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**Steve M. Kenner, Global Director**
Automotive Safety Office
Sustainability, Environment & Safety Engineering

**Fairlane Plaza South, Suite 400**
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Dearborn, MI 48126-2738

January 18, 2013

Mr. Frank S. Borris, Director
Office of Defects Investigation
National Highway Traffic Safety Administration
1200 New Jersey Avenue SE, Room W45-302
Washington, DC 20590

OFFICE OF DEFECTS INVESTIGATIONS
2013 JAN 23 P 1:0

Dear Mr. Borris:

Subject: PE12-033:NVS-213SMcH

The Ford Motor Company (Ford) response to the agency's November 19, 2012 letter concerning reports of alleged speed control cable failures resulting in a stuck throttle condition in 2000 through 2003 model year Ford Taurus and Mercury Sable vehicles equipped with a 4-valve Duratec engine is attached.

As part of Ford's ongoing investigation into this subject, extensive testing was conducted to evaluate the speed control cable collar material, potential causes for cracking, the potential effect a cracked speed control cable collar could have on throttle position, as well as vehicle brake testing with a stuck throttle condition.

Ford's testing demonstrated that collar "crazing" did not significantly decrease the strength of the collar or its ability to function as designed. Ford's believes that any cracking damage at the speed control cable collar is likely due to improper maintenance or service performed on the vehicle and not a defect in the speed control cable. Furthermore, Ford's vehicle testing shows that at a throttle opening of 29%, the vehicle is controllable and able to be braked to a stop even after multiple rapid brake applications diminish the booster vacuum. In addition, the overall report rate of the speed control cable collar breaking and preventing the throttle from returning to idle is very low, especially considering the significant time in service and mileage on these vehicles.

Ford believes that consideration of all of these findings support a conclusion that there is no unreasonable risk to motor vehicle safety associated with this subject in these vehicles.

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

Sincerely,

T. K. Franckowiak

for Steven M. Kenner

Attachment

ATTACHMENT
January 18, 2013

FORD MOTOR COMPANY (FORD) RESPONSE TO PE12-033

Ford's response to this Preliminary Evaluation 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. 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.

Ford notes that some of the information being produced pursuant to this inquiry may contain personal information such as customer names, addresses, telephone numbers, and complete Vehicle Identification Numbers (VINs). Ford is producing such personal information in an unredacted form to facilitate the agency's investigation with the understanding that the agency will not make such personal information available to the public under FOIA Exemption 6, 5 U.S.C. 552(b)(6).

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 November 28, 2012, the date of your inquiry. Ford has searched within the following offices for responsive documents: Sustainability, Environment and Safety Engineering, Ford Customer Service Division, Purchasing, Quality, Global Core Engineering, Office of the General Counsel, Vehicle Operations, and North American 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. Cruise control (yes/no);

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 2007, or a compatible format, entitled "PRODUCTION DATA." See Enclosure 1, 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 2000 through 2003 model year Ford Taurus and Mercury Sable vehicles equipped with a 4-valve Duratec engine sold in the United States, (the 50 states and the District of Columbia) protectorates, and territories (American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and Virgin Islands) is 467,719. All subject vehicles were originally equipped with cruise control.

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

| Model | 2000 MY | 2001 MY | 2002 MY | 2003 MY |
|---|---|---|---|---|
| Taurus (4v) | 97,334 | 52,840 | 59,908 | 60,313 |
| Sable (4v) | 62,326 | 55,760 | 43,885 | 35,353 |

The requested data for each subject vehicle is provided in Appendix A.

Request 2

State, by model and model year, the number of subject vehicles Ford has manufactured for sale or lease in the United States and federalized territories for which Ford sold an extended service plan. Separately, for each vehicle, state the following:

a. Vehicle identification number (VIN);
b. Make;
c. Model;
d. Model Year;
e. Name of the extended service plan;
f. The mileage at which the extended service plan expires; and
g. The number of months from the warranty start date at which the extended service plan expires.

Provide the table in Microsoft Access 2007, or a compatible format, entitled "Extended Service Plan Data." See Enclosure 1, 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 2000 through 2003 model year Ford Taurus and Mercury Sable vehicles equipped with a 4-valve Duratec engine in the United States, (the 50 states and the District of Columbia) protectorates, and territories

(American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and Virgin Islands) for which an extended service plan was sold is 124,396.

The number of subject vehicles for which an extended service plan was sold in the United States by model and model year is shown below:

| Model | 2000 MY | 2001 MY | 2002 MY | 2003 MY |
|---|---|---|---|---|
| Taurus (4v) | 27,291 | 14,348 | 16,283 | 15,547 |
| Sable (4v) | 16,794 | 14,154 | 11,285 | 8,694 |

The requested data for each subject vehicle is provided in Appendix B.

Request 3

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;
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).

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), and claim and lawsuit information maintained by Ford's Office of the General Counsel (OGC).

Descriptions of the FCSD owner and field report systems and the criteria used to search each of these are provided in Appendix C.

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

| Category | Allegation |
|---|---|
| A1 | Continues to accelerate/high idle/stuck pedal due to speed control cable broken or cracked at mounting bracket |
| A2 | Other/unknown symptom with speed control cable broken or cracked at mounting bracket |
| A3 | Continues to accelerate/high idle/stuck pedal due to broken or cracked speed control cable (unknown if at mounting bracket) |
| A4 | Continues to accelerate/high idle/stuck pedal with replacement of the speed control cable |
| B1 | Continues to accelerate/stuck pedal/won't return to idle with an unknown cause or ambiguous if related to the speed control cable |
| B2 | High idle speed with an unknown cause or ambiguous if related to the speed control cable |
| B3 | High brake pedal effort with an unknown cause or ambiguous if related to the speed control cable |

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.

Ford interprets the phrase "high engine power" or "high idle speed" in the agency's definition of the alleged defect as engine idle speeds above what would be considered a normal operating characteristic of the vehicle or above what would occur as part of the vehicle's warm-up strategy upon start-up. Accordingly, allegations of high engine power or high idle speed with an unknown cause are provided in this response. We are providing electronic copies of these and other 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.

Ford does not interpret the phrase "high engine power" or "high idle speed" to include broad, generalized allegations of a sticky pedal, vehicle surge, or sudden acceleration that would be uncharacteristic with the symptoms associated with a broken cable connector at the mounting bracket. Accordingly, Ford is not providing reports that, for example, state "vehicle surges at low speed," "vehicle suddenly accelerated," "vehicle accelerates when I put my foot on the brake," or "vehicle would suddenly speed up" unless they also make some reference to the speed control cable.

Owner Reports: Records identified in a search of the Master Owner Relations Systems (MORS) database, as described in Appendix C, were reviewed for relevance and sorted 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 database contained in Appendix D. The categorization of each report is identified in the "Category" field.

