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INFORMATION Redacted PURSUANT TO THE FREEDOM OF
INFORMATION ACT (FOIA), 5 U.S.C . 552(B)(6)



February 01, 2013

Mr. Frank Borris, Director
Office of Defects Investigation
Office of Enforcement
National Highway Traffic Safety Administration
1200 New Jersey Avenue, SE
Washington, D.C. 20590

RE: NVS-212mjl, EA12-008

Dear Mr. Borris:

This letter provides a response to your above referenced request for information, dated December 18, 2012.

Prior to responding to the request, Hyundai objects to NHTSA's boilerplate definition of "Document" as vague, incomprehensible, overly broad and unduly burdensome. Hyundai has made a good faith, reasonable attempt to search for and provide materials responsive to each request in the time frame provided.

Request 1.

State, by model and model year, the number of the subject vehicles and the other Hyundai vehicles that Hyundai-Kia has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by Hyundai-Kia, 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. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease); and
- h. Headliner substrate type material (see Request No. 10 for background information for this item).

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HATCI is an authorized representative of both Hyundai Motor Company and Kia Motors Corporation; which are separate and distinct automotive manufacturers.

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Provide the table in Microsoft Access 2010, or a compatible format, entitled "PRODUCTION DATA."

Response to Request 1.

- 1) 2011 Hyundai Elantra vehicles manufactured in Korea: 38,273.
- 2) 2012 Hyundai Elantra vehicles manufactured in Korea: 76,463.
- 3) 2013 Hyundai Elantra vehicles manufactured in Korea: 64,307.
- 4) 2009 Hyundai Elantra Touring vehicles: 8,090.
- 5) 2010 Hyundai Elantra Touring vehicles: 15,019
- 6) 2011 Hyundai Elantra Touring vehicles: 13,999
- 7) 2012 Hyundai Elantra Touring vehicles: 14,854
- 8) 2007 Hyundai Veracruz vehicles with optional sunroof: 8,526
- 9) 2008 Hyundai Veracruz vehicles with optional sunroof: 12,515
- 10) 2009 Hyundai Veracruz vehicles with optional sunroof: 1,833
- 11) 2010 Hyundai Veracruz vehicles with optional sunroof: 5,012
- 12) 2011 Hyundai Veracruz vehicles with optional sunroof: 7,072
- 13) 2012 Hyundai Veracruz vehicles with optional sunroof: 7,199
- 14) 2010 Hyundai Tucson vehicles with optional sunroof: 4,324
- 15) 2011 Hyundai Tucson vehicles with optional sunroof: 8,657
- 16) 2012 Hyundai Tucson vehicles with optional sunroof: 8,096
- 17) 2013 Hyundai Tucson vehicles with optional sunroof: 6,382
- 18) 2012 Hyundai Accent vehicles with optional sunroof: 0
- 19) 2013 Hyundai Accent vehicles with optional sunroof: 1,131
- 20) 2012 Hyundai Azera vehicles with optional sunroof: 4,457
- 21) 2013 Hyundai Azera vehicles with optional sunroof: 3,354

See "PRODUCTION DATA.accdb" in RESPONSE TO REQUEST 1 attachment for requested additional information.

Source: Hyundai Motor America
Information as of January 16, 2013

Request 2.

State the number of each of the following, received by Hyundai-Kia, or of which Hyundai- Kia is otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles and or the alleged condition in the other Hyundai 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;

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- e. Third-party arbitration proceedings where Hyundai-Kia is or was a party to the arbitration; and
- f. Lawsuits, both pending and closed, in which Hyundai-Kia 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 Hyundai-Kia'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 to Request 2.

- a. Hyundai consumer complaints, including those from fleet operators;

None

- b. Hyundai field reports, including dealer field reports;

None

- c. Hyundai 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;

One, the subject 2012 Elantra (KMHDH4AE7CU[REDACTED]). Refer to the response to request number 38 for additional requested information.

- d. Hyundai property damage claims;

None

- e. Third-party arbitration proceedings where Hyundai is or was a party to the arbitration; and

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None

- f. Lawsuits, both pending and closed, in which Hyundai is or was a defendant or codefendant.

