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OFFICE OF DEFECTS  
INVESTIGATION

March 17, 2008

**VIA FEDERAL EXPRESS**

Jeffrey L. Quandt, Chief  
Vehicle Control Division  
Office of Defects Investigation  
U.S. Department of Transportation  
National Highway Traffic Safety Administration  
1200 New Jersey Avenue, S.E.  
Washington D.C. 20590

Re: **Preliminary Evaluation (PE07-062)**  
**Peer Vehicle Data: MY 2002 Kia Sportage; Front Suspension Upper Ball Joint**

Dear Mr. Quandt:

This letter is submitted in response to your letter dated February 5, 2008 (Reference NVS-213swmc/PE07-062). That letter requested peer vehicle data concerning the upper ball joint assemblies in the 2002-2003 model year Kia Sportages to assist with an investigation of alleged front suspension upper ball joint separations in certain model 2002-2003 Jeep Liberty four-wheel drive vehicles.

Although HATCI is an organization independent of both Kia Motors Corporation ("KMC") and Kia Motors America, Inc. ("KMA"), it has been designated by those organizations to act as their communication liaison with the National Highway Traffic Safety Administration ("NHTSA"). This response is submitted to NHTSA by HATCI in that limited role.

Please note that the Kia Sportage was not produced for the 2003 model year. Thus, the response below is limited to the 2002 model year Kia Sportage. For clarity purposes, Kia does not formally use the phrase "upper ball joint assemblies" to describe the subject component. For example, Kia's Parts Catalog refers to the subject component as the "upper arm assembly" and all searches for responsive information have been conducted in relation to that part, as well as references to "ball joints".

**REQUEST NO. 1:**

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

- a. Vehicle identification number (VIN);
- b. Model;

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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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- c. Drivetrain (e.g., 2-wheel drive, 4-wheel drive);
- 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 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

**RESPONSE TO REQUEST NO. 1:**

The total number of 2002 Kia Sportage manufactured for sale in the United States was 46,887. A listing of all 2002 Kia Sportage vehicles is provided on a Data Collection Disc under the category "PRODUCTION DATA" and is submitted contemporaneously with this response.

**REQUEST NO. 2:**

State the number of each of the following, received by Kia, or of which Kia is other aware, which relate to, or may relate to, the subject condition in the subject vehicles:

- a. Consumer complaints, including those from fleet operations;
- 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 providing 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 Kia is or was a party to the arbitration; and
- f. Lawsuits, both pending and closed, in which Kia 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 casual and contributing factors and Kia's assessment of the problem, with a summary 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 the date on which the complaint or other document initiating the action was filed.



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**RESPONSE TO REQUEST NO. 2:**

Pursuant to your letter, we searched for all upper arm assembly separation incidents and found the following:

- a. Consumer Complaints—0
- b. Field Reports/Technical Assistance Reports—0
- c. Reports involving crash, injury or fatality alleging death or injury caused by possible defect—0
- d. Property Damage Claims—0
- e. Third Party Arbitrations—0
- f. Lawsuits—0

**REQUEST NO. 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. 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 model and model year;
- f. Vehicle's mileage at time of the 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 2000, or a compatible format, entitled 'REQUEST NUMBER TWO DATA.' See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

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**RESPONSE TO REQUEST NO. 3:**

Not applicable. See response to Request No. 2.

**REQUEST NO. 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 Kia used for organizing the documents.

**RESPONSE TO REQUEST NO. 4:**

Not applicable. See response to Request No. 2.

**REQUEST NO. 5:**

State, by model, drivetrain and model year, total counts for all of the following categories of claims, collectively, that have been paid by Kia to date that relate to repair or replacement of the subject components, or the associated control arm assembly if the subject component cannot be serviced separately, 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. Kia'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. Whether there was a claim for towing within 3-days of the subject component repair claim;
- k. Whether there was a claim for replacement of any of the following components at the same side as the subject component involved in the claim (i.e., right-front or left-front) within 3-days of the subject component repair claim;
  - i) Steering knuckle;
  - ii) Brake rotor; or
  - iii) Half-shaft.
- 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 2000, or a compatible format, entitled "WARRANTY DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

**RESPONSE TO REQUEST NO. 5:**

None. See response to Request No. 6.

