HYUNDAI-KIA
AMERICA TECHNICAL CENTER, INC.

September 25, 2009

VIA FEDERAL EXPRESS

D. Scott Yon, Chief
Vehicle Integrity 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

RECEIVED
2009 SEP 29 A 10: 19
OFFICE OF DEFECTS
INVESTIGATION

Re: **Preliminary Evaluation (PE09-034)**
Passenger Air Bag System (MY) 2007-2008 Kia Sorento

Dear Mr. Yon:

This letter is submitted in response to your letter of August 4, 2009 sent to Hyundai Technical America Technical Center, Inc. ("HATCI") (Reference NVS-212pco/PE09-034). That letter requested information regarding allegations of improper operation of the passenger airbag occupant classification system in the 2007-2008 MY Kia Sorento vehicles. Although HATCI is an organization independent of both Kia Motors Corp. ("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.

INTRODUCTORY STATEMENT

We are providing responses to requests 1-7 and 12 contained in your August 4th letter and KMA is consulting with KMC and its vendors to be able to provide ODI with a response to all remaining requests in a timely manner. However, we believe that the following observations can be made based on the documents included with this interim response and based on KMA's current understanding of events. Although cast as a safety investigation, Kia believes that ODI is investigating issues covered by FMVSS 208, where the 2007 – 2008 Sorento OCS suppresses the airbag in accordance with the testing requirements of that Standard and is thus a complying design. As NHTSA advised the industry in 2005, "[t]he design of these [OCS] systems may vary depending on a number of different parameters, as long as the system adequately suppresses the air bag when tested in accordance with the requirements of FMVSS No. 208." Denial of Petition for Rulemaking to Restrict CRS Weights, 70 FR 61908, 61910 (October 27, 2005).

Production of the 2007 Sorento commenced in May 2006. Pursuant to the current version of Appendix A to FMVSS 208, the OCS needed to recognize the Britax Expressway ISOFIX CRS. After

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months of production, on August 29, 2006, the compliance date for vehicles to meet the airbag suppression requirements with LATCH-equipped child restraints was extended from September 1, 2006 to September 1, 2007.

KMA identified in early 2007 that complaints had been received from customers that the OCS "Airbag Off" light was on when an adult was present. A vendor from Korea, IEE, visited KMA in April 2007 to evaluate the OCS functioning in real world vehicles. IEE advised that the 2007 Sorento OCS was in all cases evaluated as functioning as designed in compliance with FMVSS 208. However, an out of position adult male could apply pressure on a portion of the seat cushion and sensor mat which corresponded with the loads applied by the Britax Expressway ISOFIX, a very heavy, broad, flat CRS. This was an early LATCH concept CRS, primarily used for testing and evaluation rather than for retail sale. Although the Sorento OCS provided voluntary margins to increase the probabilities that out of position adult occupants were still classified as adults, such logic was limited by the need to identify the Britax Expressway ISOFIX.

On July 24, 2007, NHTSA extended the compliance date for testing CRSs equipped with components that attach to a LATCH system from September 1, 2007 to September 1, 2008. On July 26, 2007, a change was made in the 2008 Sorento OCS logic to increase the probability of recognizing adult males in the "Britax area" of the seat. A Product Update Procedure ("PUP") was conducted that Fall for 2008 Sorento production during May, June and July 2007, which had occurred before the change.

Subsequent investigations by IEE in July and August 2007 identified that the great majority of all misclassification issues were being created by out of position adults, including those sitting on the side segments of the seats. IEE determined that these out of position issues could be successfully resolved by further education of such persons regarding the Owner's Manual instructions.

On September 25, 2007, NHTSA issued an NPRM which proposed changes to Appendix A, including the elimination of the Britax Expressway ISOFIX due to its being "exceptionally uncommon in the U.S. and very difficult to obtain". In addition, NHTSA made the amended Appendix A immediately effective if manufacturers chose to comply with it voluntarily. As of November 27, 2007 production, further changes were made to the 2008 Sorento OCS logic.

During December 2007 until May 2009, KMA's field staff and dealers addressed complaints of customers who had continuing airbag light on complaints on an individual basis by reflashing their vehicles. KMA commenced a Service Campaign on May 12, 2009 to "reflash" the OCS logic in all 2007 – 2008 Sorentos which did not have the November 27, 2007 logic. That Service Campaign has a current completion rate of approximately 50%.

REQUEST NO. 1:

State within the body of the response letter a table summary, by model and model year, the number of 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. Make;
c. Model;
d. Model Year;
e. Date of manufacture (in "yyyy/mm/dd" date format);
f. Date warranty coverage commenced (in "yyyy/mm/dd" date format);
g. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease.)
h. Seat type (if applicable);
i. Seat covering/padding (if applicable); and
j. OCS software version (if applicable).

Provide the detailed information in Microsoft Access 2000, or a compatible format, entitled "PRODUCTION DATA."

RESPONSE TO REQUEST NO. 1:

Below is a table identifying the total number of 2007-2008 MY Sorento vehicles manufactured for sale in the United States.

Model Year	Vehicles Produced
2007	31,958
2008	43,826
TOTAL	75,784

A listing of all 2007-2008 Kia Sorento vehicles is provided on a Data Collection Disc under the category "PRODUCTION DATA" and submitted contemporaneously with this response.

REQUEST NO. 2:

State within the body of the response letter, the number of each of the following, received by Kia, or of which 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; 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 causal and contributing factors and 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 NO. 2:

a. Consumer Communications—470

b. Field Reports—237

   Technical Assistance Reports—492

c. Reports involving crash, injury, or fatality alleging death or injury was caused by possible defect—1

d. Property Damage Claims—0

e. Third Party Arbitrations—35

f. Lawsuits—8 (It should be noted that three (3) additional cases are treated as lawsuits but are in fact adjunct as they are treated as arbitrations in Pennsylvania and New Jersey.)

Kia's search included all files which included the words "OCS", "passenger", "airbag" and "light". The results were then reviewed to identify those items which relate, or may relate to the alleged defect as described in your letter. The summary description for "c" is attached. **See Tab 1.** The summary description for "e" and "f" will be provided in Kia's supplemental response.

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 make, model and model year;
f. Vehicle's mileage at time of incident;
g. Incident date (in "yyyy/mm/dd" date format);
h. Report or claim date (in "yyyy/mm/dd date format);
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."

RESPONSE TO REQUEST NO. 3:

A listing of all responsive communications is provided on a Data Collection Disc under the category "REQUEST NUMBER TWO DATA".

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:

Copies of the documents identified in response to Request No. 2 are submitted with this letter. They are organized by the following categories.

- Consumer Affairs Department files from KMA's department database (470)
- Field Reports (237)
- Technical Assistance Case Center Reports (492)
- Arbitrations (35)
- Lawsuits (8)

See Tab 2.

REQUEST NO. 5:

State within the body of the response letter a summary, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by Kia to date that relate to, or may relate to, the alleged defect in the subject vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign.

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

a. Kia's claim number;
b. Vehicle owner or fleet name (and fleet contact person) and telephone number;
c. VIN;
d. Repair date (in "yyyy/mm/dd" date format);
e. Vehicle mileage at time of repair;
f. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
g. Labor operation number;
h. Problem code;
i. Replacement part number(s) and description(s);
j. Concern stated by customer; and
k. Comment, if any, by dealer/technician relating to claim and/or repair.

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

RESPONSE TO REQUEST NO. 5:

A listing of the responsive warranty claims is provided on a Data Collection Disc under the category "WARRANTY DATA".

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 alleged defect 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:

The warranty claim data is separated into three separate categories as follows: 1) all seat cushion and seat assembly replacement claims; 2) reflash claims performed by KMA field staff and dealers from December 2007 to May 2009 and 3) claims related to the service campaign SC076 mailed to customers on May 12, 2009.

Codes Used. In your letter, you requested that Kia provide its "problem code" information. Kia refers to the "problem code" as a "cause code", which carries the letter "C" which reflects the technician's evaluation of the cause of the problem. You also requested that Kia provide information regarding "concerns stated by the customer". Kia's code chart refers to these as "condition codes," but they are commonly referred to as "nature codes," and carry the "N" designation. These reflect the service writer's or technician's understanding of the customer's information.

A copy of KMA's coding sheet for warranty claims is submitted with this response. **See Tab 3.**

The 2007-2008 MY Sorentos have a 5 year, 60,000 mile basic warranty. No extended or additional warranties were provided to Kia customers.

REQUEST NO. 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 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 Kia is planning to issue within the next 120 days.

RESPONSE TO REQUEST NO. 7:

Copies of the following documents are attached:

- PUP 336 Instruction—Sorento OCS Reflash, dated September 17, 2007
- Technical Service Bulletin, titled "'Passenger Air Bag Off' Indicator Light Operation", No. 020, dated February 2008
- Interoffice Regional Memorandum, dated May 4, 2009
- Technical Service Bulletin, titled "2007-2008 Sorento Occupant Classification System (OCS) Reprogram," No. SC076, dated May 2009
- Service Manager Letter, dated May 7, 2009
- Dealer Principal Letter, dated May 7, 2009
- Questions & Answers, dated May 7, 2009
- Customer notification letter, dated May 12, 2009

See Tab 4.

REQUEST NO. 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, Kia. 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 TO REQUEST NO. 8:

Pursuant to the extension that you granted KMA on September 17, 2009, this information will be provided no later than October 26, 2009.

REQUEST NO. 9:

Describe all modifications or changes made by, or on behalf of, Kia 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 Kia is aware of which may be incorporated into vehicle production within the next 120 days.

RESPONSE TO REQUEST NO. 9:

Pursuant to the extension that you granted KMA on September 17, 2009, this information will be provided no later than October 26, 2009.

REQUEST NO. 10:

Provide the block/component diagram of the logic operation of the OCS including the decision tree and any effects of occupant movement and turning the ignition off and back on. Provide also digital based photographs of each component within the subject component.

RESPONSE TO REQUEST NO. 10:

Pursuant to the extension that you granted KMA on September 17, 2009, this information will be provided no later than October 26, 2009.

REQUEST NO. 11:

Provide a table summary of the OCS software version used by chronological date of implementation and/or by VIN. Are any of the versions used for updating the OEM version during OCS service repairs?

RESPONSE TO REQUEST NO. 11:

Pursuant to the extension that you granted KMA on September 17, 2009, this information will be provided no later than October 26, 2009.

REQUEST NO. 12:

Provide any applicable portion of the subject vehicle owner's manual as it relates [sic] to proper seating procedures and mitigation measures. Describe a typical dealership service procedure (i.e. inspection, pad replacement and/or reprogramming) in dealing with owners with the alleged defect.

RESPONSE TO REQUEST NO. 12:

A copy of the applicable portions of the 2007-2008 Kia Sorento owner's manual as requested in your letter are attached. **See Tab 5.** In addition, attached is a copy of the brochure titled "Understanding Your Safety Belt & Air Bag Supplemental Restraint System". **See Tab 6.**

A copy of Technical Service Bulletin, "'Passenger Air Bag Off' Indicator Light Operation", No. 020, dated February 2008 provides a description of a typical dealership service procedure. **See Tab 4.**

REQUEST NO. 13:

Describe the similarities and differences, if any, between the MY2004-2006 Kia Sorento OCS to the subject vehicle including the identification of Tier suppliers (down to the seat mat and OCS electronic module level suppliers) and part numbers.

RESPONSE TO REQUEST NO. 13:

Pursuant to the extension that you granted KMA on September 17, 2009, this information will be provided on October 26, 2009.

REQUEST NO. 14:

Produce two of each of the following:

a. Exemplar samples of each design version of the subject component including the seat sensor mat, OCS electronic module and the interfacing harness;
b. Field return samples of the subject component exhibiting the subject failure mode; and
c. Any kits that have been released, or developed, by Kia for use in service repairs to the subject component/assembly which relate, or may relate, to the alleged defect in the subject vehicles.

RESPONSE TO REQUEST NO. 14:

Pursuant to the extension that you granted KMA on September 17, 2009, this information will be provided on October 26, 2009.

REQUEST NO. 15:

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 (air bag seat sensor, OCS electronic module & wiring harnesses only); and;
b. Any kits that have been released, or developed, by Kia 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 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. 15:

Pursuant to the extension that you granted KMA on September 17, 2009, this information will be provided on October 26, 2009.

REQUEST NO. 16:

Furnish Kia'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 TO REQUEST NO. 16:

Pursuant to the extension that you granted KMA on September 17, 2009, this information will be provided on October 26, 2009.

