

## KIA, THE COMPANY

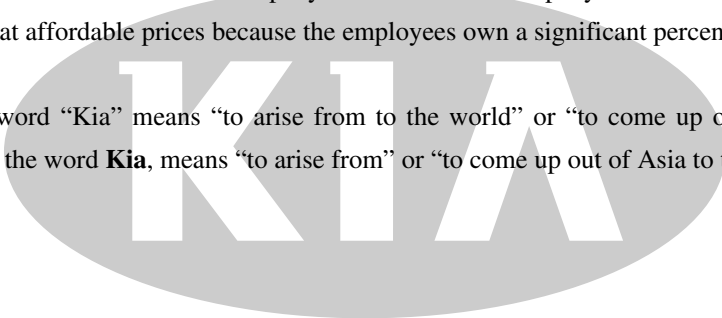
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Now that you are the owner of a Kia vehicle, you'll probably be asked a lot of questions about your vehicle and the company like "What is a Kia?", "Who is Kia?", "What does 'Kia' mean?".

Here are some answers. First, Kia is the oldest car company in Korea. It's a company that has thousands of employees focused on building high-quality vehicles at affordable prices because the employees own a significant percentage of the company.

The first syllable, **Ki**, in the word "Kia" means "to arise from to the world" or "to come up out of to the world." The second syllable, **a**, means "Asia". So, the word **Kia**, means "to arise from" or "to come up out of Asia to the world".

*Enjoy your vehicle!*

A large, semi-transparent watermark of the Kia logo is centered on the page. The logo consists of the word "KIA" in a bold, sans-serif font, with the letters "K", "I", and "A" each having a horizontal bar through its middle. The logo is set against a light gray oval background.

## FOREWORD

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Thank you for choosing a Kia vehicle.

When you require service, remember that your authorized Kia dealer knows your vehicle best. Your dealer has factory-trained technicians, recommended special tools, genuine Kia replacement parts, and is dedicated to your complete satisfaction.

Because subsequent owners require this important information as well, this publication should remain with the vehicle if it is sold.

This manual covers all OPTIMA/MAGENTIS models and will familiarize you with operation, maintenance and safety information about your new vehicle. It is supplemented by a Warranty Information Booklet that provides important information on all warranties regarding your vehicle. We urge you to read these publications carefully and follow the recommendations to help assure enjoyable and safe operation of your new vehicle.

Kia offers a great variety of options, components and features for its various models.

Therefore, the equipment described in this manual, along with the various illustrations, may not all be applicable to your particular vehicle. The information and specifications included in this manual were accurate at the time of printing.

Kia Motors reserves the right to discontinue or change specifications or design at any time without notice and without incurring any obligation. If you have questions, always check with your Kia Dealer.

We assure you of our continuing interest in your motoring pleasure and satisfaction in your Kia vehicle.

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Printed in Korea

### CAUTION:

**Severe engine and transaxle damage may result from the use of poor quality fuels and lubricants that do not meet Kia specification. You must always use high quality fuels and lubricants that meet the specifications listed on page 7- 40 in the Maintenance section and page 5-2 in the Driving tips section of the Owner's Manual.**

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# INTRODUCTION

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## INTRODUCTION

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### HOW TO USE THIS MANUAL

We want to help you get the greatest possible driving pleasure from your vehicle. Your Owner's Manual can assist you in many ways. We strongly urge you to review the entire manual. However, in order to prevent death or injuries, at the very least, you must review the WARNING and CAUTION sections spread throughout the manual, which are easily recognized by their special markings indicated below. Illustrations complement the words in this manual to help explain the best way to enjoy your vehicle. By reading your manual, you can find out about features, important safety information, and driving under various road conditions.

Layout of the manual is provided in the Table of Contents.

**Index:** A good place to start is the index; it has an alphabetical listing of all information in your manual.

**Sections:** This manual has eight sections plus an index. Each begins with a brief list of contents so you can tell at a glance if that section has the information you want.

You'll find various WARNINGS, CAUTIONS, and NOTICES in this manual. These WARNINGS, CAUTIONS and NOTICES were prepared to enhance your personal safety and continued satisfaction with your Kia vehicle. You should carefully read and follow ALL procedures and recommendations provided in these WARNINGS, CAUTIONS and NOTICES.

### WARNING:

**A WARNING indicates a situation in which serious bodily injury or death could result if the warning is ignored.**

### CAUTION:

**A CAUTION indicates a situation in which personal injury, perhaps severe, could result if the caution is ignored.**

### NOTICE:

**A NOTICE indicates a situation in which damage to your vehicle could result if the note is ignored.**

## INTRODUCTION

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### **VEHICLE BREAK-IN PROCESS**

No special break-in period is needed. By following a few simple precautions for the first 600 miles (1,000 km) you may add to the performance, economy and life of your vehicle.

- Do not race the engine.
- Do not maintain a single speed for long periods of time, either fast or slow. Varying engine speeds are beneficial for proper engine break-in.
- Avoid hard stops, except in emergencies, to allow the brakes to seat properly.
- Avoid full-throttle starts.

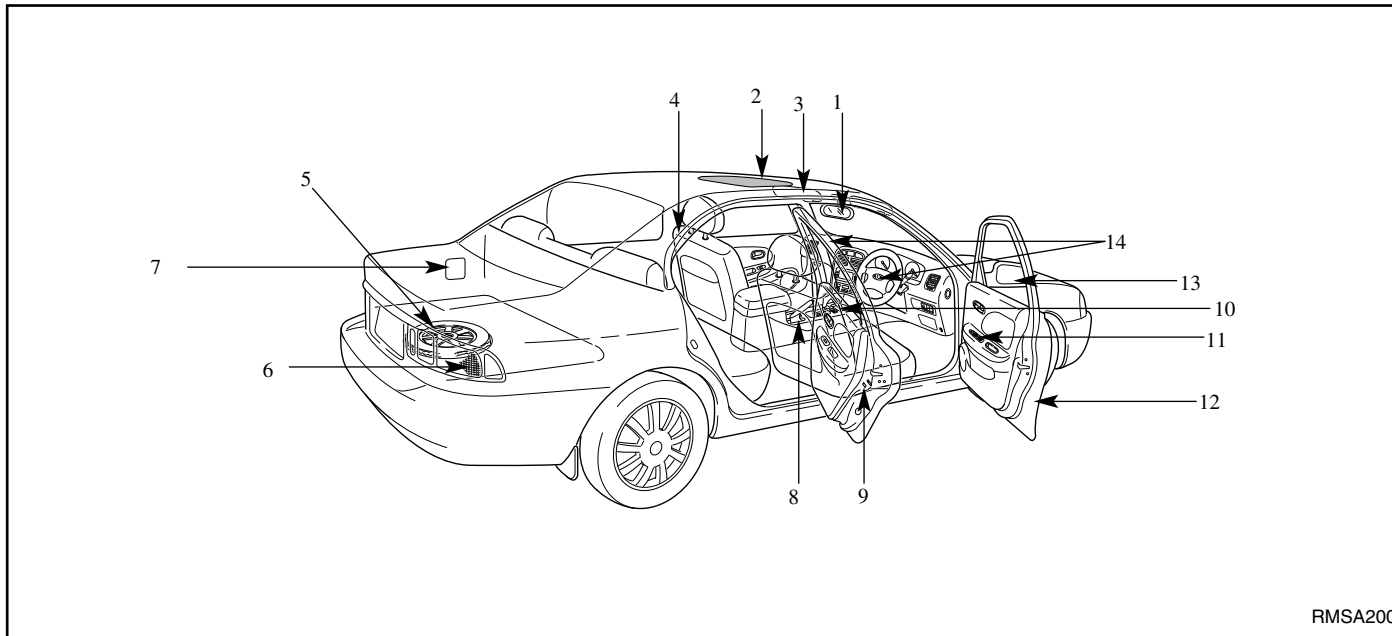
## **YOUR VEHICLE AT A GLANCE**

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## YOUR VEHICLE AT A GLANCE

### INTERIOR AND EXTERIOR OVERVIEW



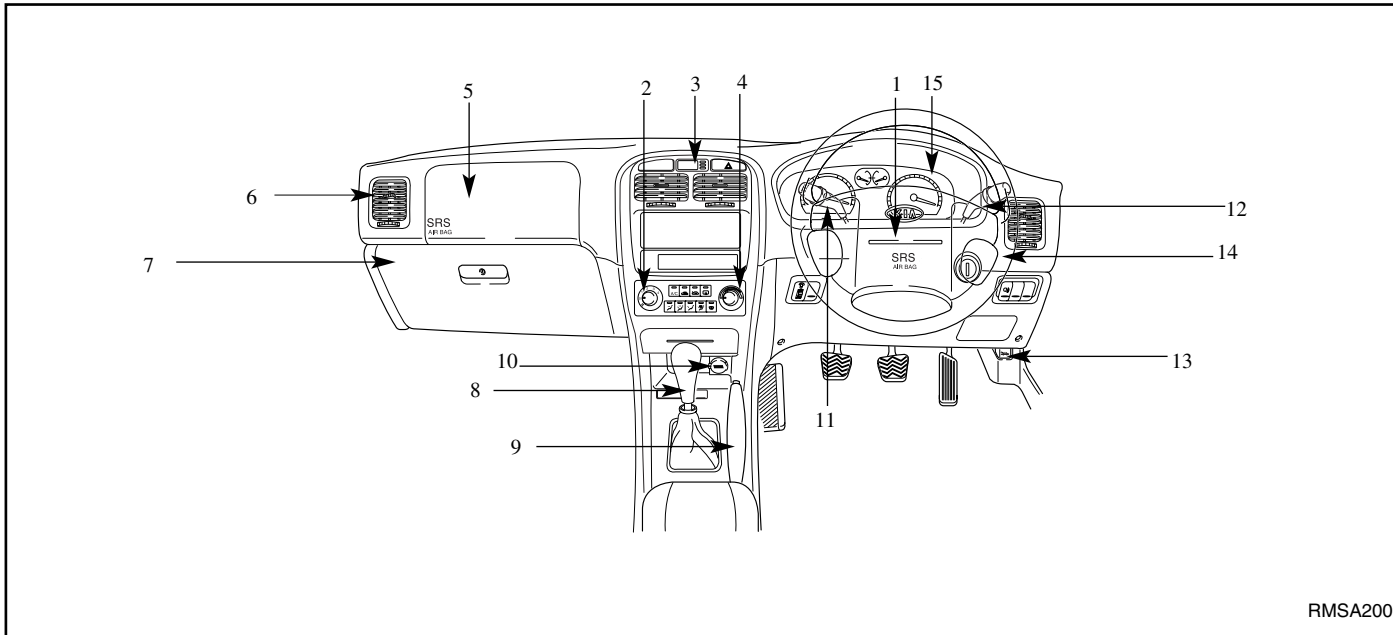
1. Rearview mirror
2. Sunroof
3. Sunvisor
4. Seat
5. Spare Tyre
6. Lights
7. Fuel filler lid

8. Parking brake
9. Rear door child safety lock
10. Shift lever (Automatic)
11. Power window switches (if equipped)
12. Door
13. Outside rearview mirror
14. Air bags (if equipped)



## YOUR VEHICLE AT A GLANCE

### INSTRUMENT PANEL OVERVIEW



RMSA2002

1. Air bag (if equipped)
2. Climate control
3. Clock
4. Radio (if equipped)
5. Air bag (if equipped)
6. Vent
7. Glove box
8. Shift lever (Automatic)
9. Parking brake
10. Power outlet
11. Wiper / Washer
12. Light control / Turn signals
13. Hood release
14. Steering wheel
15. Instrument cluster

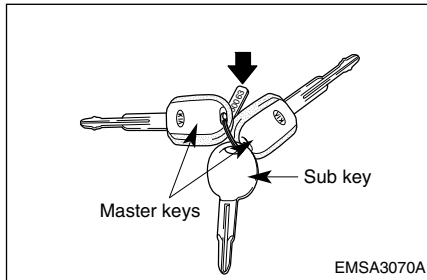
## KNOWING YOUR VEHICLE

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## KNOWING YOUR VEHICLE

### KEYS



The key number is stamped into the plate attached to the key set. If you should lose your keys, this number will enable an Authorized Kia Dealer to duplicate the keys easily. Remove the plate and store it in a safe place. Also, record the number and keep it in a safe and handy place, but not in the vehicle.

Your vehicle has two master keys and a sub key. The master key will open all locks on your vehicle.

The sub key will only function in the ignition and the door locks.

#### **⚠ WARNING : IGNITION KEY**

Leaving children unattended in a vehicle with the ignition key is dangerous even if the key is not in the ignition. Children copy adults and they could place the key in the ignition. The ignition key would enable children to operate power windows or other controls, or even make the vehicle move which could result in serious bodily injury or even death. Never leave the keys in your vehicle with unsupervised children.

Leaving your sub key with a parking attendant will ensure that your vehicle's trunk, trunk lid release, glove box compartment and rear trunk access may not be unlocked in your absence.

#### **⚠ CAUTION :**

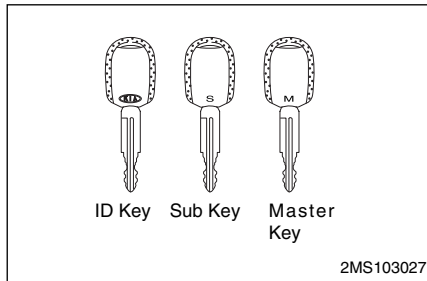
Use only Kia original parts for the ignition key in your vehicle. If an aftermarket key is used, the ignition switch may not return to ON after START. If this happens, the starter will continue to operate causing damage to the starter motor and possible fire due to excessive current in the wiring.

## KNOWING YOUR VEHICLE

### IMMOBILIZER SYSTEM (IF EQUIPPED)

The immobilizer system is an anti-theft device, designed to deter automobile theft.

#### *Three types of keys*



For greater convenience, your vehicle has three types of key as shown in the illustration.

#### 1) ID key

This key must be used first to register a unique ID code in the ICM.

#### 2) Master key

This key is for general use. It will open all locks on your vehicle. One side of the key has the Kia logo and the other side has the “M” symbol.

#### 3) Sub key

Similar to the master key, this key will only function in the ignition and the door locks, but it will not operate the trunk and the glove box. One side of the key has an “S” symbol.

4) Leaving your sub key with a parking attendant will ensure that your vehicle’s trunk, trunk lid release, glove box compartment and rear trunk access may not be unlocked in your absence.

#### \* NOTICE :

**Before leaving your sub key with a parking attendant, make sure that the lock levers of the seat back lock and the trunk lid lock are switched to the “LOCK” position.**

#### **CAUTION :**

**Don’t lose your ID key or forget the password. Always keep your ID key in a place where you remember and record your password. If you don’t have both the password and ID key, consult your Authorized Kia Dealer.**

## KNOWING YOUR VEHICLE

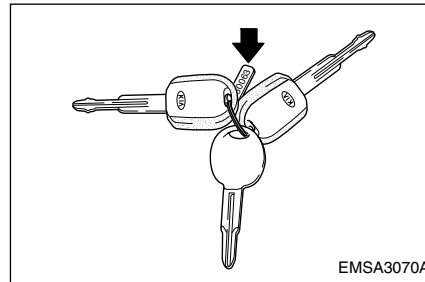
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5) If you need additional keys or if you should lose your keys, your Authorized Kia Dealer can make new keys if you can supply the key number and ID key.

**\* NOTICE :**

**If you make you own duplicate key, you will not be able to cancel the system or start the engine.**

### *Key numbers*

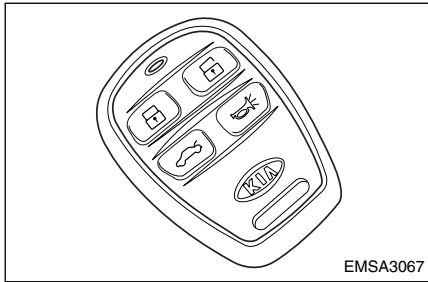


The vehicle key number is recorded upon a metal tag attached to the keys when the vehicle is first delivered to you. The key number should be recorded and kept in a safe place in case the need to order further keys arises. New keys are available from any Kia dealer by quoting the relevant key number.






In the interest of security, the metal tag attached to the keys which bears the key number should be removed from the key ring after you receive your new vehicle. In addition, key numbers cannot be provided by Kia for security reasons. If you need additional keys or if you should lose your keys, your Authorized Kia Dealer can make new keys if you can supply the key number and ID key.

## KNOWING YOUR VEHICLE

### KEYLESS ENTRY SYSTEM (IF EQUIPPED)



You can also lock or unlock the door and open the trunk from outside with transmitter.

-  To lock the door, depress this button. (Hazard warning light is turned on and turned off for about 1 second.)
-  To unlock the door, depress this button. (Hazard warning light flickers twice.)
-  To open the trunk, depress this button.
-  If you depress the panic button () on the transmitter, the horn will sound and hazard lamp will flash.

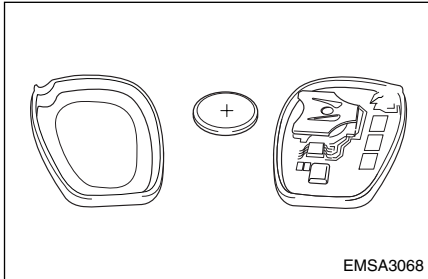
#### \* NOTICE :

- Transmitter does not work as described below.
  - Ignition key is in the ignition key hole.
  - The battery of transmitter is discharged.
- The operational distance(5m) is exceeded.
- The transmitter may not operate when the weather is very cold or when there are other vehicles or objects around the vehicle.
- When the transmitter does not work correctly, open and close the door with the ignition key. If you have a problem with the transmitter, contact an Authorized Kia Dealer.
- If you lock the door with transmitter, be sure to unlock the door with transmitter. When you unlock the door with the ignition key, the theft-alarm system is operated. But the alarm will be released if the ignition key is in the ON position for 30 seconds or more.

## KNOWING YOUR VEHICLE

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### *Battery Replacement*



Transmitter uses a battery of 3Volt lithium type. Normally the battery in your transmitter is used for several years, but replace it according to the operation condition.

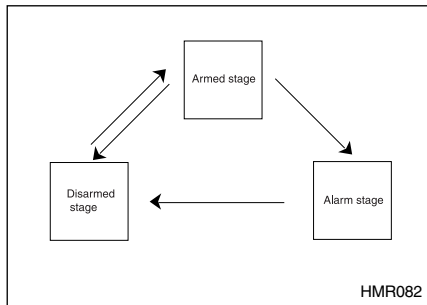
1. Using the screwdriver, loosen the screw on the back of the transmitter and use a thin tool to pry open the transmitter.
2. Disassemble the transmitter and remove the battery.
3. Make sure the battery “Plus (+)” faces up.

### **CAUTION :**

Using the wrong specified battery can cause a malfunction of the transmitter. Be sure to use the standardized goods.


## KNOWING YOUR VEHICLE

### THEFT-ALARM SYSTEM(IF EQUIPPED)



#### ***Armed stage***

#### ***The system is alarmed as described below.***

After all doors such as engine hood, trunk, doors are locked, if the transmitter is pressed “

#### ***Alarm stage***

The alarm will be activated as described below under the armed stage:

- The door is opened without using the key or the transmitter.
- The trunk lid is opened without using the key.
- The engine hood is opened.


The siren will sound “ON” for 30 seconds and “OFF” for 10 seconds which continues to be repeated three times. At the same time, the engine does not start.

#### ***Withheld alarm***

When the alarm is armed, the alarm will not sound if the trunk lid is opened with either the key of the transmitter. However, if the trunk lid is not opened completely within two seconds after unlocking with the key or transmitter. Also, if any of the doors of hood is opened while the trunk lid is open and the alarm armed, the alarm will sound.

#### ***Disarmed stage***

The alarm will be released as described below.

- When the “

3-7



## KNOWING YOUR VEHICLE

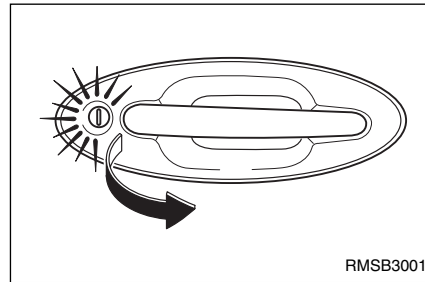
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### **CAUTION :**

If the ignition key is in the ignition keyhole, the transmitter is not operated.

Avoid trying to start the engine with the alarm activated.

### **ILLUMINATED DOOR KEY CYLINDER (IF EQUIPPED)**



Whenever the driver's door handle is pulled, the key cylinder of the door handle will be illuminated for your convenience.

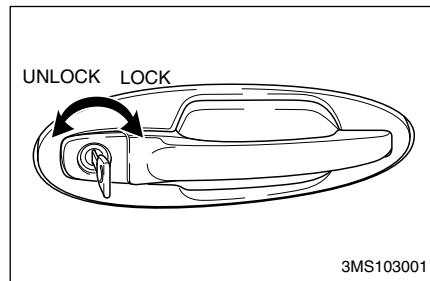
The light will go off 10 seconds after pulling the door handle.

## KNOWING YOUR VEHICLE

### DOOR LOCKS

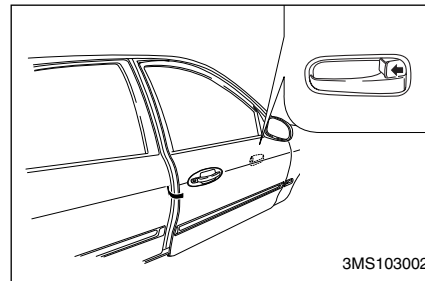
#### Manual Door Locks

#### Operating Door Locks - With Key



- Both front doors can be locked and unlocked with the key.
- Turn the key to the left to unlock and to the right to lock the door.
- Once a door is unlocked, it may be opened by pulling the door handle.

#### Operating Door Locks - Without Key

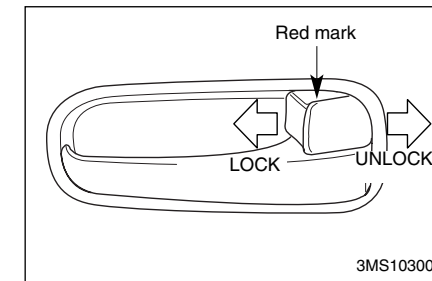


To lock a door without the key, push the inside door lock button to the "LOCK" position and close the door.

#### \* NOTICE :

**Always remove the ignition key, engage the parking brake, close all windows and lock all doors when leaving your vehicle unattended.**

#### Operating Door Locks from Inside the Vehicle



- To lock a door, push the door lock button to the "LOCK" position.
- To unlock a door, push the door lock button to the "UNLOCK" position.
- To open a door, pull the door handle towards the middle of your vehicle.

*The door ajar warning light will illuminate if a door is not fully closed. Close the door completely and the light will go out.*

## KNOWING YOUR VEHICLE

### **WARNING :**

Never leave children or animals unattended in the vehicle. An enclosed vehicle can become extremely hot or oxygen get rare, causing death or severe injury to children or to animals who cannot escape the vehicle.

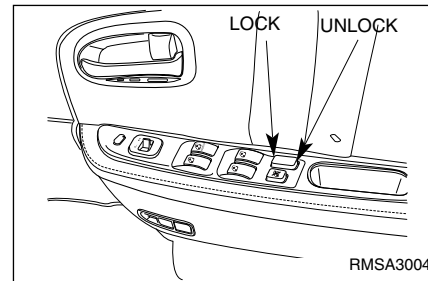
### **CAUTION :**

The doors should always be fully closed and locked while the vehicle is in motion to prevent accidental opening of the doors. Locked doors will also discourage potential intruders when the vehicle stops or slows.

### **\* NOTICE :**

When the door is locked, the red mark on the switch is not visible.

### *Central Door Locks*

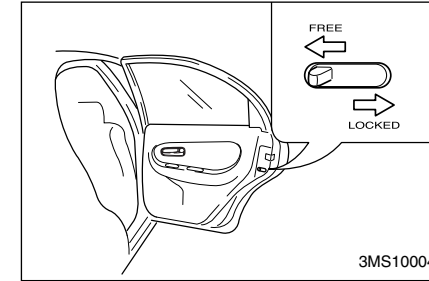


The central door locking switch is located on the driver's arm rest. It is operated by depressing the door lock switch. If any door is open when the switch is depressed, the door will remain locked when closed.

### **\* NOTICE :**

- When pushing the front portion of the driver's door lock switch, all vehicle doors will lock.
- When pushing the rear portion of the switch, all vehicle doors will unlock.

### *Rear Door Child Safety Lock*



The child safety lock is provided to help prevent children from accidentally opening the rear doors from inside the vehicle.

- To lock a rear door so that it cannot be opened from the inside, push the child safety lock located on the rear edge of the door to the "LOCKED" position (toward rear of vehicle) before closing the door.
- To open a rear door while the child safety lock is engaged, push the door lock knob to the "UNLOCK" position then pull the outside door handle.

## KNOWING YOUR VEHICLE

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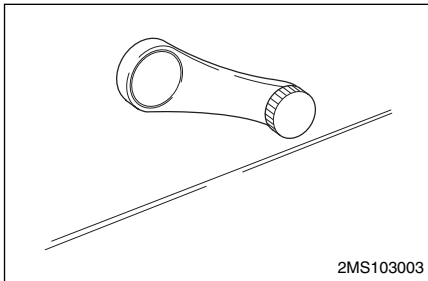
 **WARNING : REAR DOOR  
LOCKS**

If children accidentally open the rear doors while the vehicle is in motion, they could fall out and be seriously or fatally injured. To prevent children from opening the rear doors from the inside, the rear door safety locks should be used whenever children are in the vehicle.

## KNOWING YOUR VEHICLE

### WINDOWS

#### *Manual Windows (If Equipped)*



Use the window crank to open and close each window.

#### *Power Windows (If Equipped)*

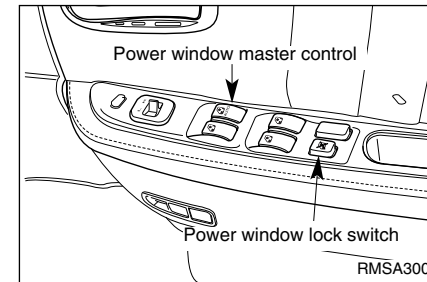
The ignition switch must be in the “ON” position for power windows to operate. Each door has a power window switch that controls that door’s window.

However, the driver has a power window lock switch which can cancel the operation of the three passenger window switches.

#### **\* NOTICE :**

**To prevent the power window fuse from malfunctioning and the power window system from being damaged, do not open or close more than two windows at the same time.**

#### *Driver’s Door Power Window Controls*



All windows can be opened or closed using the power window master control on the driver’s door. To open a window, press down on the corresponding power window switch. To close a window, pull up on the corresponding power window switch.

## KNOWING YOUR VEHICLE

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### ***Driver's Window Automatic-Down Window Switch***

The driver's window has an "Automatic-Down" feature. To activate the express-down feature, momentarily depress the front of the switch to the second detent position. To cancel this feature, pull up on the front of the switch and then release it.

### ***Driver's Power Window Switch***

The driver's power window switch provides two (2) separate windowdown functions.

- Depressing the driver's power window switch completely, automatically lowers (Automatic-Down) the driver's window. To cancel this function, pull up on the front of the switch and release it.
- Depressing the driver's power window switch partially (to the first detent) provides precise control of the window-down position.

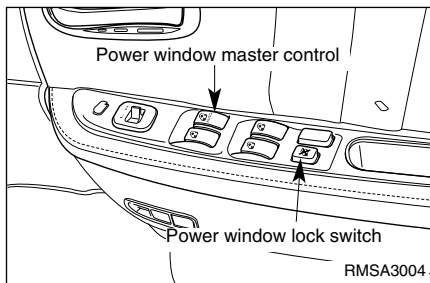
To raise/close the driver's window, pull up on the power window switch.

### ***Power Window Timer (If Equipped)***

The power windows can be operated for 30 seconds after the ignition key is turned to the "ACC" or "LOCK" position. However while the front doors are opened, the power windows cannot be operated.

## KNOWING YOUR VEHICLE

### **Power Window Lock Switch Feature**



The driver can disable the power window switches on all passenger doors by depressing the power window lock switch located on the driver's door to "ON". When the power window lock switch is ON, the driver's master control can not operate the passenger door power windows either.

### **⚠ WARNING : POWER WINDOWS**

- **Keep the power window lock switch on the driver's door in the "ON" (depressed) position except when someone is operating a passenger door window. Serious injury can result from unintentional window operation, especially to children.**
- **Always double check to make sure all arms, hands, and other obstructions are safely out of the way before closing a window.**

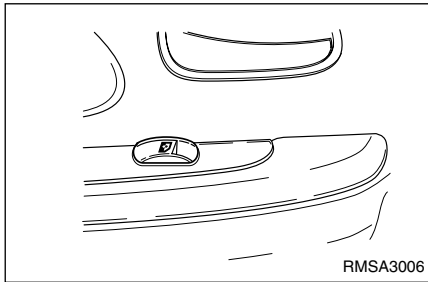
### **\* NOTICE :**

If you experience buffeting and pulsation (wind shock) with either side window open, you should open the opposite window slightly to reduce the condition.

## KNOWING YOUR VEHICLE

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### *Passenger Door Power Window Controls*



To open a window, press the front portion of the switch down. To close a window, pull the front portion of the switch up.

### **⚠ WARNING : PASSENGERS**

Do not allow children to play with the power windows. They may seriously injure themselves or others.