**REQUEST NO. 6:**

Describe in detail the search criteria used by 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 subject condition in the subject vehicles. State, by make and model year, the terms of the new vehicle warranty coverage offered by 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 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 NO. 6:**

Kia searched all upper arm assembly replacement warranty claims, including goodwill, involving part number OK011 34 200A and found 55 claims. Kia screened these claims to determine whether any of them indicated a separation in the "Tech Notes" and/or whether there was a towing claim identified since the vehicle would have needed to be towed if there had been an upper arm assembly separation. None of the 55 upper arm assembly replacement warranty claims had towing claims attached nor did any of the tech comments identify that any vehicle was towed or had a separated control arm or ball joint.

In addition, none of the 55 warranty claims involved the replacement of the steering knuckle, brake rotor or half-shaft within 3 days of the upper arm assembly replacement claim as requested in Request Number 5.

**REQUEST NO. 7:**

Provide the following parts or information regarding the subject components:

- a. Quarter sectioned exemplar samples of each design version of the subject components;
- b. A diagram of the front suspension at static curb weight with longitudinal, lateral and vertical loads of the upper and lower ball joints;
- c. State the design life of the subject components;
- d. State the end-play specification, or other criteria, for replacement of the subject components;



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- e. Describe all engineering standards and specifications regarding the durability of the subject components; and
- f. Provide copies of all results from tests described in 7e.

**RESPONSE TO REQUEST NO. 7:**

- a. Kia will send a complete part (OK011 34 200A) via Federal Express under separate cover.
- b. Kia is providing a design drawing of the upper arm assembly, including front, side and top views. Kia is also providing a copy of the pages from the 2002 Kia Sportage Parts Catalog applicable to the upper arm assembly. Kia has no drawing showing load distribution at curb weight. **See Tab 1.**
- c. Kia does not use the phrase "design life" in relation to this part. The entire vehicle was subjected to a 200,000 km durability test and no exceptions were noted for this part in such vehicle testing.
- d. Attached are the end-travel test reports. In addition, attached are pages from the 2002 Sportage Service Manual including the maintenance schedule, inspection instruction and torque specification of the "upper control arm ball joint link-to-steering knuckle bolt." **See Tab 2 and 3.**
- e. Attached is a general translation of the Korean summary of the 18 tests conducted by Central Corporation. **See Tab 4.** This summary chart contains the engineering standards and specifications for testing of the upper arm assembly. It also contains a summary of performance, strength, durability and seal testing applicable to the upper arm assembly. The original test reports, where available, from which the summary information was obtained, are also attached. **See Tab 5.** Kia is also providing a Korean version of the testing which contains photographs and graphs of the testing information identified in the original test reports. The title page and table of contents have been translated for your convenience. **See Tab 6.**
- f. See Tabs 4, 5 & 6.

**REQUEST NO. 8:**

State the number of each of the following that Kia 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;
- b. Any kits that have been released, or developed, by Kia for use in service repairs to the subject component/assembly.

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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 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.

**RESPONSE TO REQUEST NO. 8:**

A chart identifying part sales is attached. **See Tab 7.** The chart contains part sales data from June 1, 2001 thru February 15, 2008 since June 1, 2001 is the first distribution date for the 2002 Kia Sportage. However, this new part was also interchangeable with all prior Sportages for the 1995-2001 model years since the upper control arm dimensions remained the same. Thus, Kia discontinued the sale of prior versions of the upper arm assembly and part number OK011 34 200A became the standard replacement part for the 1995-2002 Sportage vehicles.

The supplier of the upper control arm (part number OK011 34 200A) is Central Corporation and the point of contact is Hyunsik Kim (Deputy General Manager). Mr. Kim can be reached at 54, Sungsan-dong, Changwon-city, Kyungnam, Korea (82)55-278-0291.

Sincerely,

Robert Babcock  
Senior Manager, Regulation and Certification Department