

Ford Motor Company

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

May 3, 2005

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

Dear Ms. DeMeter:

Subject: EA05-004:NVS-212pc0

The Ford Motor Company (Ford) response to the agency's March 14, 2005 letter concerning reports of alleged front seat belt buckle failure in certain model year 2001 Ford, Lincoln and Mercury vehicles is attached.

There are more than 1.8 million buckles in service on vehicles that have passed the recall inspection since July 2001 when the recall was announced. As of today, recall completion data indicates that 90% of the vehicles that passed the recall inspection, or had at least one buckle replaced under the recall, have at least 24 months in service. More than 98% of those vehicles have not reported any buckle latching concerns since the recall remedy was performed.

Ford estimates that vehicles with buckles that passed the recall inspection have accumulated nearly 27 billion miles since the completion of the recall inspection. Despite the significant number of vehicle miles accumulated subsequent to completion of the recall, there have been very few accidents or injuries that are alleged to be associated with the alleged defect. Based on this information, and the current low and still diminishing complaint rate, Ford does not believe that there is a pattern of a defect that presents an unreasonable risk to safety.

Ford acknowledges that there have been customer complaints regarding the performance of some buckles after they passed the recall inspection. Yet, analysis of these reports clearly indicates that the current rate of complaints is low and continues to diminish considerably. This is also evident from the incident dates reported in VOQs. Ford notes that of the incidents reported in VOQs, only four alleging a concern with a front safety belt buckle after the recall inspection from a population of greater than one million vehicles have occurred since January 2004.



It is reasonable to anticipate that the service procedure naturally resulted in a higher than normal number of customer complaints. Some customers will not be satisfied with the inspection procedure. Others will report unrelated events to the recall condition further complicating the issue. All allegations of buckle unlatching can not be accepted without additional substantiation. As the agency has determined in the past, theories about how a buckle may unlatch actually can generate buckle unlatching allegations. Unfortunately, the recall service procedure lends itself to such allegations. As indicated earlier, the number of reports is significantly diminishing. Given the limited number of accident allegations related to the alleged defect and the notably diminishing rate of reports, Ford does not believe that there is a pattern of a defect in the buckles that presents an 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 EA05-004

Ford's response to this Engineering Analysis (EA05-004) 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 every effort to provide thorough and accurate information, and we would be pleased to meet with agency personnel to discuss any aspect of this EA.

The scope of Ford's investigation conducted to locate responsive information focused on Ford employees most likely to be knowledgeable about the subject matter of this inquiry and on review of Ford files in which responsive information ordinarily would be expected to be found and to which Ford ordinarily would refer, as more fully described in this response. Ford notes that although electronic information was included within the scope of its search, Ford has not attempted to retrieve from computer storage electronic files that were overwritten or deleted. As the agency is aware, such files generally are unavailable to the computer user even if they still exist and are retrievable through expert means. To the extent that the agency's definition of Ford includes suppliers, contractors and affiliated enterprises for which Ford does not exercise day-to-day operational control, we note that information belonging to such entities ordinarily is not in Ford's possession, custody or control. However, differing from normal Ford procedure, information required to answer certain of your requests was provided to Ford by TRW, the subject vehicle buckle supplier. TRW voluntarily assisted Ford in responding to your requests in order to provide you with the most accurate and complete information possible. Ford has construed this request as pertaining to vehicles manufactured for sale in the United States, its protectorates and territories.

In a March 17, 2005 telephone conversation, Mr. Tom Cooper of the agency informed Ford personnel that the scope of the information request pertains to subject vehicles that were inspected in accordance with the service procedure for recall 01S21 and in which one or both front safety belt buckles passed the inspection.

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 March 14, 2005, the date of your inquiry. Ford has searched business units and/or affiliates within the following offices for responsive documents: Environmental and Safety Engineering, Ford Customer Service Division, Marketing and Sales Operations, Purchasing, Quality, Global Core Engineering, Office of the General Counsel, Vehicle Operations, North American Car Product Development, North American Truck Product Development.

Request 1

State, by model year and model, the number of subject vehicles Ford has manufactured for sale or lease in the United States with 01V227 recall service performed. 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. What action taken in the recall (Inspection Only, Replaced Both, Replaced L, Replaced R or Unknown); and
- h. Date of recall action performed.

Due to the large vehicle population, only those vehicles with original 01V227 recall service performed (approximately 1.1 million vehicles) shall be included (note that item "h" was not previously requested). Provide the information for each model in Microsoft Access 2000, or a compatible format, entitled "EA R-PRODUCTION DATA."