## KNOWING YOUR VEHICLE

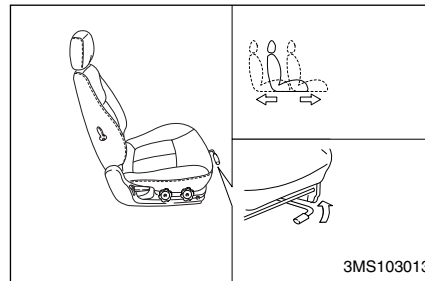
### SEATS

#### **⚠ WARNING : DRIVERS**

- Never adjust the driver's seat or seatback when the vehicle is moving. Doing so could cause loss of control, and serious personal injury or death.
- Do not allow packages or other objects to interfere with the normal position of a seat back. These objects may prevent the seat back from locking, which could result in serious injury or death in the event of a sudden stop or collision.
- Always drive and ride with your seatback upright and the lap portion of the safety belt snug and low across the hips.
- Don't seated children in the front passenger seat for it will cause serious injury or death when airbag operates if a child is riding in the front passenger seat, they should always ride with the seatback in the fully upright position.

#### *Front Seat Adjustment*

#### *Moving the Front Seat Forward and Backward*



To move the seat forward or backward;

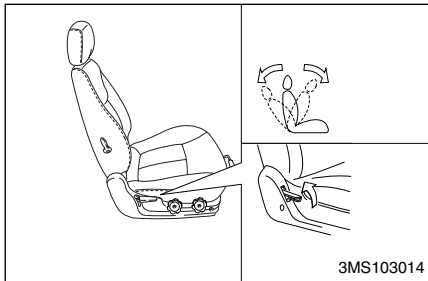
1. Pull the seat slide adjustment lever under the front edge of the seat cushion up and hold it.
2. Slide the seat to the position you desire.
3. Release the lever and make sure the seat is locked in place.

#### **⚠ CAUTION :**

Do not place anything under the front seats. Loose objects might interfere with the seat slide mechanism or possibly roll out from under the seat and interfere with the operation of the brake, clutch or accelerator foot pedals.

## KNOWING YOUR VEHICLE

### ***Adjusting the Front Seatback Recliner***



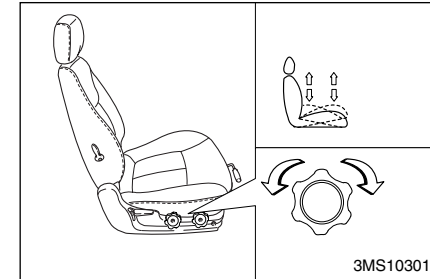
To recline the seatback;

1. Lean forward slightly and lift up on the seatback recline lever located on the outside of the seat, towards the rear.
2. Lean back on the seat and adjust the back of the seat to the position you desire.
3. Release the lever and make sure the seatback is located in place. (The lever **MUST** return to its original position for the seatback to lock.)

### **⚠ WARNING : PASSENGERS**

To reduce the risk of sliding under the lap portion of the lap/shoulder belt, and potentially suffering serious personal injury or death in the event of a collision, do not use the front seatback in a reclined position while the vehicle is in motion. If a seat is reclined, the occupant's hip could slide under or out of the lap portion of the lap/shoulder belt during a collision. **If that occurs, the occupant may no longer be properly restrained, and the safety belt could apply restraint forces to the unprotected abdomen resulting in serious personal injury or death. Therefore, keep the seatbacks in a comfortably upright position whenever the vehicle is in motion.**

### ***Adjusting the Height of Driver's Seat Cushion (If Equipped)***

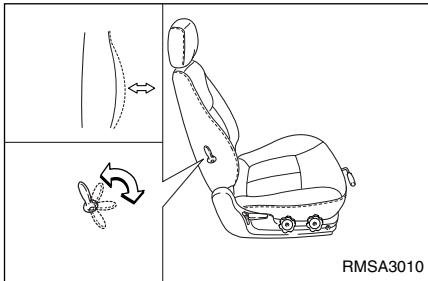


To change the height (front portion) of the seat cushion, rotate the knob located on the outside of the seat cushion.

- To lower the seat cushion, rotate the knob towards the front of the vehicle.
- To raise the seat cushion, rotate the knob towards the rear of the vehicle.

## KNOWING YOUR VEHICLE

### ***Lumbar Support (If Equipped)***



You can adjust the lumbar support by moving the lever on the side of the driver's seatback. Pivoting the lever toward the front of the vehicle increases the lumbar support. Pivoting the lever toward the rear of the vehicle decreases the lumbar support.

### ***Power Driver's Seat (If Equipped)***

The driver's seat can be adjusted appropriately by using the control knob on the left side of the seat. Before driving, adjust the seat to the proper position so as to easily control the steering wheel, pedals and switches on the instrument panel.

### **CAUTION :**

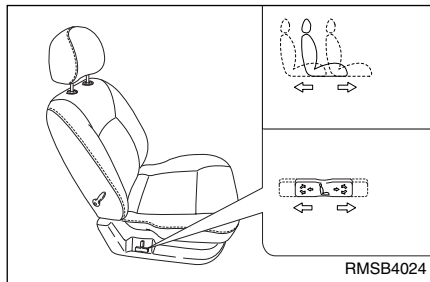
**Do not operate two knobs at the same time.**

### **WARNING :**

- **Never attempt to adjust the seat while the vehicle is moving. This could result in loss of control, and an accident causing death, serious injury, or property damage.**
- **Do not sit or lean unnecessarily close to the airbag to get better protection during its deployment in case of an accidents.**
- **Please sit 250mm more far away from steering for avoiding from serious damage resulting from airbag deployment.**

## KNOWING YOUR VEHICLE

### ***Adjusting Seat Forward and Rearward***

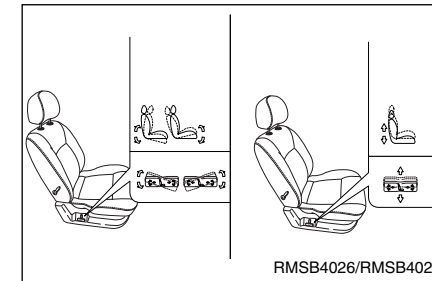


Pull the control knob forward or backward to move the seat forward or backward to the desired position. Release the knob and then the seat will lock at that position.

1. Reclining Control Knob
2. Sliding and Height Adjusting Control Knob

**⚠ WARNING :**  
To ensure the seat is locked securely, attempt to move the seat forward or backward without using the control knob.

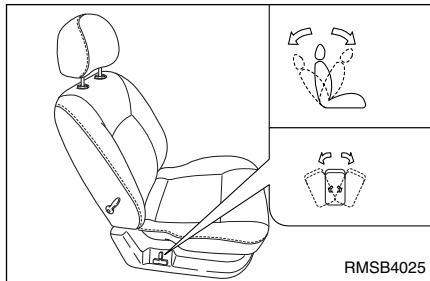
### ***Seat Cushion Height Adjustment***



Move the front portion of the control knob up or down to raise or lower the front part of the seat cushion. Move the rear portion of the control knob up or down to raise or lower the rear part of the seat cushion.

## KNOWING YOUR VEHICLE

### *Adjusting Seatback Angle*

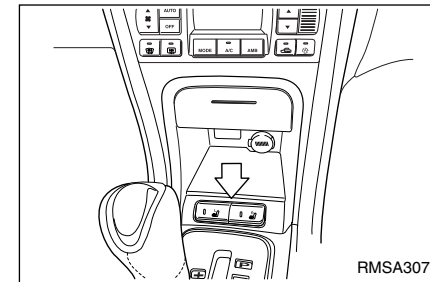


Rotate the upper portion of the control knob forward or backward to recline the seatback to the desired position. Release the control knob and then the seatback will lock in that position.

### **⚠ WARNING :**

To minimize the risk of personal injury in the event of a collision or a sudden stop, both the driver's and passenger's seatback should remain in an upright position while the car is in motion. The protection provided by the seat belts and airbags may be reduced significantly when the seatbacks are reclined. **There is a greater risk that the seat occupants will slide under the belt resulting in serious injury if a crash occurs when the seatbacks are reclined. The seat belt cannot provide full protection to an occupant if the seat back is reclined.**

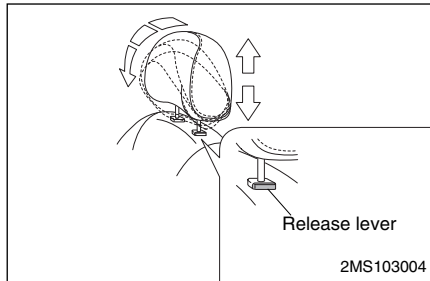
### *Heating the Front Seats (If Equipped)*



The front seats are electrically heated individually when the switches and the ignition are "ON". The thermostat regulates seat temperature by depressing the corresponding switch shown as above. To deactivate the heating system of front seats, depress the corresponding switch once again.

## KNOWING YOUR VEHICLE

### *Adjustable Headrest (If Equipped)*



To raise the headrest, simply pull it up to the desired position. To lower the headrest, press the release lever on the left side grommet, while pushing the headrest down to the desired position.

To remove the headrest, raise it as far as it can go then press the release lever while pulling upward. The headrest may be adjusted forward to three positions by pulling it forward. To adjust the headrest backwards, pull it forward to the utmost and release it.

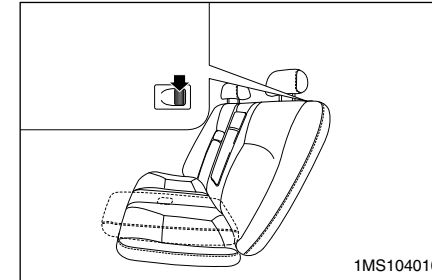
### **⚠ WARNING : HEADRESTS**

- To reduce the risk of head and neck injuries, do not operate the vehicle with the headrest removed or improperly positioned.
- Do not attempt to adjust the headrest while driving.
- Adjust the top of the headrest so that it is even with the top of your ears in order to reduce the chance of injury in the event of a collision.

### **⚠ WARNING :**

**To drive properly, adjust the driver's seat and its headrest before starting. After doing so, you should adjust the day/night rearview mirror and the outside rearview mirror.**

### *Split Folding Rear Seat*



The rear seatbacks fold forward to provide additional cargo space and to provide access to the trunk area.

- To fold the rear seatback(s) down, press the unlock button located in the top of the seatbacks, then fold the seatback forward and down.
- To raise the seatback, lift and push it firmly until it clicks into place.
- When you return the seatback to its upright position, reposition the rear safety belts so that they can be used by rear seat passengers.

## KNOWING YOUR VEHICLE

### **⚠ WARNING : CARGO**

Cargo should always be secured to prevent it from shifting and causing injury to the vehicle occupants.

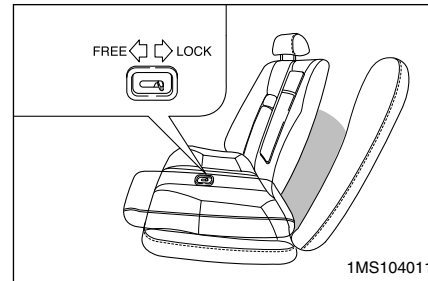
### **⚠ CAUTION :**

Do not remove the floor carpet in your vehicle. Emission controls cause high exhaust temperatures under the floor.

### **\* NOTICE :**

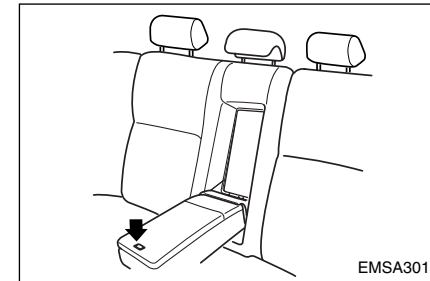
When returning the rear seatbacks to the upright position, remember to return the rear shoulder belts to their proper position. Routing the safety belt webbing through the rear safety belt guides will help keep the belts from being trapped behind or under the seats.

### *Rear Seatback Lock*



Rear seatback lock lever (located on the backside of the rear seatback) is in the “Lock” position when the rear seatbacks are closed. It will not be possible to fold the rear seatback by using the release lock lever. In this instance, move the lock lever to the “FREE” position and fold the rear seatback. The rear seatback lock lever is designed to provide protection from unauthorized entry into the trunk.

### *Rear Seat Arm Rest (If Equipped)*



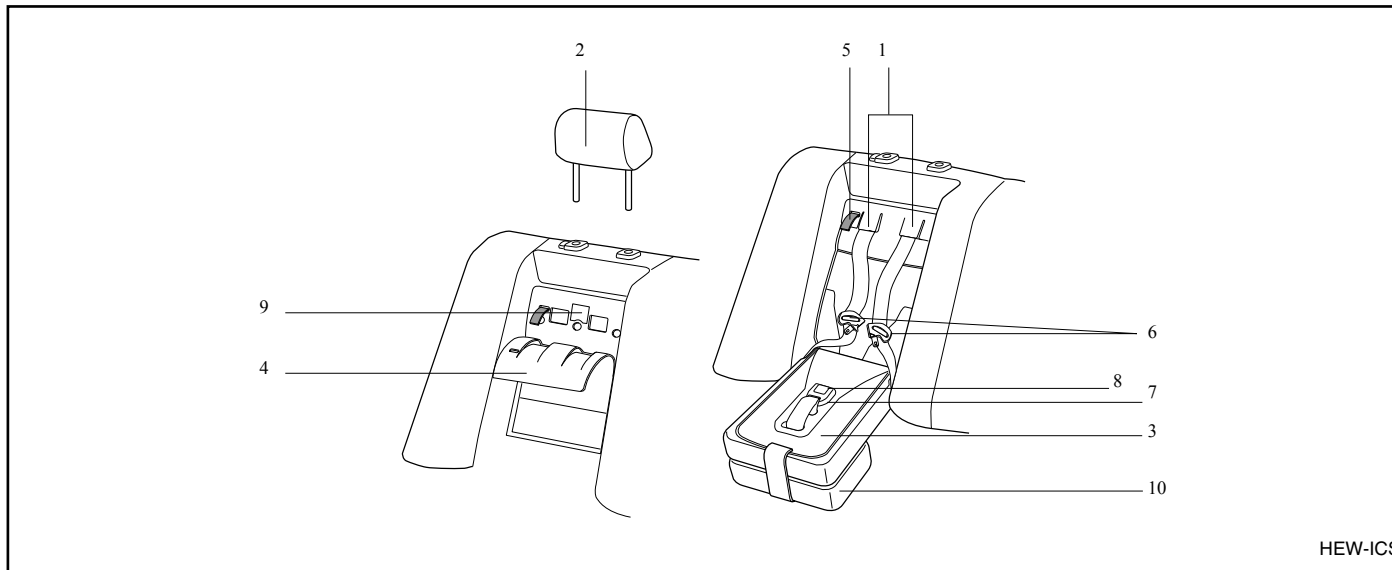
This arm rest is located in the centre of the rear seat back.

Open the armrest cover by pressing the button on it. There is a cup holder and console storage compartment.

## KNOWING YOUR VEHICLE

### *Integrated child seat (If Equipped)*

Refer to the picture below to become familiar with the parts of the integrated child seat and 5-point seat belts.



HEW-ICS

1. Shoulder Belts
2. Head Rest
3. Child Seat Cushion
4. Removable Pad
5. Seat Belt Adjustment Strap

6. Seat Belt Latch Plate
7. Buckle
8. Seat Belt Buckle Release Button
9. Maximum Shoulder Height Indicator
10. Upper Cushion



## KNOWING YOUR VEHICLE

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This child restraint is designed for use only by children who weigh between 9kg (19.8 lb) and 25kg (55 lb), whose height is 111 cm (43.7 in.) or less, who are capable of sitting upright alone, and whose shoulder height is at or below the maximum shoulder height indicator.

The child should be 9 months old or more than 85 cm (33.5 in.) in height. It is important to use a rear facing child restraint for children below the age of 9 months. A rear-facing restraint gives the child's head, neck, and body the support they would need in a crash.

If your child's shoulders are above the indicator position, do not use the built-in restraint. Your child should use the vehicle's seat belts.

This child restraint system conforms to ECE R 44.03. According to accident statistics, children are safer when properly restrained in the rear seat than in the front seat.

### CAUTION :

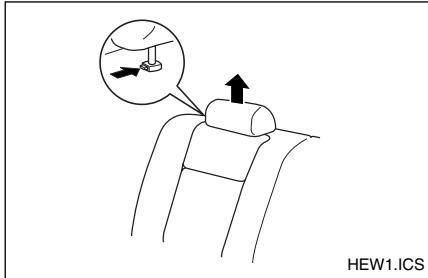
**Make sure the child is securely restrained with the built-in child restraint. Failure to follow the manufacturer's instructions on the use of this child restraint system can result in your child striking the vehicle's interior during a sudden stop or crash. Snugly adjust the belts provided with this child restraint around your child.**

**When using the built-in child restraint, observe the following:**

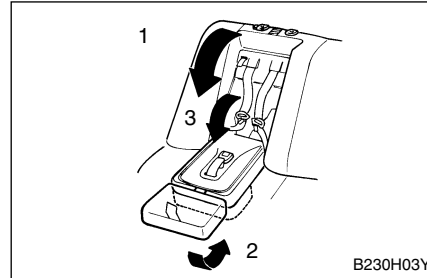
- **Use the belts for only one child at a time. Do not use the belts for two or more children.**
- **Be careful not to damage the belt webbing or hardware. Take care that they do not get caught or pinched in the seatback.**
- **Inspect the belt system periodically. Check for cuts, fraying, and loose parts. Damaged parts should be replaced. Do not disassemble or modify the child restraint belt system.**

- **Keep the belts clean and dry. If they need cleaning, use a mild soap solution of lukewarm water. Never use bleach, dye, or abrasive cleaners - they may severely weaken the belts.**
- **Replace the built-in child restraint assembly if it has been used in a severe impact. The entire assembly should be replaced even if damage is not obvious.**
- **Do not use another child restraint system over the opened built-in child restraint.**
- **Do not use the adult lap and shoulder belt with the built-in child restraint.**

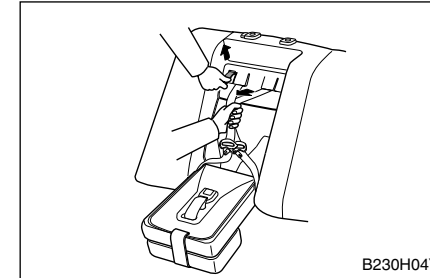
## KNOWING YOUR VEHICLE



1. Pull up the headrest while pushing the headrest release button. Separate that from the seat back (place that into trunk). Separate the fastener tapes on the seat back to separate the child restraint cushion and the upper cushion from the seat back. Lower the child restraint cushion.

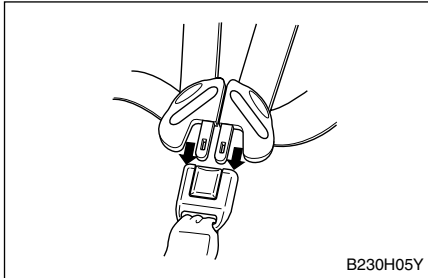


**CAUTION :**  
**Do not use the built-in child restraint with the headrest.**



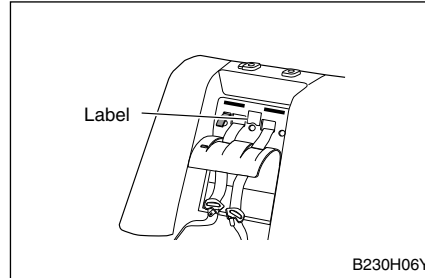
2. While pulling the seat belt adjustment strap in the child seat back, pull both shoulder belts together.  
Pull the seat belt adjustment strap upward to the child seat back. Add slack to the shoulder belts by pulling both of them together while pulling the black seat belt adjustment strap.

## KNOWING YOUR VEHICLE



3. Sit the child on the child seat. Place a shoulder belt over each shoulder. Insert the tabs into the buckle.

If your child's shoulders are above the indicator position, do not use the built-in restraint. Your child should use the vehicle's seat belts.



### **CAUTION :**

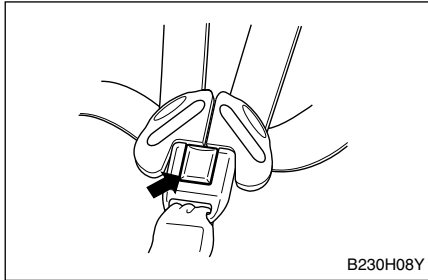
- **After inserting the tabs, make sure the tabs and buckle are locked and that the shoulder belts and buckle strap are not twisted.**
- **Do not insert coins, clips, etc. in the buckle as this may prevent you from properly latching the tab and buckle.**
- **If the seat belt does not function normally, immediately contact your Kia dealer.**



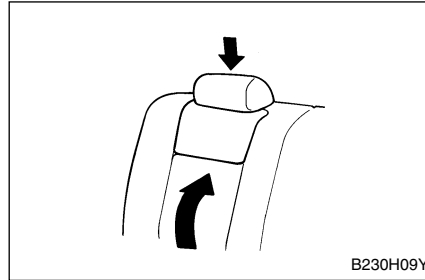
4. Pull the seat belt adjustment strap firmly until the shoulder belts are snugly adjusted around the child's shoulders. You should not be able to put more than two fingers between the shoulder belts and the child's chest. On each belt, the shoulder part should be centred on the child's shoulder. The belts should be away from the child's face and neck, but not falling off the child's shoulders.

## KNOWING YOUR VEHICLE

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5. To release the child from the seat belts, press the buckle release button. Move both belts off the child's shoulders.

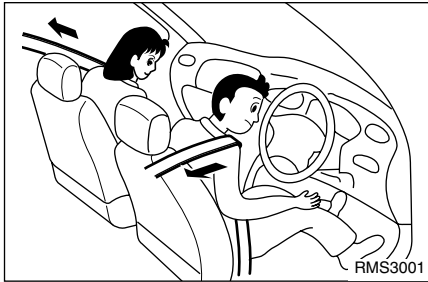


6. To store the built-in child restraint, raise the seat cushion and return the headrest.

## KNOWING YOUR VEHICLE

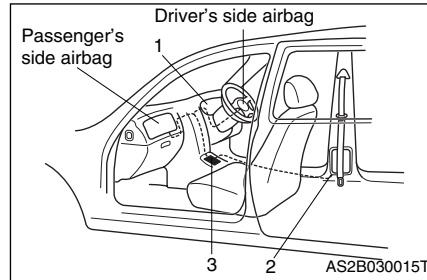
### SAFETY BELTS

#### *Pre-tensioner Seat Belt (If Equipped)*



Your vehicle is equipped with driver's and front passenger's pre-tensioner seat belts. The purpose of the pre-tensioner is to make sure that the seat belts fit tightly against the occupant's body in certain frontal collisions.

The pre-tensioner seat belts can be activated alone or, where the frontal collision is severe enough, together with the airbags.



The pre-tensioner seat belt operates in the same way as an Emergency Locking Retractor(ELR) type of seat belt. When the vehicle stops suddenly, or if the occupant tries to lean forward too quickly, the seat belt retractor will lock into position. However, in certain frontal collisions, the pre-tensioner will activate and pull the seat belt into tighter contact against the occupant's body.

Their locations are shown in the illustration.

1. SRS airbag warning light
2. Seatbelt pre-tensioner assembly
3. SRS control module

#### **⚠ WARNING :**

**To obtain maximum benefit from a pre-tensioner seat belt:**

- 1. The seat belt must be worn correctly.**
- 2. The seat belt must be adjusted to the correct position.**

## KNOWING YOUR VEHICLE

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### \* NOTICE :

- Both the driver's and front passenger's pre-tensioner seat belts will be activated in certain frontal collisions. The pre-tensioner seat belts can be activated alone or, where the frontal collision is severe enough, together with the airbags. The pre-tensioners will be activated under these conditions even if the seat belts are not being worn at the time of the collision.
- When the pre-tensioner seat belts are activated, a loud noise may be heard and fine dust, which may appear to be smoke, may be visible in the passenger compartment and are not hazardous.
- Although it is harmless, the fine dust may cause skin irritation and should not be breathed for prolonged periods. Wash your hands and face thoroughly after an accident in which the pretensioner seat belts were activated.

### CAUTION :

- Because the sensor that activates the SRS airbag is connected with pre-tensioner seat belt, the SRS airbag warning light on the instrument panel will blink for approximately 6 seconds after the ignition key has been turned to the "ON" or "ACC" positions, and then it should turn off.
- If the pre-tensioner seat belt is not working properly, this warning light will illuminate even if there is no malfunction of SRS airbag system. If the SRS airbag warning light does not illuminate when the ignition key is turned to "ON" or "ACC", or if it remains illuminated after blinking for approximately 6 seconds, or if it illuminates while the vehicle is being driven, please have an Authorized Kia Dealer inspect the pre-tensioner seat belt or SRS airbag system as soon as possible.

### WARNING :

- Pre-tensioners are designed to operate only one time. After activation, pre-tensioner seat belts must be replaced. All seat belts, of any type, should always be replaced after they have been worn during a collision.
- The pre-tensioner seat belt assembly mechanisms become hot during activation. Do not touch the pre-tensioner seat belt assemblies for several minutes after they have been activated.
- Do not attempt to inspect or replace the pre-tensioner seat belts yourself. This must be done by an Authorized Kia Dealer.
- Do not strike the pre-tensioner seat belt assemblies.

## KNOWING YOUR VEHICLE

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- Do not attempt to service or repair the pre-tensioner seat belt system in any manner.
- Improper handling of the pre-tensioner seat belt assemblies, and failure to heed the warnings to not strike, modify, inspect, replace, service or repair the pre-tensioner seat belt assemblies may lead to improper operation or inadvertent activation and serious injury. **Always wear the seat belts when driving or riding in a motor vehicle.**

### *Safety Belts Restraint Estraint System*



**WARNING :**  
**The driver and all passengers should always use the safety belts provided in order to minimize the risk of severe bodily injury.**

We strongly recommend that the driver and all passengers be properly restrained at all times by using the safety belts provided with the vehicle. Proper use of the safety belts decreases the risk of severe injury or death in accidents or sudden stops.

Safety belts provide the best restraint when:

- the seatback is upright.
- the occupant is sitting upright (not slouched).
- the lap belt portion of the safety belt is snug and low on the hips.
- the shoulder belt portion of the safety belt is snug against the chest.
- the knees are straight forward.

To help you remember to fasten your safety belt, a warning light may flash and a chime may sound. See safety belt warning on page 4-23.

All seats, except the centre rear seat(only general market), have lap/shoulder belts. The centre rear seat has a lap belt.

Inertial locks in the safety belt retractors allow all of the lap/shoulder safety belts to remain unlocked during normal vehicle operation. This allows the occupants some freedom of movement and increased comfort while using the safety belts. If a force is applied to the vehicle, such as a strong stop, a sharp turn, or a collision, the safety belt retractors will automatically lock the safety belts.

## KNOWING YOUR VEHICLE

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Since the inertial locks do not require a collision in order to lock up, you may become aware of the safety belts locking while braking or going around sharp corners.

The centre rear seat safety belt does not have an inertial lock so it is always in a locked position. Whenever possible, use the centre rear seat position to install your child restraint. The centre rear seat is the best position to install your child restraint.

### **WARNING : TWISTED SAFETY BELTS**

**Never drive or ride with a twisted or jammed safety belt. If you cannot untwist or unjam the safety belt, see your Kia dealer or the nearest qualified technician immediately.**

### **WARNING : SAFETY BELT USAGE**

**Each seating position in your vehicle has a specific safety belt assembly which includes a buckle and tongue that are designed to be used together. 1) Use the shoulder belt on the outside shoulder only. Never wear the shoulder belt under the arm. 2) Never swing the safety belt around your neck to fit over the inside shoulder. 3) Never use a single belt for more than one person.**

### **WARNING : SAFETY BELT CARE**

**Safety belts should be inspected periodically for excessive wear or damage. Pull out each belt fully and look for excessive fraying, cuts, burns or other damage. Make sure that the lap/shoulder belts return smoothly and easily into the retractor. Check the latches to make sure they latch and release without interference or delay. Any belt not in good condition or in good working order should be promptly replaced.**



## KNOWING YOUR VEHICLE

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### **WARNING : AUSTRALIAN DESIGN RULES**

- Seatbelts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.
- Seatbelts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.
- Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belts should be replaced if webbing becomes frayed, contaminated or damaged.

- It is essential to replace the entire assembly after it has been worn in severe impact even if damage to the assembly is not obvious.
- Belts should not be worn with straps twisted.
- Each belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.
- No modifications or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.

### **CAUTION : DAMAGE TO SAFETY BELTS**

Never close the doors on any part of the lap or shoulder belt. It can damage the safety belt or buckle which could increase the risk of injury in case of an accident.

### ***Restraint of Pregnant Women***

Pregnant women should wear lap/shoulder belt assemblies whenever possible according to specific recommendations by their doctors. The lap portion of the belt should be worn **AS SNUGLY AND LOW AS POSSIBLE.**

### **WARNING : PREGNANT WOMEN**

**Pregnant women must never place the lap portion of the safety belt over the area of the abdomen where the foetus is located or above the abdomen.**

## KNOWING YOUR VEHICLE

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### ***Restraint of Infants and Small Children***

Small children and infants should be restrained by an approved child-restraint system to help protect them while riding in a vehicle.

Never allow a child to stand or kneel on the seat of a moving vehicle. Never allow a safety belt to be placed around both a child and an adult or around two children at the same time.

### **WARNING : CHILDREN ON LAPS**

**Never hold a child on your lap or in your arms in a moving vehicle. Even a very strong person cannot hold onto a child in the event of even a minor collision.**

Many companies manufacture child restraint systems (often called child seats) for infants and small children. An acceptable child restraint system must always satisfy the Safety Standards of your country. Make sure that any child-restraint system you use in your vehicle is labelled as complying with those safety standards.

