

Ford Motor Company

Automotive Safety Office
Environmental and Safety Engineering

August 15, 2008

Ms. Kathleen C. DeMeter, Director
Office of Defects Investigation Safety Assurance
National Highway Traffic Safety Administration
1200 New Jersey Avenue, S.E. W45-302
Washington, D.C. 20590

Dear Ms. DeMeter:

Subject: RQ08-003:NVS-212lh

The Ford Motor Company (Ford) response to the agency's June 25, 2008, letter concerning reports of alleged rear liftgate glass hatch hinge fracture in 2004 model year Ford Explorer and Mercury Mountaineer vehicles is attached.

Ford's investigation has found that fracture of a hinge on 2004 model year vehicles most often relates to corrosion that can form at the steel pin that joins the two zinc die-cast sections of the hinge; one hinge section is fastened to the glass and the other attached to the vehicle body. As a result, the pin may shear or wear through the hinge casting. Either condition can result in separation of the hinge sections causing the liftgate glass to drop from that hinge location, though the glass would still be retained by the hinge on the other side of the vehicle along with the two struts that attach the glass to the liftgate.

The rate of hinge fracture complaints on 2004 model year Explorer and Mountaineer vehicles is significantly lower than that on vehicles included in the recall of earlier model year vehicles, despite the fact that the 2004 model year vehicles have more than twice the average time in service than the recalled vehicles had at the time that Ford's recall decision was made. The injury allegation rate is also significantly lower than that of vehicles involved in the earlier Ford recall.

Based on design differences, the lower complaint rate and the notably lower risk of any type of injury associated with the manner in which the hinges have been found to fracture on the vehicles in this investigation, Ford finds no basis to conclude that fracture of the liftgate glass hinge in 2004 model year Explorer and Mountaineer vehicles presents any unreasonable risk to safety.

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

Sincerely,



James P. Vondale
Attachment



FORD MOTOR COMPANY (FORD) RESPONSE TO RQ08-003

Ford's response to this Recall Query 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 Recall Query.

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 June 25, 2008, the date of your inquiry. Ford has searched within the following offices for responsive documents: Sustainability, Environmental and Safety Engineering, Ford Customer Service Division, Marketing and Sales Operations, Purchasing, Quality, Research, Global Core Engineering, Office of the General Counsel, Vehicle Operations, 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. Model Year;
- e. Date of manufacture;
- f. Date warranty coverage commenced.; and
- g. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

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

Answer

Ford records indicate that the approximate total number of 2004 model year Ford Explorer and Mercury Mountaineer 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 345,342.

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

Model	2004 MY
Ford Explorer	294,789
Mercury Mountaineer	50,553

The requested data for each subject vehicle is provided electronically in Appendix A (filename: 2008-08-15 Appendix A) on the enclosed CD.

Request 2

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

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

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

incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint).

In addition, for items "c" through "e," provide a summary description of the alleged problem and causal and contributing factors and Ford's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "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 these are provided electronically in Appendix B (filename: 2008-08-15 Appendix B) on the enclosed CD.

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

Category	Allegation
A	Allegation of fracture or failure of one or both of the rear liftgate glass hatch hinges
B	Allegation of broken rear liftgate glass, cause unknown

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. Though the repairs associated with these ambiguous records may involve replacement of the rear liftgate hinges, Ford notes that such replacement is not necessarily indicative of a fractured or failed hinge. For example, hinges are often replaced when the rear liftgate glass is replaced for any reason. As the agency is aware, vehicle liftgate glass can break or otherwise be replaced for a variety of reasons, including vandalism, impact with a stored object while opening or closing, or rear defroster repair. Based on our engineering judgment, the information in these reports is insufficient to support a determination that they pertain to the alleged defect. Ford is not providing reports that allege liftgate glass breakage when the vehicle was either being driven or was unattended, as such breakage would not be expected to have potentially resulted from a broken hinge. Ford is also not providing reports that refer to a rattling or loose liftgate glass system, generally addressing noise, squeak, or vibration concerns, as the condition may relate to a wide variety of causes and not a fractured hinge.