Records identified in a search of the FMC360 database, as described in Appendix C, were reviewed for relevance and sorted in accordance with the categories described above. The number and copies of relevant owner reports that may relate to the agency's request are provided in the FMC360 portion of the database contained in Appendix D – FMC360. 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 C, a description of Legal Contacts and the activity that is responsible for this information. 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 Office of General Counsel (OGC). Non-privileged documents for files that were located that are related to the responsive owner reports are provided in Appendix E. Ford notes that it was unable to locate 10 files.

Field Reports: Records identified in a search of the Common Quality Indicator System (CQIS) database, as described in Appendix C, were reviewed for relevance and sorted 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 database contained in Appendix D. 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 D but are not included in the field report count.

VOQ Data: This information request included 57 Vehicle Owner Questionnaires (VOQs), 19 of which were duplicative of reports identified in Ford's databases. Ford made inquiries of its MORS and FMC360 databases for customer contacts, and its CQIS database for field reports regarding the vehicles identified on the VOQs. Where duplicative reports were identified, Ford reviewed these reports and sorted them based on the information contained in the report, independent of any subsequent investigation or customer interview that the agency may have conducted. Ford notes that in some instances where the VOQ did not contain the VIN or the owner's last name and zip code, it was not possible to query the databases for owner and field reports specifically corresponding to the VOQs.

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. Copies of reports corresponding to these alleged incidents are provided in the FMC360, MORS, CQIS, and Analytical Warranty System (AWS) portions of the database provided in Appendix D.

Claims, Lawsuits, and Arbitrations: For purposes of identifying incidents that may relate to the alleged defect in a subject vehicle, 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 sorted 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, provided in Appendix D in the Legal Claim/Lawsuits tab. The number of relevant lawsuits and claims identified is also provided in this log. To the extent available, copies of complaints, first notices, MORS or FMC360 reports relating to matters shown on the log are provided in Appendix F. With regard to these lawsuits and claims, Ford has not undertaken to contact outside law firms to obtain additional documentation. Ford notes that it was unable to locate four claim files and, therefore, is unable to determine if the cases are related to the alleged defect.

Request 4

Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. ~~2~~ 3, 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~~ 3 (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 2007, 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 database contained in Appendix D in response to Request 3. To the extent information sought in Request 4 is available for owner and field reports, it is provided in the database. To the extent information sought in Request 4 is available for lawsuits and claims, it is provided in the Log of Lawsuits and Claims provided in Appendix D in the Legal Claim/Lawsuits tab.

Request 5

Produce copies of all documents related to each item within the scope of Request No. ~~2~~ 3. 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 database contained in Appendix D in response to Request 3. Copies of complaints, first notices, or MORS reports relating to matters shown on the Log of Lawsuits and Claims (provided in Appendix D in the Legal Claim/Lawsuits tab) are provided in Appendix F. To the extent information sought in Request 5 is available, it is provided in the referenced appendices.

Request 6

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;
k. Cause and Correction, as stated by dealer/technician; and
l. Comment, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2007, 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 of the AWS database, as described in Appendix C, were reviewed for relevance and sorted in accordance with the categories described in the response to Request 3. The number and copies of relevant warranty claims identified in this search that may relate to the agency's request are provided in the AWS portion of the database contained in Appendix D. 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 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 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 D but are not included 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 and FMC360 reports identified above in response to Request 3. Such claims that were honored are included in the warranty data provided.

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

Request 7

> Describe in detail the search criteria used by Ford to identify the claims identified in response to Request ~~5~~ 6, including the labor operations, problem codes, part numbers and any other pertinent parameters used. Provide a list of all labor operations, labor operation descriptions, problem codes, and problem code descriptions applicable to the alleged defect in the subject vehicles. State, by make and model year, the terms of the new vehicle warranty coverage offered by Ford on the subject vehicles (i.e., the number of months and mileage for which coverage is provided and the vehicle systems that are covered). Describe any extended warranty coverage option(s) 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 6 are described in Appendix C.

For 2000 through 2003 model year Ford Taurus and Mercury Sable vehicles equipped with a 4-valve Duratec engine, the New Vehicle Limited Warranty, Bumper-to-Bumper Coverage begins at the warranty start date and lasts for three years or 36,000 miles, whichever occurs first. Optional Extended Service Plans (ESPs) are available to cover various vehicle systems, time in service, and mileage increments. The details of the various plans are provided in Appendix G. As of the date of the information request, 105,005 new and 19,391 used vehicle ESP policies had been purchased on 2000 through 2003 model year Ford Taurus and Mercury Sable vehicles equipped with a 4-valve Duratec engine, all of which cover the subject speed control cable. Ford notes that only the PremiumCare ESP provided coverage for the subject mounting bracket. As of the date of the information request, 74,568 new and 4,983 used vehicle ESP policies had been purchased on 2000 through 2003 model year Ford Taurus and Mercury Sable vehicles equipped with a 4-valve Duratec engine that cover the subject mounting bracket.

Request 8

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

any dealers, regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but is not limited to, bulletins, advisories, informational documents, training documents, or other documents or communications, with the exception of standard shop manuals. Also include the latest draft copy of any communication that 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 agency's request, 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, ISMs, and the Field Review Committee files and the search criteria used are provided in Appendix C.

OASIS Messages: Ford has identified two SSMs and one TSB that may relate to the agency's request and is providing copies of them in Appendix H.

Internal Service Messages: Ford has identified no ISMs that may relate to the agency's request.

Field Review Committee: Ford has identified no field service action communications that may relate to the agency's request.

In addition to the messages provided in Appendix H that are responsive to this request, Ford is also providing additional messages in Appendix I that further demonstrate the various conditions at which a high idle or surge condition may occur or be considered normal on the subject vehicles and unrelated to the speed control cable. In addition, Ford is providing a copy of safety recalls 04S20 and 04S12 in Appendix I where the driver may experience what they believe to be a condition where the vehicle continues to accelerate on its own. Further discussion on these messages can be found in Ford's response to Request 16.

Request 9

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 interprets this request to pertain to engineering assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations associated with the alleged defect and is construing this request broadly, and as a result is providing not only studies, surveys, and investigations related to the alleged defect, but also notes, correspondence, and other communications relating to the alleged defect that were located pursuant to a diligent search for the requested information. Ford is providing the responsive non-confidential Ford documentation in Appendix J.

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 documentation in Appendix K with a request for confidentiality under separate cover to the agency's Office of the Chief Counsel pursuant to 49 CFR Part 512. Redacted copies of the confidential documents will be provided under separate cover, on separate media, to the agency's Office of Chief Counsel as Appendix K – Redacted.

