



OFFICE OF DEFECTS &
INVESTIGATIONS
ER
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Ms. Emily Reichard
Safety Defects Engineer
NHTSA – Office of Defects Investigation
Room W48-215
1200 New Jersey Avenue, SW
Washington, DC 20590

July 5, 2013

Re: NVS-212eer; PE13-015

Dear Ms. Reichard:

Enclosed is Mazda's response to the information request letter we received regarding PE13-015. The data files are included in the enclosed CD.

Mazda is not claiming any of the information to be confidential, however some of the records being provided may contain personal information, addresses, phone numbers, etc. and therefore should be treated in accordance with NHTSA's guidelines for protection of personal information.

If you have any questions or need further information please do not hesitate to contact me. My telephone number is 313-594-7778.

Sincerely,


David Robertson, Group Manager
Environmental, Safety and Powertrain Eng.
Mazda North American Operations

enclosures



Mazda Response: NHTSA Inquiry NVS-212eer, PE13-015

Mazda has prepared this response to PE13-015 after a thorough search for the information requested and has made every effort to provide thorough and accurate information to support this information request.

The answers to your questions are set forth below. In accordance to your request, the question is first cited, with the response directly following its question.

Mazda has based the scope of this search on the following criteria:

Subject vehicles: all MY 2009 Mazda6 vehicles manufactured for sale or lease in the United States.

Subject component: all door latch assemblies, including but not limited to any mounting or securing hardware, manufactured on the subject vehicles.

Alleged defect: Any of the side doors fail to properly latch when closed and/or open inadvertently after being closed.

Mazda notes that some of the documents and information that are provided in response to this inquiry might contain personal customer information such as customer names, addresses, and telephone numbers, as well as, full Vehicles Identification Numbers (VINs). Mazda respectfully requests that such personal information not be made public under FOIA Exemption 6. 5 U.S.C. 552 (b) (6).

Request 1. *State, by model and model year, the number of subject vehicles Mazda has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by Mazda, state the following:*

- a. Vehicle identification number (VIN);*
- b. Date of manufacture;*
- c. Assembly plant of manufacture;*
- d. Date warranty coverage commenced; and*
- e. 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 2010, or a compatible format, entitled "PRODUCTION DATA."

Response 1

Data collected in response to Request 1 focused on all 2009 Mazda6 vehicles, and was collected during the week of May 27 and last updated on June 10, 2013, and provides information that is current to that point of collection. The summary table shown below along with the data detail is provided separately in Microsoft Access format entitled **PRODUCTION DATA** in Appendix 1.

Country	Subject Vehicles
US	39,187
Puerto Rico	237
Grand Total	39,424

Request 2. State the number of each of the following, received by Mazda, or of which Mazda 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;
- d. Property damage claims;
- e. Third-party arbitration proceedings where Mazda is or was a party to the arbitration; and
- f. Lawsuits, both pending and closed, in which Mazda is or was a defendant or codefendant.

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

In addition, for items "c" through "f," provide a summary description of the alleged problem and causal and contributing factors and Mazda'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.

Response 2

The results of data collected for request 2, subparts “a” through “f” are summarized in the chart below and includes reports collected through June 12, 2013. Multiple incidents involving the same vehicle have been counted separately and multiple reports in regard to the same incident have also been counted separately.

Mazda identified 66 cases. Included in the consumer reports made to Mazda, a search for VOQ’s meeting our search criteria identified a total of 6 VOQ’s (includes the 4 reports provided by NHTSA with this PE) meeting the alleged defect for subject vehicles.

Category	Count
a. Consumer Complaints	38
b. Field Reports	24
c. Crash, Injury or Fatality	0
d. Property Damage	0
e. Arbitration/Mediation	0
f. Lawsuits	0
Grand Total	62

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. Mazda’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;*
- l. Number of alleged fatalities, if any*
- m. Which door(s) was/were affected;*
- n. Whether the door(s) came open after closing, and*
- o. Whether the vehicle was in motion at the time of the incident*

Provide this information in Microsoft Access 2010, or a compatible format, entitled "REQUEST NUMBER TWO DATA."

Response 3

The requested information, to the extent it is available, for consumer complaints, field reports, crash, injury or fatality reports, property damage claims, arbitration/mediations, and lawsuits in response to request 2 separately in Microsoft Access format entitled **REQUEST NUMBER TWO DATA** in Appendix 3.

Each record has been assigned a File Id that has been prefixed with the source of the information as follows:

File Id Prefix	Category	Source of Information	Number of Files
ODI	Consumer Complaints	NHTSA VOQs	6
Care	Consumer Complaints	Mazda Care Survey	9
CAC	Consumer Complaints	Customer Assistance Center	23
HTLN	Field Reports	Technical Hotline	12
PQI	Field Reports	Product Quality Information	12
Grand Total			62

Request 4. Produce copies of all documents related to each item within the scope of Request No. 2. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method Mazda used for organizing the documents.

Response 4

Documents related to Request 2 to the extent they are available, can be found in the folder titled **REQUEST NUMBER TWO DOCUMENTS** in Appendix 3.