Sincerely,

Robert Babcock

Robert Babcock
Senior Manager, Regulation and Certification Department

SUMMARY OF KIA'S ASSESSMENT

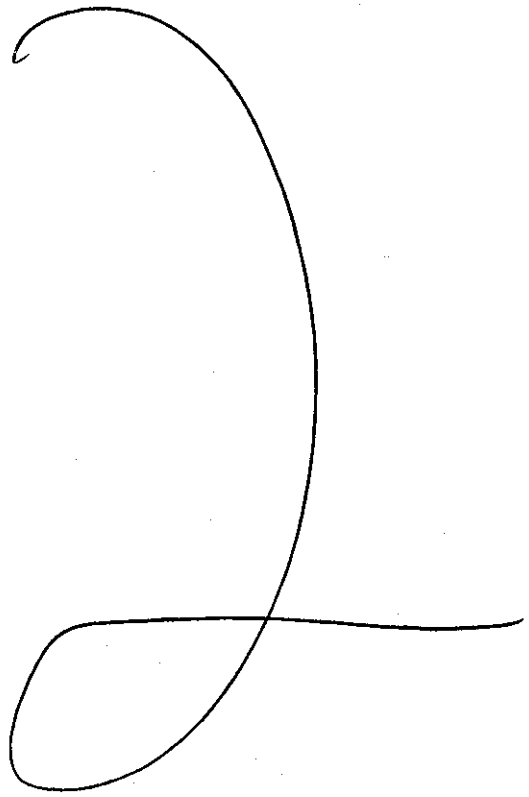
Response to Request No. 2

Kia Case No. K1553011

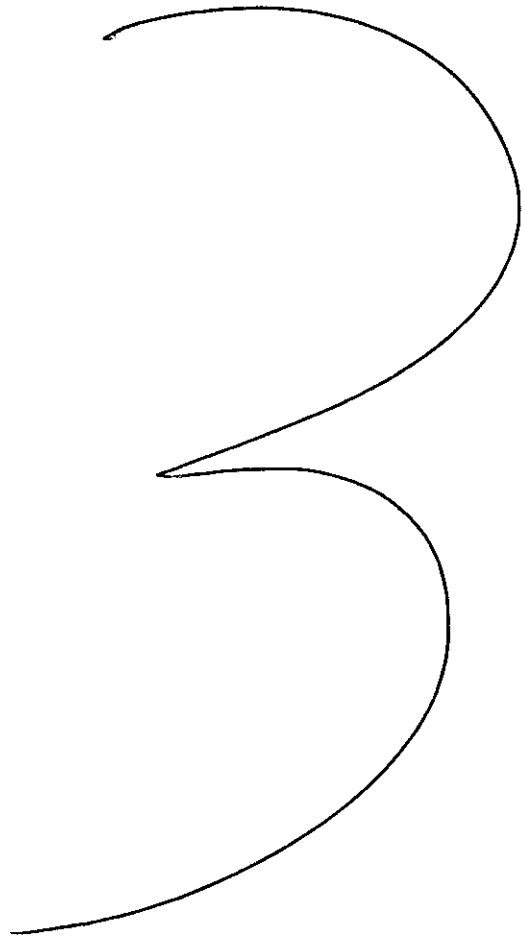
The Sorento was involved in a frontal collision against another vehicle which attempted to turn left in front of oncoming traffic. The driver's front airbag deployed. The passenger's front airbag did not. The passenger is a 200 lb female. The passenger reported chest discomfort. KMA conducted an inspection of the Sorento and its airbag system and performed a download of the Airbag Diagnostic Unit. The vehicle indications were that the passenger's only loading during the collision was on the seatbelt. The download indicated that the system was functioning properly, that the driver and passenger were belted, that OCS "AIRBAG OFF" warning light was ON, and thus the OCS had suppressed the passenger airbag.

The OCS operated as designed in compliance with FMVSS 208. Kia's assessment is that, based on her size and resulting leg positioning, the probability logic identified the passenger as matching the Britax Expressway ISOFIX pressures.

Chest discomfort can be a consequence of loading the shoulder portion of a seatbelt, and such discomfort for this woman would not have been eliminated by deployment of the front airbag.



Copies of the Documents Identified in Response to Request No. 4 are Located in Labeled Redwells Submitted Contemporaneously with Response

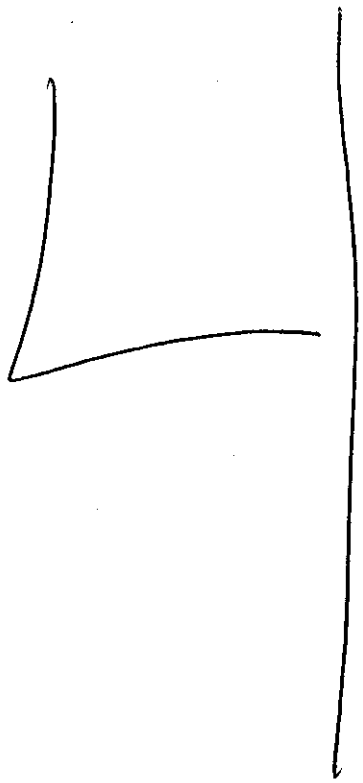


Nature Code (Depicts Nature of Defect)

Code	DESCRIPTION	Code	DESCRIPTION
N01	HARD STARTING	N43	SLIP&SHOCK WHEN UP-SHIFTING
N02	ROUGH IDLING	N44	IMPOSSIBLE FOURTH DRIVE
N03	SURGE, STUMBLE	N45	SHIFTS TOO LATE AND SHOCK AT N→D SHIFTING
N04	EXCESSIVE KNOCKING	N46	SHIFTS TOO LATE AND SHOCK AT N→R SHIFTING
N05	CHOKE MALFUNCTION	N47	SHIFTS TOO LATE AND DOUBLE SHOCK AT N→R SHIFTING
N06	ENGINE STALLING	N48	IMPOSSIBLE FRONT, REAR SHIFT
N07	EXCESSIVE FUEL CONSUMPTION (EXCEPT FUEL LEAK)	N49	IMPOSSIBLE INTERMITTENT FRONT SHIFT & RE-DRIVING
N08	EXCESSIVE OIL CONSUMPTION (EXCEPT OIL LEAK)	N50	DETERIORATION
N09	OVERHEATING	N51	IMPROPER OPENING & CLOSING
N10	ENGINE RUN-ON	N52	DIRTY, STAIN
N11	ABNORMAL TEMPERATURE	N53	COLOR MISMATCH
N12	OVERFLOWING	N54	POOR PAINTING, PLATING
N13	POOR ACCELERATION	N56	RUST, CORROSION
N14	ABNORMAL COMBUSTION	N58	DISTORTED BLURRED
N15	POOR ENGINE POWER	N59	BROKEN, CRACKED
N16	PERCOLATION	N61	DEAD BATTERY
N17	IMPROPER EXHAUST GAS	N63	INACCURATE (METER)
N18	BACK-FIRE. AFTER-FIRE	N64	POOR SOUND (HORN, RADIO)
N21	SHUDDERING, VIBRATION	N66	ELECTRICAL MALFUNCTION
N22	SLIPPING	N68	BLOWN FUSE
N23	FAILS TO DISENGAGE	N69	WARNING LIGHTS ON
N24	JUMPING-OUT	N82	WIND NOISE
N25	IMPROPER SYNCHRONIZING	N83	POOR RECOVERY
N26	ABONRMAL SHIFT	N86	FALLING OFF, SAGGED
N27	IMPOSSIBLE SHIFT (3rd HOLD)	N87	OIL LEAK, ENTERING
N29	ABNORMAL NOISE(RATTLE,SQUEALING....)	N88	WATER LEAK, ENTERING
N30	DRAGGING	N89	LEAKS-OTHER (AIR, FUEL, GAS, VACUUM)
N31	PULLS	N92	GRABS
N32	SPONGY PEDAL	N93	INTERFERENCE
N33	UNSTABLE STEERING	N94	INOPERATIVE
N34	EXCESSIVE SHOCK	N95	HIGH EFFORT
N35	IMPROPER GAP, CLEARANCE	N96	POOR MANEUVERABILITY
N38	UNUSUAL TIRE WEAR	N99	OTHERS
N41	SLIP AND SHOCK WHEN STARTING		
N42	SHOCK AT KICK-DOWN		

Cause Code (Depicts Cause of Defect)

Code	DESCRIPTION	Code	DESCRIPTION
C01	BURNT, MELTED	C24	IMPROPER CLEARANCE
C02	FROZEN (ICING)	C26	LACK OF LUBRICANT
C03	SCARRED	C28	IMPROPER WELDING
C04	PEELING, COME-OFF	C29	IMPROPER TIGHTENING
C05	RUSTY, CORRODED	C31	STICKING, SEIZED
C06	BROKEN, SPLIT, TORN	C32	FOREIGN MATERIAL
C07	CRACKED	C37	DISCOLORATION, STAIN
C08	POROUS, PINHOLES	C38	IMPROPER SEALING
C09	DEFORMED	C40	IMPROPER ADJUSTMENT
C10	WEAKENED	C48	VACUUM LEAK
C11	ABNORMAL WEAR	C61	INCORRECT PART
C12	OUT OF BALANCE	C62	MISSING PART
C15	POOR CONTACT	C63	FLAW IN MATERIAL
C19	VAPOR-LOCK	C88	WATER ENTERING
C20	POOR INSULATION	C98	NORMALITY
C23	IMPROPER MACHINING	C99	OTHERS



PUP 336 – Sorento OCS Re-flash

Model: Sorento

Description: Re-flash of the OCS system to improve occupant detection

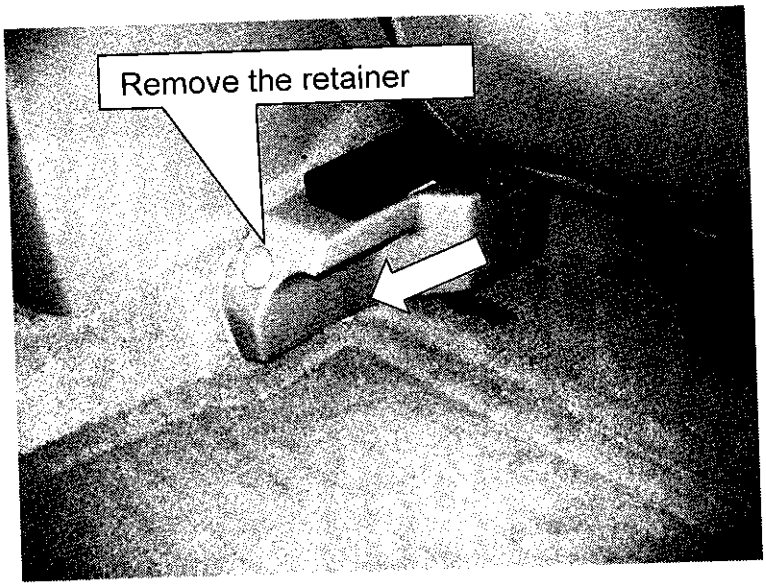
# of Vehicles: 7,283 vehicles - Contact KMA Distribution Dept. for VIN list.

Verification: Check that the vehicle is one of the affected vehicles by the vehicle's VIN.

Tools Needed: Re-flash tool

Procedure

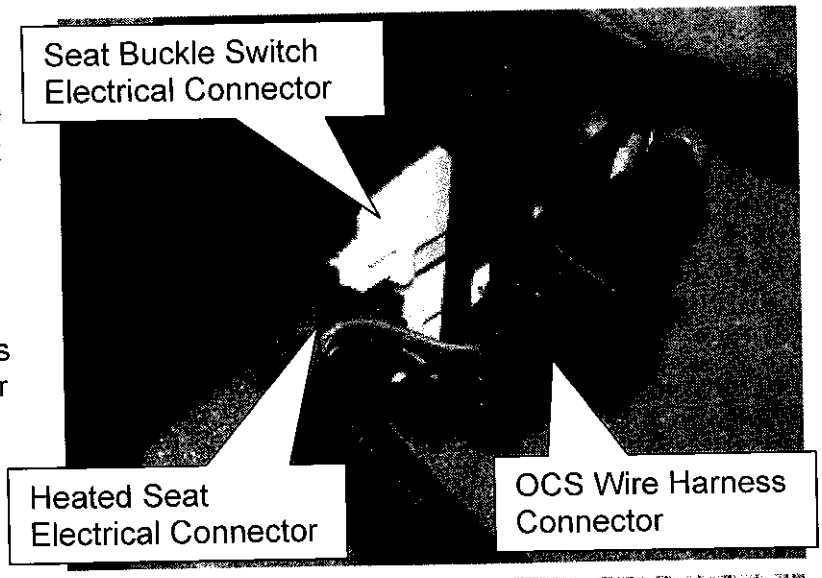
1. Slide the front passenger seat to the full forward position and fold the seat back forward.
2. Remove the inner seat track cover.

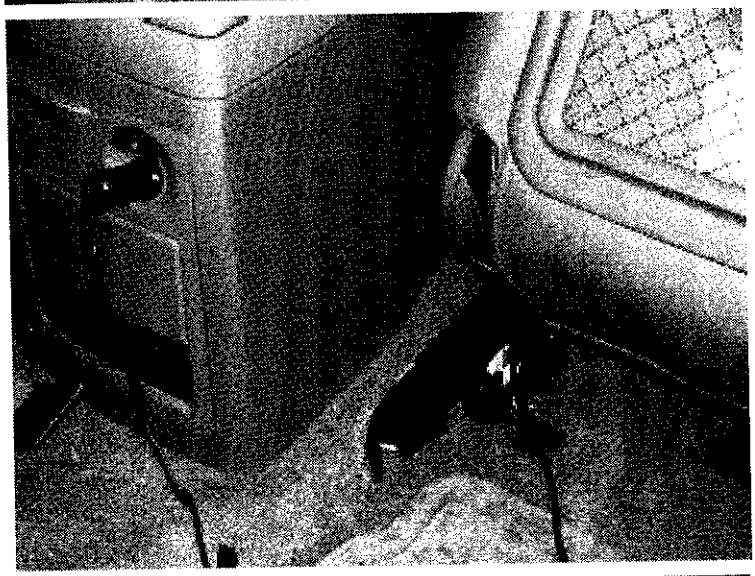


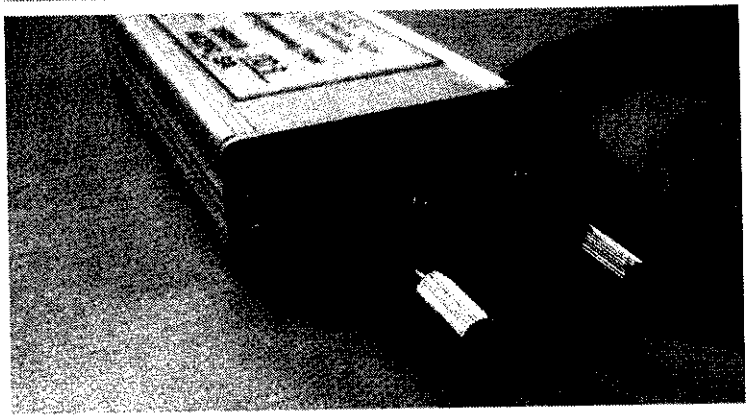
3. Disconnect the OCS wire harness connector. Connect the OCS tool to the wiring harness and plug the power connector to the 12V outlet at the base of the rear console.