Answer

The total number of model year 2001 vehicles that have had the recall service performed, including both inspection and/or buckle replacement, 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 provided in Appendix A (file: 2005-05-03_Appendix_A) on the enclosed CD.

Request 2

State by model, 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 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. All reports/incidents involving a previously completed recall remedy vehicle are to be identified and counted. Multiple reports of the same vehicle but of different seat positions are to be identified and counted. Multiple reports of the same incident are also to be identified and 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 "d," 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 potentially involving 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, and the Fleet Test Database systems, and the criteria used to search each of these are provided electronically in Appendix B (file: 2005-05-03_Appendix_B) on the enclosed CD.

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

Category Allegation

A1	Buckle allegedly comes unlatched while vehicle is in motion.
A2	Buckle allegedly comes unlatched - unsure if occurred while vehicle was in motion or parked.
A3	Buckle allegedly won't latch at all/hard to latch.
A4	Buckle allegedly inoperative/failure not specific.
B1	Ambiguous complaint regarding belt assembly, unclear if related to buckle performance.

Ford is voluntarily providing electronic copies of category B1 reports 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: Ford searched its Ford Master Owner Relations Systems (MORS) database records, as described in Appendix B. The resulting records were then reviewed and categorized in accordance with the categories described above. The categorized records can be found in Appendix C (file: 2005-05-03_Appendix_C) on the enclosed CD. The categorization of each report is identified in the "Category" field. The requested total of each item (e.g., consumer complaints, field reports, etc.) is also provided in Appendix C. 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 is marked accordingly, and the group is counted as one report. In other cases, certain vehicles may have experienced more than one incident and have more than one report associated with their VINs. These reports have been counted separately. In addition, three category A1 and four category A4 MORS reports are duplicative of Vehicle Owner Questionnaires (VOQ) reports and are provided in Appendix C.

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. Based on this search, one file was located and a copy is provided in Appendix D (file: 2005-05-03_Appendix_D).

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: The number of field reports identified in a search and review of the Ford Common Quality Indicator System (CQIS) records, as described in Appendix B, is provided by category in the CQIS portion of the electronic database contained in Appendix C. Copies of these field reports are also provided in the Appendix C. The categorization of each report is identified in the "Category" field. When we were able to identify that responsive (i.e., not ambiguous) duplicate field reports for an alleged incident were received, each of these duplicate reports is marked accordingly. In other cases, certain vehicles may have experienced more than one incident and have more than one report associated with their VINs. In addition, Ford identified two category A1 and four category A4 CQIS reports that are duplicative of VOQs and are provided in Appendix C.

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. Ford provided copies of UDB records in response to the RQ04-011 information request because a small percentage of those records contained customer or technician comments that might clarify the nature of the customer's concern or the need for repair. Due to changes in Ford's business and Information Technology processes, such customer and technician comments are no longer collected for UDB records. Accordingly, UDB records that are now collected no longer contain information that could be used to determine whether they relate to the alleged defect. Ford nonetheless searched UDB as described in Appendix B, and is providing the results in Appendix M in response to Request 10.

VOQ Data: This information request had an attachment that included five VOQs. Ford made inquiries of its MORS database for customer contacts, and its CQIS database for field reports regarding the vehicles reported in 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, as appropriate, and have been identified by a "Y" in the "VOQ Dup" field.

Ford notes that VOQ 10092755 is a duplicate of VOQ 10089720 that was addressed as part of Ford's response to RQ04-011 [VIN: 1FTYR14UX1P██████████]. According to Ford recall records, this particular vehicle was never brought into a Ford dealership to have the safety belt buckle recall remedy performed, and therefore is not part of the subject vehicle population.

Ford notes that the customer in VOQ 10050247 is not alleging any concern with the buckle, but simply stating that the buckles were not replaced by the dealership at the time of the recall inspection.

Crash/Injury Incident Claims: For purposes of identifying alleged accidents or injuries potentially related to the alleged defect, Ford reviewed responsive (i.e., not ambiguous) owner and field reports, lawsuits and claims, and warranty claims. Based on a reasonable and diligent search, Ford located two owner (MORS) reports alleging some type of buckle complaint associated with an accident. One report [VIN: 1FTZF07221K██████████] indicates that a buckle became unlatched when the vehicle hit a deer. The customer acknowledges that occupants had experienced buckle unlatching prior to this incident but the customer had not taken the vehicle to a dealership for service.

