



Full
2/28/06

RECEIVED
NHTSA

FEB 24 4 19

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

Fairlane Plaza South
330 Town Center Drive
Dearborn, MI 48128-2736 USA

February 22, 2006

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: PE 05-086:NVS212-cag

The Ford Motor Company (Ford) response to the agency's December 21, 2005, letter concerning potential failure of brake lamps in 2003-2005 model year Ranger vehicles is attached.

The agency opened this investigation based solely on a Technical Service Bulletin (TSB) issued by Ford. The TSB was issued to aid service technicians in the identification and repair of a wire chafe condition at the CHMSL that, while rare, was found to be difficult for service technicians to diagnose and locate. The reports of brake lamp outages provided in response to this information request represent a very low rate of occurrence. Ford has neither received any reports from customers of any safety concern relating to this condition in these vehicles, nor has Ford identified any allegations of accidents or even near accidents relating to this subject. Based on the above, there is no indication of any unreasonable risk to the safe operation of these vehicles.

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 PE05-066

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.

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 December 21, 2005, the date of your inquiry. Ford has searched within the following offices for responsive documents: Ford Customer Service Division, Quality, Global Core Engineering, Office of the General Counsel, Automotive Safety Office, North American Truck Product Development.

Request 1

State, by model and model year, the number of subject vehicles Ford has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by Ford, state the following:

- a. Vehicle identification number (VIN);
- b. Make;
- c. Model;
- d. Model Year;
- e. Date of manufacture;
- f. Date warranty coverage commenced.; and
- g. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

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

Answer

Ford records indicate that the approximate total number of subject 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 496,679.

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

Model	2003 MY	2004 MY	2005 MY
Super Cab	141,975	110,384	61,280
Regular Cab	82,916	60,848	39,278

The requested data for each subject vehicle is provided electronically in Appendix A (filename: 2006-02-22 Appendix A) on the enclosed CD.

Request 2

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

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

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

In addition, for items "c" through "f," provide a summary description of the alleged problem and causal and contributing factors and Ford's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "e" and "f," identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

Answer

For purposes of identifying reports of incidents that may be related to the alleged defect and any related documents, Ford has gathered "owner reports" and "field reports" maintained by Ford

Customer Service Division (FCSD), fleet reports maintained in a Fleet Test Database, and claim and lawsuit information maintained by Ford's Office of the General Counsel (OGC).

Descriptions of the FCSD owner and field report systems, and the Fleet Test Database system, and the criteria used to search each of these are provided electronically in Appendix B (filename: 2006-02-22 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	Allegations of inoperative brake lamps due to wire chafe at the CHMSL.
B	Allegations of inoperative brake lamp(s) attributable to an inoperative bulb.
C	Allegations of inoperative brake lamp(s) attributable to another cause or unknown cause.
D	Reports that are ambiguous if related to inoperative brake lamps

Because the subject of this inquiry is related to a Technical Service Bulletin (TSB) issued to address wire chafing at the Center High Mount Stop Lamp (CHMSL), Ford is not including reports relating to external lamp damage, moisture in the lamp assembly, or reports related to components that do not affect the operation of the brake lamps, such as back-up lamps and 4-way flashers.

We are providing electronic copies of reports categorized as "D" as "non-specific allegations" for your review because of the broad scope of the request. These reports refer to electrical issues or lamp outage where the information is unclear whether these reports relate specifically to a brake lamp, tail lamp, rear turn signals, back-up lamps, license plate lamps, front headlamps or front turn signals, or even lights in the interior of the vehicle. Ford notes that the tail lamps in these vehicles include the brake lamps, the running lamps, the turn signals, and the back-up lamps. Many reports, for example, indicate some type of outage relating to "a light in the rear" without specifying the affected lamp or function. Other reports indicate an open fuse without specifying the circuit or what caused the fuse to blow. 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 C1 (filename: 2006-02-22 Appendix C1 Regular Cab) for Regular Cab vehicles and in Appendix C2 (filename: 2006-02-22 Appendix C2 Super Cab) for Super Cab vehicles on the enclosed CD. Ford is providing these reports in separate databases because, as the agency is aware, the TSB, which is the basis for this investigation, was for Super Cab vehicles only. 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. No responsive (i.e. not ambiguous) owner reports indicate that they are Legal Contacts.