4. Turn the ignition key to the ACC position. Both the red and green LEDs on the re-flash tool will light up after 1~3 seconds. If the LEDs do not power-up, check the power outlet for proper operation.

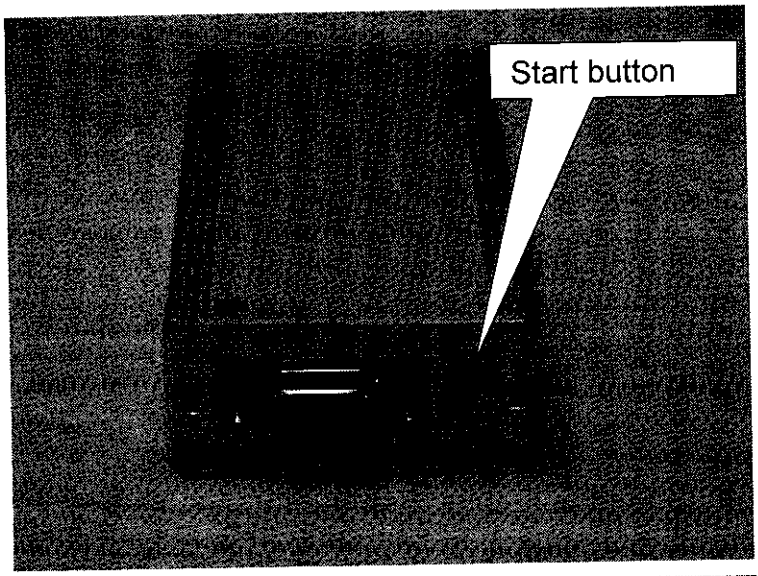
CAUTION: DO NOT TURN THE IGNITION SWITCH TO THE "ON" POSITION. THIS WILL CAUSE A DTC CODE TO BE STORED WITHIN THE SYSTEM. THIS IS A SAFETY ISSUE AND MUST BE AVOIDED.



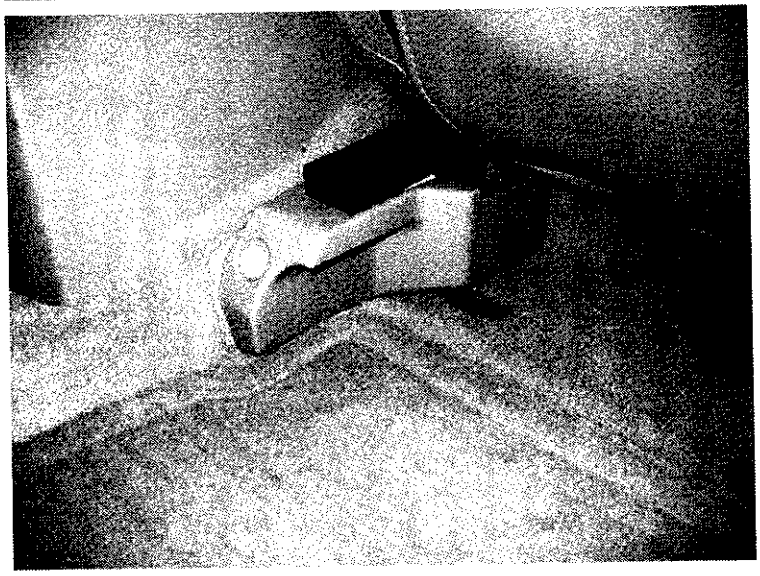




5. You are now ready to re-flash the OCS control module. Push the start button on the tool to perform the re-flash.
6. While the re-flash is occurring, the green and red LEDs will flash back and forth for approximately 60 seconds.
7. The green LED flashing 3 quick blinks, followed by a steady green light, will indicate a successful re-flash.
8. The red LED flashing 3 times briefly followed by a steady red light will indicate an unsuccessful re-flash. If not successful, check the following:
    a. The cable connections to the OCS harness and the power cable to the tool.
    b. Verify the VIN should be processed according to the KMA supplied VIN list.



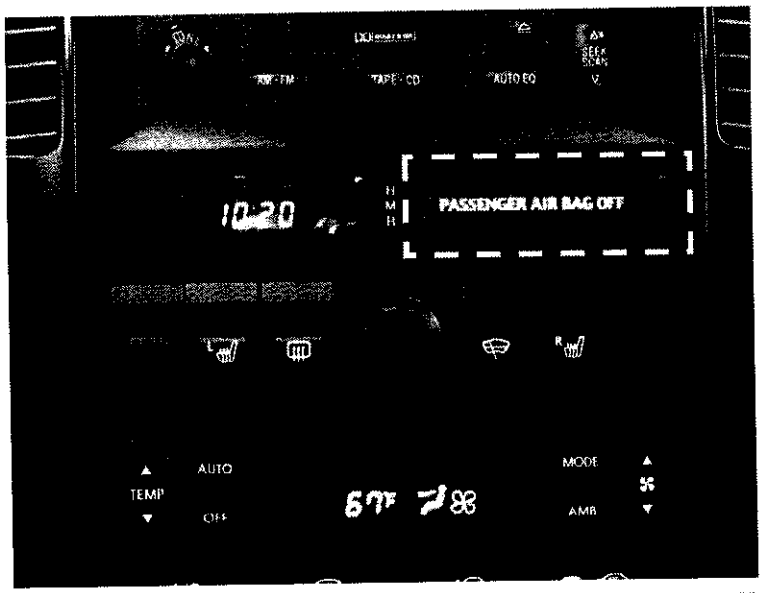
9. After completion of the re-flash, turn the ignition switch to the OFF position. Disconnect the power plug to the center console and the connection from the tool to the OCS wiring harness. Re-connect the harness to the seat.
10. Install the seat track cover.



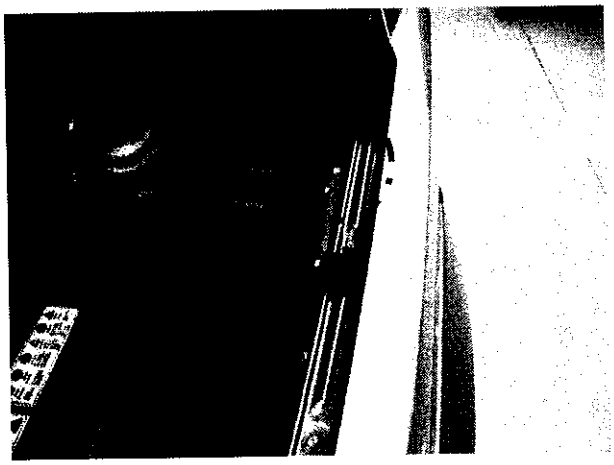
11. Perform a functional check of the OCS system.

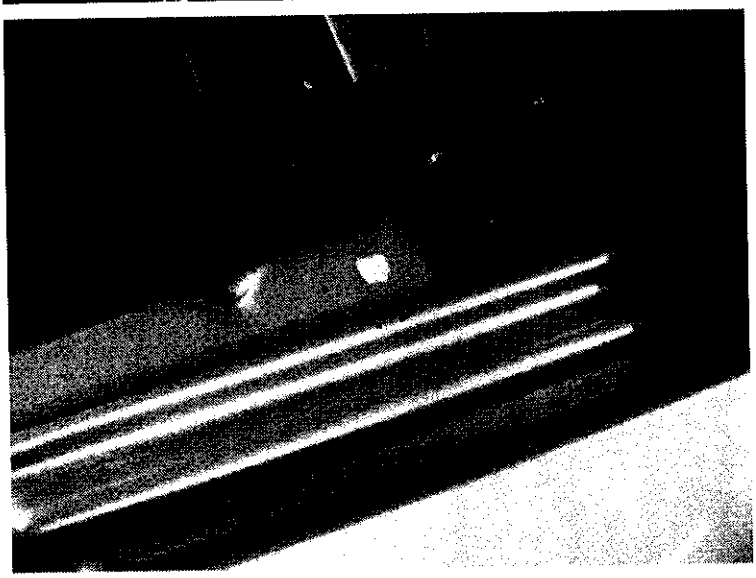
    a. Turn the ignition switch ON and monitor the tell tale lamp on the center fascia panel. The "PASSENGER AIR BAG OFF" should light up initially and then turn OFF and back ON.

    b. Sit in the front passenger seat if you weight at least 105 lbs. The air bag light should then go OFF.



12. If all checks are good, mark the vehicle with a yellow or orange paint dot on the top of the inner fender in front of the hood support mount.





PARTS INFORMATION: No parts needed. Tools will be loaned to the ports by KMA.

Warranty Information:

Warranty Type: R
Nature Code: N 94
Cause Code: C 23
Causal Part No.: 88907 3E000
Quantity = 0
OP Code: 070029P0
OP Time: 0.2 Hr.
Description: Re-flash of the OCS module in the front passenger seat.

	GROUP **General**	MODEL **All Models**
	NUMBER **020**	DATE **February 2008**

TECHNICAL SERVICE BULLETIN

SUBJECT:

"PASSENGER AIR BAG OFF" INDICATOR LIGHT OPERATION

This TSB provides an overview of the "**PASSENGER AIR BAG OFF**" indicator light operation, part of the Occupant Classification System (OCS) in Kia vehicles. This TSB also reviews the procedure to follow in case of a customer complaint regarding the operation of the "**PASSENGER AIR BAG OFF**" indicator light.

The Occupant Classification System was developed to suppress the deployment of the passenger air bag when it detects the presence of a small occupant in the front passenger seat (i.e., a very small adult, a child, or an infant—including one who is occupying a child restraint seat). The purpose of this suppression is to protect such an occupant from the risk of serious airbag induced injuries. If the sensor in the front passenger seat identifies a smaller occupant, the system automatically turns the front passenger air bag OFF. This condition is indicated by the illumination of the "**PASSENGER AIR BAG OFF**" indicator light.

Additionally, there are a variety of sitting positions that can also cause the "**PASSENGER AIR BAG OFF**" indicator light to illuminate. These positions all relate to the passenger seat occupant moving off center in the seat, or tilting so that the OCS sensors no longer detect the occupant's full weight distribution. Examples of seating positions which can cause the **"PASSENGER AIR BAG OFF"** indicator light to illuminate include:

- Sitting on either side edge of the seat.
- Sitting too far forward on the seat.
- Reclining in the seat so far that the occupant's weight is transferred to the seat back.
- Leaning heavily against the passenger door.
- Propping an elbow on the arm rest.
- Sitting cross-legged.
- Rotating in the seat so that some leg weight is supported by the seat sides, not the cushion.
- Pulling feet back and knees up so that the occupant's thighs come off the seat.

Notwithstanding the use of the suppression system discussed in this TSB, you should encourage your customers to have children 12-years old and younger seated in the backseat, using age-appropriate and size-appropriate childseats, boosters, and seatbelts, as needed. Additional information on child passenger safety and seating positions is available to the public at www.safercar.gov.

File Under: General

Circulate To:	[X] **General Manager**	[X] **Service Manager**	[X] **Parts Manager**
[X] **Service Advisor(s)**	[X] **Technician(s)**	[X] **Body Shop Manager**	[X] **Fleet Repair**

"PASSENGER AIR BAG OFF" INDICATOR LIGHT OPERATION

IMPORTANT: People have a wide variety of shapes and sizes, but the OCS sensors have a single set of design parameters. Thus, the sensors can be more or less accurate in identifying an occupant's size depending on any occupant's specific physical characteristics. It will take varying levels of effort on the part of the occupant to maintain a seating position that allows the OCS to properly detect the occupant.

The OCS also prevents the passenger air bag from deploying when the front passenger seat is unoccupied. This feature helps to lower repair costs if the vehicle is damaged with the front passenger seat unoccupied. In such a case, the passenger's front air bag will not require replacement. This feature also contributes to holding down the cost of insurance premiums. The system automatically turns the front passenger air bag OFF. This condition is indicated by illuminating the "**PASSENGER AIR BAG OFF**" indicator light when the passenger seat is unoccupied.

Remember that whenever the "**PASSENGER AIR BAG OFF**" indicator light is illuminated, the front passenger air bag will **NOT** deploy.

Here's how the "**PASSENGER AIR BAG OFF**" indicator light operates:

With Adult Size Occupants

- When the ignition key is turned to the ON position, or after the engine is started, the "**PASSENGER AIR BAG OFF**" indicator light will illuminate for about 4 to 6 seconds during the system initialization.
- After the completion of system initialization, the "**PASSENGER AIR BAG OFF**" indicator light will turn OFF.
- So long as the front passenger seat is occupied by a sufficiently large—and properly seated—person, the "**PASSENGER AIR BAG OFF**" indicator light will stay OFF.

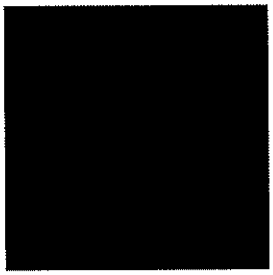
With Smaller Occupants (i.e., a smaller adult, a child or infant, including one in a child restraint seat):

- When the ignition key is turned to the ON position, or after the engine is started, the "**PASSENGER AIR BAG OFF**" indicator light will illuminate for about 4 to 6 seconds during the system initialization.
- After system initialization, the "**PASSENGER AIR BAG OFF**" indicator light will turn OFF for 2 to 3 seconds while the system calculates the sensor readings. The indicator light will then illuminate after the OCS determines that the occupant is not sufficiently large.
- Remember that the "**PASSENGER AIR BAG OFF**" indicator light will also illuminate if the front passenger seat is unoccupied or if someone of sufficient size is not sitting properly in the seat.

