

July 24, 2013

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

RE: NVS-212mil, EA12-008

Dear Mr. Borris:

On behalf of Hyundai Motor Company (Hyundai), Hyundai America Technical Center, Inc. (HATCI) hereby submits this letter responding to the above referenced request.

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 materials responsive to each request in the time frame provided.

### Request 1.

State, by model and model year, the number of the subject 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; 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 2010, or a compatible format, entitled "PRODUCTION DATA."

Hyundai-Kia America Technical Center Inc. 6800 Geddes Road, Superior Township, MI 48198 TEL: 734-337-9499 FAX: 734-483-5919

www.hatci.com

Response to Request 1.

Model/Model Year	2007	2008	2009	2010	2011	2012
Elantra Touring		-	8,090	15,019	13,999	14,851
Veracruz (w/sunroof)	8,526	12,515	1,833	4,992	7,072	7,189

See ATTACHMENT "PRODUCTION DATA.accdb" for requested information.

Source: Hyundai Motor America Information as of July 15, 2013

### Request 2.

Separately, for each subject vehicle (all MY 2009-2012 Hyundai Elantra Touring vehicles and those MY 2007-2012 Hyundai Veracruz equipped with optional sunroof), 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:

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

Hyundai has received no complaints, reports, claims or lawsuits responsive to Request No. 2.

Source: Hyundai Motor America Information as of July 15, 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;
- 1. Number of alleged fatalities, if any; and
- m. Summary of the problem with the deployment of the side curtain air bag.

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

### Response to Request 3.

Hyundai has received no complaints, reports, claims or lawsuits responsive to Request No. 2.

Source: Hyundai Motor America Information as of July 15, 2013

### 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.

Hyundai has received no complaints, reports, claims or lawsuits responsive to Request No. 2.

Source: Hyundai Motor America Information as of July 15, 2013

### Request 5.

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, 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 5.

Hyundai has received no reports of any alleged detachment, separation looseness or displacement of the metal support bracket from the headliner assembly associated with a side curtain airbag deployment, or any improper deployment of the side curtain airbag (the "alleged defect") in the subject vehicles. Accordingly, Hyundai has not undertaken any test program or evaluations of the alleged defect in the subject vehicles.

Hyundai notes that the company did not observe any potential for the alleged defect to occur during numerous development and certification side impact tests conducted on the subject vehicles.

Source: Hyundai Motor Company Information as of July 15, 2013

### Request 6.

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 component 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, separately, by model, 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 6.

See Attachment 1 and Attachment 2 for a list of the Engineering Orders associated with the Veracruz (EN) and Elantra Touring (FD) headliners.

Source: Hyundai Motor Company Information as of July 08, 2013

### Request 7.

State, by vehicle model, model year, and production date, whether adhesive strips (tape) were used or whether adhesive strips were not used during vehicle production for the Hyundai vehicles with stiffeners.

### Response to Request 7.

Model Year	Model	Production Date	Support Brad	cket Application	Adhesive Tape Applied	
			With Sunroof	Without Sunroof	With Sunroof	Without Sunroof
2012 - 2013	Hyundai Accent	2011.03.01	Yes	No	Yes	_
2009 – 2012	Hyundai Elantra Touring	2007.12.01	Yes	Yes	No	No
2012 – 2013	Hyundai Azera	2012.02.15	Yes	Yes	Yes	Yes
2010 – 2013	Hyundai Tucson	2009.10.26	Yes	No	Yes	-
2007 - 2012	Hyundai Veracruz	2007.01.15	Yes	No	No	_

Source: Hyundai Motor Company Information as of July 15, 2013

### Request 8.

In further to your answer to Number 7, explain in detail why the adhesive strips (tape) were used in particular Hyundai vehicles with stiffeners. Provide a separate response for each model and model year of the subject vehicles. Separately, provide, by model, all documents that relate to, or may relate to, Hyundai-Kia and/or its supplier's decision to use the tape.

