



Handwritten: 1/18/07

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January 12, 2007

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

Dear Ms. DeMeter:

Subject: PE06-048:NVS-213kmb

The Ford Motor Company (Ford) response to the agency's November 21, 2006, letter concerning reports of alleged engine compartment fires in 2001 through 2003 model year Ford Escape vehicles is attached.

Ford continues to investigate this issue and will update the agency of our findings as our investigation progresses.

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

Sincerely,

James P. Vondale

Attachment

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FORD MOTOR COMPANY (FORD) RESPONSE TO PE06-048

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, and 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 21, 2006, the date of your inquiry. Ford has searched within the following offices for responsive documents: Environmental and Safety Engineering, Ford Customer Service Division, Research, Global Core Engineering, Office of the General Counsel, North American Car Product Development, 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;
- g. Assembly plant where the vehicle was manufactured;
- h. Whether ABS was installed as original equipment; and
- i. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

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

Answer

Ford records indicate that the approximate total number of 2001 through 2003 model year Ford Escape vehicles 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 463,769 including 356,881 equipped with ABS.

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

Model	2001 MY	2002 MY	2003 MY
Ford Escape with ABS	111,117	127,551	118,213
Ford Escape without ABS	41,733	31,669	33,486

The requested data for each subject vehicle is provided electronically in Appendix A (filename: 2007-01-12 Appendix A) on the enclosed CD.

Request 2

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

- a. Consumer complaints, including those from fleet operators;
- b. Field reports, including dealer field reports;
- c. Reports involving a fire, based on claims against the manufacturer involving a death or injury, notices received by the manufacturer alleging or proving that a death or injury was caused by a possible defect in a subject vehicle, property damage claims, consumer complaints, or field reports;
- 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 "f," 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 "a" 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).

Descriptions of the FCSD owner and field report systems, the Fleet Test Database, and the criteria used to search each of these are provided electronically in Appendix B (filename: 2007-01-12 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	Engine compartment fire, ABS component alleged, key-off
A2	Engine compartment fire, ABS component alleged, key position ambiguous
A3	Reports of smoking, melted ABS components without allegation of flame
A4	Engine compartment fires, non-ABS component related, key-off
B	Engine compartment fire, ABS components ambiguous
C	Fire alleged with location in vehicle and/or components ambiguous
D	Reports ambiguous if related to the alleged defect

We are providing electronic copies of reports categorized as "B, C, and D" 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.

Owner Reports: Records identified in a search of the Master Owner Relations Systems (MORS) database, as described in Appendix B, were reviewed for relevance and categorized in accordance with the categories described above. The number and copies of relevant owner reports identified in this search that may relate to the agency's investigation are provided in the MORS III portion of the electronic database contained in Appendix C (filename: 2007-01-12 Appendix C) on the enclosed CD. The categorization of each report is identified in the "Category" field.

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

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: 2007-01-12 Appendix D). Ford notes that it was unable to locate four files.

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.

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 and copies of relevant field reports identified in this search that may relate to the agency's investigation are provided in the CQIS portion of the electronic database contained in Appendix C on the enclosed CD. The categorization of each report is identified in the "Category" field.

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

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 and copies of relevant reports identified in this review that may relate to the agency's investigation based on these verbatim comments is provided in Appendix C.

When we were able to identify that responsive (i.e., not ambiguous) duplicate UDB 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. UDB records that are duplicative of owner or field reports or warranty claims are provided in Appendix C but are not included in the report count.

VOQ Data: This information request had an attachment that included 11 Vehicle Owner's Questionnaires (VOQs). 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.

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, provided in Appendix C in the Legal Claim/Lawsuits tab on the enclosed CD. The number of relevant lawsuits and claims identified is also provided in this log. To the extent available, electronic copies of complaints, first notices, or MORS reports relating to matters shown on the log are provided on the enclosed CD in Appendix E. 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. Incident location;
- i. Report or claim date;
- j. Whether a vehicle fire is alleged;
- k. Whether a structure fire is alleged;
- l. Whether property damage is alleged;
- m. Number of alleged injuries, if any;
- n. Number of alleged fatalities, if any;
- o. Whether Ford received a subrogation claim regarding the incident (If so, please provide the name of the business and/or person who submitted the claim, their address, and telephone number);
- p. Whether a fire investigation was performed by any party, that Ford is aware of, to determine the origin and cause (if so, please provide a copy of the report);
- q. Alleged origin of the fire;
- r. Alleged cause of the fire;
- s. Whether the incident occurred with the engine "OFF" or the engine "ON";
- t. Ignition key position at time of incident;
- u. Complaint summary;
- v. Consumer comments; and
- w. Ford's assessment of the allegation.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER TWO DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this 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 the Legal Claims/Lawsuit portion of Appendix C.