In the interest of ensuring a timely and meaningful submission, Ford is not producing materials or items containing little or no substantive information, or materials that may relate to the subject component but do not pertain to the alleged defect. Examples of the types of materials not being produced are meeting notices, raw data lists (such as part numbers or VINs) without any analytical content, duplicate copies, non-responsive elements of responsive materials, draft electronic files for which later versions of the materials are being submitted, or communications involving commercial issues such as service part costs, or parts supply and logistics issues that do not pertain to the alleged defect in the subject component. Through this method, Ford is seeking to provide the agency with substantive responsive materials in our possession in the timing set forth for our response. We believe our response meets this goal. If the agency would like additional materials, please advise.

Request 10

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 component, 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 of the requested changes is provided in Appendix L.

Ford currently has no plans for modifications related to the subject components in the subject vehicles.

Request 11

Produce one of each of the following:
a. Exemplar samples of each design version of the speed control cable and attachment bracket; and
b. Any kits that have been released, or developed, by Ford for use in service repairs to the subject component/assembly with relate, or may relate, to the alleged defect in the subject vehicles.

Answer

Speed control cable part number YF1F-9A825-BD was used for approximately the first five months of production of the 2000 model year Ford Taurus and Mercury Sable vehicles equipped with a 4-valve Duratec engine. A slightly different design of the speed control cable with part number YF1F-9A825-CA was then used on the remaining population of subject vehicles. There were two minor differences between the original speed control cable (YF1F-9A825-BD) and the speed control cable that superseded it (YF1F-9A825-CA):

a. There was an elongated nail head connector at the throttle body (bull-nose) on the original cable; and
b. The cable length from the servo to the mounting bracket was 5mm shorter on the original cable.

The cable material, and gauge length from the bracket to the nail head connector are identical between both cables, and the superseding cable (YF1F-9A825-CA) is used as the replacement service part for all subject vehicles. Because the earlier design speed control cable (YF1F-9A825-BD) is no longer available, Ford is unable to provide the requested exemplar part.

The cable mounting bracket remained unchanged throughout this time period.

Ford has separately shipped the following parts to the agency in accordance with this request:

a. One exemplar sample of speed control cable YF1F-9A825-CA; and
b. One exemplar sample of the mounting bracket YF12-9728-BB.

Other than these replacement cables and brackets, no kits have been released for use in service repairs to the subject component/assembly that relate, or may relate, to the alleged defect in the subject vehicles. Concurrent with its investigation into this subject, and as a normal course of business, Ford has considered potential service repairs for a broken speed control cable collar. However, there are no plans to release any service parts or kits at this time. If the agency would like additional information about our consideration of potential service repairs, please advise.

Request 12

State the number of each of the following that Ford has sold that may be used in the subject vehicles by component name, part number (both service and engineering/production), model and model year of the vehicle in which it is used, and month/year of sale (including the cut-off date for sales, if applicable).

a. Subject component; and
b. Any kits that have been released, or developed, by Ford for use in service repairs to the subject component/assembly.

For each component part number, provide the supplier's name, address, and appropriate point of contact (name, title, and telephone number). Also identify by make, model and model year, any other vehicles of which Ford is aware that contain the 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 dealers. Ford has no means to determine how many of the parts were actually installed on vehicles, the vehicle model or model year on which a particular part was installed, the reason for any given installation, or the purchaser's intended use of the components sold.

Ford is providing the total number of Ford service replacement speed control cable assemblies, and mounting bracket assemblies by part number (both service and engineering) by year and month/year (last three years only) of sale, where available, in Appendix M. Information pertaining to production and service usage for each part number, and supplier point of contact information, is included in Appendix M.

Request 13

Provide the following information regarding the subject component and the alleged defect:

a. Identify the collar material trade name and composition, the names of the resin suppliers, and the names of the injection molding suppliers;
b. Copies of the process control procedures for the collar;
c. Results of any testing or analysis to determine the source of hairline surface cracks and discoloration on collars;
d. Results of any fatigue or overload tests conducted on new and used collars.
e. Describe the vehicle assembly line process for installing the speed control cable and identify all factors that would affect relative position of the accelerator and speed control cables;

f. Describe all factors that may affect the orientation of the tab windows in the speed control cable assembly collar and explain why the orientation may differ between the Duratec and Vulcan engine vehicles;
g. Describe the difference in routing of the speed control cable between the Vulcan and Duratec engines;
h. Describe all installation forces acting on the collar at the attachment bracket;
i. Describe any and all variations in the routing of the accelerator cable and speed control cables where they intersect (e.g., accelerator cable pressing from the inner side against the speed control cable routed to the outer side);
j. Describe any common service procedures that would require disconnecting the speed control cable form the distribution bracket or would require removal and reinstallation of a speed control cable or would require rerouting a speed control cable;
k. Describe all service procedures/labor operations that may result in damage to the subject component; and
l. Provide separate counts of regular and extended warranty claims performed on the subject vehicles, by model year and labor operation description and code, for each service procedure/labor operation identified in 13.h.

Answer

a-b) The speed control cable collar material trade name is DuPont Zytel ST801 and is comprised of unfilled PA66 Nylon. The resin supplier is DuPont and the injection molding supplier is Kongsberg, the manufacturer of the speed control cable. Process control procedures for the collar are not owned or maintained by Ford but are owned and maintained by Kongsberg whose contact information can be found in Appendix M.

c-d) Ford gathered speed control cables from customer vehicles for analysis. Some of the cables had no cracking, some had hairline cracks, and others had missing retention tabs. Analysis was conducted to determine the source of collar crazing, its effect on component strength, and the likely fracture mode for broken collars.

Evaluations that were conducted to determine the source of crazing suggested that a likely source is chemical exposure from battery venting. Associated test reports are provided in Appendix N1.

Testing conducted to assess the effect that surface crazing might have on collar material strength found that it had very little effect and that there was no statistically significant difference in strength between crazed and non-crazed collars. Collars were tested to see what force was required to fracture the collar material. Results are provided in the table below. As discussed later in this response, all of the forces are notably higher than the forces that typically act on this connection during normal vehicle operation, suggesting that fracture of a collar, even a crazed collar, is unlikely to occur as a result of normal vehicle operation. Associated test reports are provided in Appendix N1.

| Cable Condition | Average Mileage | Average Tensile Force to Failure (N) | Average Bend Force to Failure (N)* | Average Difference from New Cable (%) | Statistical Significant Difference? |
|---|---|---|---|---|---|
| New | N/A | 277 | 155 | N/A | N/A |
| Crazed | 103,023 | 256 | N/A | 8% | No |
| Crazed | 270,171 | N/A | 144 | 7% | Insufficient Sample Size |
| Hairline Crack | 48,000 | 55 | N/A | 80% | Insufficient Sample Size |
| Hairline Crack | 147,064 | N/A | 149 | 4% | Insufficient Sample Size |

*Bending force applied in the direction toward the driver

**Table 1 – Cable Tensile and Bending Strength**

A collar with a "hairline" crack was inspected in an effort to determine the likely fracture mode; e.g., whether due to fatigue or a single event overload. Ford's inspection and analysis of the fracture surface indicated that the hairline crack resulted from a single event overload condition and not from fatigue related loading. The associated test report is provided in Appendix N1.

