

UNDERSTANDING YOUR

Seat Belt & Air Bag Supplemental Restraint System



PASSENGER AIR BAG **OFF**





Congratulations On Your New Kia!

Your new Kia vehicle has been designed, engineered and manufactured to provide you with years of comfortable, safe and dependable driving. Kia is committed to quality, innovation, safety and, above all, your satisfaction.

Using This Guide

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

This brochure provides an overview of your vehicle's Seat Belt and Air Bag Supplemental Restraint System (SRS) operation and is not meant as a substitute for your Owner's Manual. Please refer to your Owner's Manual for detailed information about the SRS, including cautions, warnings and other safety information.

This brochure may contain information about devices that may not be in your vehicle. For complete Seat Belt Restraint System and Air Bag Supplemental Restraint System (SRS) operational instructions and important safety messages and warnings, refer to your vehicle's Owner's Manual.

UNDERSTANDING YOUR SAFETY BELT & AIR BAG SUPPLEMENTAL RESTRAINT SYSTEM

CONTENTS:

- 2** Your Safety is Important to Kia
- 3** Understanding The Supplemental Restraint System
- 4** Always Buckle-Up For Proper Body Positioning
- 5** Child Seat Tethers, Child Restraint Anchor Positions
- 5** What Happens In A Frontal Collision?
- 6** What Happens When The Air Bag Deploys?
- 7** When Frontal Air Bags Can't Help
- 8** Side & Curtain Air Bags Provide Additional Safety
- 9** The Best Position For Your Hands On The Steering Wheel
- 10** Incorrect Positions For Your Hands On The Steering Wheel
- 11** Infants, Children and Air Bags
- 12** Front Passenger Air Bag Sensing Device
- 13** Advantages Of Occupant Detection System (ODS)
- 14** Answers To Your Air Bag Questions About Occupant Detection System (ODS)



KIA MOTORS
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



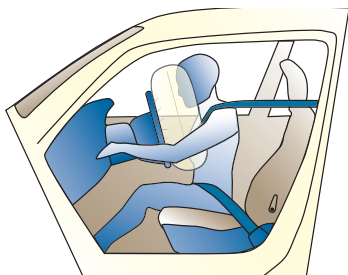
Always check and follow the complete operating information contained in your Owner's Manual. In the event that this brochure contradicts your Owner's Manual, the Owner's Manual should be followed.

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.

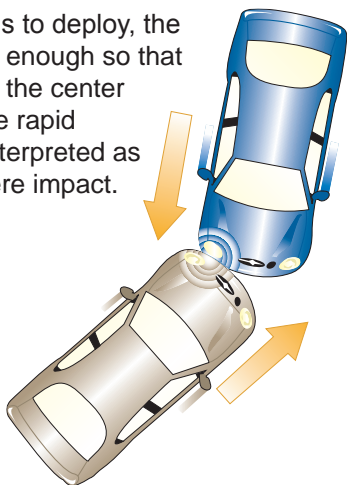
Child Seat Tethers, Child Restraint Anchor Positions

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.



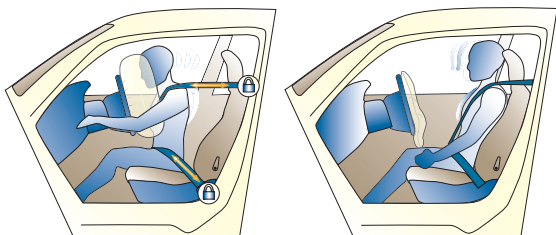
Always check and follow the complete operating information contained in your Owner's Manual. In the event that this brochure contradicts your Owner's Manual, the Owner's Manual should be followed.

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.



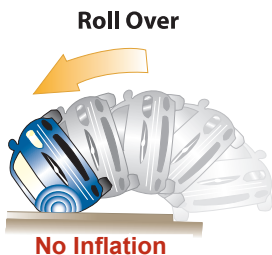
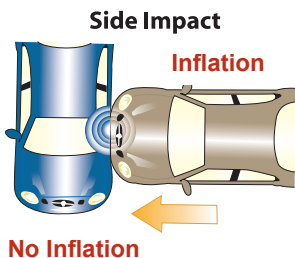
The entire process happens so fast that it is impossible to see the air bags inflate or deflate. You will only see the deflated bags hanging out of their compartments after a collision.