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 portion of the electronic database contained in Appendix C (filename: 2008-08-15 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: 2008-08-15 Appendix D). Ford notes that it was unable to locate sixteen files.

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.

VOQ Data: This information request had an attachment that included 34 Vehicle Owner's Questionnaires (VOQs). After reviewing each of the VOQs Ford believes that four are non-responsive to this inquiry. One (ODI number 10186027) refers to a crack in the rear hatch, which Ford believes refers to a cracked cosmetic appliqué and not the liftgate glass or hinge. Two VOQs (ODI numbers 10217910 and 10218194) refer to hinges that are loose with no mention of a failure, and the fourth (ODI number 10213271) refers to a crack in the glass, but no mention of a broken hinge. Additionally, Ford notes that one VOQ does not have a VIN and could not be researched in our system. Ford made inquiries of its MORS database for customer contacts, its CQIS database for field reports, and the AWS database for warranty reports regarding the vehicles identified on 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. Ford notes that it found no internal records on 14 of the searchable 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. Potentially relevant allegations are marked as such and copies of reports corresponding to these alleged incidents are provided in the MORS, CQIS, and Analytical Warranty System (AWS) portions of the electronic database provided in Appendix C. Ford comments pertaining to these reports are provided in response to Request 13.

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 (filename: 2008-08-15 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. 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.

Categorize each complaint in the following manner:

- a. In recall scope, not repaired
- b. In recall scope, repaired
- c. Not in recall scope

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

Answer

Ford is providing owner and field reports in the electronic database contained in Appendix C on the enclosed CD in response to Request 2. To the extent information sought in Request 3 is available for owner and field reports, it is provided in the database. To the extent information sought in Request 3 is available for lawsuits and claims, it is provided in the Log of Lawsuits and Claims in Appendix C in the Legal Claim/Lawsuits tab on the enclosed CD. Also note that none of the subject vehicles were within the scope of recall 04V-442.

Request 4

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

Answer

Ford is providing owner and field reports in the electronic database contained in Appendix C on the enclosed CD in response to Request 2. Copies of complaints, first notices, or MORS reports relating to matters shown on the Log of Lawsuits and Claims (Appendix 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, 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 reformation:

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

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

Answer

Records identified in a search of the AWS database, as described in Appendix B, were reviewed for relevance and categorized in accordance with the categories described in the response to Request 2. The number and copies of relevant warranty claims identified in this search that may relate to the agency's investigation are provided in the AWS portion of the electronic database contained in Appendix C (filename: 2008-08-15 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 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 reports identified above in response to Request 2. Such claims that were honored are included in the warranty data provided.

Request 6

Describe in detail the search criteria used by Ford to identify the claims identified in response to Request 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 the 2004 model year Ford Explorer and Mercury Mountaineer 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 are provided electronically in Appendix F (filename: 2008-08-15 Appendix F) on the enclosed CD. As of the date of the information request, 34,313 new vehicle

ESP policies had been purchased on 2004 model year Ford Explorer and Mercury Mountaineer vehicles.

Request 7

Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that Ford has issued to may dealers, regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but is not limited to, bulletins, advisories, informational documents, training documents, or other documents or communications, with the exception of standard shop manuals. Also include the latest draft copy of any communication that Ford is planning to issue within the next 120 days.

Answer

For purposes of identifying communications to dealers, zone offices, or field offices pertaining, at least in part, to the fracture or failure of rear liftgate glass hatch hinges, 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 no SSMs or TSBs that may relate to the alleged defect in the subject vehicles.

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

- a. Action title or identifier;
- b. The actual or planned start date;
- c. The actual or expected end date;
- d. Brief summary of the subject and objective of the action;
- e. Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
- f. A brief summary of the findings and/or conclusions resulting from the action.

For each action identified, provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents chronologically by action.

Answer

Ford is construing this request broadly and 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 G (filename: 2008-08-15 Appendix G).