Fleet Reports: In addition to fleet reports that may be contained in the owner reports or field reports identified in this response, Ford conducted a search of its Fleet Test Database as described in Appendix B for reports that may relate to the alleged defect in the subject vehicles. No fleet reports were identified that may relate to the alleged defect.

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 sorted by 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 Appendices C1 and C2 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 Appendices C1 and C2 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 of reports and copies identified in this review that may relate to the agency's investigation based on verbatim comments is provided in Appendices C1 and C2.

VOQ Data: At the time this investigation was opened, NHTSA indicated that they had not received any Vehicle Owner's Questionnaires (VOQs) relating to this subject. Ford notes that it recently searched (February 21, 2006) the VOQ database and was unable to locate any VOQs related to this issue even after the opening of the Preliminary Evaluation.

Crash/Injury Incident Claims: For purposes of identifying allegations of accidents or injuries that may have resulted from the alleged defect, Ford has reviewed owner and field reports, and lawsuits and claims. No reports alleging crash or injury resulting from the alleged defect in the subject vehicles were identified.

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 in accordance with the categories described above. Ford did not locate any lawsuits, claims or consumer breach of warranty lawsuits that relate to the alleged defect in the subject vehicles.

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 fire is alleged;
- k. Whether property damage is alleged;
- l. Number of alleged injuries, if any; and
- m. Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "COMPLAINT DATA".

Answer

Ford is providing owner and field reports in the electronic database contained in Appendices C1 and C2 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.

Request 4

Produce electronic copies of all documents related to each item within the scope of Request No. 2 and 3. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method Ford used for organizing the documents.

Answer

Ford is providing owner and field reports in the electronic database contained in Appendices C1 and C2 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 that relate to, or may relate to, the alleged defect in the subject vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign.

Separately, for each such claim, state the following information:

- a. Ford's claim number;
- b. Vehicle owner or fleet name (and fleet contact person) and telephone number;

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

Provide this information in Microsoft Access 2000, or a compatible format, entitled "WARRANTY DATA."

Answer

Because the subject of this inquiry is related to a TSB issued to aid in the diagnosis of potential wire chafing at the CHMSL, Ford's search for warranty claims was conducted for brake lamp failure claims related to wiring and connector issues.

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 Appendices C1 and C2 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 Appendices C1 and C2 but are not indicated in the report count.

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

No special warranty extensions have been issued on the subject components. For 2003-2005 model year Ranger 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 (ESP) were available to cover various vehicle systems, time in service and mileage increments. The details of the various plans are provided electronically in Appendix D (filename: 2006-02-22 Appendix D) on the enclosed CD.

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, bulletin, 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 failure of brake lamps to function, 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 (ISM) contained in CQIS; and Field Review Committee (FRC) files. We assume this request does not seek information related to electronic communications between Ford and its dealers regarding the order, delivery, or payment for replacement parts, so we have not included these kinds of information in our answer.

A description of Ford's OASIS messages, Internal Service Messages, and the Field Review Committee files and the search criteria used are provided in Appendix B.

OASIS Messages: Ford has identified no SSMs and one TSB that relates to brake lamp concerns in the subject vehicles and is providing a copy in Appendix E (filename: 2006-02-22 Appendix E).

Internal Service Messages: Ford has identified one ISM that relates to brake lamp concerns in the subject vehicles and is providing a copy in Appendix E.

Field Review Committee: Ford has identified no field service action communications that may relate to this request.

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. Include all actions that

led to the issuance of TSB #05-6-19. 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 searched not only for 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: 2006-02-22 Appendix G). Documents relating to actions that lead to the development and issuance of TSB 05-6-19 can be found in the file titled "Field Communications" in Appendix G.