None

Source: Hyundai Motor America
Information as of January 16, 2013

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. Hyundai-Kia's file number or other identifier used;
- b. The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);
- c. Vehicle owner or fleet name (and fleet contact person), address, and telephone number;
- d. Vehicle's VIN;
- e. Vehicle's make, model and model year;
- f. Vehicle's mileage at time of incident;
- g. Incident date;
- h. Report or claim date;
- i. Whether a crash is alleged;
- j. Whether property damage is alleged;
- k. Number of alleged injuries, if any; and
- l. Number of alleged fatalities, if any.

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

Response to Request 3.

See "REQUEST NUMBER TWO DATA.accdb" in RESPONSE TO REQUEST 3 attachment for requested information.

Source: Hyundai Motor America
Information as of January 25, 2013

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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 Hyundai-Kia used for organizing the documents.

Response to Request 4.

See RESPONSE TO REQUEST 4 attachment for requested Hyundai report information.

Source: Hyundai Motor America
Information as of January 25, 2013

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 Hyundai-Kia to date that relate to, or may relate to, the alleged defect in the subject vehicles and/or the alleged condition in the other Hyundai vehicles, including all claims for repairs of the subject components that relate to, or may relate to, a detachment, separation or looseness of the stiffener in the headliner assembly associated with a side curtain air bag deployment (e.g., owner reporting a rattling sound from headliner): 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 (TSB) or customer satisfaction campaign. Also, state, by model and model year, a total count for all claims that relate to repairs related to any TSBs involving the subject components.

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

- a. Hyundai-Kia's claim number;
- b. Vehicle owner or fleet name (and fleet contact person) and telephone number;
- c. Vehicle's VIN;
- d. Vehicle's make, model and model year;
- e. Repair date;
- f. Vehicle mileage at time of repair;
- g. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
- h. Labor operation number;
- i. Problem code;
- j. Whether or not the repair is related to a TSB (and if so, identify the TSB number);
- k. Replacement part number(s) and description(s);
- l. Concern stated by customer; and
- m. Comment, if any, by dealer/technician relating to claim and/or repair.

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

Response to Request 5.

There have been no claims (warranty claims; extended warranty claims; claims for goodwill 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) paid by Hyundai to date that relate to separation or looseness of the stiffener in the headliner assembly associated with a side curtain air bag deployment.

The total count for claims that have been paid by Hyundai to date which are responsive to the "owner reporting a rattling sound from the headliner" example described in Request 5 are as follows:

- 1) 2011 Hyundai Elantra vehicles manufactured in Korea: 5.
- 2) 2012 Hyundai Elantra vehicles manufactured in Korea: 19.
- 3) 2013 Hyundai Elantra vehicles manufactured in Korea: 4.
- 4) 2009 Hyundai Elantra Touring vehicles: 8.
- 5) 2010 Hyundai Elantra Touring vehicles: 14.
- 6) 2011 Hyundai Elantra Touring vehicles: 5.
- 7) 2012 Hyundai Elantra Touring vehicles: 8.
- 8) 2007 Hyundai Veracruz vehicles with optional sunroof: 2.
- 9) 2008 Hyundai Veracruz vehicles with optional sunroof: 2.
- 10) 2009 Hyundai Veracruz vehicles with optional sunroof: 3.
- 11) 2010 Hyundai Veracruz vehicles with optional sunroof: 3.
- 12) 2011 Hyundai Veracruz vehicles with optional sunroof: 8.
- 13) 2012 Hyundai Veracruz vehicles with optional sunroof: 2.
- 14) 2010 Hyundai Tucson vehicles with optional sunroof: 2.
- 15) 2011 Hyundai Tucson vehicles with optional sunroof: 2.
- 16) 2012 Hyundai Tucson vehicles with optional sunroof: 0.
- 17) 2013 Hyundai Tucson vehicles with optional sunroof: 0.
- 18) 2012 Hyundai Accent vehicles with optional sunroof: 0.
- 19) 2013 Hyundai Accent vehicles with optional sunroof: 1.
- 20) 2012 Hyundai Azera vehicles with optional sunroof: 1.
- 21) 2013 Hyundai Azera vehicles with optional sunroof: 1.