### Response to Request 8.

The design and construction of the headliner assembly is a part of the overall vehicle design. The design is dependent on a number of factors, including the bracket shape, headliner shape, fabric and installation process. As the agency is aware, the inclusion of a metal bracket is not unique to Hyundai vehicles. Metal support brackets are sometimes used with adhesive tape (such as in the Lexus LS 450 and the Renault QM5) and sometimes without adhesive tape (such as in the Toyota Prius, Honda Legend, Nissan Elgrand, and BMW320D). See Attachment 3 for a benchmarking listing of non-Hyundai vehicles. Each Hyundai design team conducted its own analysis, including review of competitive design, and decided individually whether to apply adhesive tape to the headliner support bracket.

Source: Hyundai Motor Company Information as of July 15, 2013

### Request 9.

Explain in detail why the adhesive strips (tape) were not used in some of the Hyundai vehicles with stiffeners. Provide a separate response for each model and model year not produced with the adhesive strips. Separately, provide, by model, all documents that relate to, or may relate to, Hyundai-Kia and/or its supplier's decision not to use the tape.

Response to Request 9.

See Response to Question 8.

Source: Hyundai Motor Company Information as of July 15, 2013

### Request 10.

Describe in detail by model, the process used to attach the stiffener to the headliner substrate in each of the Hyundai vehicle models with stiffeners (this is all MY 2011-2013 Elantra and MY 2009-2012 Elantra Touring vehicles, and those MY 2007-2012 Veracruz, MY 2010-2013 Tucson, MY 2012-2013 Accent and MY 2012-2013 Azera vehicles equipped with optional sunroofs, manufactured for sale or lease in the United States that had side curtain air bags). Describe and discuss significant differences, if any, in the manufacturing processes among the models and/or model years. If there were no significant differences in the manufacturing processes, so state.

### Response to Request 10.

Hyundai has previously provided the agency with details relating to the process of attaching the support bracket to the headliner substrate in the prior EA response regarding the Elantra. See Attachment 4 for a summary of the support bracket attachment process for the requested models. The installation process is similar for each vehicle in which a metal support bracket is applied.

Source: Hyundai Motor Company Information as of July 15, 2013

### Request 11.

Describe in detail by model, the process used to apply the hot melt glue to the ends of the stiffener and headliner substrate in each model of the Hyundai vehicles with stiffeners. Describe and discuss significant differences, if any, in the manufacturing processes among the models and/or model years. If there were no significant differences in the manufacturing processes, so state.

### Response to Request 11.

Hyundai has previously provided the agency with details relating to the process of applying the hot melt glue to the ends of the support bracket in the prior EA response regarding the Elantra. See Attachment 5 for a summary of the hot melt glue application process for the requested models. The application process is similar for each vehicle in which a metal support bracket is applied except for the Veracruz, where hot melt glue is not applied.

Source: Hyundai Motor Company Information as of July 15, 2013

### Request 12.

For each model and model year of Hyundai vehicles with stiffeners, provide photographs of finished headliner assemblies, including a close-up of the front portion of the stiffener.

### Response to Request 12.

Photographs responsive to Question 12 are attached as Attachment 6.

### Request 13.

Furnish Hyundai-Kia's assessment of the potential for the alleged defect occurring in the subject vehicles, separately, by vehicle model, including:

- a. The causal or contributory factor(s);
- b. The failure mechanism(s);
- c. The failure mode(s); and
- d. The risk to motor vehicle safety that it poses.

### Response to Request 13.

Hyundai has received no reports involving the alleged defect in the subject vehicles, and does not believe the subject vehicles pose an unreasonable risk to motor vehicle safety. Hyundai previously made a defect determination with regard to the Elantra after the company's investigation found that the support bracket attached to the headliner could become displaced during the deployment of the curtain airbag if the support bracket has been previously dislodged, and that the displacement could impact the driver.