The child-restraint system should be chosen to fit both the size of the child and the size of the vehicle seat. Be sure to follow any instructions provided by the child-restraint system manufacturer when installing the child-restraint system.

### **CAUTION : HOT METAL PARTS**

**Safety belts and seats can become hot in a vehicle that has been closed during warm/hot weather; they could burn a child. Check seat covers and buckles before you place a child anywhere near them.**

### ***Restraint of Large Children***


As children grow, they may need to use new child-restraint systems, including larger child seats or booster seats, which are appropriate for their increased size.

A child who has outgrown available child-restraint systems should use the belts provided in the vehicle. When seated in the rear outboard seats, the child should be restrained by the lap/shoulder belt.

If the shoulder belt portion slightly touches the child's neck or face, try placing the child closer to the centre of the vehicle. If the shoulder belt still touches their face or neck they may need to be returned to a child restraint system. In addition, after-market devices are available from independent manufacturers which help pull the shoulder belt down and away from the child's face or neck.

## KNOWING YOUR VEHICLE

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 **WARNING : SHOULDER BELTS ON SMALL CHILDREN**

- **Never allow a shoulder belt to be in contact with a child's neck or face while the vehicle is in motion.**
- **If safety belts are not properly worn and adjusted, the risk of death or serious injury to such a child is high.**

***Child Restraint System (If equipped)***

For small children and babies, the use of a child seat or infant seat is strongly recommended. This child seat or infant seat should be of appropriate size for the child and should be installed in accordance with the manufacturer's instructions. It is further recommended that the seat be placed in the vehicle's rear seat since this can make an important contribution to safety.

Children riding in the car should sit on the rear seat and must always be properly restrained to minimize the risk of injury in an accident, sudden stop or sudden maneuver. According to accident statistics, children are safer when properly restrained in the rear seats than in the front seat. Larger children should use one of the seat belts provided.

You are required by law to use safety restraints for children. If small children ride in your vehicle you must put them in a child restraint system (safety seat).

Children could be injured or killed in a crash if their restraints are not properly secured. For small children and babies, a child seat or infant seat must be used. Before buying a particular child restraint system, make sure it fits your car and seat belts, and fits your child. Follow all the instructions provided by the manufacturer when installing the child restraint system.

## KNOWING YOUR VEHICLE



### **⚠ WARNING**

- A child restraint system must be placed in the rear seat. Never install a child or infant seat on the front passenger's seat. Should an accident occur and cause the passenger airbag to deploy, it could severely injure or kill an infant or child seated in an infant or child seat. Thus, only use a child restraint in the rear seat of your vehicle.
  - Since a safety belt or child restraint system can become very hot if it is left in a closed vehicle, be sure to check the seat cover and buckles before placing a child there.
- When the child restraint system is not in use, store it in the trunk or fasten it with a safety belt so that it will not be thrown forward in the case of a sudden stop or an accident.
  - Children who are too large to be in a child restraint should sit in the rear seat and be restrained with the available lap/shoulder belts. Never allow children to ride in the front passenger seat.
  - Always make sure that the shoulder belt portion of the outboard lap/shoulder belt is positioned midway over the shoulder, never across the neck or behind the back. Moving the child closer to the center of the vehicle may help provide a good shoulder belt fit. The lap belt portion of the lap/shoulder belt or the center seat lap belt must always be positioned as low as possible on the child's hips and as snug as possible.
  - If the seat belt will not properly fit the child, we recommend the use of an approved booster seat in the rear seat in order to raise the child's seating height so that the seat belt will properly fit the child.
  - Never allow a child to stand up or kneel on the seat.
  - Never use an infant carrier or child safety seat that "hooks" over a seatback; it may not provide adequate security in an accident.
  - Never allow a child to be held in a person's arms while they are in a moving vehicle, as this could result in serious injury to the child in the event of an accident or a sudden stop. Holding a child in a moving vehicle does not provide the child with any means of protection during an accident, even if the person holding the child is wearing a seat belt.

## KNOWING YOUR VEHICLE

### *Installation on the Rear Seats*

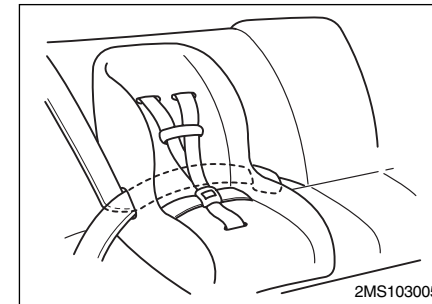
#### \* NOTICE :

- Before installing the child restraint system, read the instructions supplied by the child restraint system manufacturer.
- If the seat belt does not operate as described, have the system checked immediately by your authorized Kia dealer.

#### **⚠ WARNING**

- Do not install any child restraint system in the front passenger seat. Should an accident occur and cause the passenger airbag to deploy, it could severely injure or kill an infant or child seated in an infant or child seat. Therefore, only use a child restraint system in the rear seat of your vehicle.
- If the child restraint seat is not anchored properly, the risk of a child being seriously injured or killed in a collision greatly increases.

### *Installing a Child Restraint System by Lap/shoulder Belt (on the outboard or centre rear seat)*

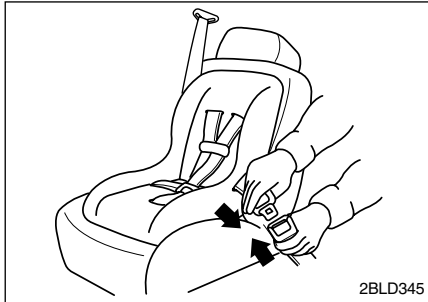


To install a child restraint system on the outboard or centre rear seats, do the following:

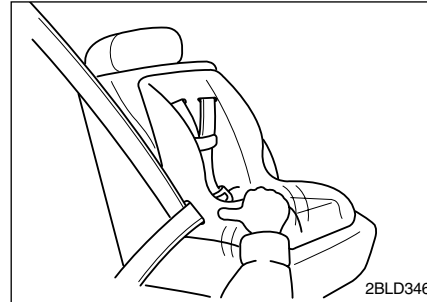
1. Place the child restraint system in the desired position.
2. Extend the shoulder/lap belt from its retractor.

## KNOWING YOUR VEHICLE

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3. Route the lap/shoulder belt through the restraint according to the seat manufacturer's instructions.



4. Buckle the seat belt and allow the seat belt to take up any slack. After installation of the child restraint system, try to move it in all directions to be sure the child restraint system is securely installed.

If you need to tighten the belt, pull more webbing toward the retractor. When you unbuckle the seat belt and allow it to retract, the retractor will automatically revert back to its normal seated passenger emergency locking usage condition.

## KNOWING YOUR VEHICLE

### ***Installing a Child Restraint System by Lap Belt (on the centre rear seat) (If equipped)***

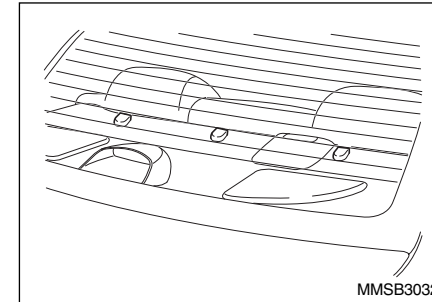


To install a child restraint system on the centre rear seats, do the following:

1. Place the child restraint system on the centre rear seat.
2. Extend the latch plate tongue of the lap belt.

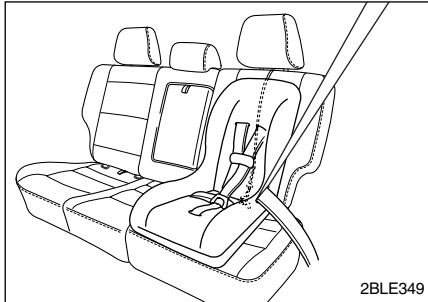
3. Route the lap belt through the restraint according to the seat manufacturer's instructions.
4. Buckle the seat belt and adjust the lap belt for a snug hold on the child restraint by pulling on the loose end of the belt. After installation of the child restraint system, try to move it in all directions to be sure the child restraint system is securely installed.

### ***Securing a Child Restraint Seat with "Tether Anchor" System (If equipped)***



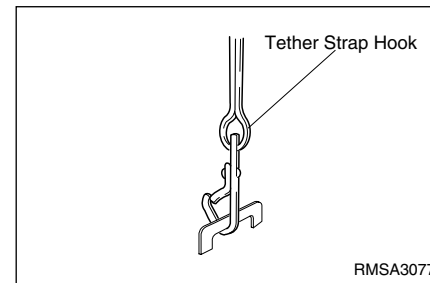
Child restraint hook holders are located on the shelf behind the rear seats.

## KNOWING YOUR VEHICLE



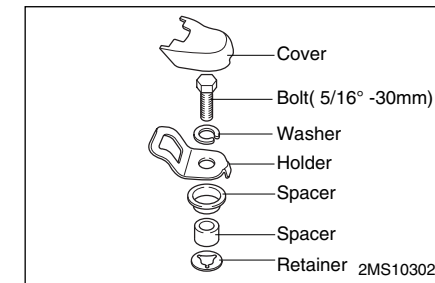
1. Open the tether anchor cover on the shelf behind the rear seats.
2. Route the child restraint seat strap over the seatback.  
For vehicles with adjustable headrest, route the tether strap under the headrest and between the headrest posts, otherwise route the tether strap over the top of the seatback.
3. Connect the tether strap hook to the belonging child restraint hook holder and tighten to secure the seat.

### Placement of a Child Restraint System



To install the child restraint on the rear seat, use the anchorage fitting located on the package tray behind the rear seat.

### Child Restraint Anchorage Fitting



You vehicle is equipped with an anchor for securing the tether strap of a child restraint system (child seat). The anchor fitting package consists as per the above illustration.



## KNOWING YOUR VEHICLE

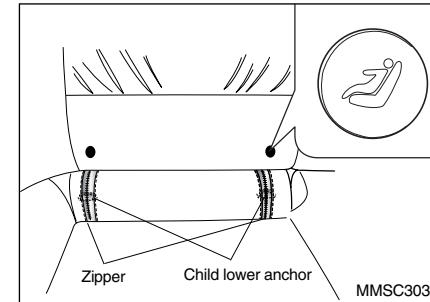
### **Securing a Child Restraint System with “ISOFIX” System and “Tether Anchorage” System**

ISOFIX is a standardised method of fitting child seats that eliminates the need to use the standard adult seat belt to secure the seat in the vehicle. This enables a much more secure and positive location with the added benefit of easier and quicker installation.

An ISOFIX-seat can only be installed if it has vehicle-specific approval in accordance with the requirements of ECE-R44. For your Kia, the “Kia ISOFIX GR1 / Kia Duo” and the “Römer Duo ISOFIX / Britax Duo ISOFIX” is approved according to the requirement ECE-R44. This seat has been tested extensively by Kia and is recommended for your Kia.

#### **\* NOTICE :**

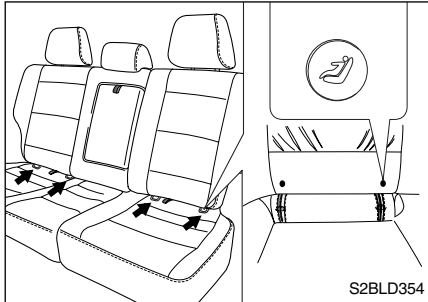
**At present, this seat is the only one complying with that provision. In case that other manufacturers will furnish proof of a respective certification, Kia is going to evaluate this seat carefully and will give a recommendation provided that seat complies to the law. Please ask your Kia dealer in this respect.**



On each side of the rear seat, between the cushion and backrest, are located a pair of ISOFIX anchorage points together with a top tether mounting on the shelf behind the rear seats.

When you open the zipper which is located under the label, you can find the child lower anchor.

## KNOWING YOUR VEHICLE

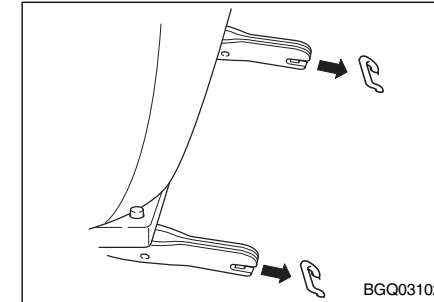


During the installing, the seat has to be engaged at the anchorage-points in a way you can hear it clicking (check by pulling!) and has to be fixed with the Top Tether-belt on the belonging point on the shelf behind rear seats. The installing and the use of a child-seat has to be done according to the installing-manual, which is added to the ISOFIX-seat.

### \* NOTICE :

An ISOFIX-child-seat can only be installed if the seat has a vehicle-specific approval according to ECE-R44. Before using the ISOFIX-child-seat, which was bought for other car, ask your Kia-dealer whether this seat-type is approved and recommended for your Kia.

### To secure the child restraint seat



1. To engage the child restraint seat to the ISOFIX anchor, insert the child restraint seat latch into the ISOFIX anchor. Listen for the audible “click” sound.
2. Connect the tether strap hook to the child restraint hook holder and tighten to secure the seat. Refer to “Securing a child restraint seat with the “Tether Anchorage” system” on page 3-38.

## KNOWING YOUR VEHICLE

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### **WARNING**

- Do not install a child restraint seat at the centre of the rear seat using the vehicle's ISOFIX anchors. The ISOFIX anchors are only provided for the left and right outboard rear seating positions. Do not misuse the ISOFIX anchors by attempting to attach a child restraint seat in the middle of the rear seat to the ISOFIX anchors. In a crash, the child restraint seat ISOFIX attachments may not be strong enough to secure the child restraint seat properly in the center of the rear seat and may break, causing serious injury or death.
- Do not mount more than one child restraint to a child restraint lower anchorage point. the improper increased load may cause the anchorage points or tether anchor to break, causing serious injury or death.

- Attach the ISOFIX or ISOFIX-compatible child restraint seat only to the appropriate locations shown in the illustration.
- Always follow the installation and use instructions provided by the manufacturer of the child restraint.

### *Child Seat Restraint Suitability for Seat Position*

Use child safety seats that have been officially approved and are appropriate for your children. When using the child safety seats, refer to the following table.

## KNOWING YOUR VEHICLE

Age Group	Seating positions		
	1st row Passenger	2nd row Outboards	2nd row Center
<b>0 : Up to 10 kg</b> (0 to 9 months)	<b>X</b>	<b>U</b>	<b>UF</b>
<b>0+ : Up to 13 kg</b> (0 to 2 years)	<b>X</b>	<b>U</b>	<b>UF</b>
<b>1 : 9 kg to 18 kg</b> (9 months to 4 years)	<b>X</b>	<b>U, L1</b>	<b>UF</b>
<b>2 &amp; 3 : 15 kg to 36 kg</b> (4 to 12 years)	<b>X</b>	<b>UF</b>	<b>UF</b>

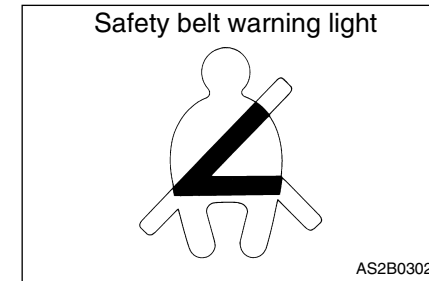
**U** : Suitable for "universal" category restraints approved for use in this mass group

**UF** : Suitable for forward-facing "universal" category restraints approved for use in this mass group

**L1** : Suitable for "Römer ISOFIX GR1" approved for use in this mass group (Approval No: E1 R44-03301133)

**X** : Seat position not suitable for children in this mass group

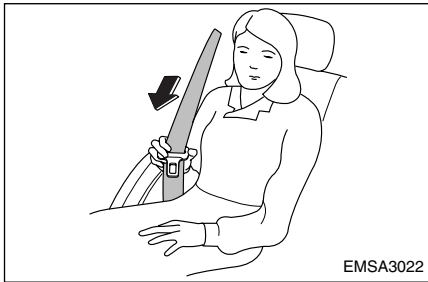
### *Safety Belt Warning Light and Chime*



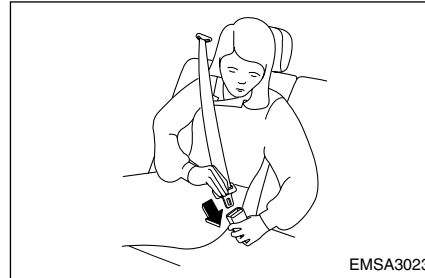
If the driver's lap/shoulder belt is not fastened when the key is turned "ON", the safety belt warning chime sounds for approximately six seconds and the safety belt warning light flashes for approximately 6 seconds.

## KNOWING YOUR VEHICLE

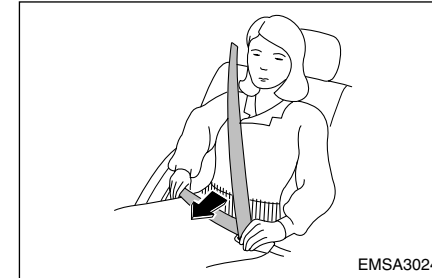
### *Front Lap/Shoulder Belt* **To fasten the front lap/shoulder belt:**



1. Grasp the buckle and tongue plate.
2. Slowly pull the lap/shoulder belt out from the retractor.

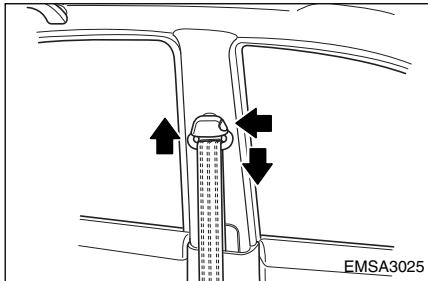


3. Insert the tongue plate into the open end of the buckle until an audible “click” is heard, indicating the belt is locked in the buckle.



4. Position the lap portion of the belt across your lap as **LOW ON THE HIPS** as possible to reduce the risk of sliding under it during an accident. Adjust the belt to a **SNUG FIT** by pulling up on the shoulder portion of the safety belt. The belt retractor applies tension to the belt in order to take up excess webbing automatically and to maintain tension on the belt. For maximum safety, do not put any excess slack into the safety belt.

## KNOWING YOUR VEHICLE



5. You can adjust the height of the shoulder anchor to one of the four positions. Adjust the shoulder anchor position to your size. To raise the anchor position, push the knob and push the anchor up. To lower the anchor position, push the knob and slide the anchor down. After adjustment, make sure the anchor is locked in position.

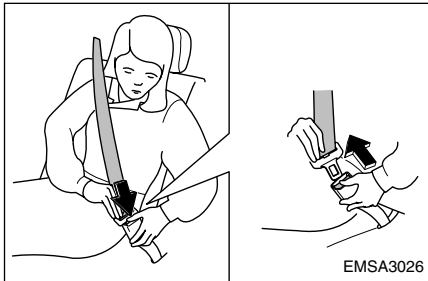
### **⚠ WARNING : FRONT SAFETY BELTS**

- The front seatbacks should always remain in a comfortable, upright position while the vehicle is in motion. The safety belt system will provide the most protection with the seatbacks in an upright position.
  - Never wear the shoulder portion of the safety belt under the outside arm or behind the back.
  - Never wear the shoulder portion of the safety belt across the neck or face.
  - Wear the lap portion of the safety belt as low on the hips as possible. Be sure the lap belt fits snugly around the hips. Never wear the lap belt over your waist.
- Never drive or ride with a twisted or jammed safety belt. If you cannot untwist or unjam the safety belt, see the nearest Kia dealer or qualified technician immediately.
  - Never use a single belt to restrain more than one person at a time.

Failure to follow these warnings will increase the risk and severity of injury in an accident.

## KNOWING YOUR VEHICLE

### **To Unfasten the Front Lap/Shoulder Belt:**

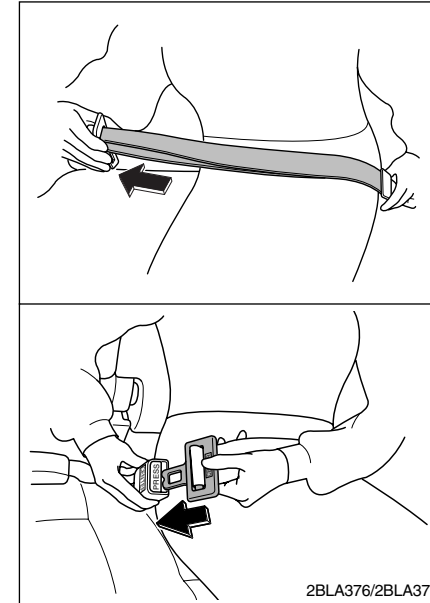


Press the release button on the buckle.

### **Rear Lap Belt (Rear Centre Seat) - (If Equipped)**

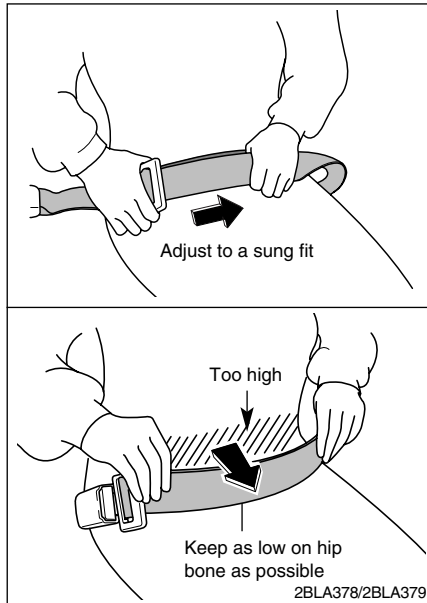
#### **To Fasten the Rear Lap Belt:**

1. Grasp the buckle end and pull it low over the abdomen.
2. Insert the tongue plate into the open end of the buckle until an audible “click” is heard, indicating the latch is locked. Make sure the belt is not twisted.
3. To lengthen the belt, hold the latch plate tongue at a right angle to the safety belt webbing and pull.
4. To shorten the belt, hold the latch plate tongue at a right angle to the safety belt webbing and pull on the loose end of the belt until the desired belt length is reached.



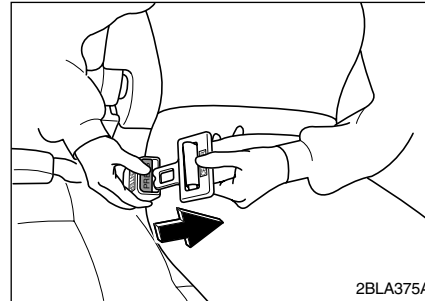
5. Grasp the free portion of the belt webbing and pull until the belt is snug over the hips and as low on the abdomen as possible.

## KNOWING YOUR VEHICLE



6. Make sure that the belt is placed as **LOW ON THE HIPS** as possible.

### To Unfasten the Rear Lap Belt:



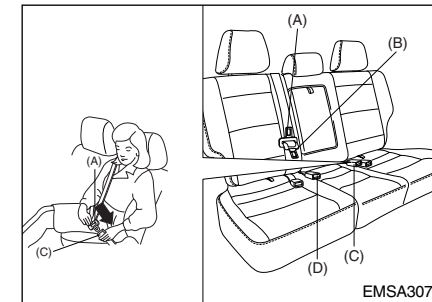
Press the release button on buckle.

### **WARNING - CENTRE REAR LAP BELT**

**Be sure the centre rear lap belt is positioned snugly around the hips, and not on the waist. Failure to position the centre rear lap belt snugly around the hips and not on the waist will increase the chance and severity of injury in the event of a collision.**

### Rear Lap/Shoulder Belt (Rear Centre seat)

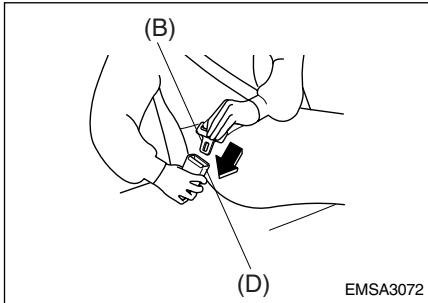
### To Fasten the Rear Lap/shoulder Belts



1. Slowly pull the tongue plates out from the retractor.
2. Insert the tongue plate (A) into the open end of the buckle (C) until an audible "click" is heard, indicating the latch is locked. Make sure the belt is not twisted.



## KNOWING YOUR VEHICLE



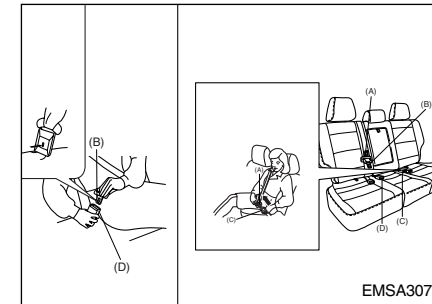
3. Pull the tongue plate (B) and insert the tongue plate into the open end of the buckle (D) until an audible “click” is heard, indicating the latch is locked. Make sure the belt is not twisted.

There will be an audible “click” when the tab locks in the buckle. The seat belt automatically adjusts to the proper length only after the lap belt is adjusted manually so that it fits snugly around your hips, if you lean forward in a slow, easy motion, the belt will extend and let you move around. If there is a sudden stop or impact, the belt will lock into position. It will also lock if you try to lean forward too quickly.

### WARNING

**When using the rear seat centre belt, you must lock all tongue plates and buckles. If any tongue plate or buckle is not locked, it will increase the chance of injury in the event of collision.**

### To Unfasten the Rear Centre Belt



1. Press the release button on the buckle (D) and remove the tongue plate (B) from the buckle (D).
2. Press the release button on the buckle (C) and remove the tongue plate (A) from the buckle (C).  
The belt webbing will retract automatically.

## KNOWING YOUR VEHICLE

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### *Proper Use and Care of the Safety Belt System*

To ensure that the safety belts provide the maximum protection, please follow these instructions:

- Use the belts at all times - even on short trips.
- If the safety belt is twisted, straighten it prior to use.
- Keep sharp edges and damaging objects away from the belts.
- Periodically inspect belt webbing, anchors, buckles, and all other parts for signs of wear and damage.

Replace damaged, excessively worn or questionable parts immediately.

- To clean the belt webbing, use any mild soap solution recommended for cleaning upholstery or carpets. Follow the instructions provided with the soap. Do not bleach or dye the webbing because this may weaken the webbing fibers and allow them to fail when loaded in a collision.

- Do not make modifications or additions to the safety belt.
- After wearing a safety belt, make sure it fully retracts to the stowed position. Do not allow the belt to get caught in the door when you close it.

## KNOWING YOUR VEHICLE

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### **AIR BAG - SUPPLEMENTAL RESTRAINT SYSTEM (IF EQUIPPED)**

#### ***What Your Air Bag System Does***

Your vehicle is equipped with a dual Supplemental Restraint System (SRS), which includes an air bag for the driver and another air bag for the front passenger. In some regions, your vehicle may be equipped with a single Supplemental Restraint System, which only includes an air bag for the driver.

#### ***What Your Air Bag System Does Not Do***

The air bag system is designed to supplement or add to the protection provided to properly BELTED occupants in moderate to severe frontal collisions. It is not a substitute for the driver's or front passenger's safety belt and it does not provide restraint to the lower body.

#### ***Why Didn't My Air Bag Go Off in a Collision?***

There are many types of accidents in which the air bag would not be expected to provide additional protection. These include side or rear impacts, rollovers, and second or third impacts in multiple-impact accidents as well as low speed impacts. Remember: air bags are only designed to inflate when the impact would throw the occupant into the air bags – generally from a little to the left to a little to the right of straight ahead. In other words, just because your vehicle is damaged and even if it is totally unusable, don't be surprised that the air bag(s) did not inflate.

## KNOWING YOUR VEHICLE

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### *The Importance of Using Safety Belts*

There are four very important reasons to use safety belts even with an air bag system. They:

- help keep you in the proper position (away from the air bag) when it inflates.
- reduce the risk of harm in rollover, side or rear impact collisions, because an air bag is not designed to inflate in such situations.
- reduce the risk of harm in frontal collisions that are not severe enough to activate the supplemental restraint system.
- reduce the risk of being thrown from your vehicle.

### **WARNING : AIR BAGS & SAFETY BELTS**

**Even in vehicles with air bags, you and your passengers must always wear the safety belts provided in order to minimize the risk and severity of injury in the event of a collision or rollover.**

- **Always wear your safety belt. It can help keep you away from the air bags during heavy braking just before a collision.**
- **Air bags are designed to inflate only in severe frontal collisions and will generally not provide protection in side or rear impacts, rollovers or less severe frontal collisions. They will also not provide protection from later impacts in a multi-impact collision.**

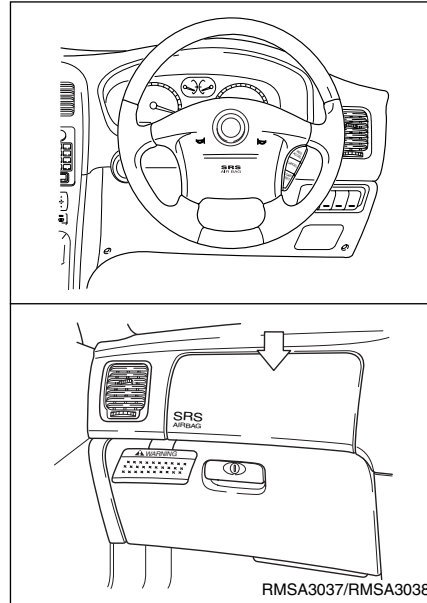
- **If your vehicle has been subjected to flood conditions (e.g. soaked carpeting/standing water on the floor of the vehicle, etc.) or if your vehicle has become flood damaged in any way, do not attempt to start the vehicle or put the key in the ignition before disconnecting the battery. This may cause air bag deployment, which could result in serious personal injury or death. Have the vehicle towed to an Authorized Kia Dealer for inspection and necessary repairs.**

## KNOWING YOUR VEHICLE

### *Air Bag System Components*

The main components of your vehicle's SRS are:

- One air bag in the steering wheel for the driver, and another in the dashboard for the front passenger. Also your vehicle is equipped with a side airbag in each front seat.
- A diagnostic system that continually monitors system operation.
- An indicator light to warn you of a possible problem with the system.
- Emergency power backup in case your car's electrical system is disconnected in a crash.