"PASSENGER AIR BAG OFF" INDICATOR LIGHT OPERATION

Here's what to check for if the "**PASSENGER AIR BAG OFF**" indicator light does not operate as explained above:

1) Check to see if the **Airbag Warning Light** on the instrument panel is illuminated. If it is, check & record the DTC (Diagnostic Trouble Code) identified by using the GDS diagnostic tool. If a DTC is identified, there is a malfunction of the OCS. The "**PASSENGER AIR BAG OFF**" indicator will not illuminate and the passenger front airbag could inflate in a frontal crash even if a smaller occupant is in the front passenger's seat. Diagnose and repair the OCS according to the service manual.



If the airbag warning light on the instrument panel is not illuminated, and no DTC code is identified, proceed to Step 2.

2) Verify that the "**PASSENGER AIR BAG OFF**" indicator light is illuminated with the passenger seat not occupied. This is the proper functioning mode. If the "**PASSENGER AIR BAG OFF**" indicator light is not illuminated when the seat is empty, check & record the OCS status using the GDS scan tool.

If the GDS scan tool indicates the OCS is operating properly, then go to Step 3.

3) Have the person who is not getting a proper reading on the OCS system occupy the front passenger seat and request that they seat themselves properly. This means:
   - Ensure that the vehicle is on a level surface
   - Ensure that the seat back is in a proper upright position.
   - The occupant must be sitting in an upright position, and centered on the seat cushion.
   - The occupant's legs should be extended comfortably forward with the bottom of their legs (thighs) making contact with the lower seat cushion.

   Turn the ignition key OFF, and then turn the key back ON after several seconds. Monitor to see if the "**PASSENGER AIR BAG OFF**" indicator light operates properly for about 30 seconds after the ignition key is ON. If the presence of a sufficiently large occupant in the passenger seat fails to turn off the indicator light, carefully recheck their seating position and then try the ignition ON sequence again. Record the result on the RO. If the improper operation of the Occupant Classification System (OCS) indicator was due to the occupant taking an improper seating position, take the following steps:

   1. Train any sufficiently large occupant on how to seat themselves properly in accordance with the Kia owner's manual.
   2. Encourage the passenger to adjust their position on the seat to ensure maximum loading on the cushion bottom—which is where the sensors are located—if they see the "**PASSENGER AIR BAG OFF**" indicator light illuminated. In particular, make sure they

"PASSENGER AIR BAG OFF" INDICATOR LIGHT OPERATION

are not mistakenly shifting part of their body load to any of the seat edges or the door. However, ensure that they understand that the OCS cannot reset itself, and that the light will not stop its illumination, until the OCS is reset.

One of the following sequences will reset the Occupant Classification System (OCS).

- Turn the ignition key OFF for several seconds, and then turn the key back ON, **~or~**
- Empty the passenger seat for at least 3 seconds.

If the "**PASSENGER AIR BAG OFF**" indicator light does not operate properly, go to Step 4.

4) Have someone with a good history for getting a proper reading in another vehicle of the same model get in the repair vehicle to ensure that the OCS works properly. Then, estimate & record the weight & height of the occupant that is experiencing the concern, and contact TechLine for further case handling and disposition.

Interoffice Memorandum

Date: May 4, 2009

To: S. Martin
F. Lind
J. Peterson
T. Beam

From: Vickie McConathy

Subject: **SC076 - 2007-2008 Sorento Occupant Classification System (OCS) Reprogram Voluntary Service Campaign**

This memo is to advise that Kia Motors America, Inc. will be announcing a Voluntary Service Campaign on certain 2007-2008 Sorento vehicles to reprogram the Occupant Classification System (OCS). Supporting documentation is being placed in the mail to your offices today.

DEALER NOTIFICATION
On May 7, 2009, all Kia Dealer Principals and Dealer Service Managers will receive a letter notifying them of the Voluntary Service Campaign. Each Kia Service Manager will have access on Kdealer to the Technical Service Bulletin that provides the following information:

- Affected VIN Production Range
- Inspection and Repair/Replacement Procedures
- Warranty Claim Information

The packet will also contain:
- Copy of owner notification letter
- Question and Answer guide for the campaign
- A listing of each dealer's retail Kia Sorento owners selected for this Service Campaign (Not Completed Campaign VIN Report)

The District Parts and Service Managers and District Managers need to follow-up with their Kia Service Managers to ensure the following:

- The dealership received the SC076 support materials.

- Appropriate personnel at the dealership are familiar with the details of this Service Campaign to ensure proper responses to customer inquiries and requests for inspection.

- That repairs on affected vehicles should be checked off of the Not Completed Campaign VIN'S Report so they can identify and contact those customers who have not been in for the Voluntary Service Campaign.

OWNER NOTIFICATION

On **May 12, 2009**, Kia will mail a letter to certain 2007-2008 Sorento vehicle owners asking them to contact their dealer service department to have the Occupant Classification System reprogrammed at Kia's expense.

NOTE: Some vehicles may have already received a reprogram for the OCS but will still need to have this campaign completed and WILL be included in the Not Completed Campaign VINS Report.

Please contact me if you have any questions.

Vickie McConathy
Government Affairs Administrator
Legal Department
(949) 468-4808

KIA MOTORS	GROUP **Service Campaign**	MODEL **2007~2008 Sorento (BL)**
	NUMBER **SC 076**	DATE **May 2009**

VOLUNTARY SERVICE CAMPAIGN TECHNICAL SERVICE BULLETIN

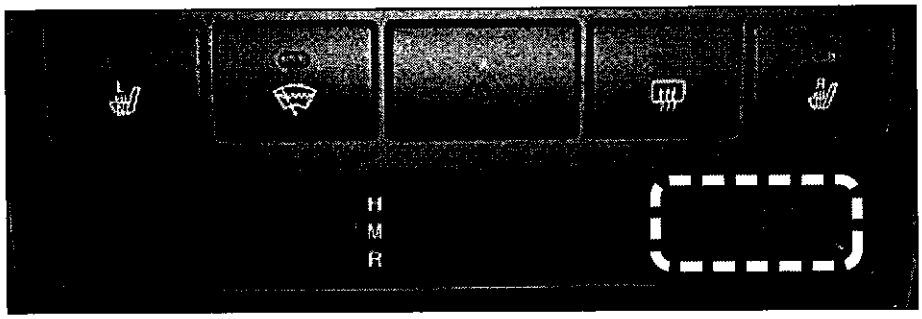
SUBJECT: 2007-2008 SORENTO OCCUPANT CLASSIFICATION SYSTEM (OCS) REPROGRAM

This service bulletin provides information relating to the 'Passenger Airbag Off' Indicator Light on some 2007-2008 MY Sorento vehicles, with production dates ranging from 06/15/2006 through 11/27/2007. These vehicles may experience a problem with the Occupant Classification System (OCS). The OCS is an integral part of the passenger's seat cushion, and it may misclassify the presence of certain adult passengers based on a combination of their weight, stature, body shape and position on the seat cushion. This condition prohibits the deployment of the passenger's air bag.

This bulletin provides information on how to update the Sorento OCS electronic control module located in the seat cushion with the reprogramming device called the "OC-Reprogramming Tool Number (Six) 6".

***NOTICE**

ONLY vehicles within the affected production date should be reflashed.



Center Panel Occupant Classification System Indicator Light

File Under: Service Campaign

Circulate To: [X] General Manager [X] Service Manager [X] Parts Manager [X] Service Advisor(s) [X] Technician(s) [X] Body Shop Manager [X] Fleet Repair

"PASSENGER AIR BAG OFF" INDICATOR LIGHT OPERATION

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"PASSENGER AIR BAG OFF" INDICATOR LIGHT OPERATION

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From: Vickie McConathy

Subject: **SC076 - 2007-2008 Sorento Occupant Classification System (OCS) Reprogram Voluntary Service Campaign**

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Please contact me if you have any questions.

Vickie McConathy
Government Affairs Administrator
Legal Department
(949) 468-4808

KIA MOTORS	GROUP **Service Campaign**	MODEL **2007~2008 Sorento (BL)**
	NUMBER **SC 076**	DATE **May 2009**

VOLUNTARY SERVICE CAMPAIGN TECHNICAL SERVICE BULLETIN

SUBJECT: 2007-2008 SORENTO OCCUPANT CLASSIFICATION SYSTEM (OCS) REPROGRAM

This service bulletin provides information relating to the 'Passenger Airbag Off' Indicator Light on some 2007-2008 MY Sorento vehicles, with production dates ranging from 06/15/2006 through 11/27/2007. These vehicles may experience a problem with the Occupant Classification System (OCS). The OCS is an integral part of the passenger's seat cushion, and it may misclassify the presence of certain adult passengers based on a combination of their weight, stature, body shape and position on the seat cushion. This condition prohibits the deployment of the passenger's air bag.

This bulletin provides information on how to update the Sorento OCS electronic control module located in the seat cushion with the reprogramming device called the "OC-Reprogramming Tool Number (Six) 6".

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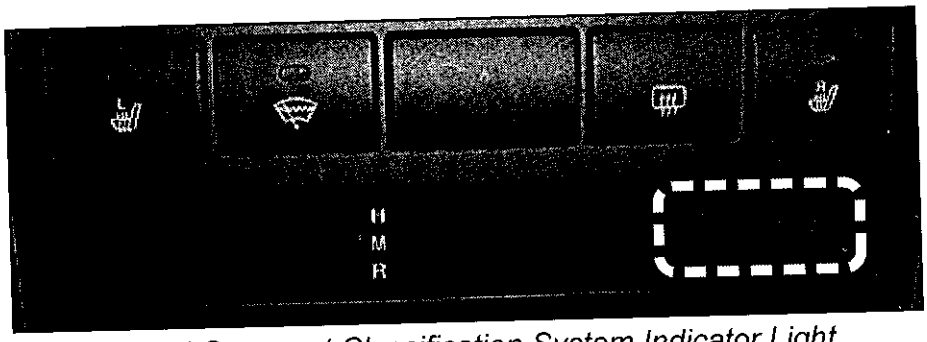


Center Panel Occupant Classification System Indicator Light

File Under: **Service Campaign**

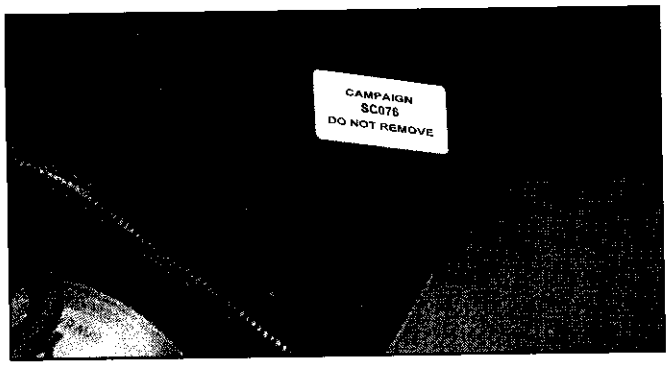
Circulate To: [X] **General Manager** [X] **Service Manager** [X] **Parts Manager** [X] **Service Advisor(s)** [X] **Technician(s)** [X] **Body Shop Manager** [X] **Fleet Repair**

2007-2008 SORENTO OCCUPANT CLASSIFICATION SYSTEM (OCS) REPROGRAM

Inspection Procedure:

Open the hood and check for SC076 campaign completion label on the panel to the left of the master cylinder. If label exists, NO FURTHER ACTION IS REQUIRED.

If label does not exist, continue to step one (1) of the Service Procedure until completion.



***NOTICE**

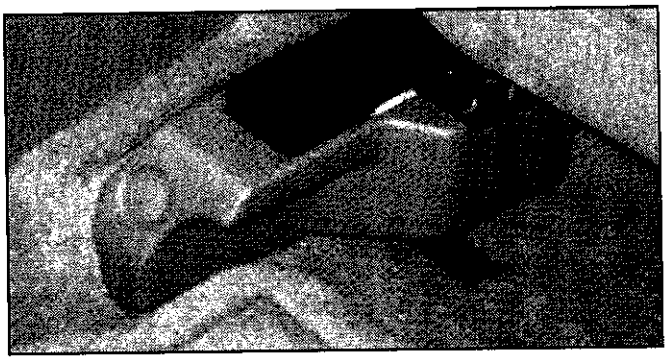
All vehicles must be verified that the campaign is not completed. WebDCS > Warranty Coverage > Warranty Coverage Inquiry > Check Open Campaign Status.

***NOTICE**

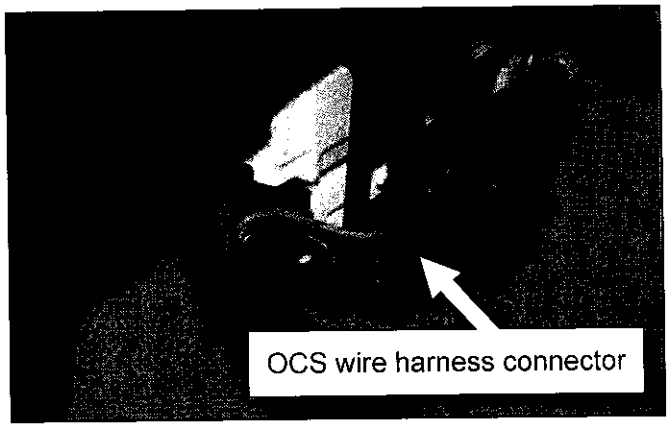
To improve customer satisfaction always remember to refer to WebDCS Warranty Coverage (validation) Inquiry Screen (Service>Warranty Coverage>Warranty Coverage Inquiry) for a list of any additional campaigns that may need to be performed on the vehicle before returning it to the customer.

Service Procedure:

1. Slide the R/F seat to the full forward position.
2. Remove the seat track cover from the left rear mounting stud of the R/F seat. Grasp the cover and pull to the rear, the cover will be removed to access the OCS electrical connector.