Ford is submitting additional responsive documentation as Appendix H (filename: 2006-02-22 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 interests 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. Include in your response a detailed description of the subject vehicles. For each such modification or change, provide the following information:

- a. The date or approximate date on which the modification or change was incorporated into vehicle production;
- b. A detailed description of the modification or change;
- c. The reason(s) for the modification or change;
- d. The part numbers (service and engineering) of the original component;

- e. The part number (service and engineering) of the modified component;
- f. Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;
- g. When the modified component was made available as a service component; and
- h. Whether the modified component can be interchanged with earlier production components.

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

Answer

A table of the requested changes for the CHMSL and the harness to the CHMSL is provided electronically as Appendix F (filename: 2006-02-22 Appendix F) on the enclosed CD.

Request 10

Identify by make, model and model year, any other vehicles of which Ford is aware that contain the subject component, whether installed in production or in service. Indicate whether Ford has received any complaints for the alleged defect in these vehicles.

Answer

In a February 8, 2006, telephone conversation with Ford personnel, Mr. Cooper of the agency indicated that Ford need not respond to this question at this time.

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 effect(s) of the failure on the subject components and/or systems in the vehicle;
- 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 the subject component was malfunctioning;
- g. A description of the analysis process used to assess "a" through "f," and;
- h. The reports generated as a result of this inquiry.

Answer

The agency opened this investigation based on a TSB issued by Ford. The TSB was issued to aid service technicians in the identification and repair of a wire chafe condition at the CHMSL that, while rare, was found to be difficult for service technicians to diagnose and locate. The reports of brake lamp outages provided in response to this information request represent a very low rate of occurrence. Due to the broad scope of the agency's request, Ford is providing reports that allege brake lamp outage due not only to wire chafe at the CHMSL (the specific subject of this TSB) but also brake lamp outage due to a variety of other causes. Analysis of these reports has not found any defect trend; rather, analysis has found these reports to be

typical of the electrical conditions that can occur in any vehicle as a result of system complexities.

Technical Service Bulletins and the Rationale for Ford TSB 05-6-19

As the agency is aware, service and repair of vehicles is performed by thousands of dealerships. Part of the relationship between dealers and manufacturers includes providing information to service technicians to assist in efficient diagnosis, troubleshooting, and repair of vehicles. Ford, like many other auto manufacturers, routinely issues such field communications for a variety of reasons. For instance, Ford issues TSBs to provide awareness to technicians of new technologies or new tool availability, to alert them to feature, component or calibration changes, or to assist in diagnosis of difficult symptoms. Such service bulletins may result, for example, from Ford's receipt of calls at the FCSD technical hotline by technicians requesting assistance with diagnosis, or from items identified by Plant Vehicle Team members.

TSB 05-6-19 was written specifically to aid service technicians in the identification and repair of a wire chafe condition at the CHMSL resulting in a short circuit that, while rare, was found to be difficult for service technicians to diagnose and locate. In late 2004, Ford Customer Service Division employees identified a limited number of field reports relating to diagnosis and repair of chafed wires at the CHMSL that required significant technician time. For example, one vehicle required three repair attempts, at a total cost of over \$450, and significant inconvenience to the customer before the proper repair was completed. Repairs associated with other vehicles were in excess of \$200, principally due to the amount of time it took the technician to diagnose and locate the source of the short circuit. In fact, some repairs were found to take well over two hours in diagnosis and location of this chafe condition. One technician indicated that he disassembled the interior of the vehicle in an attempt to locate the short circuit.

A short circuit of the CHMSL wire can be particularly difficult for technicians to diagnose because the circuitry for the CHMSL is routed behind the instrument panel, under the carpet next to the driver's door, up and behind the B-pillar trim and behind the headliner at the rear of cab where the CHMSL assembly is located. In addition, there are no wiring interconnects that allow the technician to test the circuitry along the length of the harness resulting in a labor intensive diagnostic effort with no assurance that the short will be immediately located, especially if it is intermittent. The TSB was written to aid technicians in diagnosis of this potential condition that could result in a repair that is not only less expensive but also quicker for the customer and less intrusive in the interior of the vehicle.