To indicate that your vehicle is equipped with air bags, the air bag covers on the steering wheel and on the dashboard are marked with "SRS AIR BAG."

### *How the Air Bag System Works*

The driver's air bag is stored in the centre of the steering wheel. The passenger side air bag is stored in the front instrument panel above the glove box.

If you ever have a severe frontal collision, your air bags will instantly inflate to help protect you from serious physical injury.

There is no single vehicle speed at which the air bags will inflate. Generally, air bags are designed to inflate in severe frontal collisions. The air bag Supplemental Restraint System (SRS) reacts to the severity of a collision and its direction. These two factors determine whether the sensors send out an electronic deployment or inflation signal. Whether the air bags will inflate depends on a number of factors including vehicle speed, angle of impact and the density and stiffness of the vehicles or objects that your vehicle hits in the collision.

## KNOWING YOUR VEHICLE

The air bags will completely inflate and deflate in less than 1/10th of one second. The speed of inflation and deflation protects the driver's ability to operate the vehicle. This is important in crashes where a vehicle continues to move after an impact and the driver still has some control of the vehicle's steering, braking, throttle and/or transmission systems.

**It is virtually impossible for you to see the air bags inflate during an accident.** It is much more likely that you will simply see the deflated air bags hanging out of their storage compartments after the collision.

In order to help provide protection in a severe collision, the air bags must inflate rapidly. However, that speed also causes the air bags to expand with a great deal of force. The speed of this inflation has been determined by the law to reduce the likelihood of serious or life-threatening injuries and is thus a mandatory part of air bag design.



Thus, air bag inflation could also cause injuries which normally can include facial abrasions, bruises and broken bones. **However, there are even circumstances under which contact with the steering wheel air bag can cause fatal injuries, especially if the occupant is positioned excessively close to the steering wheel.**

**YOU MUST ALWAYS SIT AS FAR BACK FROM THE STEERING WHEEL AIR BAG AS POSSIBLE, WHILE STILL MAINTAINING A COMFORTABLE SEATING POSITION FOR GOOD VEHICLE CONTROL, IN ORDER TO REDUCE THE RISK OF INJURY OR DEATH IN A COLLISION.**

### **⚠ WARNING : AIR BAG INJURIES**

- Sit as far back from the steering wheel as possible without interfering with your control of the vehicle. Positioning yourself too close to the steering wheel can result in serious or even fatal injuries if the air bag deploys.
- Never place objects over the air bag storage compartments or between the air bags and yourself. Due to the speed and force of the air bag inflation, such objects could hit your body at high speed and cause severe bodily injury and even death.
- Don't put sticker or ornament etc. on steering wheel cover, which may interfere with the airbag deployment.

## KNOWING YOUR VEHICLE

### *Noise and Smoke*

When the air bags inflate, they make a loud noise and they leave smoke and powder in the air inside of the vehicle. This is normal and is a result of the ignition of the air bag inflator.

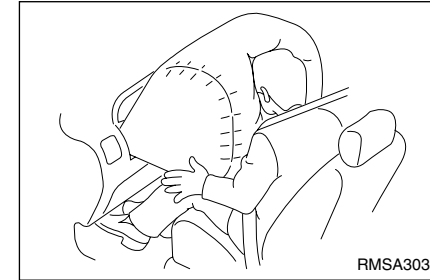
After the air bags inflate, you may feel substantial discomfort in breathing due both to the contact by your chest with both the safety belt and the air bag, as well as from breathing the smoke and powder.

**WE STRONGLY URGE YOU TO OPEN YOUR DOORS AND/OR WINDOWS AS PROMPTLY AS POSSIBLE AFTER IMPACT IN ORDER TO REDUCE DISCOMFORT AND PREVENT PROLONGED EXPOSURE TO THE SMOKE AND POWDER.**

### **⚠ WARNING : HOT METAL PARTS**

**When the air bags deploy, the air bag inflators in the steering wheel and/or in the dashboard are very hot. To prevent injury, do not touch the air bag storage area's internal components immediately after an air bag has inflated.**

### *The Importance of The Passenger Being Properly Seated*



The front seat passenger's air bag is much larger than the driver's 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 passenger should always move their seat as far back as practical and sit well back in the seat. It is essential that the front passenger always wear their safety belt, even when driving in a parking lot or up a drive way into a garage.

## KNOWING YOUR VEHICLE

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The reason for this is that in most frontal impacts there is substantial pre-impact braking which tends to throw the occupants forward. If the right front passenger is not using their safety belt, they will be directly in front of or even touching the air bag storage compartment when inflation occurs. In that situation, death or severe injury is possible.

### **WARNING : RIGHT FRONT SEAT**

**Pre-impact braking could throw an unbelted passenger toward or onto the air bag storage compartment. Upon impact in a collision, the air bag would rapidly inflate and possibly severely injure or kill that occupant who failed to wear their safety belt.**

Because of the air bag, you must **NEVER INSTALL A CHILD RESTRAINT SYSTEM IN THE FRONT PASSENGER SEAT.**

There is a very significant risk of serious or fatal injuries to a child in a child restraint if the right front passenger air bag inflates. If the passenger's air bag inflates, it could seriously or fatally hurt a child who is not in the proper position or properly restrained.

### **WARNING : FRONT PASSENGERS**

- **NEVER use a child restraint in the front seat. In the front seat, a child restraint would be positioned too close to where the air bags are stored and in the event an air bag deploys, the air bag would impact the child restraint and cause serious injuries or death.**
- **Failure to observe the instructions provided with the child restraint system could increase the risk and/or severity of injury in an accident.**



## KNOWING YOUR VEHICLE

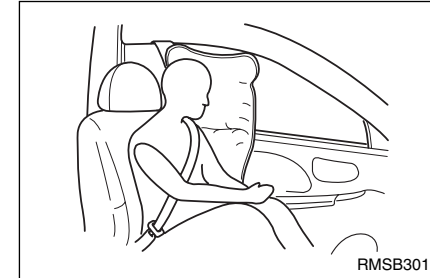
### ***Passenger presence detection***

The passenger presence detection system detects the presence of a passenger in the front seat. If no passenger is recognized on the front passenger seat, the deployment of the front passenger and/or side airbag will be prevented. This system is designed to prevent the replacement of airbag components that deploy needlessly in an accident.

### **⚠ WARNING :**

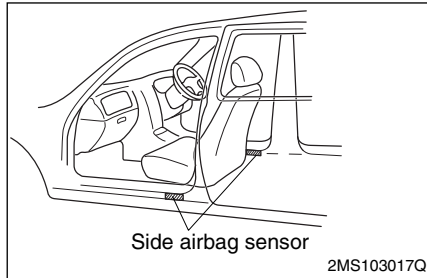
**The Passenger Presence Detection system is not intended to prevent airbag deployment while a child is in the front passenger's seat. It is intended only as a means to reduce unnecessary collision damage repair expense by preventing airbag and seat belt pretensioner deployment when the right front passenger seat is unoccupied. Deployment is still possible if only a few pounds are placed upon the seat. Therefore, children must not be transported in the front seat. All children must be seated in the rear seat and properly restrained with the vehicle's restraint system or a child restraint system appropriate for the child's size and weight.**

### ***Side Airbag (If Equipped)***



Your vehicle is equipped with a side airbag in each front seat. The purpose of the airbag is to provide the vehicle's driver and/or the front passenger with additional protection than that offered by the seatbelt alone. The side impact airbags are designed to deploy only during certain side-impact collisions, depending on the crash severity, angle speed and point of impact. The air bags are not designed to deploy in all side impact situations.

## KNOWING YOUR VEHICLE



### **⚠ WARNING :**

- For best protection from the side airbag system and to avoid being injured by the deploying side airbag, both front seat occupants should sit in an upright position with the seat belt properly fastened. The driver's hands should be placed on the steering wheel at the 9:00 and 3:00 o'clock positions. The passenger's arms and hands should be placed in their laps.

- Do not use any accessory seat covers.
- Use of seat covers could reduce the effect of the system.
- Do not install any accessories on the side or near the side airbag.
- Do not use excessive force on the side of the seat.
- Do not place any objects over the airbag or between the airbag and yourself.
- Do not place any objects (an umbrella, bag, etc.) between the front door and the front seat. Such objects may become dangerous projectiles and cause injury if the supplemental side air bag inflates.
- To prevent unexpected deployment of the side air bag that may result in personal injury, avoid impact to the side airbag sensor when the ignition key is ON.

### *Air Bag Warning Light*

The purpose of the air bag warning light in your instrument panel is to alert you of a potential problem with your Air Bag – Supplemental Restraint System (SRS).

Have the system checked if:

- The light does not illuminate briefly when you turn the ignition "ON".
- The light stays on after the engine starts.
- The light comes on or flashes while you are driving.

**AIR  
BAG**

## KNOWING YOUR VEHICLE

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### *Supplemental Restraint System Service*

Your Supplemental Restraint System is virtually maintenance-free. There are no parts which you can service.

You must have the system serviced under the following circumstances:

- If an air bag ever inflates, the air bag must be replaced. Do not try to remove or discard the air bag by yourself. This must be done by an Authorized Kia Dealer or qualified service technician.
- If the air bag warning indicator light alerts you of a problem, have the air bag system checked as soon as possible. Otherwise, your air bag might not inflate when you need it.

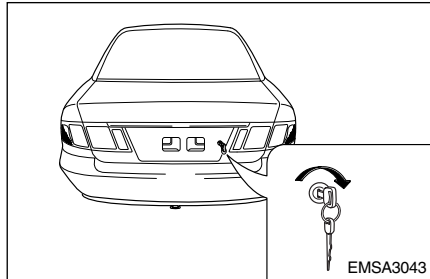
### **WARNING : SRS**

#### **MODIFICATIONS**

- **Do not modify your steering wheel or any other part of the Supplemental Restraint System. Modification could make the system ineffective.**
- **Do not work on the system's components or wiring. This could cause the air bags to inflate inadvertently, possibly seriously injuring someone. Working on the system could also disable the system so that the air bags did not deploy in a collision.**

## KNOWING YOUR VEHICLE

### TRUNK LID



- To open the trunk, insert the key into the lock and turn it clockwise until an audible “click” is heard.
- To close the trunk, use both hands to push the trunk lid down until the lock “snaps” shut.
- Do not slam the trunk lid.
- Pull up on the trunk lid to make sure it is securely latched.

To prevent premature wear or damage to the trunk lid lift cylinders and attaching hardware, the trunk lid must be fully closed before you drive your vehicle.

### **⚠ WARNING : EXHAUST FUMES**

**If you drive with the trunk lid open, you will draw dangerous exhaust fumes into your vehicle.**

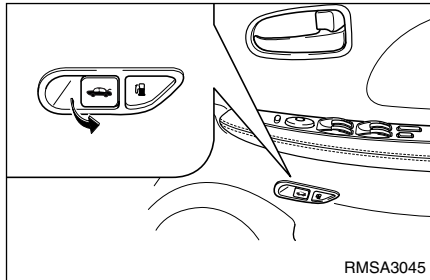
If you must drive with the trunk lid open, keep the air vents open so that additional outside air comes into the vehicle.

### **⚠ WARNING :**

**No one should be allowed to occupy the trunk of the vehicle at any time. If the trunk is partially or totally closed and the person is unable to get out, severe injury or death could occur due to lack of ventilation, fumes and rapid heat build-up, or because of exposure due to cold weather conditions. The trunk is also a highly dangerous location in the event of a crash because it is not a protected occupant space and is instead part of the vehicle’s crush zone.**

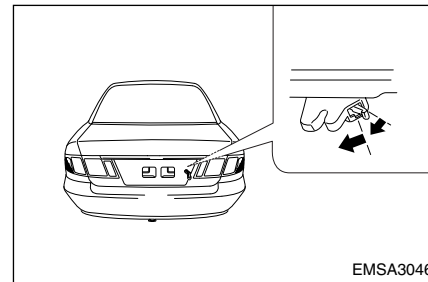
## KNOWING YOUR VEHICLE

### *Remote Trunk Lid Release*



To open the trunk, pull the release switch.

### *Trunk Lid Knob Lock (If Equipped)*



If the trunk lid lock knob (located near the latch) is in the “LOCK” position when the trunk lid is closed, it will not be possible to open the trunk lid by using the remote release. In this instance, use the master key to unlock and open the trunk lid. To allow the trunk lid to be opened with the remote release, push the trunk lid lock knob down, then to the opposite direction of the “LOCK” position.

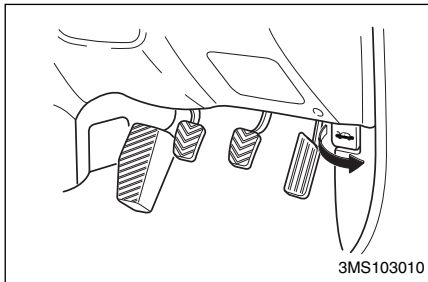
### **\* NOTICE :**

- If a person is locked in the trunk by one's own will or by another person or by accident, “push” the trunk lid lock knob may be pushed down. This will open the trunk lid.
- We're recommending that cars be kept locked and keys be kept out of the reach of children, and that parents teach their children about the dangers of playing in trunks.

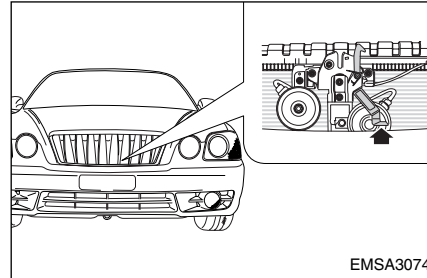
## KNOWING YOUR VEHICLE

### HOOD

#### *Opening the Hood*



1. Inside the vehicle, pull the hood release handle located at the bottom right corner of the instrument panel.



2. Go to the front of the vehicle, raise the hood until the secondary latch catches. Then lift the secondary latch up (located under the hood at the centre of the vehicle).

3. Raise the hood. It will raise completely by itself after it has been raised halfway.

#### **CAUTION :**

**Before closing the hood, make sure that all parts and tools have been removed from the engine area and that everyone is clear of the hood opening.**

## KNOWING YOUR VEHICLE

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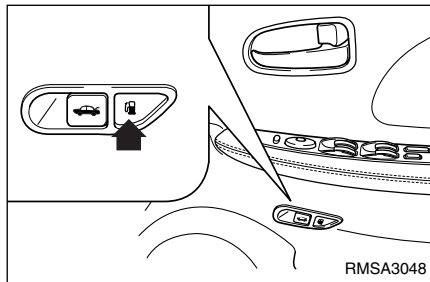
### *Closing the Hood*

- Check the underhood area to make certain all filler caps are in place and that all loose items have been removed.
- Close the hood firmly so that it latches securely. Do not slam it shut.

## KNOWING YOUR VEHICLE

### FUEL FILLER LID

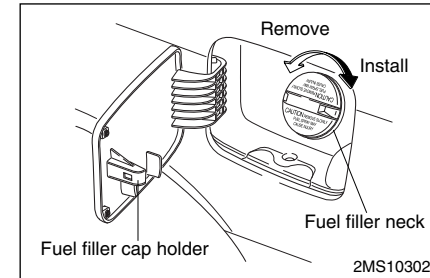
#### *Remote Fuel Filler Lid Release*



To open the filler lid, press the release switch.


#### **⚠ WARNING : FUEL FILLING**

- Fuel may be under pressure. Always remove the fuel cap carefully and slowly. If the cap is venting fuel or if a hissing sound is heard, wait until the condition stops before completely removing the cap. If these precautions are not followed, fuel may spray out and cause serious personal injury.
- Fuel vapour is extremely hazardous and can explode. When refuelling, always stop the engine and never allow sparks or open flames near the filler neck. Always extinguish cigarettes and other smoking materials before refueling.



- To remove the cap, turn it counterclockwise.
- To install the cap, turn it clockwise until it “clicks.” This indicates that the cap is securely tightened.

#### **\* NOTICE :**

A loose fuel filler cap may cause the OBD-II Malfunction Indicator Light (  ) in the instrument panel to illuminate unnecessarily. Always ensure that the fuel filler cap is tight.



## KNOWING YOUR VEHICLE

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The fuel filler neck is designed to prevent filling the fuel tank with anything but unleaded fuel.

**\* NOTICE :**

**If the fuel filler cap requires replacement, use only a genuine Kia cap or the equivalent specified for your vehicle. An incorrect fuel filler cap can result in a serious malfunction of the fuel system or emission control system. Correct replacement caps are available at Authorized Kia Dealers.**

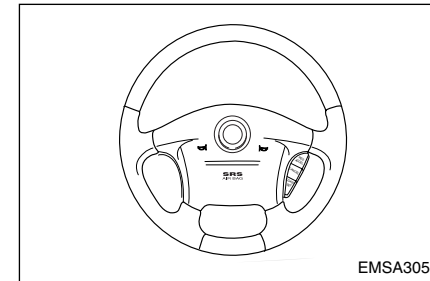
If the fuel filler lid will not open in cold weather because the area around it is frozen, push or lightly tap the lid.

**\* NOTICE :**

**Do not spill fuel on the exterior surfaces of the vehicle. Any type of fuel on painted surfaces may damage the paint.**

## STEERING WHEEL

### *Horn (With Air Bag)*



To sound the horn, press the centre on your steering wheel.

## KNOWING YOUR VEHICLE

### MIRRORS

#### *Outside Rearview Mirror*

Your vehicle is equipped with both left-hand and right-hand outside rearview mirrors. The mirrors can either be adjusted remotely with the control levers or remote switch, depending on the type your vehicle has. The mirror heads can be folded rearward to prevent damage when using an automatic car wash.

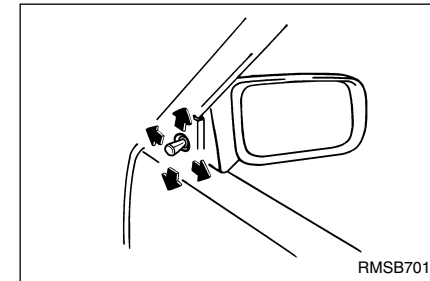
#### **CAUTION :**

- **The passenger's side rearview mirror is convex. Objects seen in the mirror are closer than they appear.**
- **When changing lanes, use your interior rearview mirror or direct observation to determine the actual distance of following vehicles behind you.**

#### **\* NOTICE :**

**Do not scrape ice off the mirror face; this may damage the surface of the glass. If ice should restrict movement of the mirror, do not force the mirror to adjust it. To remove ice, use a de-icer spray, or a sponge or soft cloth with very warm water.**

#### **Manual Remote Control (If Equipped)**

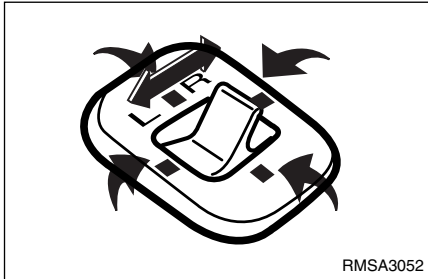


To adjust an outside mirror, move the control lever which is located at the forward inside area of the window frame.

## KNOWING YOUR VEHICLE

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### ***Electric Remote Control (If Equipped)***



This switch, located at the armrest on the driver's door, controls the adjustments for both right and left outside mirrors. To adjust the position of either mirror:

1. Move the selector switch to the right or left to activate the adjusting mechanism for the corresponding mirror.
2. Adjust the mirror angle by depressing the mirror adjustment control switch in the desired direction.

### **\* NOTICE :**

The mirrors stop moving when they reach the maximum adjusting angles, but the motor continues to operate while the switch is depressed. Do not depress the switch longer than necessary or the motor may be damaged.

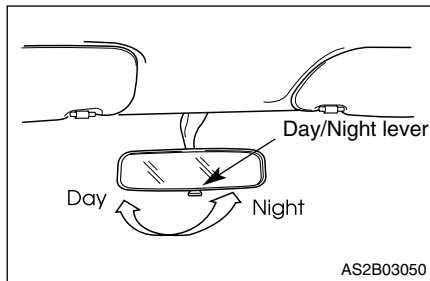
### ***Outside Rear View Mirror Heater (If Equipped)***

The outside rearview mirror heater is actuated in connection with the rear window defroster. To heat the outside rearview mirror glass, push in the switch for the rear window defroster. The rearview mirror glass will be heated for defrosting or defogging and will give you improved rear vision in inclement weather conditions. Push the switch again to turn the heater off. The outside rearview mirror heater automatically turns itself off after 20 minutes. (Refer to Rear Window Defroster)

## KNOWING YOUR VEHICLE

### ***Day/Night Rearview Mirror***

Adjust the rearview mirror to centre on the view through the rear window. Make this adjustment before you start driving and while the day/night lever is in the day position.



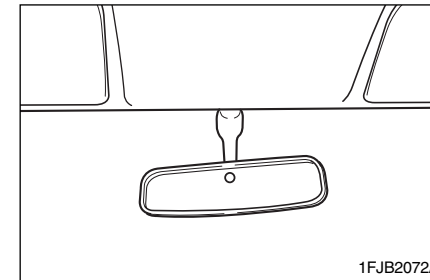
Pull the day/night lever toward you to reduce glare from the headlights of vehicles behind you during night driving.

Remember that you lose some rearview clarity in the night position.

**CAUTION :**  
Do not allow objects in the rear seat to interfere with your line of vision through the rear window.

### ***Day/Night Rearview Mirror (Electric type) (If equipped)***

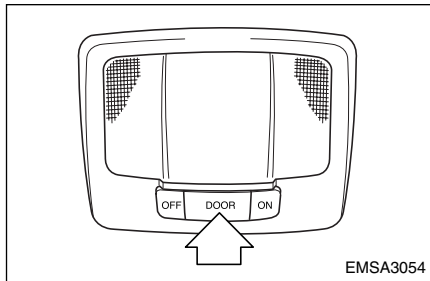
The electric type day/night inside rearview mirror controls automatically the glare of the car behind you. Adjust the rearview mirror to the desired position.



## KNOWING YOUR VEHICLE

### INTERIOR LIGHTS

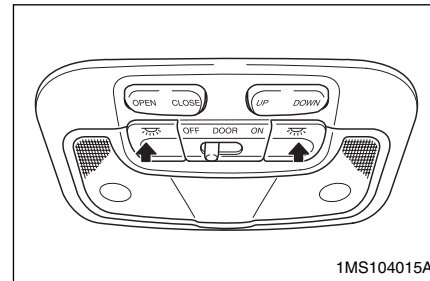
#### *Dome Light*



The dome light switch, located in the light assembly, has three positions:

- OFF – The light stays OFF even when a door is open.
- DOOR – The light turns ON or OFF when a door is opened or closed.
- ON – The light turns ON and stays ON even when the doors are all closed.

#### *Map Light (with sunroof only)*

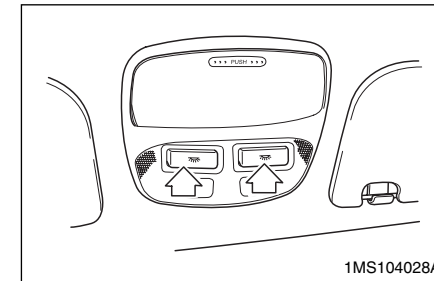


This light switch has two positions:

- OFF - The light stays OFF even when a door is open.
- DOOR - The driver's side light turns ON when the door opens and light turns OFF when the door closes.
- ON - The light turns ON and stays ON even when the doors are all closed.

The lights are switched ON or OFF by pressing the corresponding switches.

#### *Map Light (With Sun Glasses)*



The lights are switched ON or OFF by pressing the corresponding switches.

## KNOWING YOUR VEHICLE

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### *Front Door Edge Warning Light (If Equipped)*

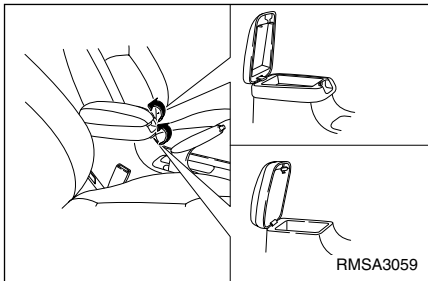
A red light comes on when the front door is opened. The purpose of this light is to assist when you get in or out and also to warn passing vehicles.

## KNOWING YOUR VEHICLE

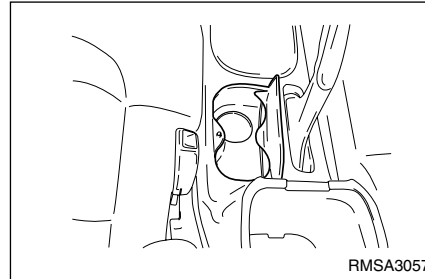
### CUP HOLDERS AND CONSOLE STORAGE COMPARTMENT

The cup holders and console storage compartment are located in the centre console.

#### *Console Storage Compartment Armrest Type (If Equipped)*



#### *Cup holders (If Equipped)*



The cup holder can be opened by pressing. The cover will slowly open.

#### **CAUTION :**

Place the drink holder in its closed position while not in use.

#### **WARNING :**

Do not place anything else on the cup holder. Such objects can be thrown out, possibly injuring persons in the vehicle during sudden braking or in an accident.

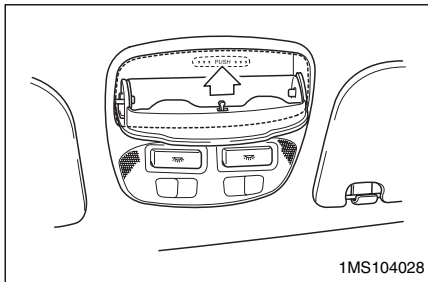
#### **WARNING :**

- Do not place uncovered cups of hot liquid in the cup holder while the vehicle is in motion. If the hot liquid spills, you could be burned and lose control of the vehicle.
- To reduce the risk of personal injury in the event of a sudden stop or collision, do not place bottles, drinking glasses, cans, etc., in the cup holder while the vehicle is in motion.

## KNOWING YOUR VEHICLE

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### SUNGLASS HOLDER (IF EQUIPPED)

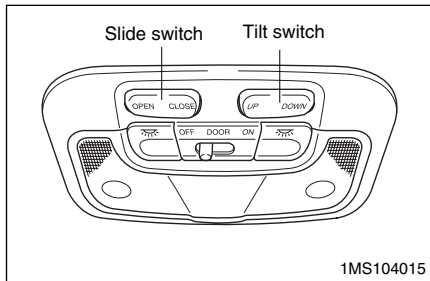


At the overhead console a compartment is provided for the storage of sunglasses. Press the cover latch to open the compartment. The cover will slowly open.



## KNOWING YOUR VEHICLE

### SUNROOF(IF EQUIPPED)



Your sunroof can be opened or closed electrically when the ignition switch is in the “ON” position. You can slide or tilt the sunroof by depressing the corresponding switch located on the dome light assembly.

To tilt the sunroof, depress the “TILT” button (UP) located on the dome light assembly. To close it, depress the “TILT” button (DOWN) again.

To slide the sunroof, depress the “SLIDE” button (OPEN) located on the dome light assembly. The sliding sunroof can be slid by depressing the “SLIDE” button (OPEN). Press and hold the button when the sunroof reaches the desired position. To close the sunroof, depress the “SLIDE” button (CLOSE) and hold it until it is closed completely.

If your sunroof is slid or tilted, you can not tilt or slide it at that condition.

To tilt/slide the sunroof that is slid/tilted, close the sunroof by depressing the corresponding switch at first, and then open it as you like.

## KNOWING YOUR VEHICLE

### \* NOTICE :

- The sunroof is made to slide together with sun shade. Make sure that sun shade is not closed while keeping the sunroof opened.
- Release the switch button as soon as the sunroof is fully opened or closed. If kept on, the sunroof may be damaged.
- Make sure that the sunroof is fully closed when leaving the vehicle unattended.

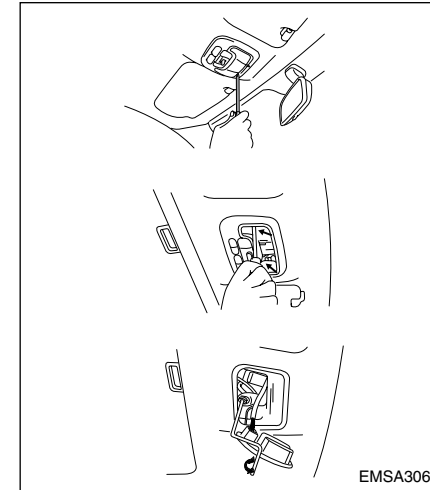
### WARNING :

Do not stick your head, arms, etc. out of the sliding sunroof when the vehicle is moving.

### \* NOTICE :

- Periodically remove any dirt that may have accumulated on the guide rail.
- Should the sliding sunroof malfunction, it can be opened or closed manually with the hex-head wrench furnished in the glove compartment. See the illustration for additional details.

### *Manual Operation of Sunroof*



## KNOWING YOUR VEHICLE

If the sunroof does not electrically operate:

1. Remove the rectangular plastic lens in the front of the roof panel.
2. Turn the cross bolt with a phillips screw driver counterclockwise to remove the front dome light assembly.
3. Insert the hexagonal head wrench provided with the vehicle into the socket. This wrench can be found in the vehicle's trunk or glove box.
4. Turn the wrench clockwise to open or counterclockwise to close.