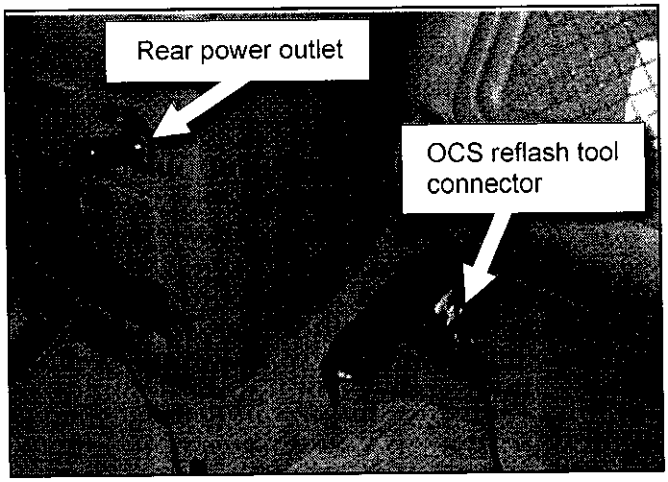


3. Disconnect the electrical connector for the OCS system.

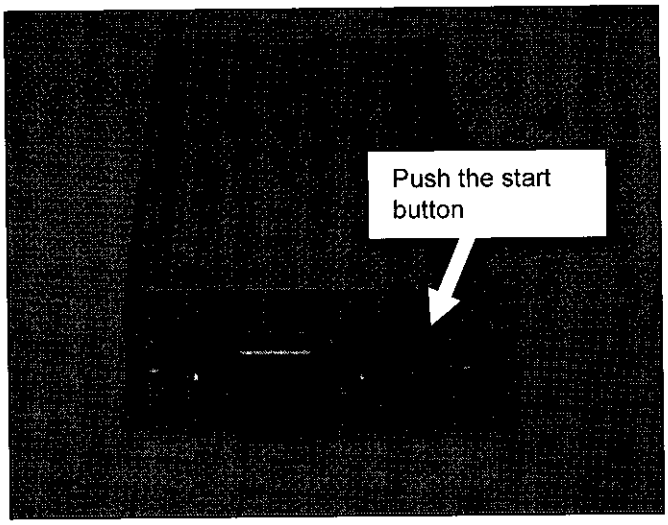


2007-2008 SORENTO OCCUPANT CLASSIFICATION SYSTEM (OCS) REPROGRAM

4. Connect the seat OCS connector to the OC reflash tool and connect to the rear power outlet.



5. You are now ready to reflash the seat control module. Push the reflash start button on the tool to initiate the communication and reflash the internal logic with the tool.



***NOTICE**

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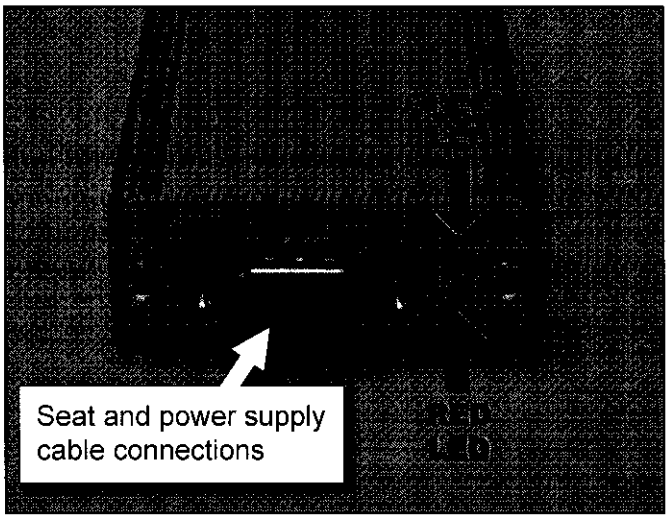
2007-2008 SORENTO OCCUPANT CLASSIFICATION SYSTEM (OCS) REPROGRAM

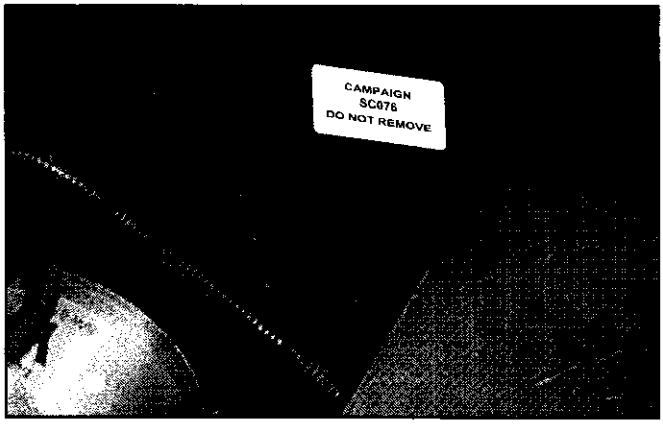
6. The green and red LED lights will toggle back and forth approximately 60 times during the reprogramming.
   - After a successful reprogram, the GREEN LED will flash 3 quick blinks, followed by a steady green light.
   - If the RED LED flashes 3 quick blinks followed by a steady red light, the reprogram was unsuccessful. Possible causes for this event:
     - Check the cable connections to the power supply and OCS seat connector.
     - Verify the proper production date on the vehicle.
     - Reprogramming has already been performed. Check previous service records for completion.



7. After completion of reprogramming, disconnect the electrical connection at the power supply and reconnect OCS seat connector. Install the seat track trim cover as required.

8. Perform a functional check of the OCS system:
   a) Turn the ignition switch OFF for 5 seconds.
   b) Turn the ignition switch ON. Monitor the tell-tale lamp on the center facia panel. The "PASSENGER AIR BAG OFF" indicator should illuminate initially, then turn OFF and back ON again.
   c) Ensure the SRS warning lamp is not illuminated on the instrument cluster.

9. After the completion of reprogramming, open the hood and check for SC076 campaign completion label on the panel to the left of the master cylinder.



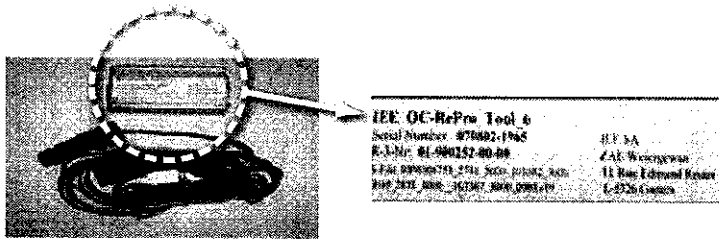
2007-2008 SORENTO OCCUPANT CLASSIFICATION SYSTEM (OCS) REPROGRAM

10. Refer to TSB GENERAL 020 *"'Passenger Air Bag Off' Indicator Light Operation"* and the Kia brochure titled "*Understanding Your Safety Belt & Air Bag Supplemental Restraint System*" (part no. UN070-KU-002) for proper OCS-related seating position instructions.

AFFECTED VEHICLE RANGE:

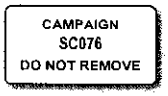
2007-2008 Sorento vehicles produced between 6/15/2006 ~ 11/27/2007

TOOLS INFORMATION:

Part Name	Part No.	Figure
OC Reprogramming Box	IEE OC- RePro_ Tool_6	

The OCS reprogramming tool number six (6) has been sent to your dealer during the 2008 calendar year. Contact your DPSM for shipment information if this tool is unaccounted for at your dealership.

PARTS INFORMATION:

Part Name	Part No.	Figure
Campaign Completion Sticker	UV090 SC076	

WARRANTY CLAIM INFORMATION:

Claim Type	Causal P/N	Qty.	N Code	C Code	Repair Description	Labor Op Code	Time	Related Parts	Qty.
R	88200 3E700KW5	0	N94	C23	SC076-Reprogram OCS	090015R0	0.2 M/H	N/A	0

To improve customer satisfaction always remember to refer to WebDCS Warranty Coverage (validation) Inquiry Screen (Service>Warranty Coverage>Warranty Coverage Inquiry) for a list of any additional campaigns that may need to be performed on the vehicle before returning it to the customer.

May 7, 2009

Attention: All Kia Service Managers

Kia Motors America, Inc. is conducting a Voluntary Service Campaign on certain 2007 and 2008 Sorento model vehicles to have the Occupant Classification System (OCS) electronic control module reprogrammed.

The Technical Service Bulletin (TSB) that provides Vehicle Repair Procedures, Affected VIN Production Range, and Warranty Claim information will be posted on the Kia Global Information System (KGIS) at www.kiatechinfo.com on May 7, 2009.

Enclosed you will find a copy of the owner notification letter, a Q&A guide for campaign questions, both of which describe the problem, and a list of retail Kia Sorento owners affected by the campaign. The owner letter will be mailed on May 12, 2009. Please start performing the repairs on any affected 2007 – 2008 Sorento vehicles produced from June 15, 2006 thru November 27, 2007 immediately.

NOTE: Some vehicles may have already received a reprogram for the OCS but will still need to have this campaign completed and WILL be included in the Not Completed Campaign VINS Report.

Please make certain the appropriate personnel in your dealership are familiar with the details of this campaign to ensure proper responses to customer inquiries and requests to have the campaign performed on their 2007 -2008 Kia Sorento vehicles.

LEGAL PRIVACY LIABILITY NOTICE: Pursuant to the terms of the Dealer Sales and Service Agreement and the Gramm-Leach-Bliley federal consumer privacy act, you are required to keep confidential any and all information and documents provided to you by Kia Motors America, Inc. or generated by you in the conduct of carrying out work under that Agreement regarding Kia vehicle purchasers and owners, including but not limited to warranty claim information. Kia dealers may use such owner information for the sole purpose of conducting and performing this voluntary recall campaign, and for no other purpose.

Your prompt attention in completing this campaign is appreciated. If you have any questions, please contact your Kia District Parts & Service Manager.

Sincerely,

Neem Van der Reest
Quality Analysis Manager
Enclosures

May 7, 2009

Attention: All Kia Dealer Principals

Kia Motors America, Inc. is conducting a Voluntary Service Campaign on certain 2007-2008 Kia Sorento vehicles to have the Occupant Classification System (OCS) electronic control module reprogrammed.

The Technical Service Bulletin (TSB) that provides Vehicle Repair Procedures, Affected VIN Production Range, and Warranty Claim Information will be posted on the Kia Global Information System (KGIS) at www.Kiatechinfo.com on May 7, 2009.

Your Service Manager was also sent a copy of the owner notification letter, a Q&A guide for campaign questions, both of which describe the problem, and a list of retail Kia Sorento owners affected by the campaign. The owner letter will be mailed on May 12, 2009.

Please make certain the appropriate personnel in your dealership are familiar with the details of this campaign to ensure proper responses to customer inquiries and requests to have the campaign performed on their 2007-2008 Sorento vehicles.

LEGAL PRIVACY LIABILITY NOTICE: Pursuant to the terms of the Dealer Sales and Service Agreement and the Gramm-Leach-Bliley federal consumer privacy act, you are required to keep confidential any and all information and documents provided to you by Kia Motors America, Inc. or generated by you in the conduct of carrying out work under that Agreement regarding Kia vehicle purchasers and owners, including but not limited to warranty claim information. Kia dealers may use such owner information for the sole purpose of conducting and performing this follow-up repair, and for no other purpose.

Your prompt attention in completing this campaign is appreciated. If you have any questions, please contact your Kia District Parts & Service Manager.

Sincerely,

Neem Van der Reest
Quality Analysis Manager

QUESTIONS AND ANSWERS

SC 076 - 2007 – 2008 SORENTO OCCUPANT CLASSIFICATION SYSTEM (OCS)
REPROGRAMMING VOLUNTARY SERVICE CAMPAIGN

May 7, 2009

Q1. What sort of campaign is Kia conducting?

A1. *Kia is conducting a Voluntary Service Campaign on certain 2007-2008 Sorento vehicles that may experience incorrect classification by the Occupant Classification System (OCS) of certain adult front seat passengers.*

Q2. What vehicles are affected by the campaign?

A2. *Certain 2007-2008 Kia Sorento vehicles manufactured from June 15, 2006 thru November 27, 2007.*

Q3. What is the problem with the Sorento Occupant Classification System?

A3. *On certain 2007-2008 Kia Sorento vehicles, the front passenger air bag may be turned off in the presence of an adult in the passenger seat under certain conditions. This happens because the Occupant Classification System (OCS) can incorrectly classify the adult in the front passenger seat as an infant car seat or small child. This misclassification illuminates the PASSENGER AIR BAG OFF indicator located on the center instrument panel and prohibits the deployment of the front passenger air bag.*

Q4. Can you describe the Service Campaign and Fix?

A4. *All owners of the affected 2007-2008 model year Sorento models will be notified to bring their vehicle to a Kia dealer to have the OCS electronic control module, located in the seat cushion, reprogrammed.*

Q5. Have there been any deaths or injuries as a result of this defect?

A5. *No*

Q6. Has Kia had any litigation regarding this defect?

A6. *No*

Q7. How many customer vehicles are affected by this campaign?

A7. *Approximately 57,259 Kia Sorento vehicles produced from June 15, 2006 thru November 27, 2007.*

Q8. How was this problem discovered?

A8. *Through the evaluation and analysis of this issue, Kia concluded that the product condition described above existed and warranted a service campaign.*

Q9. Will this cost Sorento owners any money?

A9. *No. The Occupant Classification System electronic control module will be reprogrammed at no cost.*

Q10. How long will the repair take?

A10. *The time required to repair the vehicle can vary depending on the dealer's work schedule. Therefore, an appointment is recommended.*

Q11. What should I do next?

A.11 *Owners are being asked to contact the nearest Kia dealer to schedule an appointment.*

Q12. How will owners of the affected vehicles be notified?

A12. *Kia will be notifying owners of the affected vehicles by first-class mail beginning approximately May 12, 2009.*

Q13. Are there any restrictions on an owner's eligibility?

A13. *No.*

Q14. Where were the vehicles produced?