Total count for all claims that relate to repairs related to any TSBs involving the subject components: 0

See "WARRANTY DATA.accdb" in RESPONSE TO REQUEST 4 attachment for additional requested information.

Source: Hyundai Motor America
Information as of January 25, 2013.

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Request 6.

Describe in detail the search criteria used by Hyundai-Kia 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 and/or the alleged condition in the other Hyundai vehicles. State, by make and model year, the terms of the new vehicle warranty coverage offered by Hyundai-Kia 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 Hyundai-Kia 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 to Request 6.

The claims were identified by searching for all subject and other vehicle warranty claims containing information for the Headliner Operation Codes (refer to RESPONSE TO REQUEST 6 attachment for a complete list of related Labor Operation, Nature, and Cause Codes) or Headliner Part Numbers. The claims were then manually reviewed for customer or technician comments responsive to the parameters described in Request 5.

The Hyundai New Vehicle Limited Warranty period is limited to 60 months from the date of original retail delivery or date of first use, or 60,000 miles, whichever occurs first. The headliner is covered by the Hyundai New Vehicle Limited Warranty.

As the subject and other vehicles are 2009-2013 model year vehicles for which the Hyundai New Vehicle Limited Warranty is in effect, no extended warranty information is applicable.

Source: Hyundai Motor America
Information as of January 25, 2013

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 and/or the alleged condition in the other Hyundai vehicles, that Hyundai-Kia 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 Hyundai-Kia is planning to issue within the next 120 days.

Summarize and provide a brief chronology of all actions taken by Hyundai-Kia leading to each technical service bulletin that has been issued relating to the alleged defect in the subject vehicles and/or the alleged condition in the other Hyundai vehicles. Provide copies of all documents, organized in chronological order, related to the development of these bulletins.

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Response to Request 7.

No responsive Hyundai documents exist.

Source: Hyundai Motor America
Information as of January 25, 2013

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 and/or the alleged condition in the other Hyundai vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Hyundai-Kia. This includes, but is not limited to, any and all actions by the subject component manufacturer relating to the alleged defect. 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. If an action is not complete, provide a detailed schedule for the work to be done, tentative findings and/or conclusions, and provide an update within 10 days of completion of the action.

Response to Request 8.

Hyundai Motor Company's Crash Performance Development Team conducted thirteen (13) side curtain air bag deployment tests prior to the subject incident. In each of these tests, the headliner support brackets remained securely attached to the headliner substrate. See RESPONSE TO REQUEST 14(A) attachment.

Following the report of the subject incident, Hyundai Motor Company's Crash Performance Development Team conducted six (6) additional side curtain air bag deployment tests in an attempt to duplicate the reported condition in the subject vehicle. The support bracket became dislodged only during the condition where spray adhesive was eliminated from the assembly process. See in RESPONSE TO REQUEST 6 attachment.

Following the report of the subject incident, Hyundai Motor Company contacted eight (8) retail customers in the Korean market who had purchased vehicles with production dates in the range

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of the incident vehicle (June 16, 2012). The headliners of these vehicles (with a headliner manufacturing process identical to those of Elantras exported to the US) were removed and inspected for any indications of a lack of adhesion between the support brackets and the headliner substrate. Inspection revealed the headliner support brackets securely attached to the headliner substrate. See in RESPONSE TO REQUEST 6 attachment for an exemplar vehicle inspection summary matrix and related photographs.

Source: Hyundai Motor Company
Information as of July 10, 2012

Request 9.

Describe all modifications or changes made by or on behalf of Hyundai-Kia (e.g., by a supplier) in the design, material composition, manufacture, assembly, quality control, supply, or installation of the subject components in the subject vehicles, from the start of production to the end of production of the subject vehicles, 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) (engineering and service) of the original component;
- e. The part number(s) (engineering and service) 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 Hyundai-Kia is aware of which may be incorporated into vehicle production within the next 120 days.

Response to Request 9.