### **CAUTION :**

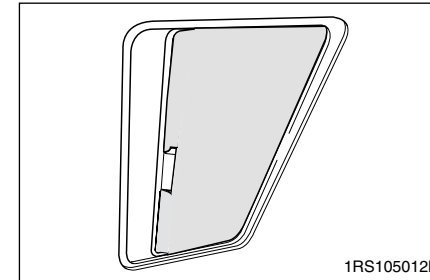
**If you try to open the sunroof when the temperature is below freezing-point or when the sunroof is covered with snow or ice the glass pane or the sunroof motor could be damaged.**

### ***Resetting the Sunroof***

When your battery happens to be disconnected or you use the hexagonal head wrench to operate the sunroof, you have to re-set your sunroof motor as follows :

- Turn the ignition key to the ON position.
- Pull the sunroof fuse out from the fuse box in engine compartment and reinstall it again.
- Then depress the front portion of sunroof switch and hold it for 5 seconds.

### ***Sunshade (If Equipped)***

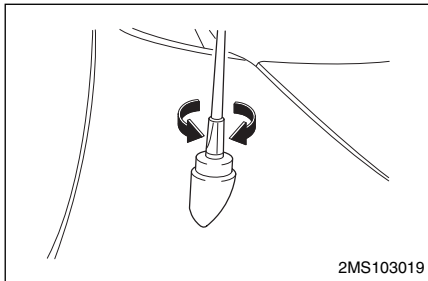


The sunshade can be opened with the glass panel automatically when the glass panel is slid. But you have to close it manually when you want to close it.

## KNOWING YOUR VEHICLE

### ANTENNA

#### *Fixed Rod Antenna (If Equipped)*

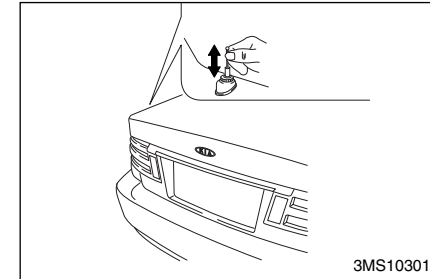


Your car uses a fixed rod antenna to receive both AM and FM broadcast signals. This antenna is a removable type. To remove the antenna, turn it counterclockwise. To install the antenna, turn it clockwise.

#### **CAUTION :**

- Be sure to remove the antenna before washing the car in an automatic car wash or it may be damaged.
- When reinstalling your antenna, it is important that it is fully tightened to ensure proper reception.

#### *Manual Antenna (If Equipped)*



Your car uses a manual stainless steel antenna to receive both AM and FM broadcast signals. Pull up the antenna using your fingers, as shown in the drawing.

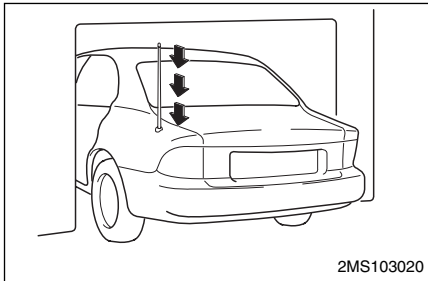
#### **\* NOTICE :**

**Before entering an automatic car wash or a place with a low height clearance, be sure that the antenna is fully retracted.**

## KNOWING YOUR VEHICLE

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### *Power Antenna (If Equipped)*



The antenna will automatically be extended when the radio power switch is turned “ON” while the ignition key is in either the “ON” or “ACC” position. The antenna will automatically be retracted and stored when either the radio power switch is turned “OFF” or the ignition key is set to the “LOCK” position.

### ✧ NOTICE :

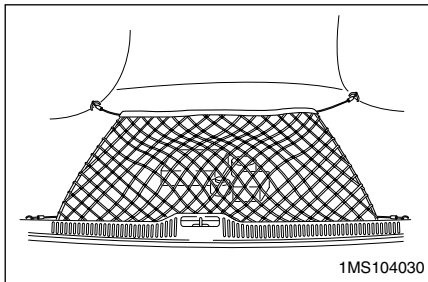
- Before turning on the radio, make sure that no one is near the antenna.
- Before entering an automatic car wash or a place with a low height clearance, be sure that the antenna is retracted and stored.
- If the antenna is dirty, be sure to clean it in order to avoid an operation malfunction.

## KNOWING YOUR VEHICLE

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### LUGGAGE NET (IF EQUIPPED)

*Cargo net*



When you drive with cargo loaded in the trunk, you can fix the cargo with four rings of the cargo net attached in the trunk to prevent shaking.

### **CAUTION :**

Do not put bulky items in the cargo net. They could be damaged. Do not allow objects to be broken by a swing in cargo area while driving.

**WARNING :**  
Avoid eye injury. DO NOT overstretch. ALWAYS keep face and body out of recoil path. DO NOT use when strap has visible signs of wear or damage.

## DRIVING YOUR VEHICLE

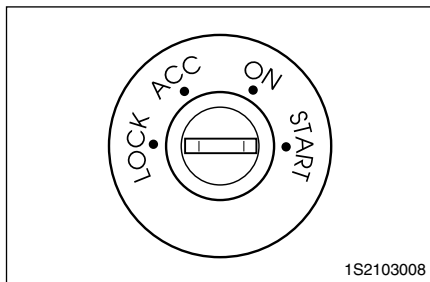
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## DRIVING YOUR VEHICLE

### IGNITION SWITCH

#### *Ignition Switch and Anti-Theft Steering Column Lock*



#### **Ignition Switch Position LOCK**

The steering wheel is locked to protect against theft. The ignition key can be removed only in the “LOCK” position. For vehicles equipped with an automatic transaxle, it also locks the gear shift lever in the P (Park) position.

#### **ACC (Accessory)**

Turning the ignition switch to this position unlocks the steering wheel and will allow some of your vehicle’s electrical accessories such as the radio to operate when the engine is “OFF”.

#### **ON**

Turning the ignition switch to this position allows you to test your vehicle’s warning lights (except the brake system warning light) to make sure they work before you start the engine. The ignition key returns to the “ON” position once the engine is started and remains in this position while the engine is running.

*Do not leave the ignition switch in the “ON” position for extended periods with the engine “OFF” because the battery will discharge.*

#### **START**

Turn the ignition key to the “START” position to start the engine. The engine will crank until you release the key, then it returns to the “ON” position. Also, the brake warning indicator illuminates to check the bulb in this position.

*Difficulty in turning the ignition key to the “START” position can be caused by pressure on the switch from the steering column. To allow the ignition key to turn, move the steering wheel right or left to release the tension and then turn the key.*

#### **\* NOTICE :**

**For safety, the engine will not start if the clutch pedal is not depressed fully on manual transaxle equipped models (If equipped).**



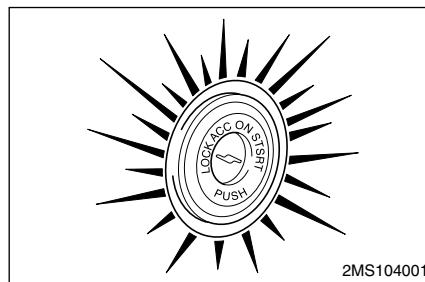
## DRIVING YOUR VEHICLE

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### **⚠ WARNING :**

- Never turn the ignition switch to “LOCK” or “ACC” while the vehicle is moving. This could result in loss of directional control and braking function, which could cause an immediate accident.
- Never reach for the ignition switch, or any other controls, through the steering wheel while the vehicle is in motion. Failure to observe this warning can result in loss of vehicle steering and braking control, which may result in an accident.

### *Illuminated Ignition Switch (If Equipped)*



Whenever a door is opened, the ignition switch will be illuminated for your convenience, provided the ignition switch is not in the “ON” position. The light will go off approximately 10 seconds after closing the door or when the ignition switch is turned on.

### *Automatic Transaxle*

When turning the ignition switch to the “LOCK” position, the shift lever must be in the P (Park) position.

### *Manual Transaxle*

When turning the ignition switch to the “LOCK” position, push the key inward at the “ACC” position and turn the key toward the “LOCK” position.

## DRIVING YOUR VEHICLE

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### STARTING THE ENGINE

1. Make sure the parking brake is applied.
2. **Manual Transaxle** - Depress the clutch pedal fully and shift the transaxle into NEUTRAL. Keep the clutch pedal depressed while cranking the engine. In the case of some models, the starter will not operate if the clutch pedal is not fully depressed.

**Automatic Transaxle** - Place the transaxle shift lever in P (Park). Depress the brake pedal fully.

You can also start the engine if the shift lever is in the N (Neutral) position.

3. Turn the ignition switch to "START" and hold it there until the engine starts (a maximum of 10 seconds), then release the key.

In extremely cold weather, below 0°F (minus 18°C), or after the vehicle has not been operated for several days, let it warm up without depressing the accelerator.

Whether the engine is cold or warm, it should be started without depressing the accelerator.

4-4

### CAUTION :

**If the engine stalls while you are in motion, do not attempt to move the shift lever to P (Park).**

**If it is safe to do so considering traffic and road conditions, you may put the shift lever in the N (Neutral) position while still moving and turn the ignition switch to the "START" position in an attempt to restart the engine.**

If the engine fails to start using this procedure, attempt the following.

***The engine fails to start when the engine is cold (engine coolant temperature is below 32°F/0°C):***

A no start condition may be caused by an engine that has become flooded (has excessive fuel in the cylinders). If this is the case, follow the starting procedure below.

1. Make sure the parking brake is applied.
2. **Manual Transaxle** - Depress the clutch pedal fully and shift the transaxle into N (Neutral). Keep the clutch pedal depressed while cranking the engine.  
**Automatic Transaxle** - Place the transaxle shift lever in P (Park) or N (Neutral). Depress the brake pedal fully.
3. Depress the accelerator fully and hold it.
4. While holding the accelerator fully depressed, turn the ignition switch to the "START" position and hold it (a maximum of 10 seconds) to discharge the excess fuel.  
If the engine starts, the engine speed will increase suddenly; immediately release the ignition key and the accelerator.  
If the engine has not yet started, release the accelerator after cranking the engine.
5. Without depressing the accelerator, crank the engine until it starts (a maximum of 10 seconds).

## DRIVING YOUR VEHICLE

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### ***If the engine fails to start when the engine is warm:***

If the engine is unusually difficult to restart when it is warm (fails to start after repeated attempts without depressing the accelerator):

1. Make sure the parking brake is applied.
2. **Manual Transaxle** - Depress the clutch pedal fully and shift the transaxle into N (Neutral). Keep the clutch pedal depressed while cranking the engine.

**Automatic Transaxle** - Place the transaxle shift lever in P (Park) or N (Neutral). Depress the brake pedal fully.

3. While depressing the accelerator pedal about halfway down, turn the ignition switch to the "START" position and hold it (a maximum of 10 seconds).
4. After the engine has started, let it idle for about 10 seconds before driving.

### **\*NOTICE:**

**Do not engage the starter for more than 10 seconds. If the engine stalls or fails to start, wait 5 to 10 seconds before re-engaging the starter. Excessive or improper use of the starter may damage it.**

In the case of some models, the starter may not operate if:

- In an automatic transaxle, the shift lever is NOT in P (Park) or N (Neutral).
- In a manual transaxle, the clutch pedal is not fully depressed.

Excessive engine noise (from valve tappets) may occur if the engine has not been operated for an extended period.

The noise should stop after the engine has reached normal operating temperature.

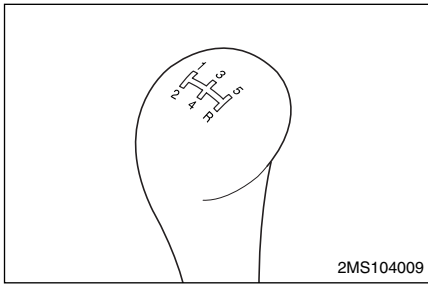
If the noise does not stop, have the vehicle inspected by an Authorized Kia Dealer.

## DRIVING YOUR VEHICLE

### MANUAL TRANSAXLE

#### *Manual Transaxle Operation*

The shift pattern is conventional for five forward gears, as shown below.



Press the clutch pedal down fully while shifting, then release it slowly.

A special safety feature prevents inadvertent shifting from 5 (Fifth) to R (Reverse). The gearshift lever must be returned to the Neutral position before shifting into R (Reverse).

#### \* NOTICE :

Make sure the vehicle is completely stopped before shifting into R (Reverse).

#### \* NOTICE :

To avoid premature clutch wear and damage, do not drive with your foot resting on the clutch pedal. Also, don't use the clutch to hold the vehicle stopped on an upgrade (while waiting for a traffic light, etc).


#### WARNING : MANUAL TRANSAXLE

Always set the parking brake fully and shut the engine off, then make sure the transaxle is shifted into 1st gear. Unexpected and sudden vehicle movement can occur if these precautions are not followed in the order identified.

# DRIVING YOUR VEHICLE

## AUTOMATIC TRANSAXLE (IF EQUIPPED)

Lock release button prevents shift lever movement without first depressing the button.



Shift lever

Automatic mode

Sports mode

+(UP)

-(DOWN)

Depress the brake pedal and push the button when shifting.

The lock release button must be depressed while moving the shift lever.

The shift lever can be moved without depressing the lock release button.

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## DRIVING YOUR VEHICLE

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### *Automatic Transaxle Operation*

All normal forward driving is done with the shift lever in the D (Drive) position.

To move the shift lever from the P (Park) position, the ignition switch must be in the "ON" position, the brake pedal must be depressed, and the lock release button must be depressed.

For smooth operation, depress the brake pedal when shifting from N (Neutral) to a forward or reverse gear.

### CAUTION :

- Do not accelerate the engine in R (Reverse) or any of the forward positions with the brakes on.
- When stopped on an upgrade, do not hold the vehicle stationary with engine power. Use the service brake or the parking brake.
- Do not shift from N (Neutral) or P (Park) into 1 (1st), 2 (2nd), 3 (3rd), D (Drive) or R (Reverse) when the engine is above idle speed.

### WARNING : AUTOMATIC TRANSAXLE

Before leaving the driver's seat, always make sure the shift lever is in the P (PARK) position; then set the parking brake fully and shut the engine off. Unexpected and sudden vehicle movement can occur if these precautions are not followed in the order identified.

## DRIVING YOUR VEHICLE

---

### *Normal Operation*

#### **P (Park)**

This position locks the transaxle and prevents the front wheels from rotating. Always come to a complete stop before shifting into this position.

#### **WARNING :**

Shifting into P (Park) while the vehicle is in motion will cause the front wheels to lock and you will lose driving control of the vehicle.

#### **\* NOTICE :**

The transaxle may be damaged if you shift into P (Park) while the vehicle is in motion.

#### **WARNING :**

- **Do not use the P (Park) position in place of the parking brake when leaving the vehicle. Always make sure the shift lever is latched in the P (Park) position so that it cannot be moved unless the lock release button is pushed in AND the parking brake is fully set.**
- **Turn the ignition switch off whenever you leave the vehicle unattended. Never leave the vehicle unattended while the engine is running. Unexpected and sudden vehicle movement may occur if these precautions are not taken.**
- **Never leave a child unattended in a vehicle.**

#### **R (Reverse)**

Use this position to drive the vehicle backward.

#### **CAUTION :**

Always come to a complete stop before shifting into or out of R (Reverse). You may damage the transaxle if you shift into R while the vehicle is in motion, except as explained in “Rocking the Vehicle.”

#### **N (Neutral)**

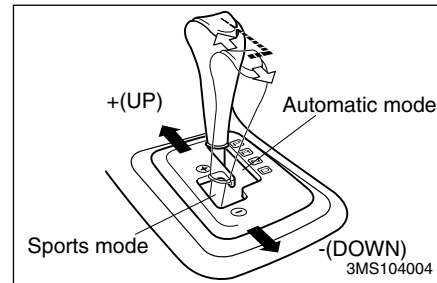
In this position, the wheels and transaxle are not locked. The vehicle will roll freely even on the slightest incline unless the parking brake or service brakes are applied.

## DRIVING YOUR VEHICLE

### D (Drive)

This is the normal forward driving position. The transaxle will automatically shift through a four-gear sequence, providing the best fuel economy and power.

### Sports Mode



Whether the vehicle is stationary or in motion, sports mode is selected by pushing the shift lever from the “D” position into the manual gate. To return to “D” range operation, push the shift lever back into the main gate.

In sports mode, moving the shift lever backwards and forwards can make gearshifts rapidly simple. In contrast to a manual transaxle, the sports mode allows gearshifts with the accelerator pedal depressed.

**UP (+):** Push the lever forward once to shift up one gear.

**DOWN (-) :** Pull the lever backwards once to shift down one gear.

### **CAUTION :**

**Upward shifts do not take place automatically in sports mode. The driver must execute upward shifts in accordance with prevailing road conditions, taking care to keep the engine speed below the red zone.**



## DRIVING YOUR VEHICLE

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### \* NOTICE :

- In sports mode, only the four/five forward gears can be selected. To reverse or park the vehicle, move the shift lever to the “R” or “P” position as required.
- In sports mode, downward shifts are made automatically when the vehicle slows down. When the vehicle stops, 1st gear is automatically selected.
- To maintain the required levels of vehicle performance and safety, the system may not execute certain gearshifts when the shift lever is operated.
- When driving away on a slippery road, push the shift lever toward into the +(UP) position. This will cause the transaxle to shift into the 2nd gear which is better for smooth driving away on a slippery road. Push the shift lever to the -(DOWN) side to shift back to the 1st gear.

### \* NOTICE :

- For smooth and safe operation, depress the brake pedal when shifting from “Neutral” position or “Park” position to a forward or reverse gear.
- The ignition key must be in the “ON” position and the brake pedal fully depressed in order to move the shift lever from the “P” (Park) position to any of the other positions.
- It is always possible to shift from “R”, “N”, “D” position to “P” position. The vehicle must be fully stopped to avoid transaxle damage.

### CAUTION :

- Shift into “R” and “P” position only when the vehicle has completely stopped.
- Do not accelerate the engine in reverse or any of the forward positions with the brakes applied.
- Always apply the footbrake when shifting from “P” or “N”, to “R” or “D” position.
- Do not use the “P” (Park) position in place of the parking brake. Always set the parking brake, shift the transaxle into “P” (Park) position and turn off the ignition when you leave the vehicle, even momentarily. Never leave the vehicle unattended while the engine is running.
- Check the automatic transaxle fluid level regularly, and add fluid as necessary.

## DRIVING YOUR VEHICLE

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### *Moving Up a Steep Grade from a Standing Start*

To move up a steep grade from a standing start, depress the brake pedal, shift the shift lever to D (Drive), 2 (2nd), or 1 (1st). Select the appropriate gear depending on load weight and steepness of the grade, and release the parking brake. Depress the accelerator gradually while releasing the service brakes.

## DRIVING YOUR VEHICLE

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### BRAKE SYSTEM

#### *Power Brakes*

Your vehicle has power-assisted brakes that adjust automatically through normal usage.

In the event that brake system power assist is lost because of a stalled engine or some other reason, you can still stop your vehicle by applying greater force to the brake pedal than you normally would. The stopping distance, however, will be longer.

When the engine is not running, the reserve brake power is partially depleted each time the brake pedal is depressed. Do not pump the brake pedal when the power assist has been interrupted, except when necessary to maintain steering control on slippery surfaces.

#### *Anti-Lock Brake System (ABS)(If Equipped)*

The anti-lock brake system is designed to prevent lock-up of the wheels during sudden braking or braking on slippery surfaces. Compared to a conventional brake system, the anti-lock brake system provides greater steering control during braking in such situations.

#### **WARNING : ABS BRAKES**

- **The anti-lock brake system (ABS) cannot compensate for bad road conditions, for unsafe or reckless driving or for bad judgement.**
- **The ABS is designed to improve maximum braking effectiveness on typical highways and roads in good condition. On road surfaces which are in poor condition, the ABS may actually reduce braking effectiveness.**
- **Always operate your vehicle at reasonable speeds that are safe for weather and traffic conditions.**

During normal driving conditions, the anti-lock brake system operates the same as a conventional brake system.

## DRIVING YOUR VEHICLE

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When the anti-lock brake system is engaged due to imminent loss of traction, a pulsation of the brake pedal will result and you may hear or feel “chattering”. This is a normal condition and indicates the system is functioning properly.

When driving a vehicle equipped with anti-lock brakes, adjust your driving according to the road and traffic conditions and keep the following in mind.

- Do not pump the brakes as you would when driving a vehicle not equipped with an anti-lock brake system (ABS). In order for the ABS to function normally, press the brake pedal firmly, without pumping the pedal.
- Even with the anti-lock brake system, your vehicle still requires a sufficient stopping distance. Always maintain a safe distance from the vehicle in front of you.

- Always slow down when cornering. The anti-lock brake system cannot prevent accidents resulting from excessive speeds.
- On loose or uneven road surfaces, operation of the anti-lock brake system may result in a longer stopping distance than for vehicles equipped with a conventional brake system.
- Avoid high speeds on wet roads. The anti-lock brake system cannot eliminate the risk of hydroplaning.

If the anti-lock brake system should fail, the brake system will function as a conventional brake system. Have your vehicle checked by an Authorized Kia Dealer or other competent repair shop as soon as possible.

### ※ NOTICE :

- **If the ABS warning light is on and stays on, you may have a problem with the ABS system. In this case, however, your regular brakes will work normally.**
- **The ABS warning light will stay on for 2-3 seconds after the ignition “ON”. During that time, the ABS will go through self-diagnosis and the light will go off if everything is normal. If the light stays on you may have a problem with your ABS system. Contact an Authorized Kia Dealer for service as soon as possible.**

### ※ NOTICE :

- **If the battery is discharged and the engine is jump started, the ABS warning light may come on. This condition occurs because of a discharged battery and not because there is an anti-lock brake system malfunction.**
- **Have the battery recharged before driving the vehicle.**

## DRIVING YOUR VEHICLE

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### *In the Event of Brake Failure*

If the service brakes should fail to operate while the vehicle is in motion, you can make an emergency stop with the parking brake. The stopping distance, however, will be much greater than normal.

### **WARNING : PARKING BRAKE**

**Pulling on the parking brake while the vehicle is moving at normal speeds can cause a sudden loss of control of the vehicle. If you must use the parking brake to stop the vehicle, use great caution in applying the brake.**

### **WARNING :**

- **Do not drive with your foot resting on the brake pedal. This will create abnormally high brake temperatures, excessive brake lining and pad wear, and increased stopping distances.**
- **When descending a long or steep hill, shift to a lower gear and avoid continuous application of the brakes. Continuous brake application will cause the brakes to overheat and could result in a temporary loss of braking performance.**
- **Wet brakes may result in the vehicle not slowing down at the usual rate and/or pulling to one side when the brakes are applied. Applying the brakes lightly will indicate whether they have been affected in this way. Always test your brakes in this fashion after driving through deep water. To dry the brakes, apply them lightly while maintaining a safe forward speed until brake performance returns to normal.**

## DRIVING YOUR VEHICLE

### *Disc Brake Wear Indicators*

Your vehicle has front disc brakes.

When your front brake pads are worn and it's time for new pads, you will hear a high-pitched warning sound from your front brakes. You may hear this sound intermittently or constantly.

#### **⚠ WARNING : BRAKE WEAR**

**This brake-wear warning sound means your vehicle needs a service. If you ignore this audible warning, you will eventually lose braking performance, which could lead to a serious accident.**

#### **\* NOTICE :**

**To avoid costly brake repairs, do not continue to drive with worn brake pads.**

Some driving conditions or climates may cause a brake squeal when you first apply, or lightly apply, the brakes. This is normal and does not indicate a problem with your brakes.

**4-16**

### *Rear Drum Brakes (If Equipped)*

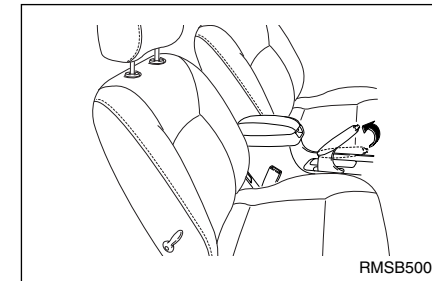
Your rear drum brakes don't have wear indicators. Have the rear brake linings inspected if you hear a rear brake rubbing noise. Also, have your rear brakes inspected each time you change or rotate your tyres and when you have the front brakes replaced.

#### **⚠ CAUTION :**

**Always replace brake linings or front pads as complete front or rear axle sets.**

### *Parking Brake*

- To set the parking brake, pull the parking brake handle fully and firmly upward while applying the service brake.

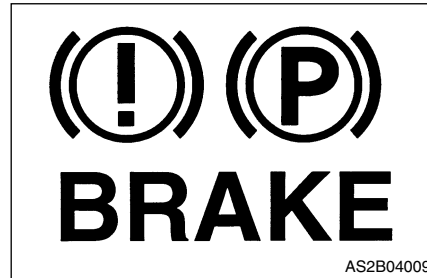
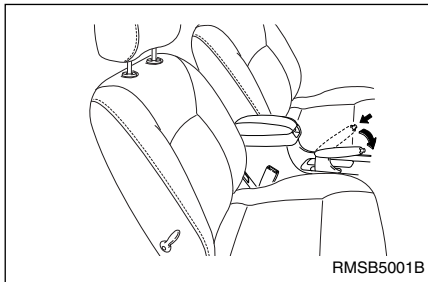


#### **⚠ CAUTION :**

**Driving with the parking brake on will cause excessive wear of the brake linings and pads.**

## DRIVING YOUR VEHICLE

- To release the parking brake, pull the handle up slightly and push the button. Then lower the handle to the released position while holding the button in.



### **CAUTION :**

**When stopped, do not use the shift lever in place of the parking brake. Always set the parking brake fully AND make sure the shift lever is securely positioned in P (Park) with an automatic transaxle or in 1st (First) or R (Reverse) gear with a manual transaxle.**

Check the brake warning light each time you start the engine. The light is located in the instrument panel. This warning light will be illuminated when the engine is running and the parking brake is set.

Before driving, be sure the parking brake is fully released and the brake warning light is off.

If the brake warning light remains on after the parking brake is released, there may be a malfunction in the brake system. Immediate attention is necessary.

If at all possible, cease driving the vehicle immediately. If that is not possible, use extreme caution in operating the vehicle and only drive it until you reach the first safe location or a repair shop.

## DRIVING YOUR VEHICLE

### STEERING WHEEL

#### *Power Steering*

Power steering uses energy from the engine to assist you in steering the vehicle. If the engine is off or if the power steering system becomes inoperative, the vehicle may still be steered, but it will require increased steering effort.

Should you notice any change in the effort required to steer during normal vehicle operation, have the power steering system checked by an Authorized Kia Dealer.

#### \* NOTICE :

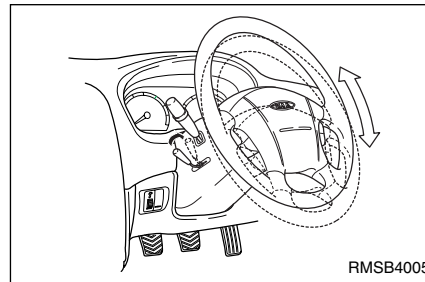
**Never hold the steering wheel against a stop (extreme right or left turn) for more than five seconds with the engine running. Holding the steering wheel for more than five seconds in either position may cause damage to the power steering pump.**

**If the power steering drive belt breaks or if the power steering pump malfunctions, the steering effort will become greatly increased.**

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#### *Tilt Steering*

A tilt steering wheel allows you to adjust the steering wheel before you drive. You can also raise it to the highest level to give your legs more room when you exit and enter the vehicle.



To tilt the wheel, hold the steering wheel and pull the lock release lever. Move the steering wheel to a comfortable level.