The second owner report [VIN: 2MEFM75W01X██████████] alleges that "THE SEAT BELT FLEW OPEN" and described the injury as "BRUISING ON CHEST AREA". However according to the information in the litigation prevention file, the customer indicates that she is not pursuing any

type of injury claim. A copy of the litigation prevention file is provided in Appendix D (file: 2005-05-03_Appendix_D).

One of the ambiguous reports [VIN 1FMRU15W61L [REDACTED] provided in this response refers to some type of injury allegedly related in some way to the restraint system. However, the allegation relating to the safety belt in this report is general, simply claiming inadequate restraint without more detail. The customer states the "SAFETY BELT DID NOT HOLD HER IN," but there is no indication or assertion that the buckle and latch became separated. However, due to the broad scope of this request, Ford is providing a copy of the MORS report as an ambiguous report in the MORS portion of Appendix C.

As the agency has previously determined, allegations of safety belt buckle unlatching can not be accepted without additional substantiation. Frequently, post-accident analyses and investigations of an alleged safety belt buckle unlatching disclose evidence that the safety belt was not used at the time of the accident, or that the safety belt had performed properly. In other instances, customers simply allege that a safety belt failed to restrain them in an accident, without allegation of any specific defect. Again, investigation of such reports often discloses that the restraint system performed properly and that customers sometimes have inappropriate expectations of system performance characteristics in an accident.

Claims, Lawsuits, and Arbitrations: For purposes of identifying incidents potentially related to the alleged defect, Ford gathered claim and lawsuit information maintained by Ford's OGC. Ford's OGC is responsible for handling product liability lawsuits, claims, and consumer breach of warranty lawsuits and arbitrations against the Company.

Based on a reasonable and diligent search, Ford did not locate any new lawsuits or legal claims that appear to relate to the alleged defect in the subject vehicles received subsequent to Ford's response to the agency's request for information (RQ04-011) in December 2004. Ford also searched for new information relating to the lawsuit and claim reports provided in response to RQ04-011. No pertinent new information relating to these reports has been received.

Request 3

Separately, for each model and 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 recall inspection procedure was previously performed;
- j. Whether driver-side, passenger-side or both outboard-side seat belt buckles were replaced;
- k. Whether a crash is alleged;

- i. Whether property damage is alleged;
 - m. Number of alleged injuries, if any; and
 - n. Number of alleged fatalities, if any.
- Clearly specify the seat position of each buckle replaced. Provide this information in Microsoft Access 2000, or a compatible format, entitled "EA MFR RPT DATA."

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 that the information requested in Request 3 is available, it is provided in that database. Information requested in items "i" and "j", to the extent it is available, is provided in response to Request 1 in the table titled "Subject Vehicles Sales". This table also includes the recall repair information for all VINs that have been brought in for the recall remedy. To the extent available, Ford is providing information identifying the seat position of the buckle that is the subject of the customer's concern in a field called "Alleged_Side" in the electronic database contained in 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 model and category (i.e., consumer complaints, field reports, etc.) and describe the method Ford used for organizing the documents.

Answer

Ford is providing electronic copies of responsive as well as ambiguous owner and field reports in the database contained in Appendix C on the enclosed CD in response to Request 2.

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 for vehicles that have had the remedy recall procedure previously performed 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, "subsequent recall claim," or seat belt replacement made in accordance with the procedure specified in the original recall campaign since Ford's cut-off date for collecting information provided in its previous response.

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. Whether recall remedy procedure was previously performed;

- h. Whether the driver-side, passenger-side or both outboard seat belt buckles were originally replaced;
- i. Whether the driver-side, passenger-side or both outboard seat belt buckles were replaced under this claim;
- j. Labor operation number,
- k. Problem code;
- l. Replacement part number(s) and description(s);
- m. Concern stated by customer; and
- n. Comment, if any, by dealer/technician relating to claim and/or repair.

Clearly specify the seat position of each buckle replaced, Provide this information for each model in Microsoft Access 2000, or a compatible format, entitled "EA WARRANTY DATA."