No modifications or changes made by or on behalf of Hyundai have occurred in the design, material composition, manufacture, quality control, supply, or installation of the support brackets to the headliner substrate.

RESPONSE TO REQUEST 9 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

No modifications or changes related to the manufacturing of the headliner assembly are planned to be incorporated into vehicle production within the next 120 days.

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Source: Hyundai Motor Company
Information as of January 25, 2013

Request 10.

ODI has identified headliner materials that appear to have different textures and toughness. The headliner from the field incident vehicle has a headliner substrate (or the outer layer material of the side facing the roof of the vehicle) identifiable by gray color. The second headliner is from a MY 2012 Elantra and its substrate material is identifiable by tan color. NHTSA's New Car Assessment Program conducted a side pole impact test of this vehicle on November 15, 2011, at MGA Research Corporation.

State, by model year, production time period and headliner substrate type /material, the number of the subject vehicles that Hyundai-Kia has manufactured for sale in the United States. Describe in detail the differences between the two headliner substrate materials described above, as well as any other types of substrate materials used in the subject components (headliner assemblies) in the subject vehicles. This includes, but is not limited to, the material properties and specifications of all substrate materials used, including information on their strength and resistance to delamination. Explain why different types of substrate materials were used in the subject components for the subject vehicles, how they can be distinguished from one another, specify all adhesives used and whether the same adhesives and hot glues are used for all different types of substrates, and whether any testing was conducted to evaluate the adhesion between the headliner and stiffener, and if any testing was conducted, provide the results of the testing.

Response to Request 10.

The lighter color nonwoven fabric was used from initial production through November 24, 2011. A darker color nonwoven fabric was introduced on November 25, 2011. With the exception of the nonwoven fabric color, the two materials are identical. The headliner manufacturing process did not change with the nonwoven fabric change.

RESPONSE TO REQUEST 10 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Request 11.

Produce copies of all documents, including all photographs, videos and notes, which relate to the inspection of the field incident vehicle conducted by Hyundai-Kia on or about May 23, 2012, in Longview, Texas.

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Response to Request 11.

See RESPONSE TO REQUEST 11 for requested information.

Sources: Hyundai Motor America, Hyundai Motor Company
Information as of January 25, 2013

Request 12.

Produce copies of all specifications, requirements, and guidelines that relate to the design and assembly of the subject components in the subject vehicles.

Response to Request 12.

RESPONSE TO REQUEST 12 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Request 13.

Produce copies of all documents related to the development, validation, testing, and analysis of the subject components in the subject vehicles that have been conducted by or on behalf of Hyundai-Kia.

Response to Request 13.

RESPONSE TO REQUEST 13 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Request 14.

Produce copies of all documents related to all side crash tests of the subject vehicles that have been conducted by or on behalf of Hyundai-Kia.

Response to Request 14.

See RESPONSE TO REQUEST 14(A) for requested information. RESPONSE TO REQUEST 14(B) has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

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Source: Hyundai Motor Company
Information as of January 25, 2013

Request 15.

Separately, describe in detail the process used to attach the metal stiffener to the headliner substrate in the subject vehicles including, but not limited to, the following information:

- a. Type description, specification, manufacturer, and photographs of the tool used to apply the adhesive to the stiffener;
- b. Process for applying the spray adhesive on one side of the stiffener, and whether the process is conducted by a human operator or a robotic device;
- c. Type, description, specification, manufacturer, and photographs of the assembly fixture used to hold the headliner for the purposes of affixing the stiffener;
- d. Process for attaching the stiffener to the headliner, including how much time elapses after force application, and how much force is specified for pressing together the two components; and
- e. Process for handling and storing the spray adhesive materials, including all procedures specified by the adhesive supplier.

In addition, produce copies of all documents related to this request.

Response to Request 15.