A14. *The affected vehicles were produced at Kia's Hwasung plant in South Korea.*

Q15. If a customer has an immediate question, where can they get further information?

A15. *They can contact their local Kia dealership or call Kia's Consumer Assistance Center at 1-800-333-4542 (Monday through Friday, 5AM to 6PM, Pacific Standard Time.)*

Voluntary Service Campaign

May 12, 2009

Dear Kia Sorento Owner:

Kia Motors America, Inc. is conducting a Voluntary Service Campaign regarding the front passenger seat Occupant Classification System (OCS) on certain 2007-2008 Kia Sorento vehicles.

Why is Kia conducting this service campaign?

Kia has become aware that in certain 2007-2008 Sorento vehicles the front passenger air bag may be turned off in the presence of an adult in the passenger seat under certain conditions. This happens because the OCS can incorrectly classify an adult in the front passenger seat as an infant car seat or small child. This misclassification illuminates the PASSENGER AIR BAG OFF indicator located on the center instrument panel and prohibits the deployment of the front passenger air bag.

What Will Kia Do?

- Kia will update the programming of the Sorento OCS electronic control module located in the front seat cushion at no charge to you, when you schedule an appointment and take your vehicle to your Kia dealership.

What Should You Do?

- Always wear your seatbelt when you are driving or riding in your vehicle.
- Pay attention to the "PASSENGER AIRBAG OFF" telltale indicator light if the front passenger seat is occupied in order to be aware of circumstances when the front passenger airbag may be deactivated.
- Please contact your Kia dealer to schedule a service appointment. The time required to repair your vehicle can vary, depending on the dealer's work schedule, therefore we recommend scheduling a service appointment to minimize inconvenience. Please present this notice when you arrive at the dealer.

Have you changed your address or sold your Kia?

- If you have changed your home address, sold your Kia vehicle, or no longer own your vehicle, please complete the attached prepaid "Change of Address/Ownership" card and mail it to us.

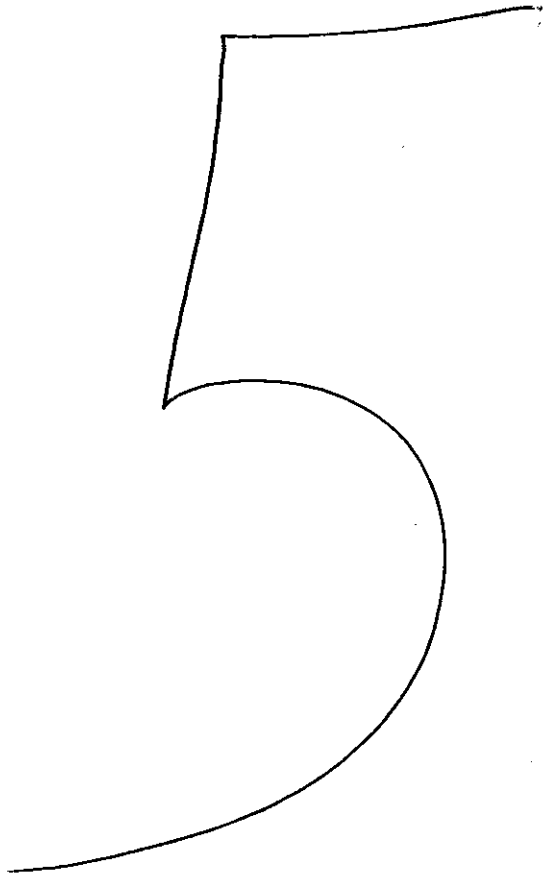
If you have a problem

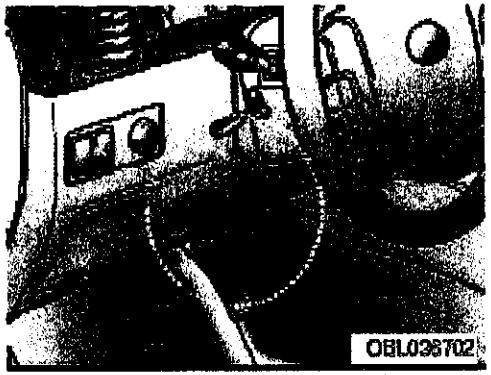
- Should you have any questions regarding this Campaign or your dealer does not respond to your service request in a timely manner, we suggest that you call Kia's Consumer Assistance Center at 1-800-333-4542 (Monday through Friday, 5AM to 6PM, Pacific Standard Time)

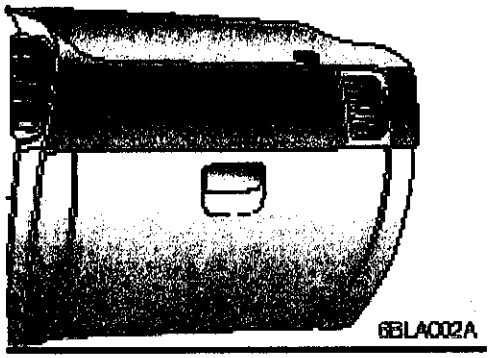
Please accept our apologies for any inconvenience this matter may cause you.

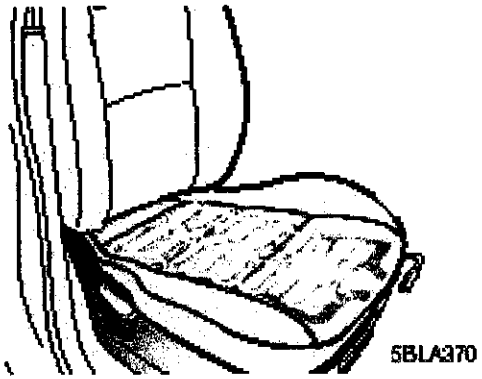
Sincerely,

Consumer Affairs Department









Occupant classification system

The occupant classification system detects the presence of a passenger in the front passenger's seat and will turn off the front passenger's air bag under certain conditions.

The occupant classification system is designed to detect the presence of a properly-seated occupant and determine if the front passenger's air bag should be enabled (may inflate) or not.

Only the front passenger front air bag is controlled by the Occupant Classification System.

Driver's knee air bag

The driver's knee air bag is stored below the steering wheel of the instrument panel.

This works in conjunction with the frontal airbags in a certain frontal impact collision to protect the knee of the driver.

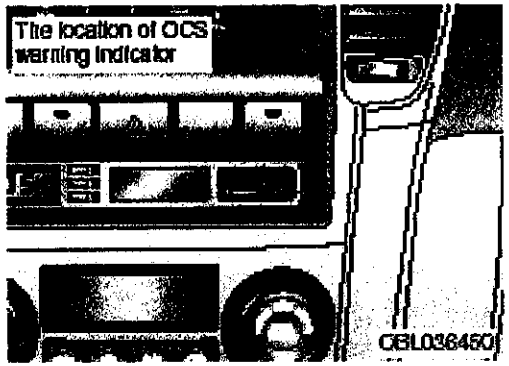
Front passenger's air bag

The front passenger's air bag is stored in the instrument panel, above the glove box area.

Since you cannot anticipate which air bags will deploy or from what direction, never put any objects or ornaments on the instrument panel.

Main components of Occupant Classification System

- A detection device located within the front passenger seat cushion.
- Electronic system to determine whether passenger air bag system should be activated or deactivated.
- A warning light located on the instrument panel which illuminates the words "PASSENGER AIR BAG OFF" indicating the front passenger air bag system is deactivated.
- The instrument panel air bag warning light is interconnected with the occupant classification system.



If there is no passenger in the front passenger seat or if the passenger in the front passenger seat is very light, (such as a child), the front **PASSENGER AIR BAG OFF** indicator may illuminate.

When this indicator is ON, the front passenger air bag will not deploy.

Always be sure that you and all vehicle occupants are seated and restrained properly (sitting upright with the seat in an upright position, centered on the seat cushion, with the person's legs comfortably extended, feet on the floor, and wearing the safety belt properly) for the most effective protection by the air bag and the safety belt.

- The OCS may not function properly if the passenger takes actions which can defeat the detection system. These include:

(1) Failing to sit in an upright position.
(2) Leaning against the door or center console.
(3) Sitting towards the sides or the front of the seat.
(4) Putting legs on the dashboard or resting them on other locations which reduce the passenger weight on the front seat.
(5) Improperly wearing the safety belt.
(6) Reclining the seat back.

- The "PASSENGER AIR BAG OFF" indicator illuminates after the ignition key is turned to the "ON" position or after the engine is started. If the front passenger seat is unoccupied or is occupied by very small person, or is occupied by someone who is improperly seated, the "PASSENGER AIR BAG OFF" indicator will remain illuminated and the front passenger air bag will not deploy in frontal crashes. If the front passenger seat is occupied by someone of adult size and body shape, the "PASSENGER AIR BAG OFF" indicator will turn off after 6 seconds and the front passenger's air bag will deploy in frontal crashes.
- If the "PASSENGER AIR BAG OFF" indicator illuminates, the front passenger air bag will not deploy in either a side or frontal collision.
- If the "PASSENGER AIR BAG OFF" indicator is not illuminated, the front passenger air bag may deploy in frontal collision.

Condition and operation in the front passenger occupant classification system

Condition detected by the occupant classification system	Indicator/Warning light		Devices
	"PASSENGER AIR BAG OFF" indicator light	SRS warning light	Front passenger air bag
1. Adult *1	Off	Off	Activated
2. Child *2 or child restraint system	On	Off	Deactivated
3. Unoccupied	On	Off	Deactivated

*1 The system judges a person of adult size as an adult. When a smaller adult sits in the front passenger seat, the system may recognize him/her as a child depending on his/her physique and sitting posture.

*2 When a larger child who has outgrown a child restraint system sits in the front passenger seat, the system may recognize him/her as an adult depending on his/her physique sitting posture, or objects in the lap of the occupant.

⚠ WARNING

If the "PASSENGER AIR BAG OFF" indicator illuminates or blinks continuously when a person of adult size sits in the front passenger's seat, it could be because that person isn't sitting properly in the seat. If this happens, turn the vehicle off, make sure the seat back is not reclined, have the passenger center on the seat cushion, with legs comfortably extended, and the safety belt properly positioned. Restart the vehicle and have the person remain in this position long enough to allow the system to detect the person and activate the passenger air bag.

⚠ WARNING

If the occupant classification system is not working properly, the air bag warning light (AIR BAG) on the instrument panel will illuminate. If there is a malfunction of the occupant classification system, the "PASSENGER AIR BAG OFF" indicator will illuminate and the front passenger's air bag will not deploy in frontal crashes even if there is an adult sized occupant in the front passenger seat. If the SRS air bag warning light does not illuminate when the ignition key is turned to "ON" position, if it remains illuminated after blinking for approximately six seconds, or if it illuminates while the vehicle is being driven, have an authorized Kia dealer inspect the occupant classification system with the SRS air bag system as soon as possible.

⚠ WARNING

If the front passenger seat should be modified for persons with disabilities that may affect the operation of the occupant classification system, contact an authorized Kia dealer.

⚠ WARNING

- Even though your vehicle is equipped with the occupant classification system, children aged 12 and under should be seated in the rear seats. Do not install a child restraint system in the front passenger seat. The child could be severely injured or killed if the air bag deploys. Children are afforded the most protection in the event of an accident when they are restrained by the proper restraint system in the rear seat.

(Continued)

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- If a very low weight adult is seated in the front passenger seat, the occupant classification system may or may not turn off the right front passenger air bag, depending upon the person's seating position and body type. Everyone in your vehicle should wear a safety belt properly – whether or not there is an air bag for that person.
- If the front seat passenger changes their seating position (for example, by not sitting upright, by sitting on the edge of the seat, or by otherwise being out of position), the "PASSENGER AIR BAG OFF" indicator may be turned on, and the passenger air bag may not deploy in a collision. Always be sure to sit properly in the front passenger seat and wear the safety belt properly.

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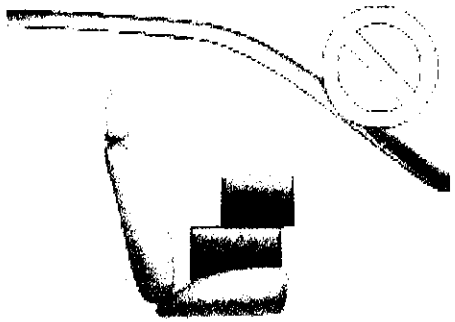
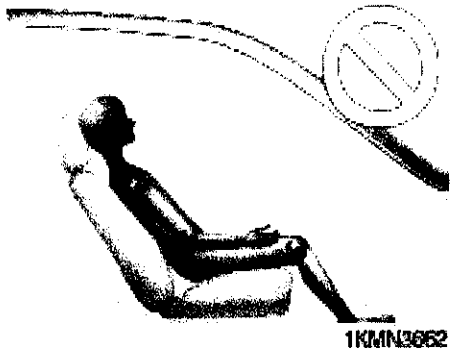


1KMN3661

- Never put a heavy load in the front passenger seat.



1KMN3662

- Never excessively recline the front passenger seatback.

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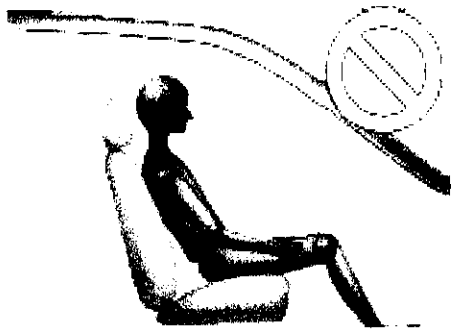
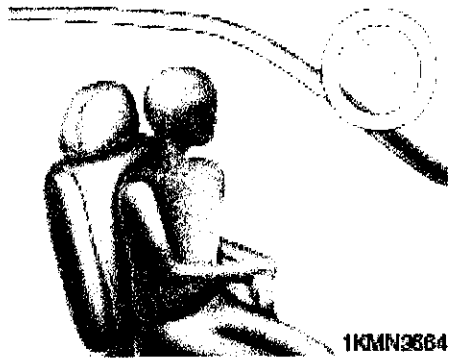


1KMN3663

- Never sit with hips shifted towards the front of the seat.