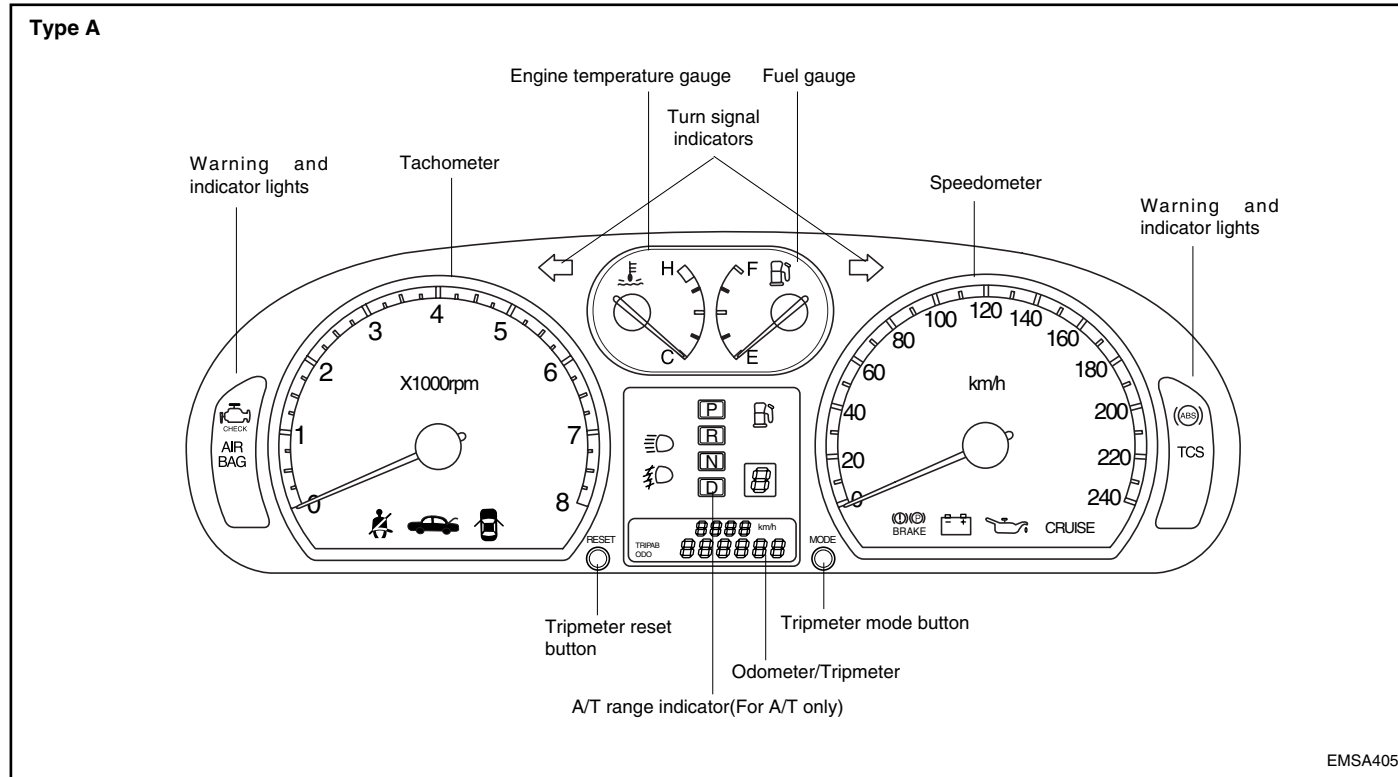
#### **⚠ WARNING**

- **Never adjust the angle of steering wheel while driving. You may lose your steering control and cause severe personal injury or accidents.**
- **After adjusting, push the steering wheel both up and down to be certain it is locked in position.**



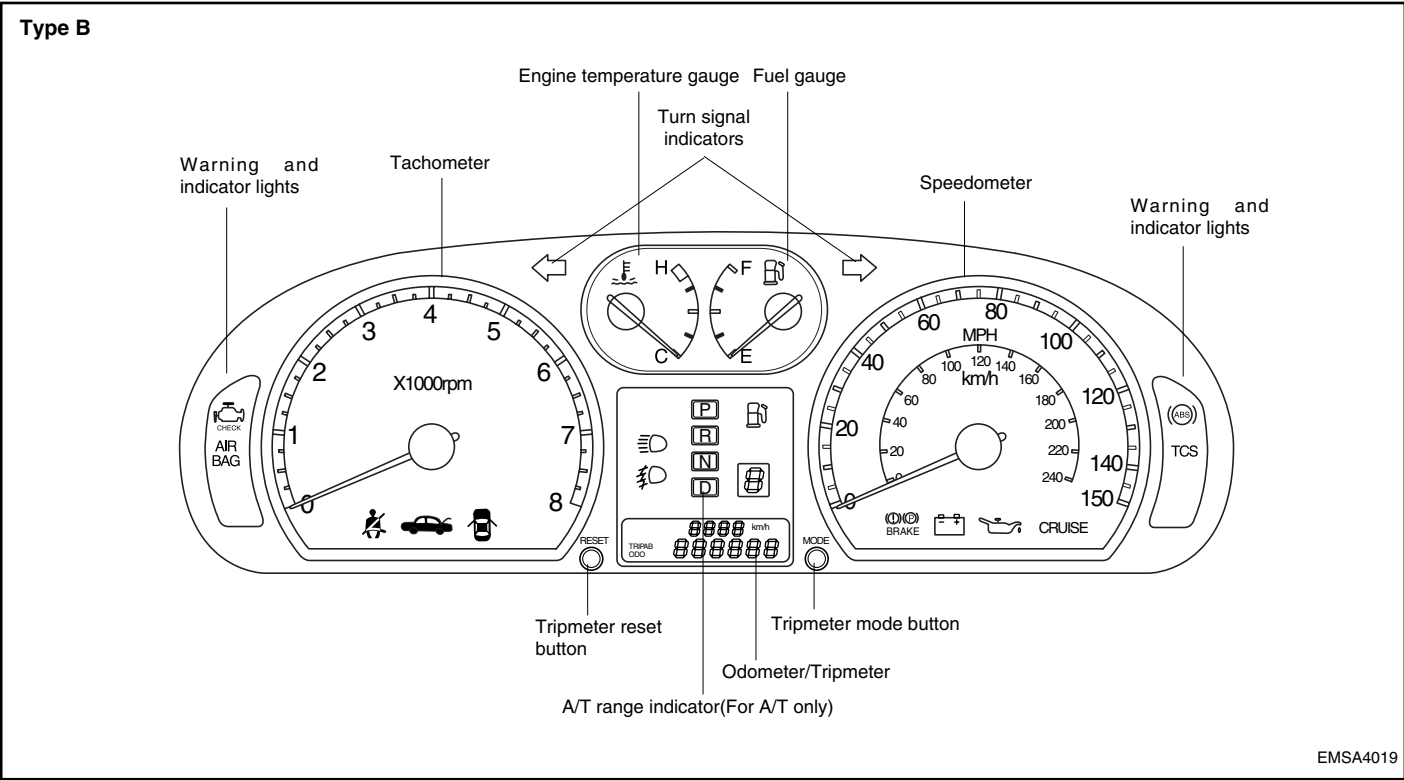
# DRIVING YOUR VEHICLE

## INSTRUMENT CLUSTER



A/T : Automatic Transaxle

# DRIVING YOUR VEHICLE



A/T : Automatic Transaxle

## DRIVING YOUR VEHICLE

### GAUGES

#### *Speedometer*

The speedometer indicates the forward speed of the vehicle.

#### *Odometer/Tripmeter*

You can choose the odometer, tripmeter A and tripmeter B by pressing the mode selection button.

#### *Odometer*

The odometer indicates the total distance the vehicle has been driven.

#### *Tripmeter*

TRIP A : Tripmeter A

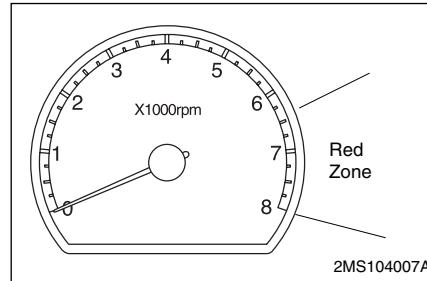
TRIP B : Tripmeter B

The tripmeter indicates the distance of individual trips selected by the driver. Tripmeter A and B can be reset to zero by pressing the reset button for one second or more then releasing.

#### **\* NOTICE :**

**Do not operate the engine within the tachometer's RED ZONE. This may cause severe engine damage.**

#### *Tachometer (If Equipped)*

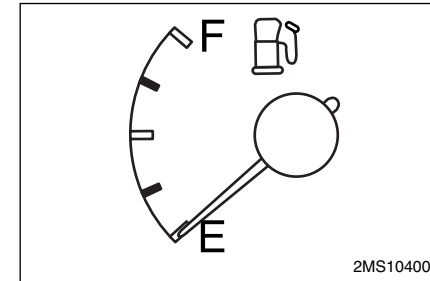


The tachometer indicates the approximate number of engine revolutions per minute (rpm).

Use the tachometer to select the correct shift points and prevent lugging the engine and/or over-revving it.

The tachometer pointer may move slightly when the ignition switch is in the "ACC" or "ON" position with the engine "OFF". This movement is normal and will not affect the accuracy of the tachometer once the engine is running.

#### *Fuel Gauge*



The fuel gauge indicates the approximate amount of fuel remaining in the fuel tank.

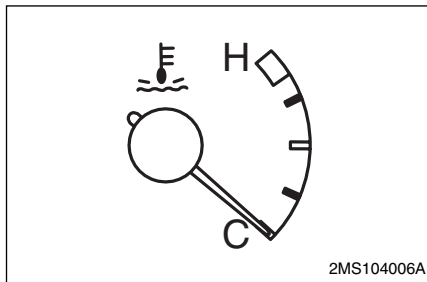
Fuel tank capacity: 65 L (16.9 gal.)

The fuel gauge is supplemented by a low fuel warning light located in the instrument panel.

## DRIVING YOUR VEHICLE

### *Engine Temperature Gauge*

This gauge shows the temperature of the engine coolant when the ignition switch is “ON”.



If the gauge pointer moves beyond the normal range area toward the H position, it indicates overheating that may damage the engine.

Do not continue driving with an overheated engine. If your vehicle overheats, refer to section 6, “Overheating” in the Index.

## WARNINGS AND INDICATORS

### *Warning Lights/Audible Indicators*

#### **Checking Operation**

All the warning lights, except the brake warning light, are checked by turning the ignition switch “ON” (you do not need to start the engine). Any light that does not come on should be checked by an Authorized Kia Dealer.

If the brake system warning light does not come on when the ignition switch is in the “START” position, have the system checked by an Authorized Kia Dealer.

After starting the engine, check to make sure that all warning lights are off. If any are still on, this indicates a situation that needs attention. When releasing the parking brake, the brake system warning light should go off.

### **Parking Brake and Brake Fluid Warning**



#### **Parking Brake Warning**

This light comes on when the parking brake is applied with the ignition switch in the “START” or “ON” position. The warning light should go off when the parking brake is released.

#### **Low Brake Fluid Level Warning**


If the warning light remains on when the parking brake is released, it may indicate that the brake fluid level in the reservoir is low.

If the warning light remains on:

1. Drive to the nearest safe location and carefully stop your vehicle.
2. With the engine stopped, check the brake fluid level immediately and add fluid as required. All brake components should also be checked immediately for fluid leaks.

## DRIVING YOUR VEHICLE

3. If leaks are found, if the warning light remains on, or if the brakes do not operate properly, do not drive the vehicle. Have it towed to an Authorized Kia Dealer or other competent repair shop for a brake system inspection and necessary repairs.

 **WARNING : BRAKE  
WARNING  
LIGHTS**

**Driving the vehicle with a warning light “ON” is dangerous. If the brake warning light remains “ON”, have the brakes checked and repaired immediately.**

To check bulb operation, the warning light illuminates when the ignition switch is in the “ON” position.

**Safety Belt Warning**



As a reminder to the driver and passenger, this warning light will flash and the chime sounds for approximately 6 seconds. If the system does not operate as described, see an Authorized Kia Dealer or other competent repair shop for assistance.

**Air Bag Warning**



This warning light will remain “ON” for approximately 6 seconds each time you turn the ignition switch “ON”. If the system does not operate as described or if the light comes on while the vehicle is being driven, see an Authorized Kia Dealer or other competent repair shop for immediate assistance.

**Charging System Warning**



This warning light indicates a malfunction of either the generator or electrical charging system.

**If the warning light illuminates while driving:**

1. Drive to the nearest safe location and carefully stop your vehicle.
2. With the engine off, check the generator drive belt for looseness or breakage.
3. If the belt is adjusted properly, a problem exists somewhere in the electrical charging system. Have an Authorized Kia Dealer or other competent repair shop locate and correct the problem as soon as possible.

**\* NOTICE :**

**Do not drive the vehicle with a loose or broken generator belt; the engine could be damaged by overheating because this belt also drives the water pump.**

## DRIVING YOUR VEHICLE

### **Engine Oil Pressure Warning**



This warning light indicates the engine oil pressure is low.

If the warning light comes on while driving:

1. Drive safely to the side of the road and stop.
2. With the engine off, check the engine oil level. If the level is low, add oil as required.

If the warning light remains on after adding oil or if oil is not available, call an Authorized Kia Dealer or other competent repair shop.

#### **\* NOTICE :**

**If the engine is not stopped as soon as possible, severe engine damage could result.**

### **Low Fuel Level Warning**



This warning light indicates the fuel tank is near empty. The warning light will come on when the fuel level has dropped to about 8.5 litres. (2.2 US gal.)

Refuel as soon as possible.



### **Malfunction Indicator Light**



This indicator light is part of the On Board Diagnostic System which monitors various emission control system. If this light illuminates while driving, it indicates that a potential problem has been detected somewhere in the emission control systems.

Generally, your vehicle will continue to be driveable, but you should have the system checked by an Authorized Kia Dealer or other competent repair shop as soon as possible.


#### **CAUTION :**

- **Prolonged driving with the On Board Diagnostic System Malfunction Indicator Light (  illuminated may cause damage to the emission control systems which could effect driveability and/or fuel economy.**
- **If the On Board Diagnostic System Malfunction Indicator Light (  begins to flash “ON” and “OFF”, potential catalytic converter damage is possible which could result in loss of engine power. Have the On Board Diagnostic System inspected as soon as possible by an Authorized Kia Dealer or other competent repair shop.**

## DRIVING YOUR VEHICLE

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### \* NOTICE :

A loose fuel filler cap may cause the On Board Diagnostic System Malfunction Indicator Light (  ) in the instrument panel to illuminate unnecessarily. Always ensure that the fuel filler cap is tight.

### **Headlight High Beam Indicator**



This indicator illuminates when the headlights are on and in the high beam position or when the turn signal lever is pulled into the Flash-to-Pass position.

### **Door Ajar Warning**



This warning light comes on when a door is not closed securely with the ignition switch in any position.

### **Anti-Lock Brake System (ABS) Warning Light (If Equipped)**



This light illuminates when you start the engine. The light will go off if the ABS system is operating normally. Also, this light comes on if the key is turned to ON, and then goes off in 2-3 seconds if the system is operating normally. If this warning light illuminates while the vehicle is being driven, have the vehicle checked by an Authorized Kia Dealer or other competent repair shop as soon as possible.

### **Front Fog Indicator (If Equipped)**



This light comes on when the front fog lights are ON.

### **Cruise Indicator (If Equipped)**



The cruise indicator light in the instrument cluster is illuminated only when the vehicle cruising speed has been set using the control switch. The indicator light does not illuminate when the main cruise control switch is activated.

## DRIVING YOUR VEHICLE

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### ***Traction Control Indicator Lights (If Equipped)***

The TCS indicator will illuminate when the ignition key is turned to the “ON” position, but should go off after 3 seconds. It means the TCS is in the stand-by status and at the moment of the actual operation of the TCS, the indicator will blink.

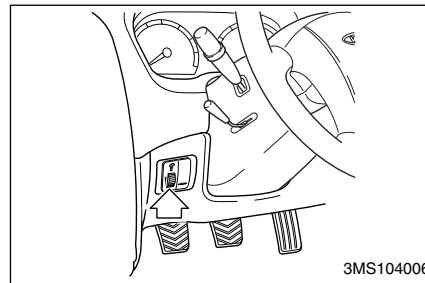
To switch to TCS OFF mode, press the TCS switch. The TCS system will be deactivated and the TCS indicator will illuminate.

If the TCS indicator stays on in the TCS ON mode, take your car to your Authorized Kia Dealer and have the system checked.

### ***Trunk Lid Open Warning Light***

This light remains on unless the trunk lid is completely closed.

### **INSTRUMENT PANEL LIGHT CONTROL (RHEOSTAT)**



The instrument panel lights can be made brighter or dimmer by turning the instrument panel light control knob.



## DRIVING YOUR VEHICLE

### LIGHTING

#### *Battery Saver Function*

※ **NOTICE :**

- This function is operated in order to prevent the battery from being discharged by turning off the small light automatically when the driver removes the ignition key and opens the driver-side door with leaving the small light on.

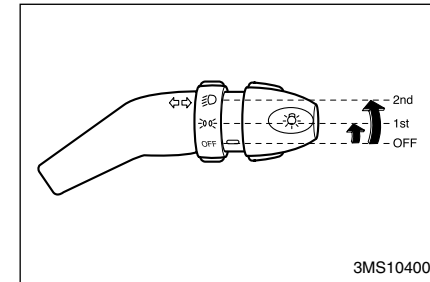
- By applying this function, the tail light shall be turned off automatically even if the driver wants to leave the light on in case of temporary parking alongside the road at night if the ignition key is removed.

Therefore, to maintain the tail light on with the ignition key being removed:

- 1) Open the driver-side door.
- 2) Turn off and on again the tail light of the multi-function switch.

#### *Lighting Control*

To turn the lights on, twist the knob on the end of the control lever which is located on the steering column to the right of the steering wheel.



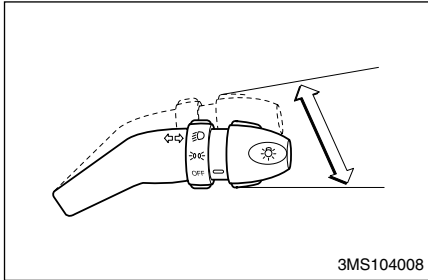
#### *First position*

Tail, position, parking, licence and instrument panel lights ON.

#### *Second position*

Head, tail, parking, licence and instrument panel lights ON.

## DRIVING YOUR VEHICLE

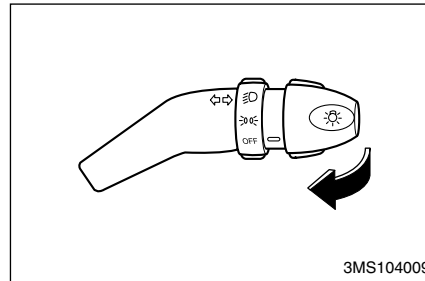


For high beam headlights, push the lever away from you. Pull it back for low beams.

The high-beam indicator will illuminate when the headlight high beams are switched "ON".

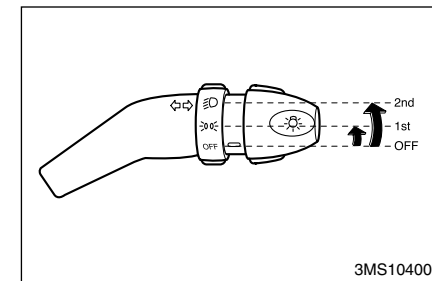
*To prevent the battery from being discharged, do not leave the lights on for a prolonged time while the engine is not running.*

### Flashing Headlights



To flash the headlights, pull the lever toward you. It will return to the normal position when released. The headlight switch does not need to be on to use this flashing feature.

### Turn Signals



The same lever that controls the headlights also controls the turn signals. The ignition switch must be "ON" for the turn signals to function. Move the lever up or down to activate the turn signals. The turn signals will self-cancel after a turn is completed. If the indicator continues to flash after a turn, manually return the lever to the "OFF" (middle) position.

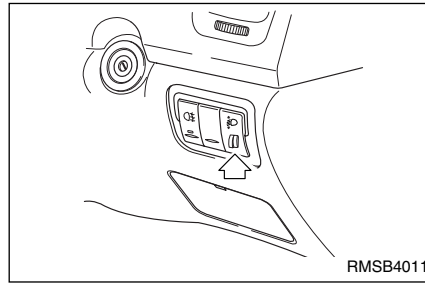
## DRIVING YOUR VEHICLE

### ***Lane Change Signals***

To signal a lane change, move the turn signal lever slightly and hold it in position. The lever will return to the “OFF” (middle) position when released.

Green arrow indicators on the instrument panel indicate which turn signal is operating. If an indicator stays “ON” and does not flash or if it flashes abnormally, one or more of the turn signal bulbs may be burned out and will require replacement.

### ***Headlight Levelling Device (If Equipped)***



This device is equipped not to obstruct the view of other road users at night and/or daytime.

### ***Description of Switch***

To adjust the headlights levelling downwards or upwards, you may refer to the below recommended description.

Position	Loading on;		
	Front seats	Rear seats	Rear trunk
0	1 or 2 persons	–	–
1	2 persons	3 persons	–
2	2 persons	3 persons	150 kg
3	1 persons	–	335 kg

## DRIVING YOUR VEHICLE

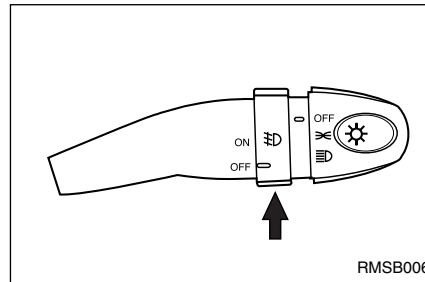
### ***Daytime Running Lights (DRL) (If Equipped)***

Daytime Running Lights (DRL) can make it easier for others to see the front of your vehicle during the day. DRL can be helpful in many different driving conditions, but they can be especially helpful in the short periods after dawn and before sunset.

The DRL system will make your low-beam headlights turn “OFF” when:

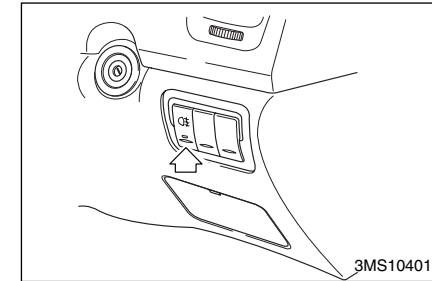
- The headlight switch is “ON”.
- The engine stops.
- The taillight switch is “ON”. When you rotate the switch counterclockwise, the reflectors of the lights turn downward around the pivot. If you turn it to the opposite direction (clockwise), the reflector moves upward around the pivot. In this whole operation, the lenses of both lights do not move.

### ***Front Fog Light Switch (If Equipped)***



To turn on the front fog lights, place the switch in the “ON” position. They will come on when the headlight switch is in the first or second position.

### ***Rear Fog Light (If Equipped)***



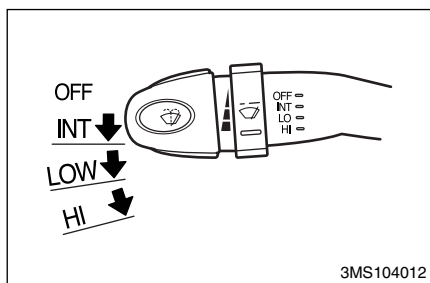
To turn the rear fog light “ON”, use this switch. The rear fog light helps your vehicle to be seen.

To turn the rear fog lights “ON”, turn the headlights “ON” and then depress the rear fog lights switch. To turn it “OFF”, depress it again or turn the headlights “OFF”.

## DRIVING YOUR VEHICLE

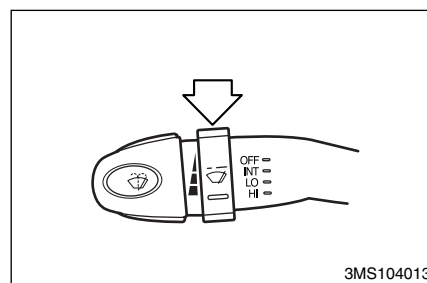
### WIPERS AND WASHERS

#### Windshield Wipers



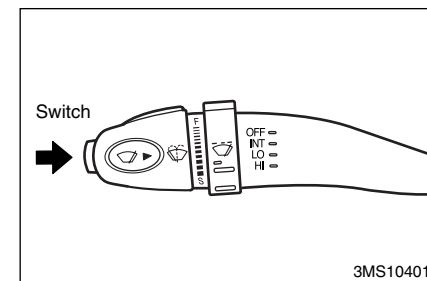
The ignition switch must be “ON”.  
To turn the wipers on, pull the windshield wiper control lever down.  
INT – Intermittent wiper operation  
LO – Normal wiper speed  
HI – Fast wiper speed

#### Variable-Speed Intermittent Wipers (If Equipped)



Set the knob to the INT position and choose the desired speed of the wipers by turning the ring.

#### One-Touch Wipers



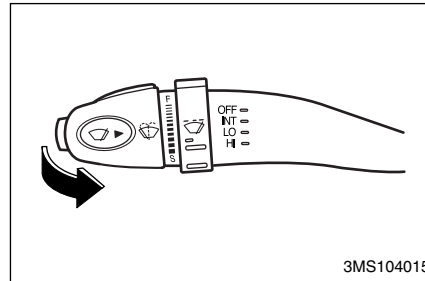
For a single wiping cycle, push the operation switch with the lever in the “OFF” position.

## DRIVING YOUR VEHICLE

### ※ NOTICE :

- To prevent possible damage to the wipers or windshield, do not operate the wipers when the windshield is dry.
- To prevent damage to the wiper blades, do not use gasoline, kerosene, paint thinner, or other solvents on or near them.
- To prevent damage to the wiper arms and other components, do not attempt to move the wipers manually.

### Windshield Washer



To use the windshield washer, pull the lever toward the steering wheel. If the washer does not work, check the washer fluid level. If the fluid level is not sufficient, add an appropriate, non-abrasive, windshield washer fluid to the washer reservoir. The reservoir filler neck is located in the front of the engine compartment, on the passenger's side.

### ⚠ CAUTION:

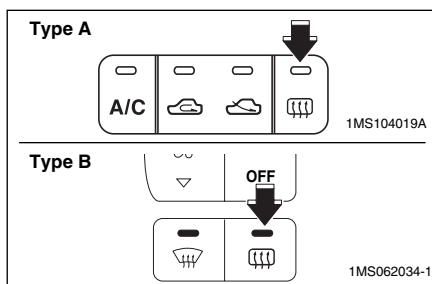
Do not use the washer in freezing temperatures without first warming the windshield with the defrosters; the washer solution could freeze on contact with the windshield and obscure your vision.

### ※ NOTICE :

To prevent possible damage to the washer pump, do not operate the washer when the fluid reservoir is empty.

## DRIVING YOUR VEHICLE

### REAR WINDOW DEFROSTER



The defroster heats the window to remove frost, fog and thin ice from the interior and exterior of the rear window. The ignition switch must be “ON” for the defroster to operate.

To activate the rear window defroster, press the rear window defroster button located in the air conditioning panel. The indicator on the rear window defroster button illuminates when the defroster is “ON”.

The rear window defroster automatically turns “OFF” after 20 minutes or when the ignition switch is turned “OFF”. To turn off the defroster, press the rear window defroster button again. If there is heavy accumulation of snow on the rear window, brush it off before operating the rear defroster.

#### \* NOTICE :

**To prevent damage to the conductors bonded to the inside surface of the rear window, never use sharp instruments or window cleaners containing abrasives to clean the window.**

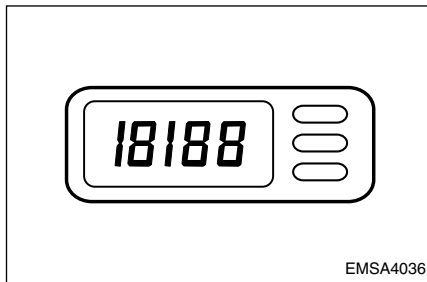
#### \* NOTICE :

**To prevent the battery from being discharged, operate the defroster only while the engine is running.**

## DRIVING YOUR VEHICLE

### INTERIOR FEATURES

#### *Digital Clock*



When the ignition switch is in the "ON" position, the clock buttons operate as follows:

#### **RESET:**

To clear away minutes, press the "R" button with your finger, a pencil or similar object. When you release the button, the clock will be set precisely on the hour.

For example, if the "R" button is pressed while the time is between 9:01 and 9:29, the display will be reset to 9:00.

9:01~9:29 = 9:00

9:30~9:59 = 10:00

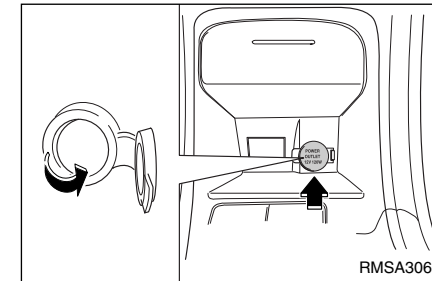
#### **HOUR:**

Pressing the "H" button with your finger, a pencil or similar object will advance the time displayed by one hour.

#### **MINUTE:**

Pressing the "M" button with your finger, a pencil or similar object will advance the time displayed by one minute.

#### *Power Outlet (If Equipped)*



Open the power outlet cover on the front of the center console and insert the connector of electrical appliances which fits the socket and draws less than the 10 Ampere at 12 volts in electrical capacity after engine is started.

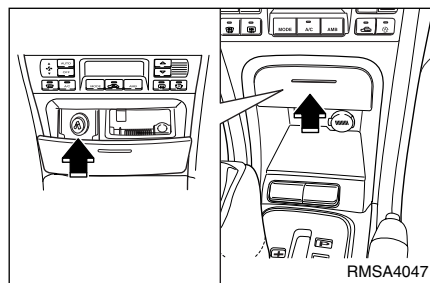


## DRIVING YOUR VEHICLE

### \* NOTICE :

- Use the electrical power outlet with engine on.
- If you have to use the electrical accessories that draw higher power (vacuum cleaner, lights, cooler, etc.), only use these power outlets intermittently with greater caution.
- Long periods of the vehicle not being started (with electrical accessories plugged in) will discharge the vehicle's battery to degrade the battery life.
- Cap the cover of power outlet when not in use.
- Some electronic devices can cause electronic interference when plugged into a vehicle's power outlet. These devices may cause excessive audio static and malfunctions in other electronic systems or devices used in your vehicle.

### *Cigarette Lighter*



To operate the cigarette lighter, press it in and release it. When it is heated, it automatically pops out ready for use. If the engine is not running, the ignition switch must be in the "ACC" position for the lighter to operate.

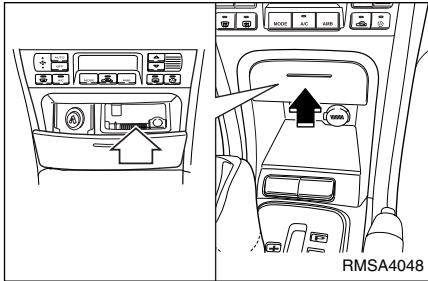
### \* NOTICE :

- Do not hold the lighter in because it will overheat.
- Only a genuine Kia lighter or equivalent should be used in the cigarette lighter socket. The use of plug-in accessories (shavers, hand-held vacuums and coffee pots, for example) may damage the socket or cause electrical failure.
- If the lighter does not pop out within 30 seconds, remove it to prevent overheating.