The assembly process of the headliner can be described as follows:

1. The support brackets are coated on one side with a resin based spray adhesive using an industrial adhesive spray gun. This is performed by a human operator. The production requirement is 100% adhesive coverage of the support bracket surface which contacts the headliner substrate.
2. The metal support brackets are then placed in an assembly fixture to properly locate the brackets for attachment to the polyurethane-based headliner substrate.
3. The headliner substrate is then compressed with an industrial press to form the headliner and securely attach the support brackets to the headliner substrate.
4. The headliner is subject to a visual inspection to confirm support bracket attachment and acceptable visual appearance
5. The excess material is trimmed from the headliner assembly edges using an industrial trimming press.
6. A polyolefin-based adhesive (hot melt) is applied to ends of the metal support brackets. The specification is for a continuous bead of the adhesive to be applied between the edge of the metal support bracket and the headliner substrate. The adhesive extends 10 centimeters from each end of the metal support bracket.

RESPONSE TO REQUEST 15 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

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Source: Hyundai Motor Company
Information as of July 10, 2012

Request 16.

Separately, describe in detail the process used to apply the hot glue to the ends of the stiffener and headliner substrate in the subject vehicles including, but not limited to, the following information:

- a. Type, description, specification, manufacturer, and photographs of the tool used to apply the hot glue to the stiffener;
- b. Process for applying the hot glue to the stiffener, and whether the process is conducted by a human operator or a robotic device; and;
- c. Process for handling and storing the spray adhesive materials, including all procedures specified by the adhesive supplier.

In addition, produce copies of all documents related to this request.

Response to Request 16.

Refer to RESPONSE TO REQUEST 15 for requested information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Request 17.

Separately, describe in detail each type of quality control check, inspection, test, or analysis performed during the manufacture and assembly of the subject components for the subject vehicles, and specifically with respect to the adhesion of the stiffener to the headliner substrate, the application of adhesive to the stiffener, and the application of the hot glue material to the headliner. For each check, test, inspection, etc., describe the types of information or data collected and the frequency they are collected at. Explain the pass-fail criteria for each check, test, inspection, etc.

In addition, produce copies of all documents related to this request.

Response to Request 17.

RESPONSE TO REQUEST 17 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Hyundai-Kia America Technical Center, Inc

Request 18.

Produce copies of all documents, including all data collected, which relate to the quality control records for the manufacture and assembly of the subject components for the day the headliner assembly installed in the field incident vehicle was manufactured. Provide the same quality control information for the headliner assemblies manufactured during the following time periods: one week before, one month before, four months before, one week after, one month after, and four months after the date the headliner assembly in the field incident vehicle was manufactured. Provide one full day's record for each time period specified.

Response to Request 18.

RESPONSE TO REQUEST 18 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Request 19.

Separately, describe in detail the process for receiving, handling and inspecting the subject components to be installed in the subject vehicles. Provide the number of shipments of the subject components that Hyundai's subject vehicle assembly plant(s) received and the number of headliner assemblies contained in each shipment for the day the field incident vehicle was built. Provide a typical number of shipments per day and a typical number of headliner assemblies in each shipment at around the time period in which the field incident vehicle was built. Provide the normal and expected time duration between the assembly of the headliner at the supplier and the arrival at the vehicle assembly plant.

Response to Request 19.

RESPONSE TO REQUEST 19 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Request 20.

For the following, provide the date and time, or approximate time:

- a. The headliner assembly in the field incident vehicle was manufactured/assembled;
- b. The same headliner was received by Hyundai's vehicle assembly plant; and;
- c. The same headliner was installed in the field incident vehicle.

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Explain whether the time duration between the headliner assembly and headliner installation was shorter, longer or normal when compared to the normal or expected time duration.

Response to Request 20.

RESPONSE TO REQUEST 20 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Request 21.

Provide in miles the distance between the subject component supplier facility and Hyundai's subject vehicle assembly plant.

Response to Request 21.

Approximately 9 miles. RESPONSE TO REQUEST 21 with additional information has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Request 22.

Produce copies of all documents that relate to the manufacture/assembly of the field incident vehicle, including all build history records.

Response to Request 22.

RESPONSE TO REQUEST 22 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Request 23.

Separately, describe in detail the factory procedure for installing the headliner assemblies in the subject vehicles during vehicle assembly. In addition, produce copies of all documents related to this request, including instructions, drawing, pictographs, and videos used by

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assembly workers.

Response to Request 23.

RESPONSE TO REQUEST 23 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Request 24.