Ford is providing additional information summarizing this testing in Appendix N2. In addition, Ford is providing the lab reports containing the details and results of the above testing, in Appendix N1 with a request for confidentiality under separate cover to the agency's Office of the Chief Counsel pursuant to 49 CFR Part 512.

e) Ford is providing the assembly process sheets for the subject speed control cable in Appendix N1. Ford notes that these process sheets specify that the speed control cable is to be installed after the accelerator cable and prior to installation of the air inlet tube assembly. Ford believes this process would typically result in a speed control cable routing under the air inlet tube assembly and inboard of the accelerator cable

f-i) The speed control cable collar on the subject vehicles is designed with a locating key that orients the collar, and subsequently the retention tab window, to the bracket. While this key does allow for a minimal amount of rotation (approximately 5 mm), it ensures that the cable collar is consistently oriented relative to the mounting bracket and results in the retention tab windows being positioned somewhat horizontally on the subject vehicles. A similar locating key is present on the 2000 through 2003 model year Ford Taurus and Mercury Sable vehicles equipped with a 2-valve Vulcan engine that also locates the cable relative to the mounting bracket. This unique mounting bracket design locates the retention tab window on the speed control cable vertically.

In addition to having a unique mounting bracket design, 2000 through 2003 model year Ford Taurus and Mercury Sable vehicles equipped with a 2-valve Vulcan engine also have a different throttle body design from the subject vehicles. This combination of both a unique throttle body design and cable mounting bracket design result in a slightly different cable routing which angles the cable down and under the air inlet tube. The different resulting orientations can be seen in Figures 1 and 2 below:

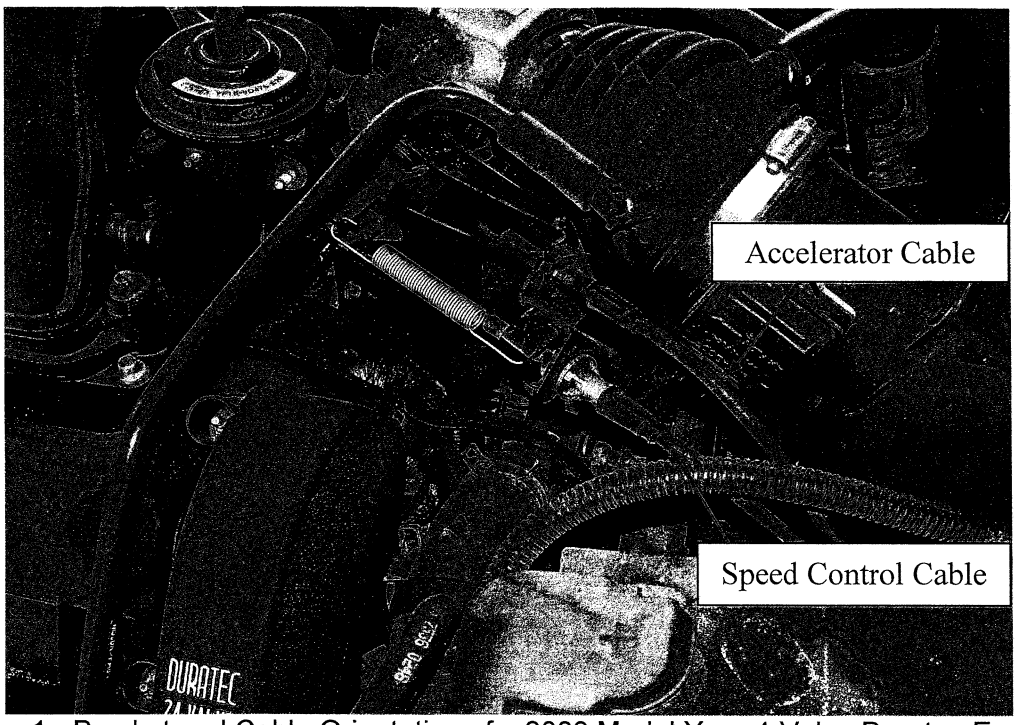


Figure 1 - Bracket and Cable Orientation of a 2003 Model Year 4-Valve Duratec Engine

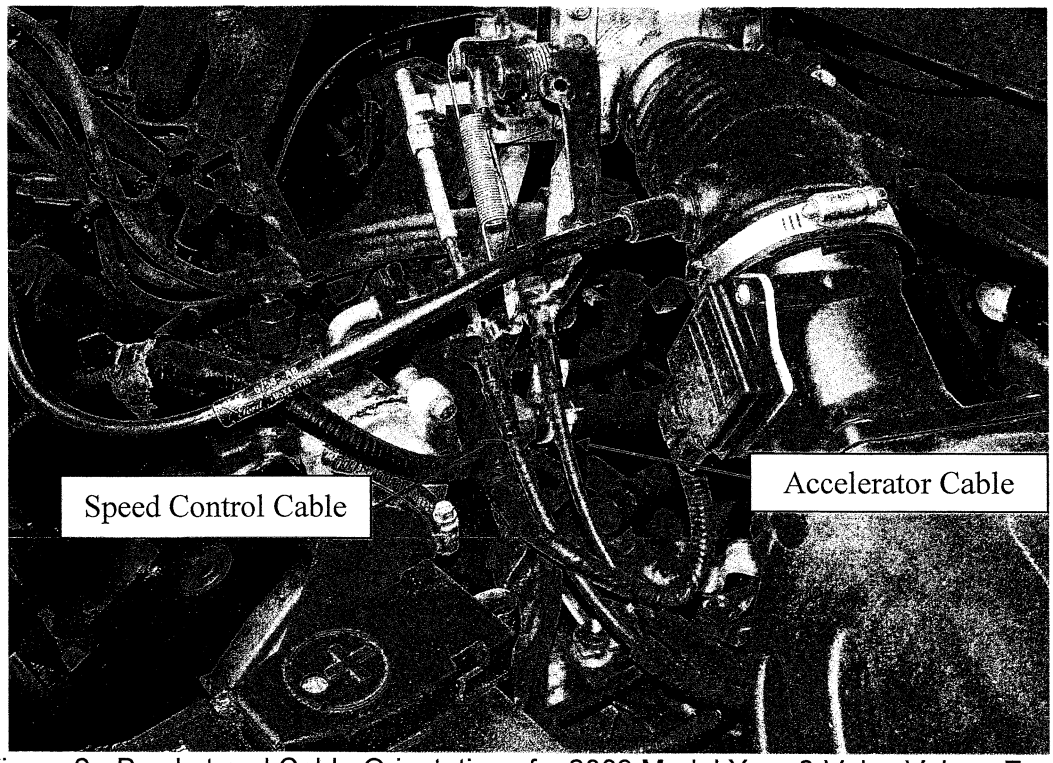


Figure 2 - Bracket and Cable Orientation of a 2003 Model Year 2-Valve Vulcan Engine