## DRIVING YOUR VEHICLE

### Ashtrays

#### Front Ashtray

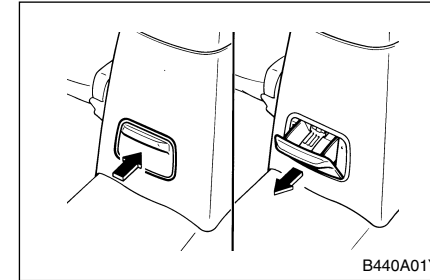


To use the ashtray press the front face then the ashtray slide out. To remove the ashtray, grasp the bucket in the ashtray, and pull it up carefully.

#### **⚠ WARNING : ASHTRAY USE**

- Do not use the vehicle's ashtrays as waste receptacles.
- Putting lit cigarettes or matches in an ashtray with other combustible materials may cause a fire.

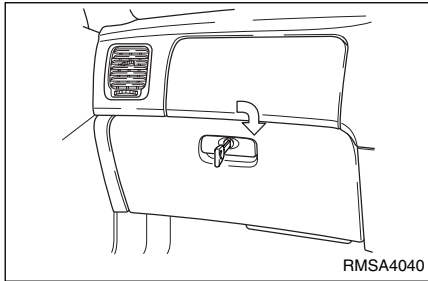
#### Rear Ashtray



The rear ashtray may be opened by pulling it out by its top edge. To remove the ashtray to empty or clean it, lift it up slightly and pull it all the way out.

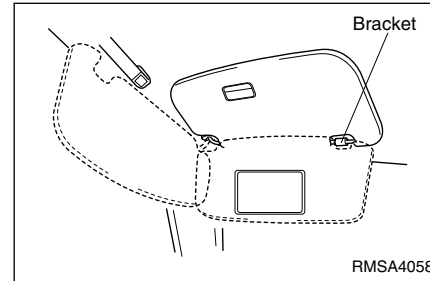
## DRIVING YOUR VEHICLE

### *Glove Box*



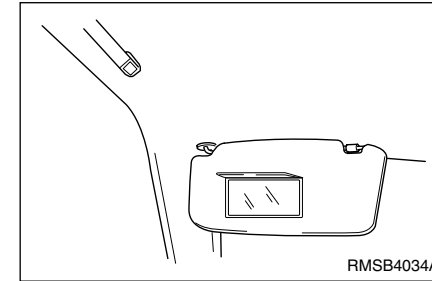
To open the glove box door, pull the latch towards you.  
The glove box door can be locked (and unlocked) with the key (If equipped).

### *Sunvisors*



To use a sunvisor, pull it downward.  
To use a sunvisor for a side window, pull it downward, unsnap it from the bracket and swing it to the side.

### *Vanity Mirror (If Equipped)*



To use the vanity mirror, rotate the sunvisor downward and pull up the vanity mirror cover. The lamp is turned on automatically.

### **CAUTION :**

**To reduce the risk of injury in case of an accident or sudden stop, always keep the glove box door closed while driving.**

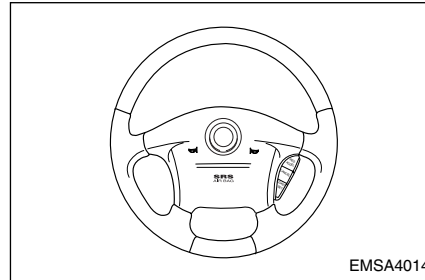
## DRIVING YOUR VEHICLE

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### CRUISE CONTROL (IF EQUIPPED)

The cruise control system provides automatic speed control for your comfort when driving on freeways, toll-roads, or other noncongested highways. This system is designed to function above approximately 25 mph (40 km/h).

#### *To Set the Cruise Speed*



1. Push in the cruise control main switch. This turns the system on.
2. Accelerate to desired cruising speed above 25 mph (40 km/h).
3. Push the control switch to "SET(COAST)" position and release it. The "CRUISE" indicator light in the instrument cluster will illuminate after you have set the vehicle speed at the desired speed.
4. Remove your foot from the accelerator pedal and the desired speed will automatically be maintained.
5. To increase speed, (temporarily) depress the accelerator pedal enough for the vehicle to exceed the preset speed. When you remove your foot from the accelerator pedal, the vehicle will return to the speed you have set.

## DRIVING YOUR VEHICLE

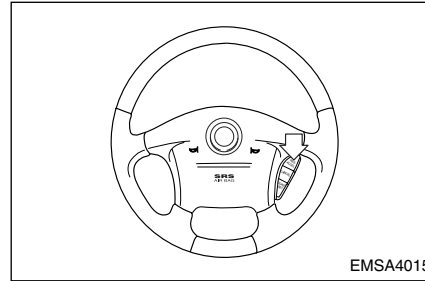
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### *To Cancel the Cruise Speed*

Do one of the following:

- Depress the brake pedal.
- Depress the clutch pedal (Manual transaxle).
- Shift the selector lever in “N” position (Automatic transaxle).
- Depress the “CANCEL” switch located on your steering wheel.
- Decrease the vehicle speed lower than memory speed by 12 mph (20 km/h).
- Decrease the vehicle speed approximately to less than 25 mph (40 km/h).
- Release the main switch.

### *To Resume the Preset Speed*



The vehicle will automatically resume the speed set prior to cancellation when you push the control switch “RESUME (ACCEL)” and release, providing the vehicle speed is above 25 mph (40 km/h).

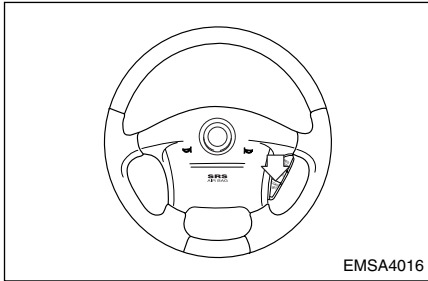
### *To Reset at a Faster speed*

1. Push the control switch “RESUME (ACCEL)” and hold it.
2. Accelerate to desired speed and release the control switch. While the control switch is held, the vehicle will gradually gain speed.

## DRIVING YOUR VEHICLE

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### *To Reset at a Slower Speed*



1. Push the control button “SET (COAST)” and hold it. While the control switch is pushed, the vehicle speed will gradually decrease.
2. When the desired speed is obtained, release the control button.

### ※ NOTICE :

- Keep the main switch off when not using the cruise control.
- Do not use the cruise control when it may not be safe to keep the car at a constant speed, for instance driving in heavy or varying traffic, or on slippery (rainy, icy or snow-covered) or winding roads or over 6% up-hill or down-hill roads.
- Pay particular attention to the driving conditions whenever using the cruise control system.
- During cruise-speed driving with a manual transaxle vehicle, do not shift into neutral without depressing the clutch pedal, since the engine will be overrevved. If this happens, depress the clutch pedal or release the main switch.
- During normal cruise control operation, when the set button is activated or reactivated after applying the brakes, the cruise control will energize after approximately 3 seconds. This delay is normal.

## DRIVING YOUR VEHICLE

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### **TRACTION CONTROL SYSTEM (IF EQUIPPED)**

On slippery road surfaces, the traction control system(TCS) limits the drive wheels from spinning excessively, thus helping the car to accelerate. It also provides improved driving force and steering performance as the car turns at accelerated speeds.

#### **CAUTION :**

**When the TCS indicator blinks, SLIP control function has been activated. It also means that the road is slippery or your car is accelerating excessively. In this situation, release foot pressure from the accelerator pedal and maintain moderate speed.**

#### **WARNING :**

**Traction control is a driving aid; all normal precaution for driving in inclement weather and on slippery road surfaces should be observed.**

#### ***TCS ON/OFF Mode***

In the TCS ON mode, the indicator in the instrument cluster will not be illuminated. The TCS indicator will illuminate when the ignition key is turned to the “ON” position, but should go off after 3 seconds. It means the TCS is in the stand-by status and at the moment of the actual operation of the TCS, the indicator will blink.

To switch to TCS OFF mode, press the TCS switch. The TCS system will be deactivated and the TCS indicator will illuminate.

If the TCS indicator stays on in the TCS ON mode, take your car to your Authorized Kia Dealer and have the system checked.

## DRIVING YOUR VEHICLE

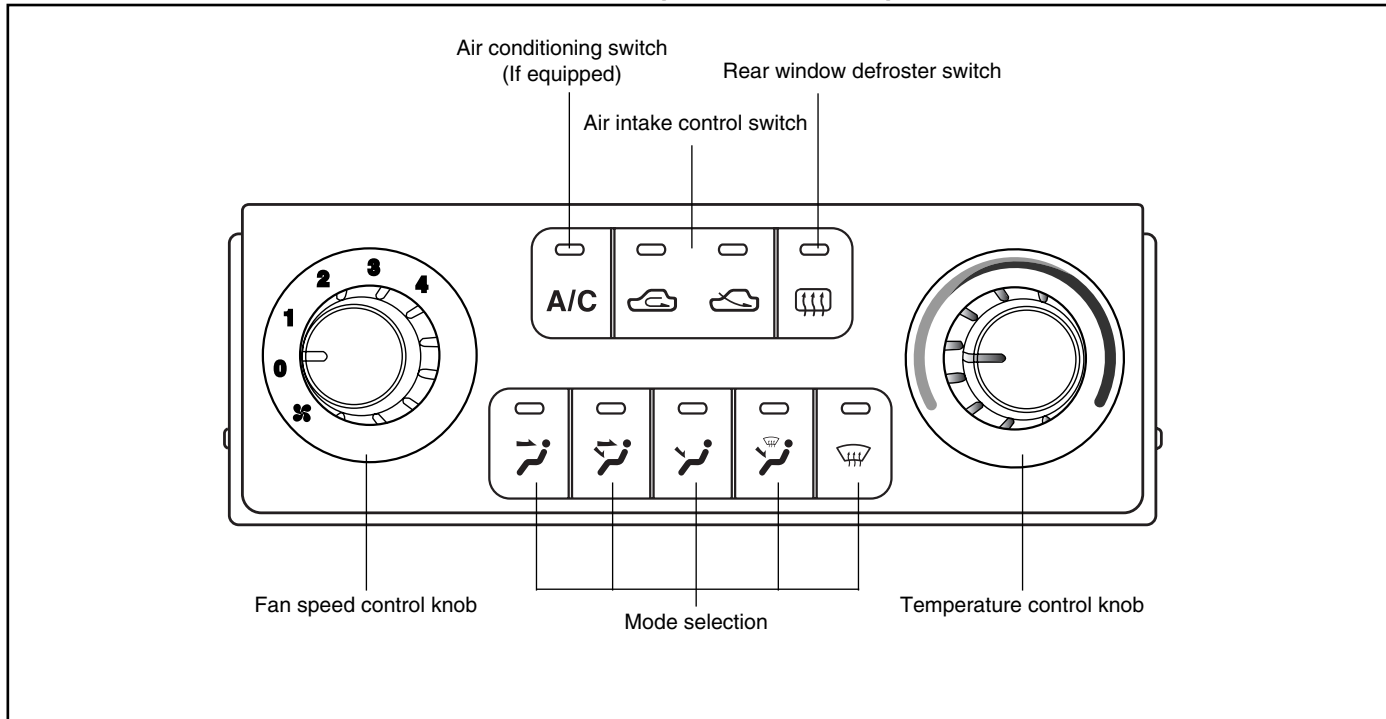
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**\* NOTICE :**

- **Stop the engine once. Then restart the engine, and the TCS mode will automatically turn ON.**
- **When the traction control is operating properly, you can feel a slight pulsation in the vehicle. This is only the effect of brake control and indicates nothing unusual.**
- **When the engine starts, a click is heard from the engine compartment; however, this is only the sound of traction control being checked.**
- **When moving out of the mud or fresh snow, pressing the accelerator pedal may not cause the engine speed to increase.**



## MANUAL CLIMATE CONTROL SYSTEM (IF EQUIPPED)



EMSA4044

## DRIVING YOUR VEHICLE

### ***Fan Speed Control Knob***

The fan speed control knob is the knob closest to the driver. Four (4) adjustable fan speeds are provided which increase as the number increases. The ignition switch must be in the ON position for fan operation.

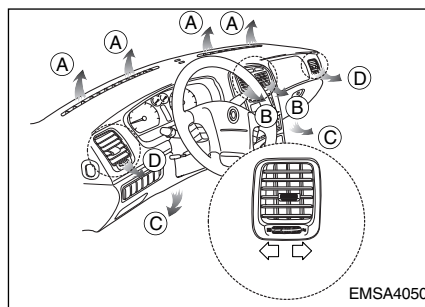
OFF - Fan off

- 1 - Low speed
- 2 - Medium speed
- 3 - High speed
- 4 - Maximum speed

### ***Mode Selection***

Controls the direction of air flow through the ventilation system.

The air from outlet port (D) flows at any mode. Close the ventilation outlets using the knob to block the air flow if you do not want the air.



### **Face position**



Air flow is directed toward the upper body and face. Additionally, each outlet can be controlled to direct the air discharged from the outlet. (outlet port: (B), (D))

### **Face - floor position**



Air flow is directed towards the face and the floor. The air to the floor is warmer than the air to the face (except when the temperature control is set to the extreme cold position). (outlet port: (B), (C), (D))

### **Floor position**



Most of the air flow is directed to the floor, with a small amount of the air being directed to the windshield and side window defroster. (outlet port: (C), (D))

---

### Floor - defrost position



Most of the air flow is directed to the floor and the windshield with a small amount directed to the side window defrosters. (outlet port: Ⓐ, Ⓒ, Ⓓ)

### Defrost position



Most of the air flow is directed to the windshield with a small amount of air directed to the side window defrosters. (outlet port: Ⓐ, Ⓓ)

When the floor-defrost position or defrost is selected the air conditioning (if equipped) will be automatically turned on and outside (fresh) air mode will be selected. If you don't want the air conditioning refer to "How to cancel forced air conditioning operation in floor-defrost and defrost position" in windshield defrosting and defogging section.

### Temperature Control Knob

The temperature control knob is the round knob closest to the passenger side of the ventilation control panel. To change the air temperature in the passenger compartment, turn the knob either clockwise for warmer air or counterclockwise for cooler air.

### Air Intake Control Switch

This is used to select fresh outside air or recirculation of the inside air.



### Recirculated Air Position

When the air intake control switch is depressed (switch indicator illuminates), almost all outside air flow into the vehicle is shut off and air inside the vehicle is recirculated.

This position can be used temporarily for maximum heating or cooling (if equipped with air conditioning) and to help prevent undesirable outside air flow into the vehicle.

### WARNING

- **Continued climate control system operation in the recirculated air position may allow humidity to increase inside the vehicle which may fog the glass and obscure visibility.**
- **Don't sleep in a vehicle with air conditioning system on. It may cause serious harm to passenger's or death due to rare density of oxygen and drop of bodily temperature.**

## DRIVING YOUR VEHICLE

### **Outside (Fresh) Air Position**

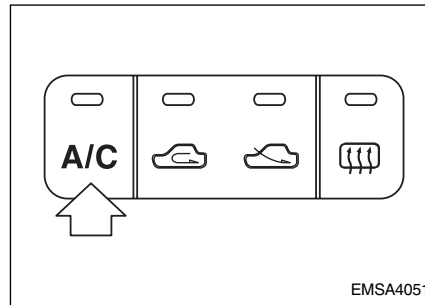
When the air intake control switch is depressed (switch indicator illuminates) air enters the ventilation system from outside the vehicle. Use this position for normal ventilation and heating.

Whenever you start the engine, the air flow control will be set at outside (fresh) air position. If you want the recirculated air position, press the corresponding button.

To cancel the forced outside (fresh) air position when the engine has started, refer to the canceling procedure in “Windshield Defrosting and Defogging” section.




### **Air Conditioning Switch (if equipped)**




Depress the switch to turn the air conditioning system on. An indicator light in the switch will illuminate when the fan switch is on indicating air conditioning system operation. Depress the switch again to turn the air conditioning system off.

### **System Operation**

#### **Ventilation**

1. Set the mode selection switch to the  position.
2. Set the air intake control switch to the outside air position.
3. Set the temperature control knob to the desired position.
4. Set the fan speed control knob to the desired speed.



#### **Heating**

1. Set the mode selection switch to the  position.
2. Set the air intake control switch to the outside air position.

---


**CAUTION:**


**Continued climate control system operation in the recirculated air position may allow humidity to increase inside the vehicle which may fog the glass and obscure visibility.**

3. Set the temperature control knob to the desired position.
4. Set the fan speed control knob to the desired speed.
5. If dehumidified heating is desired, turn the air conditioning system (if equipped) on.
  - If cool air is desired at face level for bi-level operation, set the mode selection switch to the  position.
  - If the windshield fogs up, set the mode selection switch to the  position.

***Air conditioning (if equipped)***

All Kia Air Conditioning Systems are filled with environmentally friendly R134a refrigerant which is not damaging to the ozone layer.

1. Start the engine. Push the air conditioning button.
2. Set the mode selection knob to the face  position.
3. Set the air intake control button to the outside air or recirculated air position.
4. Set the temperature control knob to the desired position.
5. Set the fan speed control knob to the desired speed.
6. Adjust the fan speed control knob and temperature control knob to maintain maximum comfort.

- If warmer air is desired at floor level for bi-level operation, set the mode selection knob to the  position and adjust the temperature control knob to maintain maximum comfort.
- When maximum cooling is desired, rotate the temperature control knob to the extreme left position and set the air intake control button to the recirculated air position, then set the fan speed control knob to the highest speed.

**NOTICE :**

**When using the air conditioning system, monitor the temperature gauge closely while driving up hills or in heavy traffic when outside temperatures are high. Air conditioning system operation may cause engine overheating. Continue to use the blower fan but turn the air conditioning system off if the temperature gauge indicates engine overheating.**

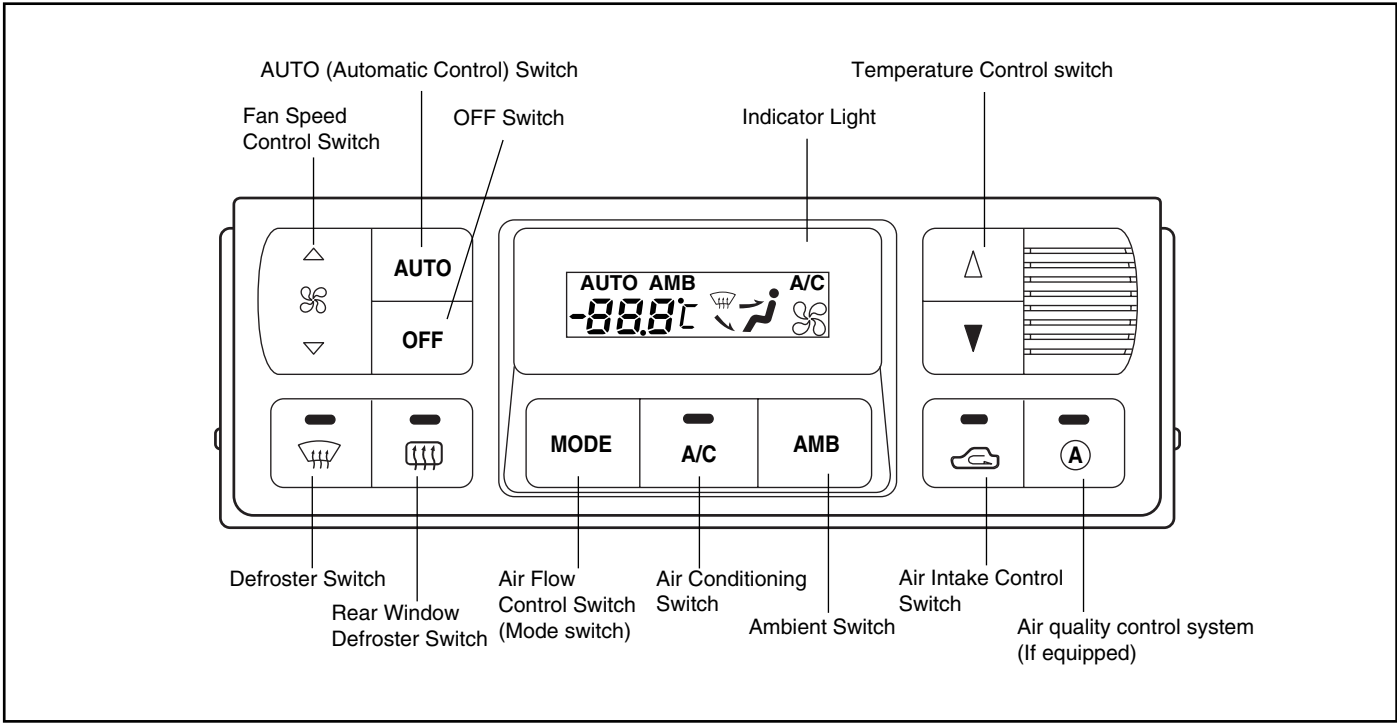
## DRIVING YOUR VEHICLE

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### ***Air Conditioning System Operation Tips***

- If the vehicle has been parked in direct sunlight during hot weather, open the windows for a short time to let the hot air inside the vehicle escape.
- To help reduce moisture inside of windows on rainy humid days, decrease the humidity inside the vehicle by operating the air conditioning system.
- During air conditioning system operation, you may occasionally notice a slight change in engine speed at idle as the air conditioning compressor cycles on. This is a normal system operation characteristics.
- Use the air conditioning system every month if only for a few minutes.
- After the use of the air conditioning system, you may notice clear water dripping (or even puddling) on the ground under the passenger side of the vehicle. This is a normal system operation characteristics.
- The air conditioning system includes a function that will automatically turn the air conditioning compressor off if engine coolant temperature approaches an over heating level. The air conditioning compressor operation will resume once engine coolant temperature returns to the normal range. Also, the air conditioning compressor automatically turns off for a few seconds when the accelerator is fully depressed.
- When operating the air conditioning system use the outside (fresh) air position.
- Operating the air conditioning system in the recirculated air position does provide maximum cooling, however, continual operation in this mode may cause the air inside the vehicle to become stale.

**AUTOMATIC HEATING AND COOLING CONTROL SYSTEM (IF EQUIPPED)**



EMSA4045

Your vehicle is equipped with an automatic heating and cooling control system controlled by simply setting the desired temperature.

## DRIVING YOUR VEHICLE

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### ***Automatic Operation (If Equipped)***

The FATC (Full Automatic Temperature Control) system automatically controls the heating and cooling by doing as follows:

1. Push the "AUTO" switch. The indicator light will come on confirming that the Face, Floor and/ or Bi-Level modes as well as the blower speed and, air conditioner will be controlled automatically.
2. Press the "temperature control" switch to set the desired temperature. The temperature will increase to the maximum 90°F (32°C) by pressing the red button. Each time the red button is pressed the temperature will increase by 1°F (0.5°C). The temperature will decrease to the minimum 62°F (17°C) by pressing the blue button. Each time the blue button is pressed, the temperature decreases by 1°F (0.5°C).

### **NOTICE :**

**When you want to view the temperature in Fahrenheit (°F) instead of Celsius (°C) (or vice versa), while pressing the AMB button, press the temperature control (Down) button for three seconds.**

### ***Ambient Switch***

Pressing the AMB button displays the ambient temperature on LCD.

### ***Manual Operation***

The heating and cooling system can be controlled manually as well as by pushing buttons other than the "AUTO" button. At this state, the system sequentially works according to the order of buttons selected. The function of the buttons which are not selected will be controlled automatically. Press the "AUTO" button in order to convert to automatic control of the system.

### ***Fan Speed Control***

The fan speed can be set to the desired speed by pressing the appropriate fan speed control button. The higher the fan speed is, the more air is delivered. Pressing the "OFF" button turns off the fan.



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### ***Air Intake Control***

This is used to select either fresh outside air or recirculated air.

### ***Recirculated Air position***

When the air intake control switch is depressed (switch indicator illuminates), almost all outside air flow into the vehicle is shut off and air inside the vehicle is recirculated.

This position can be used temporarily for maximum heating or cooling (if equipped with air conditioning) and to help prevent undesirable outside air flow into the vehicle.

### ***Outside (Fresh) Air Position***

When the air intake control switch is not illuminated air enters the ventilation system from outside the vehicle. Use this position for normal ventilation and heating.

### ***Heating and Cooling System Off***

Press the "OFF" button to stop the operation of the heating and cooling system.

### ***Air Flow Control (Mode Switch)***

The mode selection button controls the direction of the air flow through the ventilation system.

The air flow outlet port is same as manual climate control system.



### ***Face position***



Air flow is directed toward the upper body and face. Additionally, each outlet can be controlled to direct the air discharged from the outlet. (outlet port: **Ⓑ**,**Ⓓ**)

### ***Face - floor position***



Air flow is directed towards the face and the floor. The air to the floor is warmer than the air to the face (except when the temperature control is set to the extreme cold position). (outlet port: **Ⓑ**,**Ⓒ**,**Ⓓ**)

### ***Floor position***



Most of the air flow is directed to the floor, with a small amount of the air being directed to the windshield and side window defroster. (outlet port: **Ⓒ**,**Ⓓ**)

## DRIVING YOUR VEHICLE

### Floor - defrost position



Most of the air flow is directed to the floor and the windshield with a small amount directed to the side window defrosters. (outlet port: Ⓐ, Ⓒ, Ⓓ)

In automatic operation, the air conditioning system will automatically cycle on and the outside (fresh) air position will be selected. To cancel, press the outside (fresh) air button on the instrument panel once.

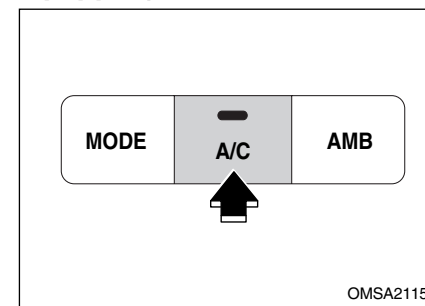
### Defrost Button



Most of the air flow is directed to the windshield with a small amount of air directed to the side window defrosters. (outlet port: Ⓐ, Ⓓ)

When the defrost button is pressed the outside (fresh) air position will automatically selected and the air will be discharged through the windshield defrost vents. The air conditioning will automatically operate based on ambient temperature. If you don't want the air-conditioning or outside (fresh) air position press the corresponding button to cancel the operation.

### Air Conditioning Button (If equipped)





Push the A/C button to turn the air conditioning system on. The indicator light in the button will illuminate when the fan speed control knob is on. Push the button again to turn the air conditioning system off.

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### **Air Conditioning**

All Kia Air Conditioning Systems are filled with environmentally friendly R134a refrigerant which is not damaging to the ozone layer.

1. Start the engine. Depress the air conditioning switch.
2. Set the mode selection switch to the face  position.
3. Set the air intake control switch to the outside air or the recirculated air position (switch indicator ON).
4. Set the temperature control knob (or switch) to the desired position.
5. Set the fan speed control knob (or switch) to the desired speed.
6. Adjust the fan speed control knob (or switch) and temperature control knob to maintain maximum comfort.

- If warmer air is desired at floor level for bi-level operation, set the mode selection switch to the  position and adjust the temperature control knob (or switch) to maintain maximum comfort.
- When maximum cooling is desired, set the temperature control knob (or switch) to the extreme left position and set the air intake control switch to the recirculated air position (switch indicator ON), then set the fan speed control knob to the highest speed.

#### **NOTICE :**

**When using the air conditioning system, monitor the temperature gauge closely while driving up long hills or in heavy traffic when outside temperatures are high. Air conditioning system operation may cause engine overheating. Continue to use the blower fan but turn the air conditioning system off if the temperature gauge indicates engine overheating.**

### **Air Conditioning System**

#### **Operating Tips:**

- If the vehicle has been parked in direct sunlight during hot weather, open the windows for a short time to let hot air inside the vehicle escape.
- To help reduce moisture on the inside of windows on rainy, humid days, decrease the humidity inside the vehicle by operating the air conditioning system.
- During air conditioning system operation, you may occasionally notice a slight change in engine speed at idle as the A/C compressor cycles ON. This is a normal system operating characteristic.
- Use the air conditioning system every month if only for a few minutes.
- After air conditioning system use, you may notice clear water dripping (or even puddling) on the ground under the passenger side of the vehicle. This is a normal system operating characteristic.

## DRIVING YOUR VEHICLE

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- The air conditioning system includes a function that will automatically turn the A/C compressor off if engine coolant temperature approaches an overheating level.  
A/C compressor operation will resume once engine coolant temperature returns to the “normal” range. Also, the A/C compressor is automatically turned off for a few seconds when the accelerator is fully depressed.
- When operating the air conditioning system use the outside (fresh) air position.
- Operating the air conditioning system in the recirculated air position does provide maximum cooling, however, continual operation in this mode may cause the air inside the vehicle to become stale.

### ***Rear Heater Duct (if equipped)***

Whenever the ventilation controls are in the face-floor or floor position, air is directed to the rear seat passenger floor area.


### ***Air Quality Control System (If equipped)***

The air inflow from the outside vehicle can be automatically controlled.

Press the (  ) button to activate the “Air Quality Control System”. To deactivate the system, press the (  ) button or air intake control button or select the defrost ( ,  ) position.

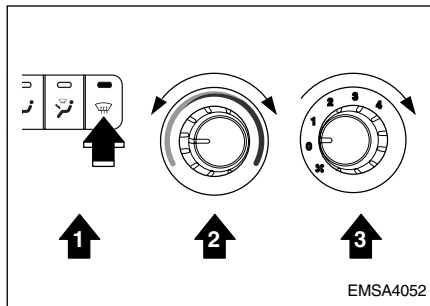
When using AQS mode, AQS (Air Quality Control System) automatically senses outdoor air pollutants and minimizes them from entering the vehicle, however, unpleasant or foul odors that might be present may still be noticeable within the vehicle.





### **CAUTION:**

- Prolonged driving with the “Air Quality Control System” ON will cause frosting inside the vehicle.
- To defrost inside the vehicle, set the mode selection knob to (  ) Defrost position or air intake button to the outside position.
- The air quality control sensor is located at the side of the radiator, be careful to avoid damaging the sensor.