All documents are organized in sub-folders as follows:

- **CAC Documents sub-folder:** contains data from Mazda’s Epiphany system. Our Customer Assistance Center logs all files related to customer contacts in Epiphany. In the case of telephone calls, there are no reports associated with the file, so an Excel Spreadsheet with details of the call (**CAC Epiphany Extract**) can be found in that folder. In addition if the contact was initiated with any type of written document, these can be found in the **CAC Written Documents** sub-folder.
- **Field Reports sub-folder:** contains data from Mazda’s New National System (NNS). All hotline technical calls and product quality information reports from dealers and/or field personnel are logged into the NNS system. Hence no physical reports exist for these files. So

an Excel spreadsheet with details of the technical hotline calls (Technical Hotline Extract), and a second spreadsheet (PQI Extract) have been included in this folder.

- Mazda Care Survey sub-folder: This folder contains copies of the Care Surveys (Care Survey) included in response 3.
- VOQs sub-folder: This folder contains the 2 VOQs found in addition to the original 4 VOQs included with this request.

(*)NNS: New National System is a database system maintained by Mazda North American Operations (MNAO). It is a core information system and supports various customer service activities such as customer relations, repair inquiry, warranty claim submission and others.

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 Mazda 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:

- Mazda's claim number;*
- Vehicle owner or fleet name (and fleet contact person) and telephone number;*
- VIN;*
- Repair date;*
- Vehicle mileage at time of repair;*
- Repairing dealer's or facility's name, telephone number, city and state or ZIP code;*
- Labor operation number;*
- Problem code;*
- Replacement part number(s) and description(s);*
- Concern stated by customer; and*
- Comment, if any, by dealer/technician relating to claim and/or repair.*

Provide this information in Microsoft Access 2010, or a compatible format, entitled "WARRANTY DATA."

Response 5

In response to request 5, a search of the Mazda Global Warranty System has been completed as of June 12, 2013 and the results are provided in file WARRANTY DATA in Appendix 5.

Please note that these claims are submitted to Mazda by dealers to seek payment for repairs, which they have made related to the door latch assembly. This list includes claims which may not be directly related to the alleged defect and also includes insufficient information to accurately determine why a repair was made, if the repair was appropriate, or even if the repair was necessary.

Below is a summary of the warranty data collected by labor operation:

Labor Operation	Claim Count
DOOR LOCK ASSEMBLY, R&R - LEFT SIDE	128
DOOR LOCK ASSEMBLY, R&R - RIGHT SIDE	75
ACTUAL TIME	34
DOOR CHECKER, R&R, LEFT SIDE	21
DOOR CHECKER, R&R, RIGHT SIDE	14
DOOR TRIM, R&R - LEFT SIDE	8
DOOR LOCK ASSEMBLY, R&R - ALL	8
DOOR TRIM, R&R - RIGHT SIDE	5
DOOR STRIKER, R&R, RIGHT SIDE	4
DOOR STRIKER, R&R, LEFT SIDE	4
INNER HANDLE, R&R, RIGHT SIDE	3
DOOR BODY, R&R, LEFT SIDE	3
WIRING HARNESS, DIAGNOSE	2
INNER HANDLE, R&R, LEFT SIDE	2
INNER HANDLE COVER, R&R - RIGHT SIDE	2
DIAGNOSTICAR RUIDO VIBRACION Y ASPEREZA	2
GLASS & GLASS HOLDER, R&R, RIGHT SIDE	2
DOOR HINGE, R&R, RIGHT SIDE	1
OUTER HANDLE (BRACKET), R&R, RIGHT SIDE	1
LOWER PANEL, R&R	1
FRONT DOOR FITTING, ADJUST, RIGHT SIDE	1
POWER WINDOW SWITCH, R&R (FRONT) LEFT SIDE	1
FRONT DOOR HARNESS, R&R - BOTH SIDES	1
DOOR HINGE, R&R, LEFT SIDE	1
DOOR CHECKER, R&R, A11	1
OUTER HANDLE (BRACKET), R&R, ALL	1
INNER HANDLE COVER, R&R - BOTH SIDE	1
POWER WINDOW REGULATOR, R&R, RIGHT SIDE	1
INNER HANDLE COVER, R&R - LEFTT SIDE	1
Grand Total	333

Request 6. Describe in detail the search criteria used by Mazda 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 Mazda 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 Mazda 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.

Response 6

Mazda Global Warranty System was used to provide an initial search of all warranty claims that may have occurred.

Search Criteria:

- Model / Model Year: Mazda6 / 2009
- Claim Received Date: All claims received through June 12, 2013
- Claim part is any of the subject components (As for list of full parts, refer to Part Number Details sheet included in spread sheet file **SUBJECT COMPONENT PARTS DATA** in Appendix 10.

Analysts then reviewed the data and kept claims that may be related to the alleged defect. Please note that sometimes the warranty claims don't offer enough detailed information to make an accurate assessment on the repair, so this list includes claims which may not be directly related to the alleged defect.