The agency requested an assessment of forces acting on the collar as installed at the attachment bracket. While the assembly process would typically result in a speed control cable routing under the air inlet tube assembly and inboard of the accelerator cable, vehicle

inspections also found speed control cables routed outboard of the accelerator cable (as shown in Figure 3). Accordingly, Ford measured the average strain and corresponding forces acting on the speed control cable collar as installed in each of these two cable routing conditions as well as during vehicle operation, as summarized in the table below.

| | Speed Control Cable Relative to Accelerator Cable | Speed Control Cable Relative to Air Inlet Tube | Accelerator Cable Relative to Air Inlet Tube | **Average Strain Bending/Axial (Micro strain) – Vehicle Stationary** | *Approximate Force Bending/Axial (N) – Vehicle Stationary* | **Maximum Strain While Driving Bending/Axial (Micro strain)** | *Approximate Maximum Force While Driving Bending/Axial (N)* |
|---|---|---|---|---|---|---|---|
| 1 | Inboard | Under | Under | **267/ 268** | *18/ 18* | **284/ 346** | *19.2/ 23* |
| 2 | Outboard | Under | Under | **61 / 143** | *5/ 11.5* | | |

*(While other routing scenarios are possible, they are unlikely)*

**Table 2- Cable Routing, Strain, and Force**

As can be seen in the above table, the bending and axial forces acting on the speed control cable collar during vehicle operation are significantly lower than the force required to break a crazed or even cracked cable collar, as previously described in Table 1. This is discussed more in our response to Request 16.

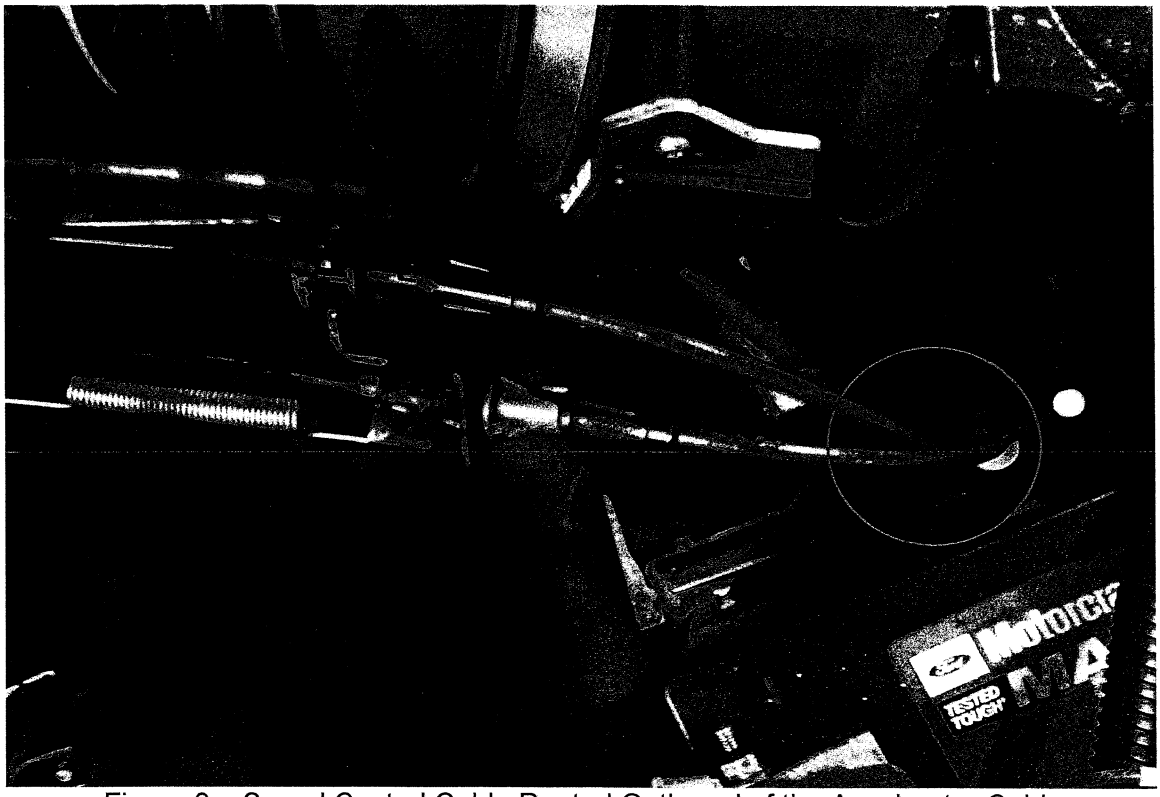


Figure 3 – Speed Control Cable Routed Outboard of the Accelerator Cable

j-l) Ford is providing several common service procedures that require removal and installation of the speed control cable in Appendix O. If these procedures are not performed properly, damage to the cable collar or rerouting of the cable outboard of the accelerator cable can result. In addition, customer surveys and interviews have indicated that other repairs, such as replacing the bypass tube or cleaning the throttle body, have resulted in damage to their speed control cable, including the most common occurrence of a damaged speed control cable collar resulting from a battery change. In addition to the battery, the speed control mounting bracket and the cable routing are in close proximity to other items that require regular maintenance and replacement, such as the air filter. Ford is also providing additional procedures in Appendix P.

The labor operation codes and descriptions as well as the parts replaced for each regular and extended warranty claim relating to the alleged defect on the subject vehicles are provided in Appendix D. However, given that the average age of the subject vehicles is 12 years old, Ford believes that it is unlikely that they are still covered under an extended warranty plan and that the majority of the repairs are likely performed by independent technicians or the customers themselves.

Request 14

Provide the following information about the powertrain system in MY ~~2001~~ 2000 through ~~2007~~ 2003 Ford Taurus and Mercury Sable vehicles (for both Vulcan and Duratec engines):

a. Engine power and torque curves;
b. Describe torque converter design and operation, including stall speed, stall torque ratio, lockup speed, and characteristic curves;
c. Identify and describe the design/operation of each automatic transmission, including gear ratios;
d. Drive axle description, code and gear ratio;
e. All powertrain efficiency ratings related to transmitting torque from the engine to the wheels;
f. Provide Ford's assessment of the driving conditions during which the alleged defect is most likely to occur (assuming maximum possible throttle opening), the associated engine and transmission operating ranges/conditions, and the approximate engine torque and the torque transmitted to the wheels; and
g. Provide Ford's assessment of the driving conditions during which the alleged defect would produce the maximum torque to the wheels either at the beginning of the event or as the operator is braking the vehicle to a stop. Include descriptions of the associated engine and transmission operating ranges/conditions, and the approximate engine torque and torque transmitted to the wheels.