Request 4

Produce 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 C) are provided in Appendix E. 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, (a) the subject components; or (b) brake fluid leakage from the master cylinder assembly 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. Causal part (if identified);
- j. Replacement part number(s) and description(s);
- k. Whether smoke, arcing, melting or fire is identified;
- l. Concern stated by customer; and
- m. 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

In a December 18, 2006, telephone conversation, Jeffrey Quandt of the agency informed Ford personnel that Ford should provide categorized warranty reports related to the alleged defect on the subject components, in addition to those identified in Request 5 (which would be provided in an uncategorized format)

The uncategorized records provided in Appendix F (filename: 2007-01-12 Appendix F) include reports of an engine compartment wiring harness, master cylinder reservoir assembly or a master cylinder reservoir cap, or an ABS component that was replaced due to a brake fluid leak regardless of any other reported circumstances or indication that the report is related to the alleged defect. The search criteria used is further described in Appendix B.

The records that were reviewed for relevancy and categorized in accordance with the categories described in the response to Request 2 were obtained by searching for reports of ABS components or an engine compartment wiring harness that was replaced or repaired. The search criteria used is further described in Appendix B. The number and copies of relevant warranty claims identified in this search are provided in the AWS portion of the electronic database contained in Appendix C on the enclosed CD. The categorization of each report is identified in the "Category" field.

When we were able to identify that duplicate claims for an alleged incident were received, each of these duplicate claims 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 C but are not indicated in the report count above.

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

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

Request 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. 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 5 are described in Appendix B.

For 2001 through 2003 model year Ford Escape vehicles, 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) were available to cover various vehicle systems, time in service and mileage increments. The details of the various plans, as well as the number of vehicles participating in the plans is provided electronically in Appendix G (filename: 2007-01-12 Appendix G) on the enclosed CD.

Request 7

Produce copies of all service, warranty, and other documents that relate to, or may relate to: (a) the alleged defect; or (b) brake fluid leakage from the master cylinder assembly, that Ford has issued to any dealers, regional or zone offices, field offices, fleet purchasers, or other entities for the subject vehicles. 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 ABS component related fires or brake fluid leaks, 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 B.

OASIS Messages: Ford has identified three SSMs and no TSBs that may relate to the alleged defect in the subject vehicles and is providing copies of them in Appendix H (filename: 2007-01-12 Appendix H).

Internal Service Messages: Ford has identified no ISMs that may relate to the alleged defect in the subject vehicles.

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, and provide circuit diagrams of, the electrical circuit that contains the ABS electronic control module (2C219) in the subject vehicles. Include in this description the other components that are powered on this same circuit, all circuit protection devices and state the normal and transient current flow through the subject ABS harness wiring and connectors.

Answer

The information provided in response to this information request is provided electronically in Appendix I (filename: 2007-01-12 Appendix I). Ford described the requested system and its functionality in sufficient detail to allow for an effective analysis. If the agency desires further detail of any portion of the system please advise.

Ford is providing current ranges for the ABS harness wiring and connectors in Appendix I. Because the current flow may be affected by many factors (temperature and brake fluid viscosity for pump motor current flow, for examples) the transient and normal (steady state) current flows may vary within the ranges that are identified.

Request 9

Identify all of the components in the engine compartment that may receive electrical power when the ignition key is in the off position on the subject vehicles. Identify the quadrant in the engine compartment where the component is located (front left, front right, rear left, or rear right).

Answer

The information provided in response to this information request is provided electronically in Appendix I (filename: 2007-01-12 Appendix I).

Request 10

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

In a December 18, 2006, telephone conversation, Jeffrey Quandt of the agency, and in a December 20, 2006, electronic mail from the agency Ford was informed that the scope of Request 10 relates to the subject components and Ford's Critical Concern Review Group's documents regarding brake fluid leakage on the subject vehicles.