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 H (filename: 2008-08-15 Appendix H).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 9

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. Identify and describe modifications/changes in the subject component for Ford recall campaign 04S20 (NHTSA No. 04V442). 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 electronically as Appendix I (filename: 2008-08-15 Appendix I) on the enclosed CD.

Request 10

For each modification or change described in response to request number 9, provide 2 samples of the subject component with appropriate identification.

Answer

Ford is unable to locate a "new" sample of the AB level hinge as this component is no longer available for service or in production. Used samples of the AB level hinge are provided in response to Request 11. Two samples of the AC level hinge are provided with this response and labeled accordingly.

Request 11

Provide two samples of failed hinges removed from real-world subject vehicles.

Answer

Two samples that were removed from complaint vehicles are provided with this response and labeled accordingly.

Request 12

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

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

For each component part number, provide the suppliers name, address, and appropriate point of contact (name, title, and telephone number. Also identify by make, model and model year, any other vehicle 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.

Ford is providing the total number of Ford service replacement hinges by part number (both service and engineering) and year of sale, where available, in electronic form in Appendix J1 (filename: 2008-08-15 Appendix J1) 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 J2 (filename: 2008-08 Appendix J2).

Request 13

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 subject component was malfunctioning; and
- f. The reports included with this inquiry.

Answer

While Ford has received reports of broken liftgate glass hinges on 2004 model year Explorer and Mountaineer the cause, effect, and rate of hinge breakage on these vehicles differ from earlier model year Explorer and Mountaineer vehicles recalled by Ford that used a different hinge design. As a consequence of the different design the hinge breakage does not result in the same risk that led to Ford's decision to recall the prior model year vehicles.

In early 2004, Ford initiated a recall on certain 2002-2003 model year Explorer and Mountaineer vehicles to replace either the liftgate glass hinge or both the strut and hinge on affected vehicles. In some of the affected vehicles, the ball stud bracket located on the rear liftgate window could rotate out of position on the glass due to inadequate bonding of the bracket to the glass or inadequate clamp load of the bracket to the glass. The liftgate glass hinge itself on these vehicles also had the potential to fracture at the hinge boss/bolt attachment to the glass. Consequently, the strut could detach from the glass, or the glass could detach from the hinge, possibly causing the glass to fall from the open position and break. At the time of the recall, Ford had received over 1,200 customer and field reports relating to this condition on those 2002

and 2003 model year vehicles, including 126 allegations of associated injuries on vehicles that had been in service for approximately two years.

The cause of hinge fracture, and the resulting safety risk, on 2004 model year Explorer and Mountaineer vehicles differs from the recalled vehicles due to the different hinge design. Ford's investigation has found that fracture of a hinge on 2004 model year vehicles most often relates to the use of non-optimal coating on the steel pin that joins the two zinc die-cast sections of the hinge, one hinge section is fastened to the glass and the other attached to the vehicle body. As a result, corrosion can form between the two hinge sections and the pin. Eventually rotational movement can be restricted, making liftgate glass opening or closing more difficult. This corrosion has been found to result in one of two hinge fracture modes. Torsional loading of the hinge pin when the liftgate glass is opened or closed may eventually exceed the strength of the pin, causing the pin to shear. Alternately, a corroded pin may eventually wear through the hinge casting. Either condition can result in separation of the hinge sections causing the liftgate glass to drop from that hinge location, though the glass would still be retained by the hinge on the other side of the vehicle along with the two struts that attach the glass to the liftgate. Ford has found that technicians sometimes replace both hinges though only one of the hinges may have fractured, making it difficult to evaluate whether one hinge fractured or both fractured concurrently. However, Ford does not think it is common for both hinges to fracture at the same time or that the fracturing of one hinge typically would cause the immediate fracture of the other. This hinge fracture mechanism differs from that on the recalled vehicles that were much more susceptible to fracture at the hinge boss/bolt attachment to the glass, which resulted in a greater potential for glass breakage in the hinge/bolt attachment area. Instead, hinge fracture in the area of the pin, as seen on these 2004 model year vehicles, does not directly affect the hinge/glass attachment interface and, accordingly, is much less likely to result in glass breakage. More typically, customers who have reported a fractured hinge on 2004 model year vehicles typically note shifting of the glass out of position following hinge fracture, the majority without any associated injury or glass breakage.