Answer

a, e) Because of the age of the subject vehicles, documentation containing the engine power and torque curves as well as the efficiency ratings relating to transmitting torque from the engine to the wheels is not available. However, Ford did conduct testing to determine the torque transmitted to the wheels on a 2002 model year Ford Taurus equipped with a Duratec engine with a throttle opening of 29%. The results of this testing is provided in Appendix Q.

b-d) All of the subject vehicles are front wheel drive vehicles equipped with the same 4-speed automatic transmission (AX4N). Given that these vehicles are front wheel drive, the driven

axle is integral to the transmission through a final drive chain with an axle code of "6R" on the Vehicle Certification Label. The drive axle gear ratio, or "Chain Final Drive Ratio", for the 2000 and 2001 model year subject vehicles is 3.98, and 3.96 for the 2002 and 2003 model year subject vehicles. The requested transmission and torque converter information for the subject vehicles is provided in Appendix R.

f, g) Ford believes the throttle position must first be greater than 29% before the alleged defect could prevent the throttle from returning to idle. Based on Ford's analysis and a review of reports alleging a stuck throttle condition caused by a broken speed control cable collar, this condition seems to most often occur in the vehicle speed range of approximately 40 to 60 miles per hour when the transmission is in overdrive. In overdrive, a throttle opening of 29% results in an approximate wheel torque of 365 lbf. The wheel torque then increases as the vehicle is braked to a stop and the transmission downshifts. This can be seen in the graphs provided in Appendix Q.

Request 15

Provide the following information for the brake systems in MY ~~2001~~ 2000 through ~~2007~~ 2003 Ford Taurus and Mercury Sable vehicles:

a. Performance curves:
   1. Vehicle deceleration as a function of master cylinder pressure;
   2. Vehicle deceleration as a function of brake pedal force with full booster vacuum and no booster vacuum (two curves);
   3. Master cylinder pressure as a function of brake pedal force with full booster vacuum and no booster vacuum (two curves);
b. Copies of all FMVSS 105 and 135 test reports;
c. System design information:
   1. Basic description of the brake system (e.g., split system, front/rear brake description, front/rear proportioning);
   2. Brake pedal ratio;
   3. Describe brake power assist system design and operation, including a detailed description of the vacuum delivery system, booster design, booster output as a function of input force and vacuum, and copies of all documents related to design specifications and performance requirements;
   4. Provide performance data for the aspirator over a range of throttle positions. Describe what conditions determine when an aspirator is included in a brake booster system.
   5. Master cylinder bore diameter;
   6. For all disc brakes, provide a basic description of the design/operation, identify all design parameters affecting the theoretical braking torque at each wheel that would be produced by a given brake system hydraulic pressure (e.g., bore diameter, pad friction coefficient, effective rotor radius), and state the design values for each;
   7. For all drum brakes, provide a basic description of the design/operation, identify all design parameters affecting the theoretical braking torque at each wheel that would be produced by a given brake system hydraulic pressure, and state the design values for each;
   8. Describe how brake line pressures are proportioned from front to rear; and
   9. Provide the tire size, recommended inflation pressure and design rolling radius.

Answer

a, b) Ford has provided the requested performance curves, FMVSS test reports, and the design specifications as they relate to the brake system, as well as the requested tire information on the subject vehicles with a request for confidentiality under separate cover, on separate media, to the agency's Office of the Chief Counsel pursuant to 49 CFR, Part 512. These results are provided in Appendix S.

c) The brake power assist system on the subject vehicles includes a vacuum harness and a vacuum booster. The vacuum harness includes an aspirator and a check valve. Aspirators are commonly used to provide increased vacuum after cold engine starts when the high idle might reduce the vacuum normally available at the intake manifold. Detailed information regarding the vacuum harness routing and the booster design and performance can be found in the component drawings included in Appendix S.

The brake actuation system on the subject vehicles includes a master cylinder, a brake pressure valve, and a brake pedal. The master cylinder and the pressure valve create, proportion, and distribute the hydraulic pressure separately to the front and rear brakes. Detailed information regarding the master cylinder, the master cylinder bore diameter, the pressure valve, the front/rear proportioning, the brake pedal, and the pedal ratio is included in the component drawings and design specifications in Appendix S.

The foundation brake system on the subject vehicles utilizes front disc brakes along with either rear drum or optional rear disc brakes. The front and rear calipers are single piston type and the rear drum has a single wheel cylinder. Detailed information on the disc and drum brake dimensions and design parameters that could affect theoretical brake torque can be found in the design specification sheet included in Appendix S.

Request 16

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 maximum throttle position that could be produced by the alleged defect;
e. The maximum engine torque that could result from the alleged defect;
f. The maximum wheel torque that could result from the alleged defect (state the operating conditions for the vehicle speed, engine speed, transmission gear and torque converter);
g. The effect on braking performance (deceleration rate) for the following brake pedal efforts (50, 100, 250 and 500 N) under the following conditions:
    1. Initial brake application after the stuck throttle condition; and
    2. After multiple brake applications with the stuck throttle condition (include an assessment of the effects of application force, duration and rate - e.g., rapid/light applications vs. slower/hard applications);
h. The effect on braking efforts required to produce 0.2 g and 0.5 g vehicle decelerations under the same conditions stated in 16.g.i and 16.g.ii;
i. The risk to motor vehicle safety that it poses;
j. 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

k. The reports included with this inquiry.

Answer

Low Rate of Reports

As part of this investigation, Ford performed a comprehensive search of its databases to identify allegations that may relate to the alleged defect. Of those reports identified as relating to the speed control cable, only 16 allege that the collar was broken or cracked at the mounting bracket (categorized as A1 and A2). The remaining responsive reports either do not specify the location of the cable concern (category A3), or simply indicate that the speed control cable was replaced (category A4), with the latter comprising nearly half of all of these reports. Despite the ambiguity of most of these "responsive" allegations, the rate of reports that relate to the alleged defect involving all of these categories remains very low at 0.25 R/1000; this on vehicles with an average of 12 years in service.

Ford also identified "ambiguous" reports (categorized as B1) that alleged the vehicle either continues to accelerate or there was a stuck pedal that would not return to idle where the cause was unknown or ambiguous. There is no mention of the speed control cable in these reports and, based on our engineering judgment, the information in these reports is insufficient to support a determination that they pertain to this subject. Yet even if all of these ambiguous reports were to be combined with those "responsive" reports identified above, the rate of reports still remains very low at 0.78 R/1000, especially given the significant mileage and average of 12 years in service for these vehicles.

Vehicle Remains Controllable

Ford conducted multiple vehicle evaluations to better evaluate the potential effect on vehicle control resulting from a broken speed control cable collar, and found that the vehicles remained controllable and could safely be brought to a stop with reasonable brake pedal pressure under a variety of driving conditions.