2009 Mazda6 Warranty Coverage:

Warranty Type	Term in Months	Term in Miles
Basic Warranty	36	36,000
OEM Battery	36	Unlimited
Powertrain	60	60,000
Safety	60	60,000
Perforation	60	Unlimited
Federal Emissions	96	80,000

Mazda does not extended warranty coverage option(s) which covers the door latch components.

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 Mazda has issued to any dealers, regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but is not limited to, bulletins, advisories, informational documents, training documents, or other documents or communications, with the exception of standard shop manuals. Also include the latest draft copy of any communication that Mazda is planning to issue within the next 120 days.

Response 7

As for door latch assembly, Mazda has not issued any service documents that relate to, or may relate to, the alleged defect in the subject vehicles. Also there are no drafts of service documents planned to be issued within the next 120 days.

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, Mazda. 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.

Response 8

Response to request 8 are provided in file **ACTION LIST** in Appendix 8. Copy related to the action is provided attachment from "a" through "g".

"Long screw" stated in attached document is not related to the screw looseness/falling of the alleged defect.

Request 9. Describe all modifications or changes made by, or on behalf of, Mazda in the design, material composition, manufacture, quality control, supply, or installation of the subject component, from the start of production to date, which relate to, or may relate to, the alleged defect in the subject vehicles. For each such modification or change, provide the following information:

- a. The date or approximate date on which the modification or change was incorporated into vehicle production;
- b. A detailed description of the modification or change;
- c. The reason(s) for the modification or change;
- d. The part number(s) (service and engineering) of the original component;
- e. The part number(s) (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 Mazda is aware of which may be incorporated into vehicle production within the next 120 days.

Response 9

Mazda confirmed that there was no fact that modifications or changes made by, or on behalf of, Mazda, in the design, material composition, manufacture, quality control, supply, or installation of the subject component, and there will not be such modifications or changes as well as well as in the next 120 days.

Request 10. State the number of each of the following that Mazda has sold that may be used in the subject vehicles by component name, part number (both service and engineering/production), model and model year of the vehicle in which it is used and month/year of sale (including the cut-off date for sales, if applicable):

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

For each component part number, provide the supplier's name, address, and appropriate point of contact (name, title, and telephone number). Also identify by make, model and model year, any other vehicles of which Mazda is aware that contain the identical component, whether

installed in production or in service, and state the applicable dates of production or service usage.

Response 10

Mazda service parts are sold to authorized Mazda dealers for their part sales and service requirements. Mazda has no means to determine if and when the parts were actually used by the dealer parts department.

No kits have been released or developed by Mazda for use in service repairs to the door latch assembly.

None of the parts included in the subject component have any sale cut-off dates.

Please refer to Excel document **SUBJECT COMPONENT PARTS DATA** in Appendix 10 for part vendor, model applications, and sales data.

Request 11. *Furnish Mazda'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.*

Response 11

In our preliminary analysis of this alleged defect Mazda has identified the failure symptom of this event as loosening and/ or complete unthreading of one or more of the mounting screws for securing the door latch assembly to the door shell mounting area. As a result of loose or missing mounting screws, the door latch assembly may become misaligned in the door shell and may not ensure engagement of the striker to the door latch assembly when closing the door to the body.

Mazda has identified the possible causal factor(s) of mounting screw loosening: (1) Design/Structure problem, (2) Abnormality in precision of concerned parts, (3) Insufficient torque applied in vehicle assembly process and/or (4) improper field adjustment/repair of the door latch assembly.

If the door latch mounting is loose then when closing the door, users may experience the following conditions: (1) door half-latch or partial latch engagement or, (2) door latch assembly

does not function properly. In the event that either condition (1) or (2) occurs, the door ajar warning will illuminate on the instrument panel / cluster if the door latch assembly fails to engage the striker properly. Mazda has designed the door ajar switch into the door latch assembly and it is switched "on" and "off" by the full engagement of the striker on all subject vehicles. This door ajar switch controls the activation of the door ajar indicator icon on the instrument panel / cluster. During event (1) or (2), customers may also notice or observe some pre-warning abnormalities that the door is not closed properly as indicated by excessive door gap / noise / rattling when this event occurs. In condition (1) during dynamic vehicle operation, the door will not open even if half-latch occurs because of partial latch to body striker engagement. In condition (2), because the door latch assembly is not latched to the striker, the door may open while driving only if the driver fails to notice the pre-warning of the door ajar warning on the instrument panel / cluster.

Mazda's believes that no unreasonable safety risk is present due to prior warning of this event with the door ajar warning illumination on the instrument panel / cluster, as long as customers assess this warning appropriately and are properly secured with a seat belt. Analysis of four (4) VOQs, ODI#10406174, #10492403, #10503682, #10508051, door latch malfunction complaints indicated that all three (3) mounting screw to the door latch assembly are missing. Therefore, Mazda is confirming that this occurred because mounting screws were loosened and fell out by one of the causal modes mentioned above. Of the four (4) ODI Reports, there was very limited detail of the failure mode information of customer's identification factors /events (door ajar lamp or noise) of pre-warning at the time of their door malfunction events. Mazda's records for these four (4) ODI complaints has yielded very limited Dealer and Customer Assistance Center Records to further understand this event. If additional NHTSA information is available, please forward to Mazda for further analysis.