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

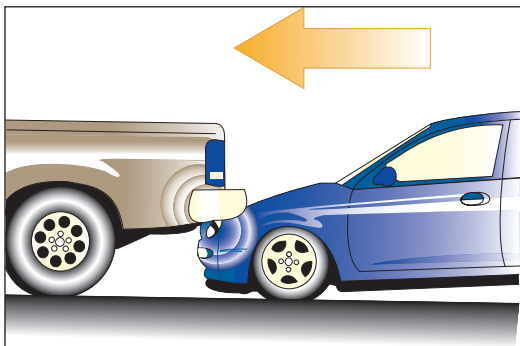
Front air bags are designed for one purpose and one purpose only - to deploy in severe frontal or front angle collisions identified by rapid deceleration.

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.



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.

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. An increasing number of Kia vehicles now have rollover sensors that are designed to deploy your vehicle's side/curtain air bags in certain rollover events.




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.



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.

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.

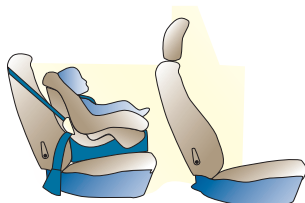
Infants, Children and Air Bags

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.

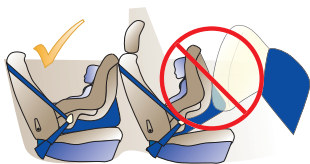
Real-world experience has shown that children are at a special risk for injuries caused by inflating air bags. In fact, most air bag deaths have happened when unbelted children were thrown into the dashboard, during pre-impact braking, when the air bag deployed. **The National Highway Traffic Safety 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, preferably 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.



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.

- 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 Detection System (ODS) 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 Detection System (ODS)

- 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 Detection System (ODS) is a safety system that meets the performance levels required by the NHTSA.
- The Occupant Detection System (ODS) 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.
- ODS 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.

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.

Answers To Your Air Bag Questions About Occupant Detection System

How does the Occupant Detection System work?

The Occupant Detection 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.

A rectangular indicator light with a black background and the text "PASSENGER AIR BAG OFF" in red capital letters.

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 ODS. Have your system inspected by an authorized Kia Retailer to ensure it is working properly.

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.

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

Usually this happens because the ODS 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, insist that your passenger ride in a rear seat and have the system inspected by a Kia Retailer.

Important Facts About Occupant Detection Systems (ODS)

To help ensure that the sophisticated Occupant Detection 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 ODS 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 Detection System in your Owner's Manual.

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

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

Always Buckle Up!

WARNINGS: See Owner's Manual for important safety information. Serious personal injury or death could result in failure to abide by the warnings in the Owner's Manual. Do not adjust seats while driving, because you could lose control of vehicle. Never drive with the seat in a reclined position. Seat belts must always be worn by all occupants when the vehicle is in motion. Air bags are supplemental and deploy only in certain collisions, and do not replace seat belt usage. Always wear your seat belt and properly secure children 12 years and younger in the rear seat. The back seat is the safest place for children 12 years and younger. Make sure all children use seat belts and/or child seats, as required by law. Do not install a child restraint on the front passenger's seat, because children can be seriously or fatally injured by the deployment of the passenger air bag. In addition, never place a rear-facing infant-safety seat in front of any air bag, because doing so puts an infant in danger of being seriously or fatally injured. **For further safety information, please review your Owner's Manual.**

See your Owner's Manual for more details and complete SRS information, including specific cautions and warning.

If you have any questions about your Kia vehicle, please contact your local retailer or, if you need additional help, feel free to call:

Toll Free Consumer Assistance at:

1-800-333-4KIA (4542) Monday through Friday, 5 AM - 6 PM PST

Emergency Roadside Assistance at:

1-800-333-4KIA (4542) 24 hours a day, 365 days a year, accessible from anywhere in the U.S. or Canada.

24-hour Roadside Assistance is a service plan provided by Kia Motors America, Inc. Certain limitations apply – coverage details are available in the Kia Warranty and Consumer Information Manual.

Reproduction of the contents of this material without the express written approval of Kia Motors America, Inc. is prohibited.

Kia reserves the right to change product specifications at any time without incurring obligations.

