outer shell of the cable is readily noticeable.

Five of the six reports that Ford believes may be responsive to the alleged defect all resulted in the customer being able to control the vehicle, and bring it to a stop without allegation of an accident or injury. The sixth alleged report only exhibited a high idle. Ford was not able to locate further information in its database on any of the six reports.

2003-2004 Escape Recall

As the agency is aware, in December 2004 Ford conducted a safety recall (04S25) involving accelerator pedal cables on certain 2003-2004 model year Escape vehicles. Ford's investigation leading to that recall found that the accelerator cable inner liner could migrate out of the conduit at the dash panel fitting during vehicle operation to sufficiently contact the accelerator pedal arm. Though the condition typically resulted in a progressive increase in the engine speed if liner migration continues over time, Ford found evidence, in some instances, that a portion of the cable could move rapidly, resulting in a more sudden increase in engine speed.

The accelerator cable for 2004 model year Explorer vehicles differs in construction from those found in the 2003-2004 Escape vehicles in that it consists of a 16 lay wire design comprised of a Teflon liner, nylon tube extruded over the Teflon, lay wires wrapped around the nylon tube and a nylon jacket extruded over and around the lay wires. In contrast, the Escape cable has a flat wrap wire design with only a plastic wrap. The lack of a Teflon liner can increase the friction within the cable allowing for more aggressive movement in the Escape application.

Though our analysis into reports of accelerator pedal complaints on 2002 model year Explorer and Mountaineer vehicles has found inner liner migration that is similar in appearance to that found in the Escape vehicles, our analysis and testing relating specifically to the Explorer reports has not identified any evidence of a substantial cable liner movement. Rather, testing has only reproduced migration that exhibits movement up to 35mm over the length of the test. We observed that the liner migration was progressive in nature, which was supported by multiple compression marks on the liner as the pedal returns to idle, which would not be witnessed if the liner pulled in a single movement. Documents relating to this testing have been provided in Appendix J. Further, as previously stated, a review of the reports that were identified in Ford's investigation found the majority of the reports to relate to complaints of high idle or stuck throttle without allegation that the condition presented any type of concern with vehicle control. This further suggests that owners recognize the progressive changes in engine characteristics or performance and consequently have the vehicle serviced.

Summary

Our evaluations have found that if cable liner migration occurs, it will typically manifest itself as increased pedal effort and/or an elevated engine idle speed that is readily noticeable to an operator. Lab evaluations and inspections have indicated that the cause of the high pedal effort and/or high idle is progressive in nature, resulting in a small increase in idle speed over time that will be noticed by a customer prior to progressing to the point where a throttle may stick to the point of causing a customer concern with vehicle control. Many of the reports provided in this response are inconsistent with a cable issue in that they describe conditions that were intermittent in nature or a technician was unable to determine a cause. Many reports result from aftermarket floor mat usage, improper pedal application, or a build up of grease in the throttle body over years of usage, causing a sticky throttle at tip-in.

While throttle cable concerns that affect engine idle speed are a source of dissatisfaction to owners, and as the symptoms associated with this condition (higher idle speed that may require more frequent brake pedal application) are noticeable to the driver, such throttle cable performance does not constitute an unreasonable risk to the safe operation of vehicles. This is supported by the fact that there are no allegations of accidents, or even near accidents, in the provided responsive reports related to the alleged defect, on vehicles that have been in service for over four years. The reports indicate that the customers typically observe the increased idle

and/or pedal effort characteristic and have their vehicle serviced. Should the condition continue to progress, the brakes are capable of stopping the vehicle, consistent with the reports, which indicate that the vehicles remain controllable and that drivers can bring them to a safe stop. Over this time, the trend of reports related to the cable appears to be declining.

###