For vehicle evaluation purposes, Ford installed a speed control cable with a broken collar on a 2002 Taurus and manually positioned the cable ferrule on the edge of the broken collar as shown in Figure 4, below. A throttle opening of approximately 29% was recorded. This process was repeated with a different speed control cable, also with a broken collar, and a similar result was achieved.

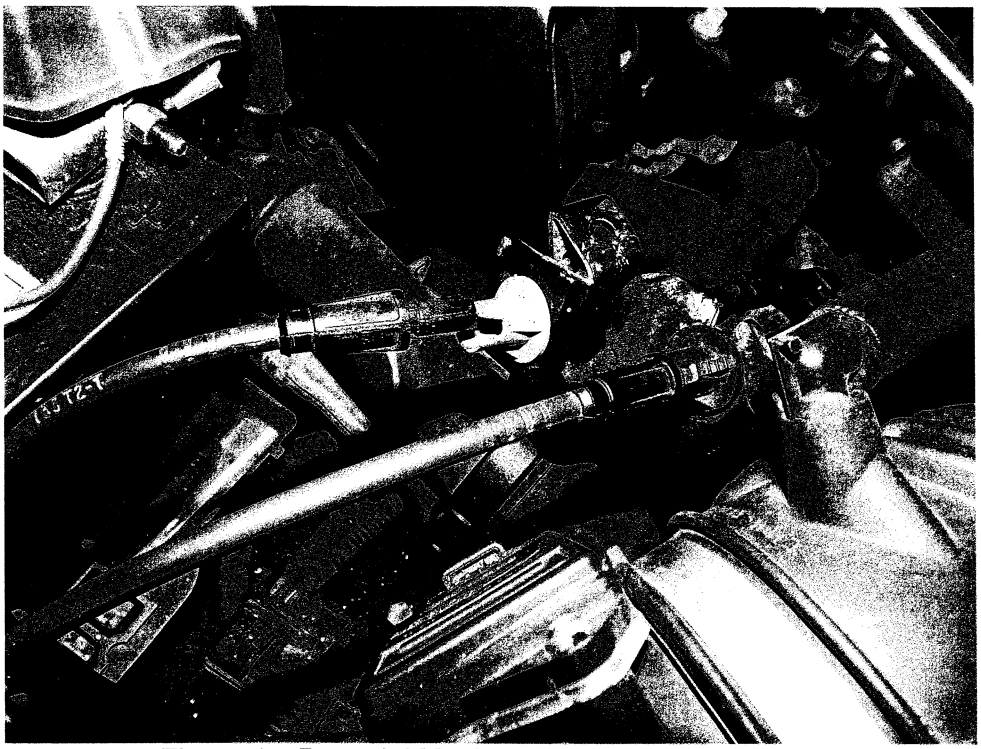

Figure 4 – Potential Maximum Throttle Opening

Ford then performed vehicle drive evaluations to better understand the effect that a 29% throttle opening had on brake vacuum depletion and on braking ability. During these evaluations, which were conducted at vehicle speeds of up to 70 mph, the vehicle was easily controllable and was braked to a complete stop with a single brake apply. The vehicle stopping distance was normal and required only a slight increase in braking effort. Similarly, after multiple brake applications (applied both rapidly and slowly) to diminish vacuum assist, the vehicle was again controllable and safely brought to a complete stop using the vehicle brakes.

Ford also conducted vehicle evaluations that specifically addressed some of the agency's questions in this information request, such as stops at certain brake pedal pressures and deceleration rates. These evaluations also found that the vehicle remained controllable and could safely be brought to a stop with reasonable brake pedal efforts.

Testing was also performed at vehicle speeds of 40 and 60 mph with either a single brake pedal application, or with multiple applications. The agency requested deceleration rate information at constant braking forces of 500, 250, 100, and 50 N. With a single brake pedal application and 29% throttle opening, the vehicle was braked smoothly to a stop at pedal applications of 500, 250, and 100 N with very little difference in the deceleration rate between these two vehicle speeds. A constant brake pedal force application of 50 N, which is considered to be light, resulted in the vehicle decelerating to below 7 mph, though not coming to a complete stop. Similar results were achieved at the target deceleration rates of 0.2 and 0.5g, where 0.2 g resulted in the vehicle decelerating to below 6 mph and 0.5g resulted in the vehicle coming to a complete stop. The details and results of this testing are provided in Appendix S. Ford notes that pedal applications of 50 and 100 N are well below what would be expected to occur under normal stopping conditions.

Next, Ford evaluated the effect of rapid, repeated brake pedal application. Based on the results from the previous testing, brake pedal applications of 500N and 250N were used in a rapid application sequence designed to diminish vacuum in the brake system prior to the final brake apply. With essentially no booster vacuum and 29% throttle opening, the vehicle was braked to a final vehicle speed of below 6 mph using both 500N and 250N brake pedal pressures, and to a complete stop by increasing the brake pedal force to 667N (which would not be unusual for a driver attempting to stop quickly). Performing the same rapid brake application sequence as above, the vehicle was safely braked to a complete stop at both the 0.2 and 0.5 g target decelerations as well. The details and results of this testing are also provided in Appendix S.

While this testing was conducted using the agency's requested parameters, Ford believes that actual customer pedal application force during a stuck throttle event would likely increase as necessary to stop the vehicle. Ford notes that the vehicle was safely braked to a stop in each of these scenarios with efforts just slightly above what would often be considered typical under normal braking conditions where there is no throttle interference.

Collar Damage Results from Improper Service

As stated in Ford's response to Request 13, Ford's evaluations found that the forces required to create a crack in even a crazed collar are well above the forces seen on the collar during normal vehicle operation, suggesting that collar fracture results from other means such as improper repair. Ford believes that damage can occur if the proper service procedures are not followed for vehicle maintenance as discussed in the response to Request 13. This is also supported by customer comments. During Ford's vehicle inspections, two customers reported that their speed control cable collar had been broken. Further discussion revealed that one customer had broken his speed control cable collar when installing a new battery and accidentally dropping it on the cable collar, while the other had noticed a broken speed control cable collar the day after having his vehicle serviced for a new coolant bypass hose.

Effect of Cable Routing on a Broken Collar

Ford's vehicle evaluations were only able to generate a stuck throttle condition "while driving" with both a broken collar (no retention tabs) and a speed control cable routing that was outboard of the accelerator cable (Figure 3), where accelerator cable movement during vehicle operation can put an outward axial load on the speed control cable. In Ford's testing, we were unable to generate a stuck throttle condition "while driving" with the speed control cable routed inboard of the accelerator cable, even with a broken speed control cable collar.