Separately, describe in detail each type of quality control check, inspection, test, or analysis performed during the installation of the subject components in the subject vehicles. For each check, test, inspection, etc., describe the types of information collected and the frequency they are collected at. Explain the pass-fail criteria for each check, inspection, test, or analysis.

In addition, produce copies of all documents related to this request.

Response to Request 24.

RESPONSE TO REQUEST 24 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Request 25.

Produce copies of all documents, including all data collected, which relate to the quality control records for the installation of the subject components for the day the headliner assembly was installed in the field incident vehicle. Provide the same quality control information for the headliner assemblies installed during the following time periods: one month before and one month after the date the headliner assembly was installed in the field incident vehicle. Provide one full day's record for each time period specified.

Response to Request 25.

RESPONSE TO REQUEST 25 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Hyundai-Kia America Technical Center, Inc

Request 26.

Separately, describe in detail the repair procedure that would be used by a service technician for the purposes of removing and installing a headliner assembly in the subject vehicles, including the time period (time allowance) the procedure is expected to take.

Response to Request 26.

The labor time to remove and install the headliner assembly in a 2012 Elantra is 1.8 hours. See RESPONSE TO REQUEST 26 for the requested service procedure.

Source: Hyundai Motor America
Information as of January 25, 2013

Request 27.

Separately, describe in detail the process for assembling side curtain air bags to be installed in the subject vehicles, including but not limited to, the process for rolling up the air bag and the orientation (roll direction) of the air bag for the left and right side curtain air bags.

In addition, produce copies of all documents related to this request.

Response to Request 27.

RESPONSE TO REQUEST 27 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Request 28.

Separately, describe in detail each type of quality control check, inspection, test, or analysis performed during the manufacture and assembly of side curtain air bags for the subject vehicles. Specifically provide information with respect to whether or not the left side and right side curtain air bags are interchangeable, whether or not they can be physically interchanged, and if not, what prevents that from occurring, and whether any evidence or damage that may be present on a deployed side curtain air bag assembly that may have been misassembled.

For each check, test, inspection, etc., describe the types of information or data collected and the frequency they are collected at. Explain the pass-fail criteria for each check, test, inspection, etc.

In addition, produce copies of all documents related to this request..

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Response to Request 28.

RESPONSE TO REQUEST 28 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Request 29.

Produce copies of all documents, including all data collected, which relate to the quality control records for the manufacture and assembly of the side curtain air bags for the day the side curtain airbags installed in the field incident vehicle were manufactured. Provide the same quality control information for the side curtain air bags manufactured during the following time periods: one week before, one month before, four months before, one week after, one month after, and four months after the date the side curtain air bags in the field incident vehicle were manufactured. Provide one full day's record for each time period specified.

Response to Request 29.

RESPONSE TO REQUEST 29 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Request 30.

Separately, describe in detail the factory procedure for installing the side curtain air bag assemblies in the subject vehicles during vehicle assembly. Produce copies of all documents related to this request, including instructions, drawing, pictographs, and videos used by assembly workers.

Response to Request 30.

RESPONSE TO REQUEST 30 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Request 31.

Hyundai-Kia America Technical Center, Inc

Separately, describe in detail each type of quality control check, inspection, test, or analysis performed during the installation of the side curtain air bags in the subject vehicles. For each check, test, inspection, etc., describe the types of information collected and how often they are collected. Explain the pass-fail criteria for each check, test, inspection, etc.

Response to Request 31.

Refer to RESPONSE TO REQUEST 30 for requested information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Request 32.

Produce copies of all documents, including all data collected, which relate to the quality control records for the installation of the side curtain air bags for the day the side curtain air bags were installed in the field incident vehicle. Provide the same quality control information for the side curtain air bags installed during the following time periods: one month before and one month after the date the side curtain air bags were installed in the field incident vehicle. Provide one full day's record for each time period specified.

Response to Request 32.

RESPONSE TO REQUEST 32 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Request 33.

Separately, describe in detail the repair procedure that would be used by a service technician for the purposes of removing and installing a side curtain air bag assembly in the subject vehicles, including the time period (time allowance) the procedure is expected to take.