1KMN3664

- Never lean on the center console.
- Never sit on one side of the front passenger seat.

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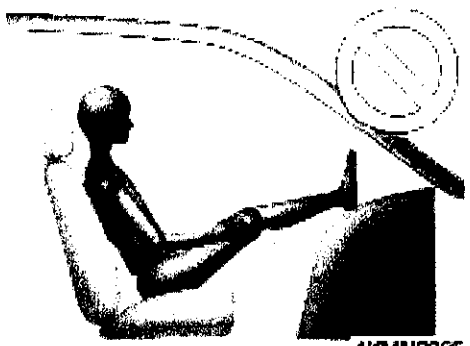
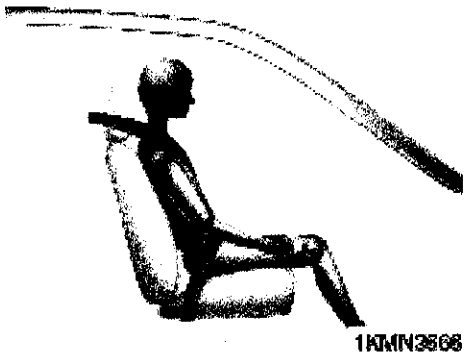


1KMN3665

- Never place feet on the dashboard.



1KMN3666

- Always sit in a proper seating position.

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- Manufacturers are required by government regulations to provide a contact point concerning modifications to the vehicle for persons with disabilities, which modifications may affect the vehicle's advanced air bag system. That contact is Kia's toll-free Customer Assistance Center at 1-800-333-4KIA. However, Kia does not endorse nor will it support any changes to any part or structure of the vehicle that could affect the advanced air bag system, including the occupant classification system. Specifically, the front passenger seat, dashboard or door should not be replaced except by an authorized Kia dealer using original Kia parts designed for this vehicle and model. Any other such replacement or modification could adversely affect the operation of the occupant classification system and your advanced air bags. For the same reason, do not attach anything to the seat, dashboard or door, even temporarily.

(Continued)

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If the system is adversely affected, it could cause severe personal injuries or death in a collision.

- Do not place sharp objects on the front passenger seat. These can damage the occupant classification system, if they puncture the seat cushion.
- Do not install accessory seat covers on the front seats, since these will interfere with proper sensor operation.

✱ NOTICE

- If luggage or other objects are placed on the front passenger's seat or if the temperature of the seat changes while the seat is unoccupied, the "PASSENGER AIR BAG OFF" indicator may blink. These conditions do not indicate a problem.
- Do not put heavy objects on the front passenger's seat. This may cause front passenger air bag deployment in the event of an accident, thus increasing your repair costs.

⚠ WARNING

- The front seat passenger air bag is much larger than the steering wheel air bag and inflates with considerably more force. It can seriously hurt or kill a passenger who is not in the proper position and wearing the safety belt properly. The front passengers should always move their seat as far back as practical and sit back in their seat.
- It is essential that the front passengers always wear their safety belts when vehicle is in motion, even when the vehicle is moving in a parking lot or up a driveway into garage.
- If the driver brakes the vehicle heavily prior to an impact, unbelted occupants will be thrown forward. If the front passenger is not wearing the safety belts, they will be directly in front of the air bags when deployment occurs. In that situation, serious injury or death is possible.

(Continued)

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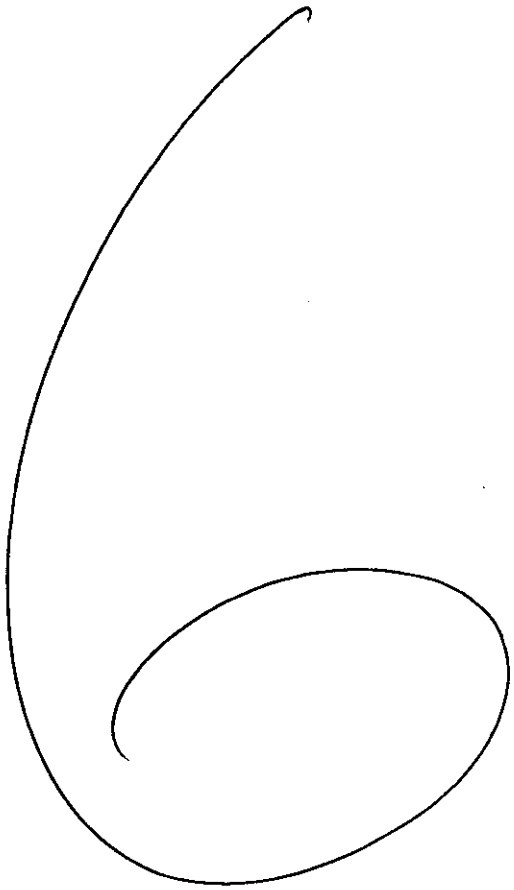
- Never allow front passenger to put their hands, feet or face on or close to the instrument panel. In the event of air bag deployment, such a mispositioned occupant would be likely to suffer severe injury or death.
- Never allow children/old and feeble persons/pregnant women to sit on the front passenger's seat. They may be seriously injured by the air bag inflation when air bag deploys.
- Do not put objects or stickers on the instrument panel. Do not apply any accessory to the front windshield. Do not install aftermarket mirrors or accessories on the factory-installed rearview mirror. Any of these could interfere with the deployment of the air bag or could hit your body at high speed and cause severe bodily injury and even death.

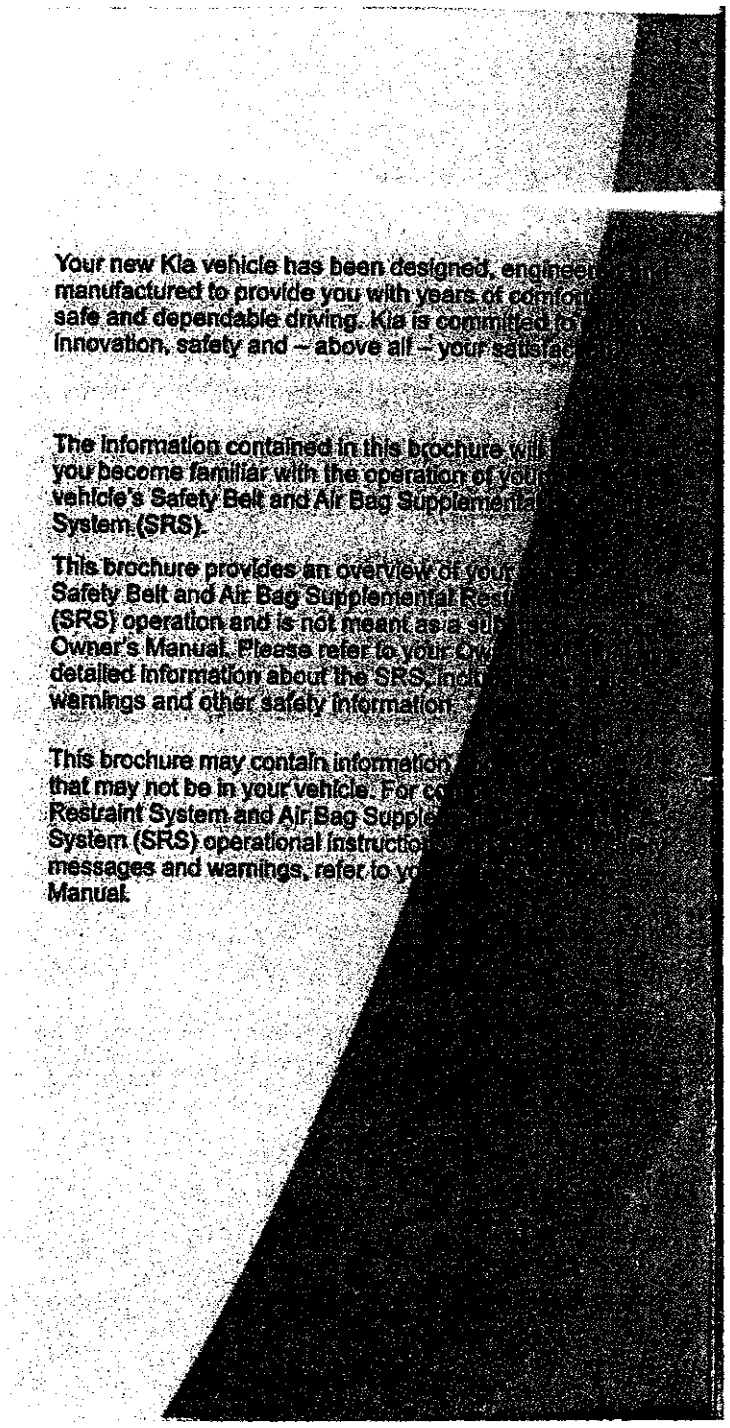


UNDERSTANDING YOUR
Safety Belt & Air Bag Supplemental Restraint

PASSENGER AIR BAG

KIA

The Power to Surprise™



Your new Kia vehicle has been designed, engineer
manufactured to provide you with years of comfort
safe and dependable driving. Kia is committed to
innovation, safety and – above all – your satisfac

The information contained in this brochure will
you become familiar with the operation of your
vehicle's Safety Belt and Air Bag Supplemental
System (SRS).

This brochure provides an overview of your
Safety Belt and Air Bag Supplemental Rest
(SRS) operation and is not meant as a sub
Owner's Manual. Please refer to your Own
detailed information about the SRS, incl
warnings and other safety information.

This brochure may contain information
that may not be in your vehicle. For co
Restraint System and Air Bag Supple
System (SRS) operational instructio
messages and warnings, refer to yo
Manual.

UNDERSTANDING YOUR SAFETY BELT & AIR BAG SUPPLEMENTAL RESTRAINT SYSTEM

CONTENTS:

KIA

The Power to Surprise™

Always check and follow the complete operating information contained in your Owner's Manual. In the event that this brochure contradicts your Owner's Manual, the Owner's Manual should be followed.

Your Safety Is Important to Kia

Please take a few minutes to read through this information and learn about front passenger air bag sensing devices and how air bags contribute to your overall safety and protection.

Air bags are a part of your vehicle's Supplemental Restraint System (SRS). They are designed to supplement, not replace, the safety belt system in your vehicle. Your safety belt offers protection that an air bag can't in side or rear impacts, rollovers and in frontal collisions not severe enough to activate the air bags. A collision is not severe enough to activate the air bag unless it is equivalent to hitting a solid barrier in excess of 8 to 14 miles an hour.

Remember, air bags are NOT intended to replace the use of safety belts, so above all, ALWAYS buckle up and make sure your passengers do, too!

To help you remember to fasten your safety belt, a warning light will come on and a chime will sound. For more information regarding your vehicle's safety belts, refer to your vehicle's Owner's Manual.

Understanding the Supplemental Restraint System (SRS)

The SRS is an automatic restraint system that uses sensors throughout the vehicle to gather information in order to control and most effectively deploy the air bags. Depending on the SRS your vehicle is equipped with; the sensors will monitor data such as:

- How close the driver's seat is to the steering wheel
- How close the passenger's seat is to the instrument panel
- Whether or not the safety belts are fastened
- The severity of the impact
- The direction of impact (front or side)

Advanced SRS front air bags offer the ability to control the air bag inflation with two levels, for moderate-severity impacts and for more severe impacts. There are several different locations from where the air bags may deploy, depending on the SRS the vehicle is equipped with and the type of collision or impact.

- Driver's air bag — stored in the center of the steering wheel
- Front passenger's air bag — stored in the instrument panel
- Side air bags — seat-mounted within the driver and passenger front seat back
- Curtain air bags — stored along both sides of the roof rails, above the front and rear doors
- Driver's knee air bag — stored in the front dash area below the steering column

Always check and follow the complete operating information contained in your Owner's Manual. In the event that this brochure contradicts your Owner's Manual, the Owner's Manual should be followed.

Always Buckle-Up For Proper Body Positioning

Always be sure to position yourself and your passengers correctly within your vehicle. Safety belts help prevent injury by keeping you and your passengers in the proper position, away from the air bag, when it inflates. It is important to remember that very close or direct contact with an air bag during deployment can cause serious or fatal injury. The National Highway Traffic Safety Administration (NHTSA) has recommended maintaining a distance of at least 10 inches between the driver's chest and steering wheel. Kia recommends that the driver and front passenger seats be moved back away from the air bag at least 10 inches or more, if practical. Also, sit back firmly in your seat.

Safety belts restrain passengers in their seats, allowing occupants to decelerate with the vehicle during a crash. Occupants that do not use their safety belts keep moving forward at the same speed the vehicle was moving before the impact. Safety belts help protect the occupants from striking the interior parts of the vehicle or being suddenly thrown out of the vehicle.

Both the driver and passenger safety belts on newer Kia vehicles are equipped with pretensioners. The purpose of the pretensioner is to take up any additional slack of the safety belt just after a frontal collision. This can help to reduce the risk and severity of an injury.

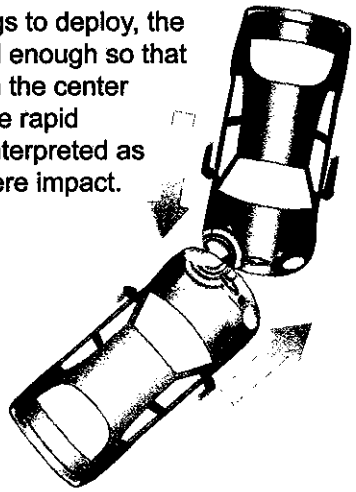
Child Seat Tethers, Child Restraint Anchor Positions

Kia vehicles are equipped with child restraint anchors designed to provide additional security during an accident. Before using any type of child restraint system (child seats that use child restraint tether straps), refer to your Owner's Manual for all information related to safety belts, air bags, child restraint systems and the locations and usage of the various types of child restraints and anchors.