Ford is construing this request broadly and is 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 J (filename: 2007-01-12 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 as Appendix K (filename: 2007-01-12 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.

In the interest of ensuring a timely and meaningful submission, Ford is not producing non-responsive materials or items containing little substantive information. 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, 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 substantive responsive materials in our possession in the timing set forth for our response. We believe our response meets this goal. Should the agency request additional materials, Ford will cooperate with the request.

Request 11

Identify and 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 ABS electronic control module, the associated electrical connector to the ABS electronic control module, and the electrical circuit containing the ABS electronic control module 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.

Provide the same information for any such changes made by, or on behalf of, Ford regarding brake fluid leakage from the brake master cylinder assembly.

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 electronically as Appendix L (filename: 2007-01-12 Appendix L) on the enclosed CD. There are no changes or modifications planned for incorporation in the next 120 days that relate to the subject components in the subject vehicles.

Request 12

Produce one of each of the following:

- a. Exemplar samples of the ABS electronic control module, the associated electrical connector, and the wiring harness that includes the electrical circuit containing the ABS electronic control module;
- b. Field return samples of any subject components that exhibited smoke, arcing, melting and/or fire;
- c. Field return samples of leaking master cylinder reservoir caps;
- d. Samples of master cylinder service replacement caps; and
- e. Any kits that have been released, or developed, by Ford for use in service repairs to the subject component/assembly which relate, or may relate, to the alleged defect in the subject vehicles.

Answer

The requested parts for items a. through d. are being provided with this submission. There are no kits that have been released for use in repairs to the subject components/assembly which relate or may relate to the alleged defect in the subject vehicles. Ford notes that service part number -2C065- contains ABS components and fasteners and the ABS components are the same as those provided in response to item a. of this request, so duplicative components are not provided for item e.

Request 13

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. ABS electronic control modules;
- b. Wiring harnesses that include the electrical circuit containing the ABS electronic control module;
- c. Brake master cylinder reservoir caps; and
- d. Any kits that have been released, or developed, by Ford for use in service repairs to the subject component/assembly which relate, or may relate, to the alleged defect in the subject vehicles.

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 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. Further, Ford notes that the reservoir cap is utilized on several vehicle lines in addition to Escape vehicles and is not able to differentiate part sales by specific vehicle applications in this instance.

Ford is providing the total number of Ford service replacement of ABS modules, engine compartment wiring harnesses and master cylinder reservoir caps as well as kits that contain the master cylinder reservoir cap (cap and regulatory decals), by part number (both service and engineering) and year of sale, where available, in electronic form in Appendix M (filename: 2007-01-12 Appendix M) on the enclosed CD. Information pertaining to production and service usage for each part number, and supplier point of contact information, is included in Appendix M.

Request 14

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 risk to motor vehicle safety that it poses;
- e. 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 that one or more subject components was malfunctioning; and
- f. The reports included with this inquiry.

Answer

Model year 2001 through 2003 Ford Escape vehicles were manufactured with an optional anti-lock braking system (ABS). The connector that attaches the electrical system to the ABS module contains power supplies for the hydraulic pump, valve solenoids, and memory, as well as grounds, and several signal and monitoring circuits, some of which are powered in all key positions.

In some vehicles ineffective sealing at the ABS electrical connector wires has been observed. Ineffective sealing could allow contamination to enter the electrical terminals and over time contamination within the electrical connection may lead to increased electrical resistance, potentially leading to electrical connectivity issues, heating, or heat damage to the connector or ABS module mating connector.

If contamination causes corrosion at the ABS connection, warning of the condition may be provided by an illuminated ABS warning light, an illuminated brake warning light, or opening of the circuit's fuse. Our analysis has found that in very rare instances, over time, sufficient heating may result in localized fires in the area around the ABS module. We are continuing to investigate whether there is a potential that a localized fire could spread beyond the ABS module. Given the nature of the localized fire and its location, it is not clear that combustion beyond the module can be supported. Ford notes that during the review of reports to determine relevance to the alleged defect a number of reports indicate that corrosion or contamination of the connector pins was identified after the operator was alerted by an illuminated warning light. These reports indicate that the vehicles were repaired and restored to service. Because these reports do not contain any indication of heat damage, smoking, or flames they are not included within the responsive reports.

Ford continues to investigate this issue and will update the agency as our investigation progresses.