Answer

In responding to this information request, Ford electronically searched its Analytical Warranty System (AWS) for all claims meeting the criteria described in Appendix B. The resulting claims were then reviewed individually for allegations that may relate to the alleged defect. The number of warranty claims and electronic copies of the claims that may relate to the alleged defect are provided in the AWS portion of the electronic database contained in Appendix C. The categorization of each report is identified in the "Category" field. When we were able to identify that duplicate claims for an alleged incident were received, each of these duplicate claims is marked accordingly and the group is counted as one report. In other cases, certain vehicles may have experienced more than one incident and have more than one claim associated with their VINs. These claims have been counted separately.

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.

Information requested in items "g" and "h", to the extent it is available, is provided in response to Request 1 in the table titled "Subject Vehicles Sales". This table also includes the recall repair information for all VINs. Requests for "claims for good will services that were provided; field, zone, or similar adjustments and reimbursements" received by Ford to date that relate to the alleged defect in the subject vehicles that were honored would be provided in the warranty section of Appendix C. Such requests that were not honored, if any, would be included in the MORS reports identified above in response to Request 2.

For information requested in item "i", to the extent available, Ford is providing information identifying the seat position of the buckle that is the subject of the customer's concern in a field called "Alleged_Side" in the electronic database contained in Appendix C.

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

The criteria used for searching Ford's Analytical Warranty System (AWS) are described in Appendix B. All claims coded under the selected part numbers were included in this search regardless of labor operation or problem codes. The resulting claims were then reviewed individually for allegations that may relate to the alleged defect.

The standard new vehicle warranty coverage for 2001 model year Ford vehicles is three years or 36,000 miles, whichever occurs first. Warranty coverage on the restraint system, including the safety belts, is five years or 50,000 miles, whichever occurs first. A list of Extended Service Plans (ESP) that cover the subject components is provided in Appendix E (file: 2005-05-03_Appendix_E) along with time-in-service and mileage coverage by plan. This appendix also includes the count of subject vehicles that are covered by each ESP.

Request 7

Produce copies of all service, warranty, and other documents that relate to, or may relate to, the subject component in the subject vehicles and the training and use of the "special tool," that Ford has issued during original recall 01V227 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 alleged defect in the subject vehicles, Ford has reviewed the following FCSD databases and files: The On-Line Automotive Service Information System (OASIS) containing Technical Service Bulletins (TSBs) and Special Service Messages (SSMs); Internal Service Messages (ISMs) contained in the 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 FRC files and the search criteria used are provided in Appendix B.

OASIS Messages: Ford did not identify any SSMs or TSBs that relate to the alleged defect in the subject vehicles.

Internal Service Messages: Ford did not identify any ISMs that relate to the subject component on the subject vehicles.

Field Review Committee: Ford did not identify any field service action communications that relate to front safety belt buckle failure after performance of the recall remedy (the subject of this inquiry.)

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 subject component or the proper use of the "special tool," in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Ford. Include any work performed during the "RQ" phase of the investigation. 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 groups/supplier(s) responsible for designing and for conducting the action; and
- f. A brief summary of the findings and/or conclusions resulting from the action.

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

Answer

Ford is construing this request broadly and providing not only studies, surveys, and investigations related to the alleged defect, but also notes, correspondence, and other communications that were located pursuant to a diligent search for the requested information. Ford is providing the responsive non-confidential Ford documentation in Appendix F (file: 2005-05-03_Appendix_F).

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.

As the agency is aware, Ford and TRW (the buckle supplier) have analyzed buckles that have been replaced to further understand the field performance of these buckles. Information relating to this effort is being provided in Appendix K (file: 2005-05-03_Appendix_K) on the enclosed CD and is further discussed in response to Request 11.

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

Request 9

Describe all modifications or changes made by, or on behalf of, Ford in the design, material composition, manufacture, quality control, supply, 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 including in detail the root cause and manufacturing corrective action used during the original recall campaign (01V227). Include all process or inspection changes made for buckles used as the replacement part and buckle used in subsequent vehicles manufactured at the assembly plants. 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

In a March 17, 2005 telephone conversation, Mr. Tom Cooper of the agency informed Ford personnel that the scope of this request pertains to the subject vehicles and the time immediately following the recall period. Accordingly, we are providing information regarding modifications or changes through December 2001.

Ford understands this request to relate to changes or modifications to front outboard safety belt buckle assemblies that were originally manufactured on the vehicles that were subject to recall 01S21. The information required to respond to this request was provided to Ford by TRW, the buckle supplier. TRW voluntarily assisted Ford in responding to this request in order to provide the agency with the most accurate and complete information possible. A table describing changes or modifications made between January 2001 and December 2001 is provided electronically with a request for confidentiality under separate cover as Appendix H (file: 2005-05-03_Appendix_H) to the agency's Office of the Chief Counsel pursuant to 49 CFR, Part 512. The table provided in Appendix H includes the changes identified in our response to RQ04-011 which included changes up to May 2001.