Response to Request 33.

The Labor Time allowance to remove and install a side curtain air bag is 1.6 hour. See RESPONSE TO REQUEST 33 for requested service procedure information.

Source: Hyundai Motor America
Information as of January 25, 2013

Hyundai-Kia America Technical Center, Inc

Request 34.

State whether any other design of the subject component for the subject vehicles was ever considered or used by Hyundai-Kia. If so, describe the other design(s) considered or used and the differences between the subject component design and the other designs. Identify the subject vehicles that used another subject component design by model, model year and the period of vehicle production. Also, identify the suppliers of the other subject component designs.

Response to Request 34.

Hyundai Motor Company utilizes a polypropene-based headliner assembly without support brackets for 2011-2013 Hyundai Elantras manufactured in its Montgomery, Alabama assembly plant. The 2011-2013 Elantras produced at the Alabama assembly plant are not exported outside of North America

The Korean produced 2011-2013 Elantras are manufactured for domestic (Korea) and several overseas markets including the United States and Canada.

RESPONSE TO REQUEST 34 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Supplier of the US production headliner:

DAEHAN Solution
9101 County Rd. 26
Hope Hull, Alabama 36043

Source: Hyundai Motor Company
Information as of January 25, 2013

Request 35.

Separately, state, by model and model year, all part numbers of the subject components that have been installed on the subject vehicles as assembled by Hyundai-Kia, and the service part numbers of the subject components Hyundai-Kia designates for installation on the subject vehicles. State, by sales month, sales year and part number, the total number of subject components sold as service parts by Hyundai-Kia. Identify any kits that Hyundai-Kia has released or developed for use in service repairs to the subject components or assembly. For each subject component part number, provide the supplier's name, address, and point of contact used by Hyundai-Kia (name, title and telephone number). Also, identify by model and model year, any other vehicles of which Hyundai-Kia is aware that contain the identical component, whether installed in production or in service, and state the applicable dates of production or service usage.

Hyundai-Kia America Technical Center, Inc

Response to Request 35.

State, by model and model year, all part numbers of the subject components that have been installed on the subject vehicles as assembled by Hyundai-Kia.

RESPONSE TO REQUEST 35(B) has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

State, by model and model year, the service part numbers of the subject components Hyundai-Kia designates for installation on the subject vehicles.

See RESPONSE TO REQUEST 35(A) for the Hyundai Elantra service part number application based on vehicle production date.

State, by month, year and part number, the total number of subject components sold as service parts by Hyundai-Kia.

See RESPONSE TO REQUEST 35(A) for the Korean-built Hyundai Elantra's service part sales.

Identify any kits that Hyundai-Kia has released or developed for use in service repairs to the subject components or assembly.

Hyundai has not released or developed any kits for use in service repairs to the subject components or assembly.

For each subject component part number, provide the supplier's name, address, and point of contact used by Hyundai-Kia (name, title, and telephone number).

Supplier information for the Korean built Hyundai Elantra headliner:

NVH Korea
801-5,Munsan-ri, Oedong-eup,
Gyeongju-si, Gyeongbuk
Korea

Kim, Dae-ho
+82-10-9363-0093

Also, identify by make, model and model year, any other vehicles of which Hyundai-Kia is aware that contain the identical component, whether installed in production or in service, and state the applicable dates of production or service usage.

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No other Hyundai models manufactured by Hyundai Motor Company utilize an identical component.

Source: Hyundai Motor Company, Hyundai Motor America
Information as of January 25, 2013

Request 36.

Separately, describe the function of the headliner stiffeners installed in the subject vehicles and other Hyundai vehicles. For the subject vehicles and each model of the other Hyundai vehicles, provide photographs and drawings of the subject components that depict the configurations and dimensions of the various headliners and stiffeners. Provide, by model and model year, the name, address, and point of contact (name, title and telephone number) of each supplier of the subject components in the other Hyundai vehicles.

Response to Request 36.

RESPONSE TO REQUEST 36 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Source: Hyundai Motor Company
Information as of January 25, 2013

Request 37.