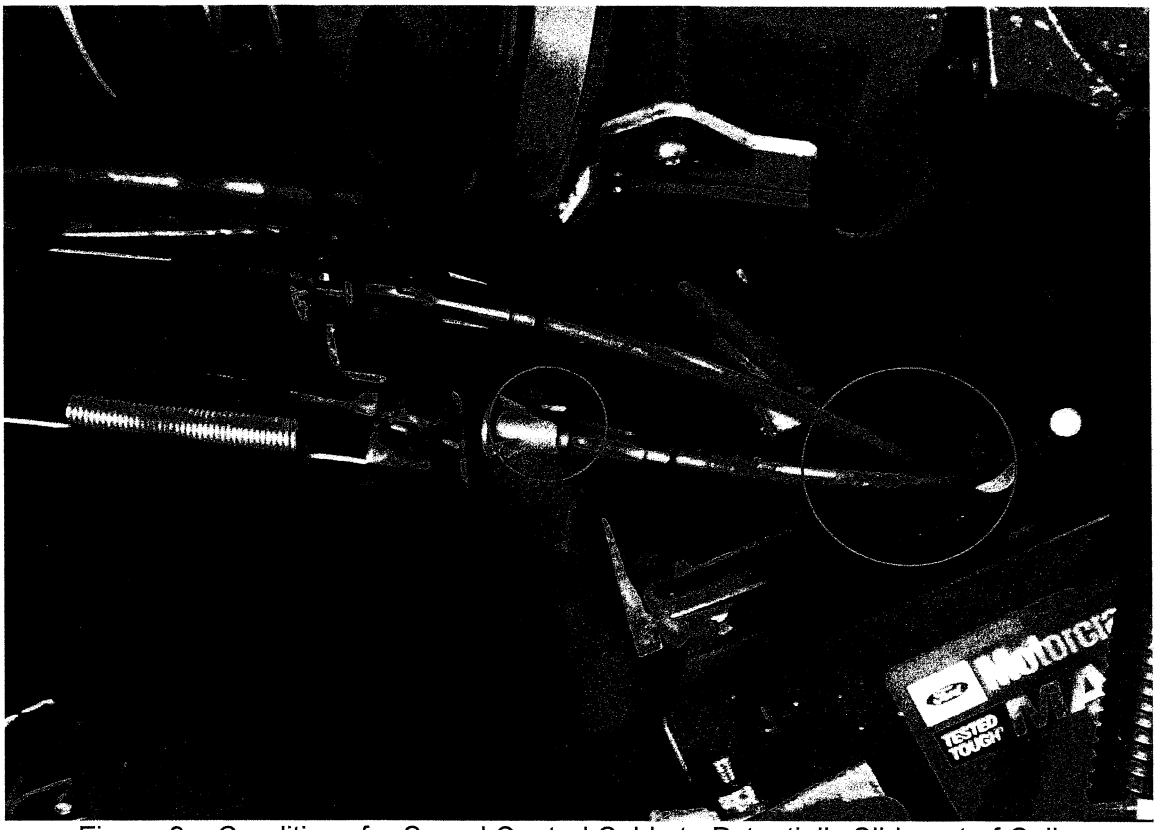


Figure 3 – Conditions for Speed Control Cable to Potentially Slide out of Collar

Reports Alleging High Idle and High Braking Efforts

The agency's alleged defect included "...complaints...in which the problem was not diagnosed or identified..." relating to allegations of "high engine power" or "high idle speed". As previously described in Ford's response to Request 3, Ford interprets the phrase "high engine power" or "high idle speed" in this context to mean idle speeds above what would be considered normal warm-up and operating characteristics of the vehicle. Therefore, Ford has provided ambiguous reports where there was an unknown cause or the problem could not be duplicated; these are categorized as "B2". While Ford is providing category "B2" reports because they are responsive to the agency's request, Ford believes the vast majority of these reports are not related to a broken speed control cable collar at the mounting bracket, but pertain to other operating characteristics of this vehicle.

For example, one of the normal operating characteristics of the subject vehicles is a high idle under certain conditions. This is part of the vehicle calibration to prevent spark plug fouling and increase customer satisfaction. An elevated engine speed can also occur while driving due to a faulty Idle Air Control (IAC) valve, Mass Air Flow (MAF) sensor, Cam Position (CMP) Sensor, or Delta Pressure Feedback Exhaust Gas Recirculation (DPFE) sensor, which Ford has found can often be difficult for the technician to diagnose and has therefore published the additional service messages provided (reference the documents provided in Appendix H and Appendix I in response to Request 8). In addition, Ford also notes that these vehicles were also included in safety recalls 04S20 and 04S12 where the driver may experience what they believe to be a condition where the vehicle continues to accelerate on its own similar to the alleged defect for this investigation.

Similarly, the agency's alleged defect includes allegations of increased brake pedal effort or hard brake pedal feel with an unknown or ambiguous cause. Given the age of the subject vehicles, it is likely that the subject vehicles would have required some sort of regular brake service or maintenance, such as a change in brake pads or rotors, that could affect the perceived brake pedal effort on a properly functioning brake system. Ford is providing category "B3" reports because they are responsive to the agency's request. However, Ford believes that it is extremely unlikely that any of these reports, which make no mention or allegation of a stuck throttle or even refer to the speed control cable, actually relate to the subject of this investigation.

Accident Allegations

Ford's search for reports pertaining to this subject identified two minor accident allegations (no injuries). In both of these reports, the exact nature of the alleged cause is unclear, and there is no indication that the cable collar was broken in either instance. The first report states "...no root cause found..." The second report simply states the driver was "...in accident due to cruise control cable..." with no additional explanation. Despite the ambiguous nature of these reports, Ford categorized them as "A4" because there is reference to the speed control cable in both reports. However, one incident occurred at an apartment complex, and the other occurred when the driver "...rammed the garage door unintentionally...". The circumstances associated with each of these allegations are inconsistent with the conditions we would expect to be associated with this subject.

The ambiguous (category "B") reports provided in this response include allegations of minor accidents where the cause is ambiguous or unknown. These reports include details such as "put the vehicle in reverse and accelerator got stuck...", "...the accident occurred parking lot...", or "...accelerator stuck down...cust was going approximately 10 mph when he went to applied the brake...", all of which are again inconsistent with the conditions we would expect to be associated with this subject.

Summary

Ford's search for reports pertaining to this subject found a very low incident rate, especially considering the significant time in service (averaging over 12 years) and mileage of these vehicles. Ford's vehicle testing has also found that a vehicle with a throttle stuck at 29% remains very controllable and able to be braked to a stop even after multiple, rapid brake applications. Ford's analysis has found that collar cracking does not appear to occur during normal vehicle operation and, accordingly, that there is no defect with the collar. Ford's analysis of field returned parts found that collar damage likely resulted from improper service or maintenance.

Ford believes that consideration of all of these findings support a conclusion that there is no unreasonable risk to motor vehicle safety associated with this subject in these vehicles.

###