Further, the rate of hinge fracture complaints (0.75R/1000) on 2004 model year Explorer and Mountaineer vehicles is significantly lower than that associated with the recall population (over 2R/1000), despite the fact that the 2004 model year vehicles have more than twice the average time in service than the recalled vehicles had at the time that Ford's recall decision was made. The injury allegation rate is also significantly lower, approximately 1/5th that of vehicles involved in the earlier Ford recall.

While some reports indicate that liftgate glass fell due to a broken hinge and contacted a customer with no glass breakage, very few allege or describe bruising or any type of injury resulting from such contact. For example, one customer indicated in a report to Ford (VIN:1FMZU73K64Z [REDACTED]) that they were contacted by the liftgate glass when the hinge fractured, but specifically stated that they were not injured. A review of customer statements in several VOQs where the injury field was populated (e.g. ODI numbers 10194140, 10231333, 10194738, 10157805) simply found statements that the liftgate glass contacted a customer following hinge fracture, with no description of any injury or need for medical attention.

Ford acknowledges that it has received a few reports of minor injury due to conditions other than glass breakage (and even fewer injury allegations associated with glass breakage), although the number is extremely low and the alleged injuries are apparently very minor in nature. For example, the customer in one VOQ (ODI number 10225708) alleged a cut to the hand when the glass fell after a hinge broke, though a search of Ford's databases was unable to find any report to Ford relating to this incident. The customer in another VOQ (ODI number 10205897) alleged an injury, but offered no details within the VOQ. This customer stated in a related owner report to Ford that they were "hit on the back" but made no mention of any injury. The customer in another VOQ (ODI number 10144852) stated their "left shoulder has been hurting since the incident." However, a related owner report to Ford regarding this incident does not make any mention of injury. Ford is aware of four reports (VINs: 1FMZU74W64UA [REDACTED], 1FMZU73K64UA [REDACTED], 1FMZU62K04ZA [REDACTED] and 1FMZU73K14UB [REDACTED]) in which customers allege minor cuts to their head or face when the liftgate glass fell, though none were reported to have resulted from broken glass. Again, the extent of these injuries appears to be minor.

Though a small percentage of reports received by Ford that relate to a fractured hinge on the subject vehicles also indicate associated glass breakage, Ford believes there are few resulting "injuries" and that even those few are minor in nature. In fact, most reports involving glass breakage do not indicate any injury, whatsoever, as a consequence. The liftgate glass in these vehicles conforms to FMVSS 205, which requires the glass to be manufactured "to reduce injuries resulting from impact" should the glass break. Ford is aware of only three allegations of minor injury that are attributed to a fractured hinge and associated broken glass on these vehicles. One customer (VIN 1FMDU73W94UB [REDACTED]) alleges cuts to either their feet or hands resulting from broken glass. Related photos contained in Appendix D depict very minor cuts to the skin. The other two reports allege some type of injury but offer no detail, from which Ford surmises that the alleged injuries, if confirmed, would have been minor in nature.

It is understandable that a customer who has experienced a broken liftgate glass hinge on a 2004 model year Explorer or Mountaineer might be confused or expect repair assistance based on Ford's recall of earlier model year vehicles with a different design hinge. A review of the reports finds many in which the customer is simply seeking reimbursement for repair costs based on Ford's previous recall.

As described above, and supported by a review of the reports provided in this response, differences in hinge design result in differences in the rate, cause, and effect of a fractured hinge in these vehicles compared to those in the recalled vehicles. Based on these differences, the associated and significantly lower complaint rate, the warning, and the notably lower risk of any type of injury associated with this subject, Ford finds no basis to conclude that fracture of the liftgate glass hinge in the 2004 model year Explorer and Mountaineer presents any unreasonable risk to motor vehicle safety.