As shown in Attachment 7, the dimensions of the support bracket for the Hyundai Elantra Touring differ significantly than those in the recalled Elantra vehicles. The interface area with the curtain airbag is also significantly different. Due to these differences, Hyundai does not believe the potential exists for the alleged defect occurring in this model. The metal support bracket for the Hyundai Veracruz does not extend to the front edge of the headliner. Even were there prior dislodgement, the potential to interfere with the airbag and interact with a front seat occupant is not present.

Sincerely,

Robert Babcock

Robert Bahnoch

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

Attachments:

Two CDs, each containing:

PRODUCTION DATA. accdb Attachments 1 - 7

# EA12-008 HYUNDAI-KIA 7-24-2013 Attachment 3

Headliner Benchmarking

### SUPPORT BRACKET / ADHESIVE TAPE APPLICATION BENCHMARKING

VEHICLE	LEXUS LS 450	HONDA LEGEND 08MY(JAN)	NISSAN ELGRAND
PHOTOGRAPH			
HEADLINER MATERIAL	PU	PU	PP+GF
SUPPORT BRACKET	•	● (HARD BOARD)	•
ADHESIVE TAPE	•	X	X
VEHICLE	BMW320D	TOYOTA PRIUS ('08)	RENAULT QM5
PHOTOGRAPH			
HEADLINER MATERIAL	PU	PP+CF+GF/부직포	PP+GF
SUPPORT BRACKET	•	•	•
ADHESIVE TAPE	X	X	•

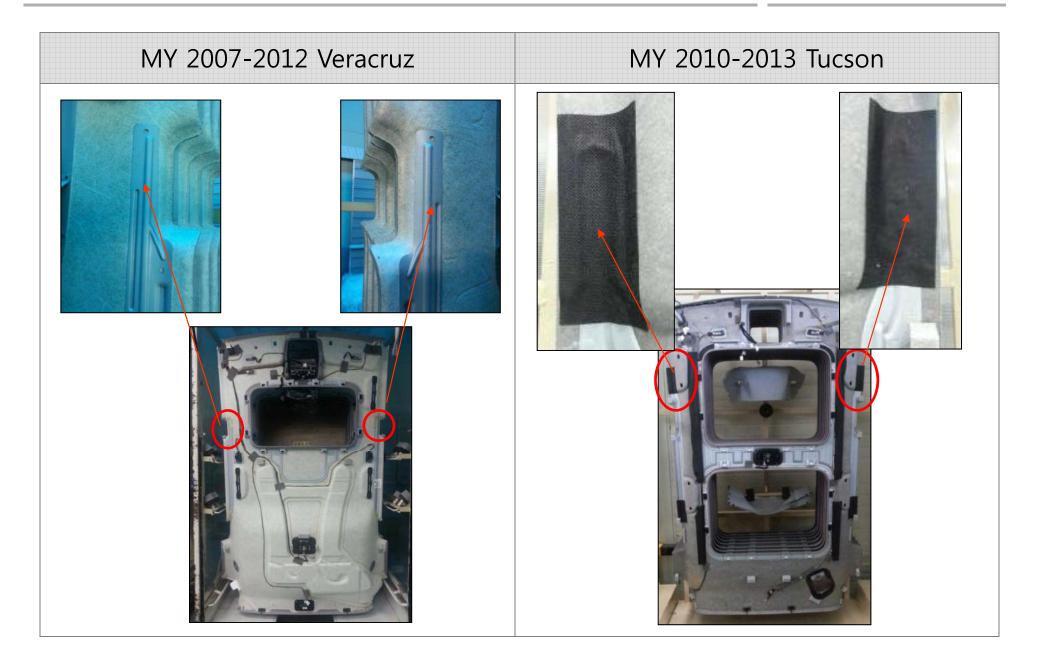
## EA12-008 HYUNDAI-KIA 7-24-2013

### Attachment 6 Support Bracket Photographs

### Support Bracket Photographs



### Support Bracket Photographs



### Support Bracket Photographs