Separately, for the subject vehicles and each model of the other Hyundai vehicles, provide photographs and drawings of the side curtain air bag assemblies in these vehicles. Provide, by model and model year, the name, address, and point of contact (name, title and telephone number) of each supplier of the side curtain air bags installed in the subject vehicles and other Hyundai vehicles.

RESPONSE TO REQUEST 37 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.

Request 38.

Furnish Hyundai-Kia's assessment of the alleged defect in the subject vehicles, including:

- a. The causal or contributory factor(s);
- b. The failure mechanism(s);
- c. The failure mode(s);

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- d. The risk to motor vehicle safety that it poses; and
- 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 incident reported in the VOQ report referenced in this inquiry.

Response to Request 38.

- a. The causal or contributory factor(s):

The most likely explanation is insufficient adhesive application to a portion of the driver's side headliner support bracket. Following a thorough review of the headliner assembly processes and inspection results, Hyundai believes this was an isolated incident.

- b. The failure mechanism(s);

Insufficient adhesion between a portion the driver's side headliner support bracket and the headliner substrate.

- c. The failure mode(s);

It is believed that upon deployment of the incident vehicle's driver's curtain air bag (in response to a lateral collision), the curtain air bag material contacted a portion of the headliner support bracket where there was insufficient adhesive. The front portion of the metal bracket was dislodged and forced downward. The rear portion of the support bracket remained adhered and attached to the headliner substrate.

- d. The risk to motor vehicle safety that it poses;

If a vehicle with this condition is involved in a collision where the side curtain air bag deploys, the air bag could contact a portion of the headliner support bracket with insufficient adhesive and possibly dislodge a portion of the metal bracket.

- 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.

There would be no warning to the operator and the other persons both inside and outside the vehicle.

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f. The incident reported in the VOQ report referenced in this inquiry.

Please see Response 38 c.

Source: Hyundai Motor Company
Information as of January 25, 2013

There is no defect trend associated with the Hyundai Elantra side curtain air bag. Please let me know if you have any questions about the information provided in this letter.

Sincerely,



Robert Babcock
Director, Certification and Compliance Affairs
Hyundai-Kia America Technical Center, Inc.

Attachments:

Two CDs, each containing:

RESPONSE TO REQUEST 1
RESPONSE TO REQUEST 3
RESPONSE TO REQUEST 4
RESPONSE TO REQUEST 5
RESPONSE TO REQUEST 6
RESPONSE TO REQUEST 8

RESPONSE TO REQUEST 9 (RESPONSE TO REQUEST 9 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 10 (RESPONSE TO REQUEST 10 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 11

RESPONSE TO REQUEST 12 (RESPONSE TO REQUEST 12 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 13 (RESPONSE TO REQUEST 13 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

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RESPONSE TO REQUEST 14 (RESPONSE TO REQUEST 14(B) has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 15 (RESPONSE TO REQUEST 15 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 17 (RESPONSE TO REQUEST 17 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 18 (RESPONSE TO REQUEST 18 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 19 (RESPONSE TO REQUEST 19 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 20 (RESPONSE TO REQUEST 20 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 21 (RESPONSE TO REQUEST 21 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 22 (RESPONSE TO REQUEST 22 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 23 (RESPONSE TO REQUEST 23 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 24 (RESPONSE TO REQUEST 24 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 25 (RESPONSE TO REQUEST 25 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 26

RESPONSE TO REQUEST 27 (RESPONSE TO REQUEST 27 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 28 (RESPONSE TO REQUEST 28 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 29 (RESPONSE TO REQUEST 29 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 30 (RESPONSE TO REQUEST 30 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

Hyundai-Kia America Technical Center, Inc

RESPONSE TO REQUEST 32 (RESPONSE TO REQUEST 32 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 33

RESPONSE TO REQUEST 34 (RESPONSE TO REQUEST 34 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 35 (RESPONSE TO REQUEST 35(B) has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 36 (RESPONSE TO REQUEST 36 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)

RESPONSE TO REQUEST 37 (RESPONSE TO REQUEST 37 has been provided to the Office of Chief Counsel with a request for treatment as Confidential Business Information.)