Request 10

State the number of each of the following that Ford has sold subsequent to the recall campaign notification of July, 2001, 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. Driver-side seat belt buckle; and
- b. Passenger-side seat belt buckle.

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

Answer

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

Ford is identifying in electronic form in Appendix I (file: 2005-05-03_Appendix_I) on the enclosed CD the total number of Ford service replacement front safety belt buckles since Ford's response to RQ04-011 by part number (both service and engineering) and calendar month and year of sale where available. A list of models and model years for which these parts are released and supplier names and contacts are also provided in this appendix. Parts used for recall 01S21 repairs are also included in this sales information. Results of the UDB search, as discussed in UDB section of Ford's response to Request 2, are also provided in Appendix I.

Request 11

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

- a. The causal or contributory factor(s);
- b. The failure mechanism(s);
- c. The failure mode(s);
- d. The high rate of warranty claim buckle repairs on vehicles built in early-2001;
- e. The risk to motor vehicle safety that it poses;
- f. What warnings, if any, the operator and the other persons both inside and outside the vehicle would have that the alleged defect was occurring or subject component was malfunctioning; and
- g. The reports included with this inquiry.

Answer

There are more than 1.8 million buckles in service on vehicles that have passed the recall inspection since July 2001 when the recall was announced. As of today, recall completion data indicates that 90% of the vehicles that passed the recall inspection or had at least one buckle replaced under recall, have at least 24 months in service. More than 98% of those vehicles have not been the subject of any reported buckle latching concerns since the recall remedy was performed.

As part of the recall, a special tool was developed to inspect the safety belt buckles in the subject vehicles. In Appendix L (bates 10829 -10836) in the confidential portion of its response to RQ04-011, Ford submitted documents to the agency that pertain to an extensive study conducted by TRW on the recall inspection tool prior to the recall to validate its repeatability and reproducibility. This study demonstrated that the tool, when used according to the published

instruction, would not only reject suspect buckles, but it would also conservatively reject approximately five percent of buckles that are nonetheless expected to perform as designed. The inspection procedure for this recall lends itself to difficult customer satisfaction issues.

Ford acknowledges that there have been customer complaints regarding the performance of some buckles after they passed the recall inspection. Yet, analysis of these reports clearly indicates that the current rate of complaints is low and continues to diminish considerably. This is also evident from the incident dates reported in VOQs. Ford notes that of the incidents reported in VOQs, only four alleging a concern with a front safety belt buckle after the recall inspection from a population of greater than one million vehicles have occurred since January 2004.

Of the responsive reports provided in our responses to RQ04-011 and EA05-004, approximately 92% were reported more than 12 months ago, while less than three percent have been reported in the last six months. While these vehicles are getting older and continue to accumulate miles, the rate of reports has dropped considerably. Based on this trend, Ford does not expect a significant number of buckle failures in the future. Future report projection analysis supports the expectation of few additional buckle failures.

Ford estimates that vehicles with buckles that passed the recall inspection have accumulated nearly 27 billion miles since the completion of the recall inspection. Despite the significant number of vehicle miles accumulated subsequent to completion of the recall, there have been very few accidents or injuries that are alleged to be associated with the alleged defect. Though Ford has received one allegation of a fatality related to a buckle unlatching during a rollover accident due to a defective buckle, subsequent analysis has found that the evidence contradicts this assertion. Details regarding this incident are further discussed below. Based on this information, and the current low and still diminishing complaint rate, Ford does not believe that there is a pattern of a defect that presents an unreasonable risk to safety.

Additionally, once customers receive recall notices about a safety belt buckle and buckles are not replaced, many customers will relate any buckle concerns, regardless of the cause, back to the safety recall. Our analysis of the returned parts has demonstrated this natural consequence of inspecting, but not replacing buckles. As mentioned in Ford's response to RQ04-011, Ford and TRW, the safety belt buckle supplier, have been collecting warranty return parts for five months and analyzing them. In the process, over 100 buckles from customer vehicles that alleged some type of concern relating to the buckle have been analyzed. Of these buckles, 32% were found to contain some type of contamination that is believed to be the cause of the specific performance complaint, six percent were found to have no latching issues when tested with the recall inspection tool or with a production tongue and 56% were found to fail the inspection with the recall tool. TRW notes that this percentage of buckles with contamination is consistent with its analysis for buckle-related complaints on other vehicle lines where return buckles exhibit some performance degradation. The remaining six percent were found to have some type of external damage or concern unrelated to the recall. This analysis demonstrates that the inspection procedure is effective in identifying buckles affected by the recall inspection procedure. Information pertaining to this analysis is provided in Appendix J (file: 2005-05-03_Appendix_J) for the agency's review.