Distinctive Differences in Body Styles

The subject TSB applies specifically to Ranger Super Cab vehicles due to the unique package in the area of the CHMSL. The CHMSL wiring in a Super Cab vehicle enters the CHMSL through an oval opening on the interior sheet metal directly in front of the CHMSL. A combination of factors can affect package clearances in this area, including variation between the body sheet metal and the interior sheet metal, headliner decking, and wire routing. An example of this can be seen in photographs of a 2004 model year Super Cab vehicle provided in Appendix I (filename: 2006-02-22 APPENDIX I). In contrast, the sheet metal package and CHMSL wire routing in this area of Regular Cab vehicles differs significantly from that in Super Cab vehicles, resulting in a unique package that is not related to the specific subject of this TSB. This also can be seen in photographs of a 2004 model year Regular Cab vehicle also provided in APPENDIX I. These differences are further supported by Ford's analysis of reports relating specifically to CHMSL wire chafe as further discussed below.

Data Analysis

Ford's review of files conducted to respond to this information request identified only 120 reports (2% of the total reports) appear to relate to brake lamp outage due wire chafe near the CHMSL. Of these 120 reports, 115 pertain to Super Cab vehicles confirming our assessment that this particular CHMSL wire chafe condition is specifically related to the unique Super Cab CHMSL package. Ford notes that a few reports of brake lamp outage were identified for Regular Cab vehicles; however, these are likely unrelated to the specific and unique subject addressed by this TSB based on the distinct vehicle packages.

Of the 120 reports alleged to relate to the condition addressed by this TSB, at least 25 relate to vehicles for which some type of repair was attempted at least once prior to the TSB repair that finally resolved the concern. This confirms that such communications are a valuable tool for aiding technicians in diagnosis and repair of even rare events, as they can and do provide both a cost effective as well as timely repair diagnosis and remedy, to the benefit of both technicians and customers. The apparent lack of repeat visits on vehicles that received the repair outlined in the TSB suggests that stop lamp(s) concerns related to CHMSL wire chafe are being accurately identified and resolved.

While the condition resulting in the TSB has been found to exist, the rate of related repairs is very low. In fact, only 115 repairs relating to this condition have been reported on an affected Super Cab vehicle in a population of over 313,000 vehicles resulting in a very low report rate of less than 0.4 R/1000.

Typically when a TSB is issued to the field, there is an increase and steady rate of reports relating to a repair as recommended in the TSB. In this case, when reports are evaluated based on the repair date, 60% of the repairs occurred in the first five months after issuing the field communication. After August 2005 there is a steady decline of repairs relating to this TSB.

Ford notes that 79% of the responsive repairs relate simply to bulb outage. Bulbs by nature are routine wear items that periodically cease to function and require replacement.

Another 15% of the responsive reports provided in this response pertain to outage of brake lamp(s) or the CHMSL due to a wide variety of other factors. Analysis of these reports has not found any specific defect pattern, but rather has found these reports to be typical of the wide variety of electrical anomalies that can be found in the complexities of any vehicle. These reports relate to such miscellaneous items as switches, connectors, electrical short or open circuits of various kinds, or even installation or mis-installation of aftermarket accessories. Further, the percentage of these reports that relate to Regular Cab vehicles and Super Cab vehicles closely mirrors the vehicle populations of Regular Cab and Super Cab vehicles. This indicates that such electrical concerns, while a source of customer dissatisfaction, do not appear to be related to specific or unique vehicle model variation. This contrasts with the unique Super Cab characteristics associated with the CHMSL TSB.

CONCLUSION

While brake lamp concerns in the Ranger Super Cab vehicles due to wire chafe at the CHMSL are a source of dissatisfaction to both vehicle owners as well as service technicians attempting a difficult diagnosis, they do not constitute an unreasonable risk to safe operation of the vehicles. TSB 05-6-19 was written to aid in the diagnosis of a wire chafe at the CHMSL based only on a limited number of reports in which diagnosis was found to be difficult and costly. Ford notes that the agency had not received any VOQs at the time this investigation was opened. Ford has neither received any reports from customers of any safety concern relating to this condition in these vehicles, nor has Ford identified any allegations of accidents or even near

accidents relating to this subject. Based on the above analysis and the extremely low rate of reports related to this condition, there is no indication of any unreasonable risk to the safe operation of these vehicles.