What Happens In A Frontal Collision

A frontal collision is an impact that's head-on or at a near head-on angle, with another vehicle or solid object.

In order for your air bags to deploy, the impact must be forceful enough so that the computer system in the center of the vehicle can sense rapid deceleration which is interpreted as being a potentially severe impact.



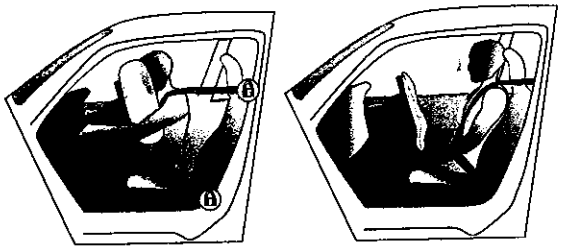
Always check and follow the complete operating information contained in your Owner's Manual. In the event that this brochure contradicts your Owner's Manual, the Owner's Manual should be followed.

What Happens When The Air Bag Deploys?

No occupant safety system can guarantee complete protection. An air bag may help reduce the severity of head and chest injuries. But be aware that contact with an inflating air bag could cause bruises, abrasions and even serious injuries, depending on the circumstances and severity of the crash.

Your air bag is definitely NOT a big, soft "pillow". Upon vehicle impact, an air bag deploys from the dashboard in about a fraction of a second "faster than the blink of an eye" and at speeds up to 200 miles per hour. Here's what happens:

- The sensor detects and analyzes your vehicle's deceleration and computes whether or not to deploy the air bag based on how severe the impact is likely to be.
- Safety belts lock, restraining the occupants' lower bodies and torsos.
- The belts also stretch, slowing down the occupants' and helping to absorb crash energy.
- The air bag is inflated and the occupant's heads and chests continue moving forward into the inflated air bag.
- The gas propellant instantly dissipates and the air bag immediately start to deflate.



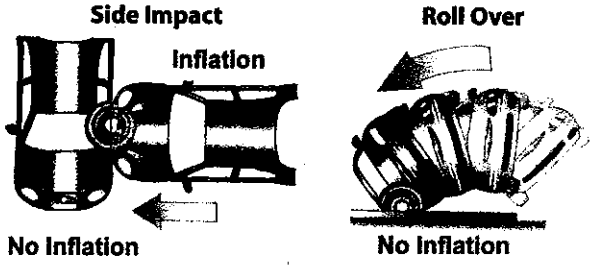
The entire process happens so fast that it is impossible to see the air bags inflate or deflate. You will only see the deflated bags hanging out of their compartments after a collision.

When an air bag inflates, it makes an extremely loud noise and leaves smoke and powder in the air. This is normal and is a result of the ignition of the air bag inflator. After the bags inflate, you may experience substantial discomfort in breathing due to the impact on your chest against both the safety belt and the air bag, as well as from breathing the residue in the air. It is best to get out of the car or open the doors and windows, as soon as it is safe to do so.

When Frontal Air Bags Can't Help

Front air bags are designed for one purpose and one purpose only - to deploy in severe frontal or front angle collisions identified by rapid deceleration.

There are many frontal collisions in which the vehicle is moving much faster than 14 mph, but the object it hits only slows down the vehicle slightly, thus keeping the instantaneous impact below the deployment level for the air bag.



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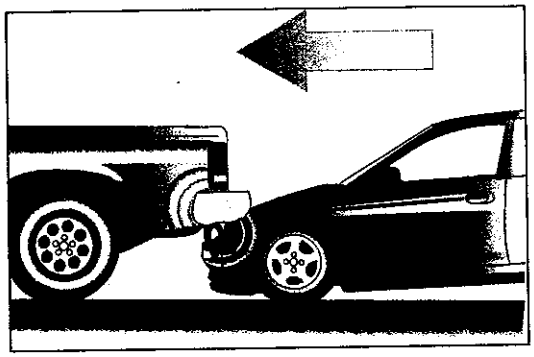
Air bags may also not deploy if your car under rides the rear end of another vehicle; depending on how far forward your vehicle goes and depending on



your vehicle's speed. Be aware, your air bag MIGHT deploy in a very deep pothole or at low speed frontal impact with a heavy, immovable object.

REMEMBER... air bags can deploy only once during an accident. In a multiple impact accident, the air bag will deploy only once at the first significant impact.

Side & Curtain Air Bags Provide Additional Safety

Consult your Kia Owner's Manual to determine if your vehicle contains a Side Impact and/or Curtain Air Bag.

Safety belts worn properly will ensure maximum benefit of your side impact and curtain air bags. The following precautions should be taken in a vehicle with side and/or curtain air bags:

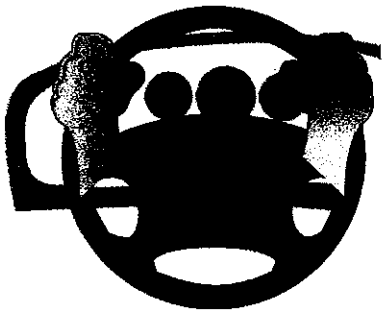
- Never place a child in the front seat.
- Never lean against the door.
- Avoid resting your arm on an open window frame.
- Avoid placing your arm out of an open window.

Injury could occur from a deploying side and/ or curtain air bag if these precautions are not followed.

Side air bags/curtains are designed to deploy in moderate to severe side collisions to the impacted side. The requirement for the air bag(s) to deploy is determined by the speed and angle of impact. Side/curtain air bags may also deploy during rollover accident, if the side of the vehicle is struck with sufficient force.

The Best Position For Your Hands On The Steering Wheel

When you are driving, grip the steering wheel at the sides, no higher than the 10 and 2 o'clock positions.



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Incorrect Positions For Your Hands On The Steering Wheel

- Never drive with your hands at the top of the steering wheel or lying across the center of the steering wheel.

- Do not rest your hands, thumbs, fingers, or arms on the center of the steering wheel. In an accident, this will help prevent your arms and hands from being violently thrown into your face or chest.

- Turn the steering wheel without crossing your arms in front of the air bag cover.

- Do not attempt to sound the horn at the onset of an inevitable accident.
- Do not place any objects on the dashboard shelf in front of your passenger.

Remember, grip the steering wheel at the sides, no higher than the 10 and 2 o'clock positions.

Infants, Children and Air Bags

The key to protecting children riding in your vehicle is simple; they must be properly restrained in a safety seat appropriate to their size and weight.

Real-world experience has shown that children are at a special risk for injuries caused by inflating air bags. In fact, most air bag deaths have happened when unbelted children were thrown into the dashboard, during pre-impact braking, when the air bag deployed. **The National Highway Traffic Safety Administration (NHTSA) strongly recommends that all children under 12 years of age ride properly restrained, in the rear center seat position.**

For optimum protection, follow these guidelines when transporting children in your vehicle.

ALWAYS position infant/child seat in the rear seats of the vehicle, preferrably in the center position. The center position of the rear seat provides the greatest protection from potential impact points with other vehicles or objects. Always follow the instructions of the infant/child seat manufacturer and make sure the child seat is tightly secured to the vehicle.

NEVER under any circumstances, place a rear-facing infant/child restraint in the front seat of the vehicle because it places the infant's head too close to the air bag and upon deployment it could cause serious or fatal injury to the infant.

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- Children who graduate to booster safety seats, should continue to be positioned in the rear seats.
- If older children must ride in the front seat, make sure they always buckle their safety belts and that their seat is moved back as far as possible from the dashboard.

Front Passenger Air Bag Sensing Device

If equipped, your Kia will contain an air bag sensing device or "grid" in the front passenger's seat cushion. This air bag sensing device is called the Occupant Classification System (OCS) it activates or deactivates the front passenger air bag after detecting a passenger's presence, weight and/or seating position.

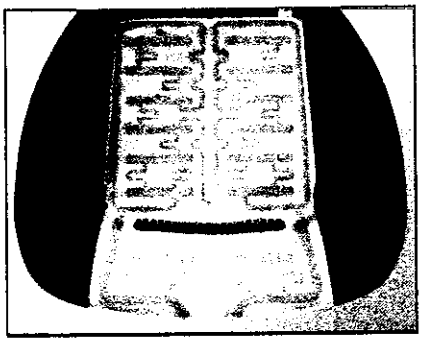

Illustration of Air Bag Sensing Device That is Inside Passenger Seat Cushion.

Advantages Of Occupant Classification System (OCS)

- While air bags offer protection to adult sized passengers, they can cause fatal injuries if the occupant is a child smaller (in weight) than a typical one year old. In response to this, the National Highway Transportation and Safety Administration (NHTSA) requires that automobile manufacturers begin equipping vehicles with an automatic suppression system to detect the presence of child or infant and suppress the air bag deployment. The Occupant Classification System (OCS) is a safety system that meets the performance levels required by the NHTSA.
- The Occupant Classification System (OCS) protects front seat vehicle passengers who are either too small or who are sitting in a position that could be harmful if the air bag deploys.
- OCS prevents the passenger air bag from deploying when the seat is unoccupied. This feature helps to lower repair costs if the vehicle is damaged, because the passenger's air bag doesn't need to be replaced.

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Answers To Your Air Bag Questions About Occupant Classification System

How does the Occupant Classification System work?

The Occupant Classification System was developed to detect the presence of a child or infant in the front passenger seat and for their safety, suppresses air bag deployment. If the sensor in the front passenger seat cushion identifies an occupant below the system weight designation, or who is improperly seated, the system automatically turns off the front passenger air bag. PASSENGER AIR BAG

Here's how the system operates:

- When the ignition key is turned to the ON position, or after the engine is started, the PASSENGER AIR BAG OFF indicator light will illuminate.
- If the front passenger seat is unoccupied, or occupied by a small person, or someone who is not sitting properly in the seat, then the indicator light will stay ON.
- If the seat is occupied by a person of adult size who's properly seated in the seat, the PASSENGER AIR BAG OFF indicator light will turn OFF in a few seconds.
- Whenever the PASSENGER AIR BAG OFF indicator light is illuminated, the front passenger air bag will NOT deploy in frontal crashes.

Will the PASSENGER AIR BAG OFF light always go out when an adult is in the front seat?

Not always. The sensor detects seating position to determine if an adult or a young child is seated in the front passenger seat. An improperly seated adult can cause the PASSENGER AIR BAG OFF indicator to remain illuminated and disable the passenger air bag. Ensure that the occupant of the front passenger seat is properly seated.

What is the proper seating position for an adult?

First, make sure the seat is in an upright position. Have the passenger sit upright in the seat, centered on the seat cushion. Their legs should be extended comfortably forward with the bottom of their legs making contact with the lower seat cushion.

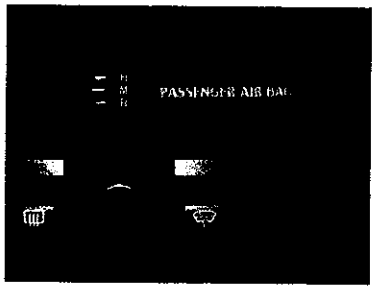
What would be considered an improper seating position?

There are a variety of improper seating positions that could cause the PASSENGER AIR BAG OFF light to remain illuminated. Some of the most common are:

- Sitting on the edge of the seat.
- Sitting cross-legged in the seat.
- Reclining in the seat while the vehicle is being driven.
- Sitting too far forward on the seat.
- Resting feet on the dash.
- Leaning on the door or dashboard

What if an adult is sitting properly in the front passenger seat and the PASSENGER AIR BAG OFF light is still on?

Depending on the front seat passenger's body type, an adult sized person may not contact enough of the seat cushion surface to allow the sensors to determine the passenger is an adult. In this case, the system may determine the occupant is a child (or child seat) and the PASSENGER AIR BAG OFF indicator would remain on. Temperature can also affect the seat material and sensing characteristics of the OCS. Have your system inspected by an authorized Kia Retailer to ensure it is working properly.



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My PASSENGER AIR BAG OFF light came on then went off again while an adult passenger was sitting in the front seat. Does this mean the system is malfunctioning?

When a passenger of appropriate size is seated in the proper position, the indicator should turn off. A momentary illumination of the indicator with a passenger in the front passenger seat may indicate the system briefly sensed less weight in the seat, or the passenger was temporarily out of position, and does not necessarily indicate a malfunction of the system.

Why does the OCS cause the PASSENGER AIR BAG OFF light to come on at some times and not at others?

Usually this happens because the OCS detected the initial seating position of the passenger (after ignition ON) was improper. If this happens, try turning the ignition key off and reposition the front passenger correctly:

- In an upright position
- Sitting upright in the seat
- Centered on the seat cushion
- Legs extended comfortably forward
- Bottom of legs making contact with the lower seat cushion.

After the passenger is seated properly, turn the ignition ON and make sure the passenger stays in position for about 30 seconds. If the PASSENGER AIR BAG OFF indicator remains on after performing this procedure, have the system inspected by a Kia Retailer.

Important Facts About Occupant Classification Systems (OCS)

To help ensure that the sophisticated Occupant Classification System safety technology works properly in your vehicle, there are several important guidelines you should observe:

- Do not install accessory seat covers on the front seats, as they will interfere with OCS sensor operation and they can also interfere with the deployment of side air bags.
- Do not place sharp objects on the front passenger seat. These can damage the system if they puncture the seat cushion.
- Never install a child restraint system in the front passenger seat. The child could be severely injured or killed if the air bag deploys.
- Never place objects over the air bag storage compartments or between the air bags and yourself.

Refer to the specific cautions, warnings and additional information about the operation of your vehicle's Occupant Classification System in your Owner's Manual.

REMEMBER... safety belts have been proven to be the best protection in all types of collisions: frontal crashes, side or rear impacts and rollovers.

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Always Buckle Up!