In December 2004, Mr. Peter Ong of the agency contacted Ford requesting recall information on a 2001 Grand Marquis [VIN: 2MEFM74WX1X] and requesting that Ford analyze safety belt buckles from that vehicle. Ford had provided two MORS reports pertaining to this vehicle in its December 15, 2004 response to RQ04-011 that alleged a fatality in a rollover accident. Ford notes that the police report relating to this incident states the driver of the vehicle was not wearing his safety belt at the time of the accident.

Ford and TRW personnel examined the vehicle and front safety belt buckles with the claimant's attorney on January 13, 2005. A summary of the observations and results of this evaluation is provided in Appendix K with a request for confidentiality under separate cover to the agency's Office of the Chief Counsel.

On April 8, 2005, TRW performed a thorough analysis of these buckles at TRW's engineering facility, Ford personnel and the claimant's attorney's representative were also present during this evaluation. A summary of the observations and results of this evaluation is also provided in Appendix L with a request for confidentiality under separate cover to the agency's Office of the Chief Counsel at the request of TRW. According to TRW's engineering analyses of this particular buckle design, full buckle load capability is achieved when the latch tip protrudes at least 0.43 mm through the latch window. Photographic representation of the measurement process used to evaluate the buckles from the vehicle is also provided in Appendix L. Several measurements of the latch tip protrusion were taken for each of the buckles. In each instance, the average measurement across the latch tip exceeded 0.43 mm. This confirms that the buckle exceeded the level required to provide full load capability. Also, no evidence of damage or chipping of the latch tooth was observed in the tear-down analysis. Latch tooth damage or chipping could occur if the latch was partially engaged (less than 0.43 mm) at the time of severe loading to the restraint system during a vehicle accident. The amount of engagement as well as the lack of any damage or chipping of the latch tip provides further indication that buckle performance was not compromised by any design or manufacturing related factors. Though each of these buckles did not pass the recall inspection tool at some point during the evaluation, we note that buckle contamination (either resulting from the vehicle maintenance practices of the owner or resulting from environmental exposure to the elements during this vehicle's storage in outdoor for over a year in an unprotected environment broken windows following the accident) likely contributed to the buckle's performance when tested with the inspection tool. Based on these findings, and the fact that the latch tip engagement was found to exceed the required protrusion dimension as established by TRW's testing, Ford believes that the buckle would have performed as designed and the unfortunate consequences associated with this accident were not related to the buckle performance. A copy of the analysis is provided in Appendix L with a request for confidentiality from TRW under separate cover to the agency's Office of the Chief Counsel.

Based on the reports that have been identified in response to RQ04-011 and EA05-004, there appears to be a relatively higher report rate associated with vehicles built during the January through April 2001 time period compared to vehicles built earlier in the recall period. Though there is a distinct difference in the complaint rates between these vehicle populations, Ford believes this is simply attributed to the combination and interaction of the root causes that were the basis of 01S21 recall. Those root causes were due to variability of TRW's manufacturing process during that time frame. Ford notes that the recall was announced in July 2001 as soon as those concerns were identified. We do not believe there is any significance associated with

this disparity in report rates, and note that the recall encompassed all vehicles within this timeframe, not just those vehicles built during the elevated report rate period.

It is reasonable to anticipate that the service procedure naturally resulted in a higher than normal number of customer complaints. Some customers will not be satisfied with the inspection procedure. Others will report unrelated events to the recall condition further complicating the issue. All allegations of buckle unlatching can not be accepted without additional substantiation. As the agency has determined previously, theories about how a buckle may unlatch actually can generate buckle unlatching allegations. Unfortunately, the recall service procedure lends itself to such allegations.

As indicated previously, the number of reports is significantly diminishing. Given the limited number of accident allegations related to the alleged defect and diminishing rate of reports, Ford does not believe that there is a pattern of a defect in the buckles that presents an unreasonable risk to safety.

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