## WINDSHIELD DEFROSTING AND DEFOGGING (MANUAL TYPE)

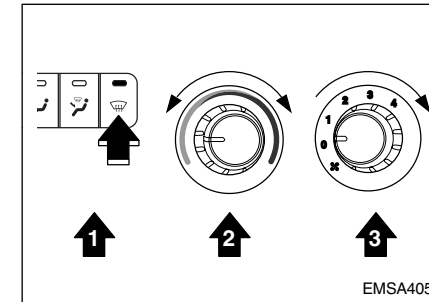
### *To Defog Inside Windshield*





1. Set the mode selection switch to the  or  position.  
When you select  or  position, the system automatically turns on the A/C and outside (fresh) air mode.
2. Set the temperature control knob to the desired position.

3. Set the fan speed control knob to any desired speed except “0”.  
For maximum defogging, set the fan speed control knob to the “3” or “4” position.


### *To Defrost Outside Windshield*






1. Set the mode selection switch to the  position.  
When you select  position, the system automatically turns on the A/C and outside (fresh) air mode.
2. Set the temperature control knob to the extreme right/hot position
3. Set the fan speed control knob to the “3” or “4” position.

## DRIVING YOUR VEHICLE

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- For maximum defrosting, set the temperature control knob to the extreme right/hot position and the fan speed control knob to the highest speed.
- If warm air to the floor is desired while defrosting or defogging, set the mode selection knob to the  position.
- Before driving, clear all snow and ice from the windshield, rear window, outside rear view mirrors, and all side windows.
- Clear all snow and ice from the hood and the air inlet in the cowl grille to improve heater and defroster efficiency and to reduce the probability of fogging on the inside of the windshield.

### WARNING

Do not use the  or  position during cool operation in extremely humid weather. The difference between the temperature of the outside air and that of the windshield could cause the outer surface of the windshield to fog up, causing loss of visibility. In this case, set the mode selection knob to the  position and fan speed control knob to the lower speed.

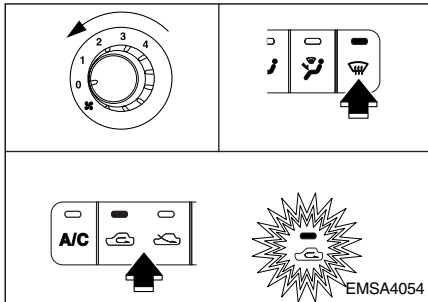
### NOTICE :

If you don't want air-conditioning or outside (fresh) air when operating in either of these modes, pressing the air-conditioning switch or air intake control switch again will deactivate the air-conditioning or outside (fresh) air mode.

### ***How to cancel automatic air-conditioning operation and the outside (fresh) air position in the Floor-Defrost and Defrost position (If equipped):***

When you select the Floor-Defrost or Defrost position, the system automatically turns on the air-conditioning system and the outside (fresh) air position will be selected.

If you don't want air-conditioning and the outside (fresh) air position when operating in either of these modes, you can turn off the air-conditioning system operation by performing the following:



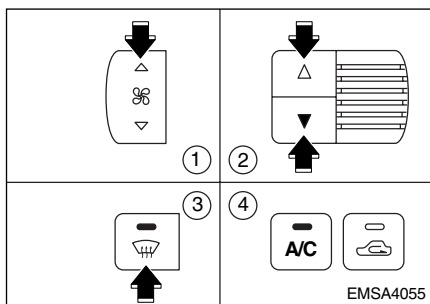
1. Make sure the engine is running or the ignition switch is in the ON position.
2. Turn the fan speed control knob to the “0” position.
3. Turn the mode selection knob to the defrost (☃) position.
4. Push the air intake control button (🚗) at least 5 times within 3 seconds.



Then the indicator light on the air intake control button (🚗) will blink 3 times with 0.5 second intervals between blinks. If you want to return to the automatic air conditioning system and outside (fresh) air position, repeat the procedure above. Follow the same procedure if you want to cancel or return to the forced outside(fresh) air position when you start the engine.

## DRIVING YOUR VEHICLE

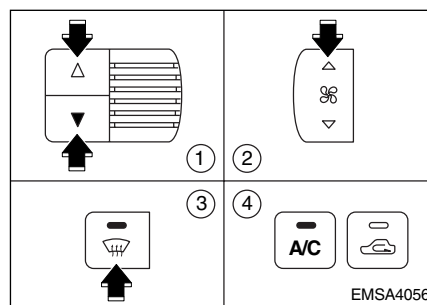
### WINDSHIELD DEFROSTING AND DEFOGGING (AUTOMATIC TYPE)




#### To Defog Inside Windshield



1. Select any fan speed except OFF (  ) position.
  2. Select desired temperature.
  3. Press the defrost button (  ).
  4. The air conditioning will be turned on according to the detected ambient temperature and outside (fresh) air position will be selected.
- If you don't want the air conditioning or outside (fresh) air position press the corresponding button to cancel the operation.



#### To Defrost Outside Windshield



1. Set temperature to the extreme hot (25°C~32°C) position.
  2. Set the fan speed to the  or  position.
  3. Press the defrost button (  ).
  4. The air conditioning will be turned on according to the detected ambient temperature and outside (fresh) air position will be selected.
- If you don't want the air conditioning or outside (fresh) air position press the corresponding button to cancel the operation.

- Before driving, clear all snow and ice from the windshield, rear window, outside rear view mirrors, and all side windows.
- Clear all snow and ice from the hood and the air inlet in the cowl grille to improve heater and defroster efficiency and to reduce the probability of fogging on the inside of the windshield.

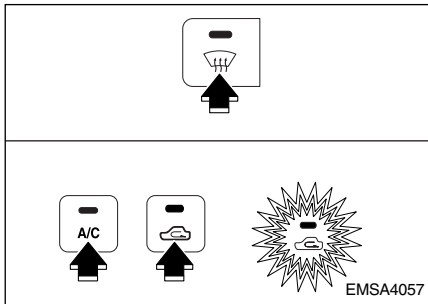
#### CAUTION:

**Do not use defrost  position during cooling operation in extremely humid weather. The difference between the temperature of the outside air and that of the windshield could cause the outer surface of the windshield to fog up, causing loss of visibility. In this case, set the mode selection knob to the  position and fan speed control knob to the lower speed.**



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**How to cancel forced air conditioning operation and outside (fresh) air position in floor-defrost and defrost position (If equipped);**



1. Select the defrost position pressing defrost button (☃).
2. While holding the air conditioning button A/C depressed, depress the recirculated air position button (☁) at least 5 times within 3 seconds.  
The indicator light in the recirculated air position button (☁) will blink 3 times with 0.5 second interval.

If you want to return to the automatic air conditioning system and outside (fresh) air position, repeat the same procedure. Follow the same procedure if you want to cancel or return to the forced outside (fresh) air position when you start the engine with recirculated air position selected manually before the engine off.

## DRIVING TIPS

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## DRIVING TIPS

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### FUEL REQUIREMENTS

Your new Kia vehicle must use only UNLEADED FUEL having an octane rating of 91 or higher. Your new Kia is designed to obtain maximum performance with unleaded fuel. Unleaded fuel will minimize exhaust emissions and spark plug fouling.

#### \* NOTICE :

**NEVER USE LEADED FUEL. The use of leaded fuel is detrimental to the catalytic converter. Never add any fuel system cleaning agents to the fuel tank other than what Kia has specified or the equivalent. (Consult an Authorized Kia Dealer for details.)**

**Leaded fuel will damage the engine control system's oxygen sensor and affect the emission control system.**

In the country using LEADED FUEL, your new Kia vehicle may use LEADED FUEL. Your new Kia vehicle is designed to correspond to LEADED FUEL specially. In this case, Your vehicle must use only LEADED FUEL. Please check your vehicle whether your vehicle can use LEADED FUEL or not.

#### *Gasoline Containing Alcohol and Methanol*

Ethanol (also known as grain alcohol) is a mixture of ethanol and gasoline marketed as gasohol. Do not use gasohol containing more than 10% ethanol.

Methanol (also known as wood alcohol) is a mixture of gasoline and methanol marketed as gasohol. Do not use gasoline or gasohol containing methanol.

Either of these fuels may cause driveability problems and damage to the fuel system.

Discontinue using gasohol of any kind if driveability problems occur.

Vehicle damage or driveability problems may not be covered by the manufacturer's warranty if they result from the use of:

- Gasohol containing more than 10% ethanol,
- Gasoline or gasohol containing methanol, or
- Leaded fuel or leaded gasohol

#### \* NOTICE :

**Never use gasohol which contains methanol. Discontinue use of any gasohol product which impairs driveability.**

## DRIVING TIPS

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### EMISSION CONTROL SYSTEM (IF EQUIPPED)

#### *Vehicle Modifications*

This vehicle should not be modified. Modification of your Kia could affect its performance, safety or durability and may even violate governmental safety and emissions regulations.

In addition, damage or performance problems resulting from any modification may not be covered under warranty.

#### *Engine Exhaust Gas Precautions (Carbon Monoxide)*

Engine exhaust gases contain carbon monoxide. Although colourless and odourless, it is dangerous and could be lethal, if inhaled.

- Carbon monoxide can be present with other exhaust fumes. Therefore, if you smell exhaust fumes of any kind inside your vehicle, have it inspected and repaired immediately by an Authorized Kia Dealer. If at all possible, do not drive with exhaust fumes present. If you must, do so only with all windows fully open. Have your vehicle checked and repaired immediately.
- Do not operate the engine in confined or closed areas (such as garages) any more than what is necessary to move the vehicle in or out of the area.
- When the vehicle is stopped in an open area for more than a short time with the engine running, adjust the ventilation system to draw outside air into the vehicle. Turn the engine off if you smell any exhaust fumes.
- Never sit in a parked or stopped vehicle for an extended time with the engine running.

#### *Operating Precautions for Catalytic Converters (If Equipped)*

Your vehicle is equipped with a catalytic converter emission control device.

Therefore, the following precautions must be observed:

- Use only UNLEADED FUEL.
- Do not park the vehicle over or near flammable objects, such as dry grass, paper, leaves, etc. Under certain conditions, they could be ignited by a hot exhaust system.
- Do not operate the vehicle when there are signs of engine malfunction, such as misfire or a noticeable loss of performance.
- Do not misuse or abuse the engine. Examples of misuse are coasting with the ignition off and descending steep grades in gear with the ignition off.

## DRIVING TIPS

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- Do not operate the engine at high idle speed for extended periods (5 minutes or more).
- Do not modify or tamper with any part of the engine or emission control system. All inspections and adjustments must be made by a qualified technician.

Failure to observe the above precautions could result in damage to the catalytic converter and to your vehicle and could void your warranties.

### **BEFORE DRIVING**

Before entering vehicle:

- Be sure that all windows, outside mirror(s), and outside lights are clean.
- Check the condition of the tyres.
- Check under the vehicle for any sign of leaks.
- Be sure there are no obstacles behind you if you intend to back up.

### ***Necessary Inspections***

Fluid levels, such as engine oil, engine coolant, brake/clutch fluid, and washer fluid should be checked on a regular basis, with the exact interval depending on the fluid. Further details are provided in Maintenance, Section 7.

### ***Before Starting***

- Close and lock all doors.
- Position the seat so that all controls are easily reached.
- Adjust the inside and outside rearview mirrors.
- Be sure that all lights work.
- Check all gauges.
- Check the operation of warning lights when the ignition switch is turned to the “ON” position.
- Release the parking brake and make sure the brake warning light goes out.

For safe operation, be sure you are familiar with your vehicle and its equipment.

## DRIVING TIPS

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### ***Drunk Driving***

Drinking and driving is dangerous. Drunk driving is the number one contributor to the highway death toll each year. Alcohol impairs a driver's judgment, vision and muscular coordination. Even a small amount of alcohol will affect a driver's reflexes, perceptions and judgment.

Please don't drink and drive, or ride with a driver who has been drinking. Choose a designated driver if you're with a group, or if you're alone, call a cab.

### ***Drugs and Driving***

Driving while under the influence of drugs is as dangerous or more dangerous than driving under the influence of alcohol, depending on the drug(s) used and the quantity consumed. Don't take drugs and drive.

If you are taking a prescription medicine, check with your doctor or pharmacist regarding whether you may operate a motor vehicle.

## DRIVING TIPS

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### SUGGESTIONS FOR ECONOMICAL OPERATION

Your vehicle's fuel economy is mainly dependent on your style of driving, how you drive, where you drive and when you drive.

Each of these factors has an effect on how many miles (kilometres) you can get from a gallon (litre) of fuel. To operate your vehicle as economically as possible, use the following driving suggestions to help save money in both fuel and repairs:

- Avoid lengthy warm-up idling. Once the engine is running smoothly, begin driving. Remember, though, that on cold days, engine warm-up may take a little longer.
- Save fuel by accelerating slowly after stopping.

- Keep the engine in tune and follow the recommended periodic maintenance schedule.

This will increase the life of all parts and lower your operating costs.

- Do not use the air conditioner unnecessarily.
- Slow down when driving on rough roads.
- For longer tyre life and better fuel economy, always keep the tyres inflated to the recommended pressures.
- Maintain a safe distance from other vehicles to avoid sudden stops. This will reduce wear on brake linings and pads and save fuel because extra fuel is required to accelerate back to driving speed.
- Do not carry any unnecessary weight in the vehicle.

- Do not rest your foot on the brake pedal while driving. This can cause needless wear, possible damage to the brakes, and poor fuel economy.

- Improper wheel alignment causes the tyres to roll at excessive angles, which results in faster tyre wear. It takes more power to overcome this improper alignment, which wastes fuel.

- Open windows at high speeds can reduce fuel economy.

- Crosswinds and headwinds reduce fuel economy. To help offset some of this loss, slow down when driving in these conditions.

Keeping a vehicle in good operating condition is important both for economy and safety. Therefore, have an Authorized Kia Dealer perform scheduled inspections and maintenance.

## DRIVING TIPS

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** WARNING : ENGINE OFF  
MOTION**

Never turn the engine off to coast down hills or anytime the vehicle is in motion. The power steering and power brakes will not function without the engine running. Instead, downshift to any appropriate gear for engine braking effect.



## DRIVING TIPS

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### SPECIAL DRIVING CONDITIONS

#### *Hazardous Driving*

When hazardous driving is encountered because of water, snow, ice, mud, sand, or similar hazards, follow these suggestions:

- Drive cautiously and allow extra distance for braking.
- Avoid sudden movements in braking or steering.
- When braking in vehicles without anti-lock brakes, depress the brake pedal with a controlled up-and-down motion until the vehicle is stopped.
- When starting from a stop in snow, mud, or sand, use second gear and accelerate slowly to avoid spinning the front wheels. Low gear may be used, if necessary.

- Use sand, rock salt, tyre chains, or other non-slip material under the front wheels to provide traction when stalled on ice, snow, or mud.

 **WARNING : DOWNSHIFTING**  
**Downshifting into first gear with a manual transaxle or into low with an automatic transaxle while driving on slippery surfaces can cause an accident. The sudden change in tyre speed could cause the tyres to skid. Be careful when downshifting on slippery surfaces.**

#### *Rocking the Vehicle*

If it is necessary to rock the vehicle to free it from snow, sand, or mud, move the shift lever of an automatic transaxle from D (Drive) to R (Reverse) in a repeat pattern while depressing the accelerator gently. With a manual transaxle, move the shift lever back and forth from 1 (First) to R (Reverse).

Do not race the engine. If you are still stuck after a couple minutes of rocking, have the vehicle pulled out by a tow vehicle to avoid engine overheating and possible damage to the transaxle.

#### **\* NOTICE :**

**Prolonged rocking may cause engine overheating, transaxle damage or failure, and tyre damage.**

## DRIVING TIPS

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### **WARNING : SPINNING TYRES**

**Do not spin the wheels especially at speeds more than 35 mph (56 km/h). Spinning the wheels at high speeds when the vehicle is stationary could cause a tyre to overheat, explode and injure bystanders.**

### *Driving at Night*

Because night driving presents many more hazards than driving in the daylight, here are some important tips to remember:

- Slow down and keep more distance between you and other vehicles as it may be more difficult to see at night, especially in rural areas where there may not be any street lights.
- Adjust your mirrors to reduce the glare from other driver's headlights.

- Keep your headlights clean and properly aimed. Dirty or misaimed headlights will make it much more difficult to see at night.
- Avoid staring directly at the headlights of oncoming vehicles. You could be temporarily blinded and it will take several seconds for your eyes to readjust to the darkness.

### *Driving in the Rain*

Rain and wet roads can make driving dangerous, especially if you're not prepared for the slick pavement. Here are a few things to consider when driving in the rain:

- Be sure your windshield wipers are in good condition.
- A heavy rainfall will make it harder to see and will increase the distance needed to stop your vehicle, so slow down.

- If your tyres aren't in good condition, making a quick stop on wet pavement can cause a skid and possibly lead to an accident. Be sure your tyres and windshield wipers are in good shape.
- Turn on your headlights to make it easier for others to see you.
- Driving too fast through large puddles can affect your brakes. If you must go through puddles, try to drive through them slowly.
- If you believe you may have gotten your brakes wet, apply them lightly while driving until normal braking operation returns.

## DRIVING TIPS

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### *Winter Driving*

- We recommend that you carry emergency equipment. Some things you might include are tyres chains, a window scraper, windshield de-icer, a bag of sand or salt, flares, a small shovel and jumper cables.
- Make sure you have sufficient ethylene glycol coolant in the radiator.
- Check the battery condition and cables. Cold temperatures reduce the capacity of any battery, so it must be in top shape to provide enough winter starting power.
- Make sure the engine oil viscosity is suitable for cold weather.
- Check the ignition system for loose connections and damage.
- Use antifreeze-formulated windshield washer fluid and make sure you have sufficient fluid for your trip. (Do not use engine coolant antifreeze.)

- Do not use the parking brake if it might freeze. This is most likely to happen after driving in slushy or wet conditions and temperatures drop into the freezing range. When parking, shift to P (Park) with automatic transaxle, or to 1 (First) or R (Reverse) with a manual transaxle and block the rear wheels.

### *Snow Tyres*

When snow tyres are used, select the size and construction specified on the Tyres Pressure Label. It is strongly recommended that snow tyres be used on all four wheels, or poor handling may result. Snow tyres should not be operated at speeds exceeding 120 km/h (75 mph).

These tyres should be inflated 4 psi (28 kPa, 0.3 kg/cm<sup>2</sup>) above the recommended pressures shown on the Tyre Specification/Pressure Label, but

inflation should never exceed the maximum cold-tyre pressure shown on the tyre sidewalls.

### **WARNING : SNOW TYRE SIZE**

**Snow tyres should be equivalent in size and type to the vehicle's standard tyres. Otherwise, the safety and handling of your vehicle may be adversely affected.**

Do not install studded tyres without first checking local, state and municipal regulations for possible restrictions against their use.

## DRIVING TIPS

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### TRAILER TOWING

**⚠ WARNING : TOWING A TRAILER**

If you don't use the correct equipment and drive properly, you can lose control when you pull a trailer. For example, if the trailer is too heavy the brakes may not work well-or even at all. You and your passengers could be seriously or fatally injured. Pull a trailer only if you have followed all the steps in this section.

**Maximum trailer weights:**

- **Trailer without brake system:**  
453kg / 750kg(1650 pound)  
(For Australia / For Europe)
- **Trailer with brake system:**  
907kg / 1700kg(3740 pound)  
(For Australia / For Europe)
- **Tongue weight:**  
36kg / 75kg(165 pound)  
(For Australia / For Europe)

**\* NOTICE :**

Pulling a trailer improperly can damage your vehicle and result in costly repairs not covered by your warranty. To pull a trailer correctly, follow the advice in this section.

Your vehicle can tow a trailer. To identify what the vehicle trailering capacity is for your vehicle, you should read the information in "Weight of the Trailer" that appears later in this section.

Remember that trailering is different than just driving your vehicle by itself. Trailering means changes in handling, durability, and fuel economy. Successful, safe trailering takes correct equipment, and it has to be used properly.

## DRIVING TIPS

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This section contains many time-tested, important trailering tips and safety rules. Many of these are important for your safety and that of your passengers. Please read this section carefully before you pull a trailer.

Load-pulling components such as the engine, transaxle, wheel assemblies, and tyres are forced to work harder against the load of the added weight. The engine is required to operate at relatively higher speeds and under greater loads. This additional burden generates extra heat. The trailer also adds considerably to wind resistance, increasing the pulling requirements.

### ***If You Decide to Pull a Trailer***

Here are some important points if you decide to pull a trailer:

- Consider using a sway control. You can ask a hitch dealer about sway control.
- After your odometer indicates 800 km (500 miles) or more, you can tow a trailer. For the first 800 km (500 miles) that you tow a trailer, don't drive over 80 km/h (50 mph) and don't make starts at full throttle. This helps your engine and other parts of your vehicle "wear" in at the heavier loads.
- Three important considerations have to do with weight:

### **Weight of the Trailer**

How heavy can a trailer safely be? It should never weigh more than 907kg / 1700kg(3740pound) (For Australia/For Europe). But even that can be too heavy.

It depends on how you plan to use your trailer. For example, speed, altitude, road grades, outside temperature and how much your vehicle is used to pull a trailer are all important. The ideal trailer weight can also depend on any special equipment that you have on your vehicle.

## DRIVING TIPS

### Weight of the Trailer Tongue

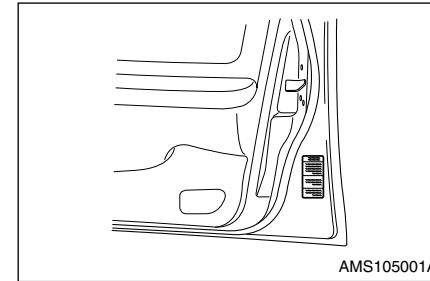
The tongue load of any trailer is an important weight to measure because it affects the total gross vehicle weight (GVW) of your vehicle. This weight includes the curb weight of the vehicle, any cargo you may carry in it, and the people who will be riding in the vehicle. And if you will tow a trailer, you must add the tongue load to the GVW because your vehicle will also be carrying that weight.

The trailer tongue should weigh a maximum of 10% of the total loaded trailer weight. After you've loaded your trailer, weigh the trailer and then the tongue, separately, to see if the weights are proper. If they aren't, you may be able to correct them simply by moving some items around in the trailer.

### CAUTION :

- **Never load a trailer with more weight in the rear than in the front. The front should be loaded with approximately 60% of the total trailer load; the rear should be loaded with approximately 40% of the total trailer load.**
- **Never exceed the maximum weight limits of the trailer or trailer towing equipment. Improper loading can result in damage to your vehicle and/or personal injury. Check weights and loading at a commercial scale or highway patrol office equipped with scales.**

### Total Weight on Your Vehicle's Tyres



Be sure your vehicle's tyres are inflated to the limit for cold tyres. You'll find these numbers on the Tyre Pressure Label on the driver's door. Be sure not to exceed the GVW limit for your vehicle.

## DRIVING TIPS

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### ***Hitches***

It's important to have the correct hitch equipment. Crosswinds, large trucks going by, and rough roads are a few reasons why you'll need the right hitch. Here are some rules to follow:

- Will you have to make any holes in the body of your vehicle when you install a trailer hitch? If you do, then be sure to seal the holes later when you remove the hitch. If you don't seal them, deadly carbon monoxide (CO) from your exhaust can get into your vehicle, as well as dirt and water.
- The bumpers on your vehicle are not intended for hitches. Do not attach rental hitches or other bumper-type hitches to them. Use only a frame-mounted hitch that does not attach to the bumper.

### ***Safety Chains***

You should always attach chains between your vehicle and your trailer. Cross the safety chains under the tongue of the trailer so that the tongue will not drop to the road if it becomes separated from the hitch.

Instructions about safety chains may be provided by the hitch manufacturer or by the trailer manufacturer. Follow the manufacturer's recommendation for attaching safety chains so they do not drag on the ground.

### ***Trailer Brakes***

If your trailer weighs more than 453 kg /750 kg(For Australia/For Europe) loaded, then it needs its own brakes - and they must be adequate. Be sure to read and follow the instructions for the trailer brakes so you'll be able to install, adjust and maintain them properly.

- Don't tap into your vehicle's brake system.
- Do not use a trailer with its own brakes unless you are absolutely certain that you have properly set up the brake system. This is not a task for amateurs. Use an experienced, competent trailer shop for this work.

## DRIVING TIPS

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### ***Driving with a Trailer***

Towing a trailer requires a certain amount of experience. Before setting out for the open road, you must get to know your trailer. Acquaint yourself with the feel of handling and braking with the added weight of the trailer. And always keep in mind that the vehicle you are driving is now a good deal longer and not nearly as responsive as your vehicle is by itself. Before you start, check the trailer hitch and platform, safety chains, electrical connector(s), lights, tyres and mirror adjustment. If the trailer has electric brakes, start your vehicle and trailer moving and then apply the trailer brake controller by hand to be sure the brakes are working. This lets you check your electrical connection at the same time. During your trip, occasionally check to be sure that the load is secure, and that the lights and any trailer brakes are still working.

### ***Following Distance***

Stay at least twice as far behind the vehicle ahead as you would when driving your vehicle without a trailer. This can help you avoid situations that require heavy braking and sudden turns.

### ***Passing***

You'll need more passing distance up ahead when you're towing a trailer. And, because you're a good deal longer, you'll need to go much further beyond the passed vehicle before you can return to your lane.

### ***Backing up***

Hold the bottom of the steering wheel with one hand. Then, to move the trailer to the left, just move your hand to the left. To move the trailer to the right, move your hand to the right. Always back up slowly and, if possible, have someone guide you.

### ***Making Turns***

When you're turning with a trailer, make wider turns than normal. Do this so your trailer won't strike soft shoulders, curbs, road signs, trees, or other objects. Avoid jerky or sudden manoeuvres. Signal well in advance.



## DRIVING TIPS

---

### ***Turn Signals When Towing a Trailer***

When you tow a trailer, your vehicle has to have a different turn signal flasher and extra wiring. The green arrows on your instrument panel will flash whenever you signal a turn or lane change.

Properly connected, the trailer lights will also flash to alert other drivers you're about to turn, change lanes, or stop.

When towing a trailer, the green arrows on your instrument panel will flash for turns even if the bulbs on the trailer are burned out. Thus, you may think drivers behind you are seeing your signals when, in fact, they are not. It's important to check occasionally to be sure the trailer bulbs are still working. You must also check the lights every time you disconnect and then reconnect the wires.

Do not connect a trailer lighting system directly to your vehicle's lighting system. Use only an approved trailer wiring harness.

Your Authorized Kia Dealer can assist you in installing the wiring harness.

### **CAUTION :**

**Failure to use an approved trailer wiring harness could result in damage to the vehicle electrical system and/or personal injury.**

### ***Driving on Grades***

Reduce speed and shift to a lower gear before you start down a long or steep downgrade. If you don't shift down, you might have to use your brakes so much that they would get hot and no longer operate efficiently.

On a long uphill grade, shift down and reduce your speed to around 70 km/h (45 mph) to reduce the possibility of engine and transaxle overheating.

If your trailer weighs more than 453 kg (996 lbs.) and you have an automatic transaxle, you should drive in D (Drive) when towing a trailer. Operating your vehicle in D (Drive) when towing a trailer will minimize heat buildup and extend the life of your transaxle. If you have a manual transaxle, drive in fourth gear (or, as you need to, a lower gear).

## DRIVING TIPS

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### ***Parking on Hills***

Generally, you should not park your vehicle, with a trailer attached, on a hill. People can be seriously or fatally injured, and both your vehicle and the trailer can be damaged if they begin a downhill trajectory.

### **WARNING : PARKING ON A HILL**

**Parking your vehicle on a hill with a trailer attached could cause serious injury or death should a down hill trajectory occur.**

However, if you ever have to park your trailer on a hill, here's how to do it:

1. Apply your brakes, but don't shift into gear.
2. Have someone place chocks under the trailer wheels.
3. When the wheel chocks are in place, release the brake until the chocks absorb the load.
4. Reapply the brakes. Apply your parking brake, and then shift to R (Reverse) for a manual transaxle or P (Park) for an automatic transaxle.
5. Release the brakes.

### **WARNING : PARKING BRAKE**

**It can be dangerous to get out of your vehicle if the parking brake is not firmly set. If you have left the engine running, the vehicle can move suddenly. You or others could be seriously or fatally injured.**

## DRIVING TIPS

---

### ***When You are Ready to Leave After Parking on a Hill***

1. With the manual transaxle in Neutral or automatic transaxle in P (Park), apply your brakes and hold the brake pedal down while you:
  - Start your engine;
  - Shift into gear; and
  - Release the parking brake.
2. Slowly remove your foot from the brake pedal.
3. Drive slowly until the trailer is clear of the chocks.
4. Stop and have someone pick up and store the chocks.

### ***Maintenance When Trailer Towing***

Your vehicle will need service more often when you regularly pull a trailer. Important items to pay particular attention to include engine oil, automatic transaxle fluid and cooling system fluid. Brake condition is another important item to frequently check. Each item is covered in this manual, and the Index will help you find them quickly. If you're trailering, it's a good idea to review these sections before you start your trip.

Don't forget to also maintain your trailer and hitch. Follow the maintenance schedule that accompanied your trailer and check it periodically. Preferably, conduct the check at the start of each day's driving. Most importantly, all hitch nuts and bolts should be tight.

### ***Loading Your Vehicle***

The Certification/Tyre label is found on the front edge of the LH "B" pillar. The label shows the size of your original tyres and inflation pressures needed to obtain the gross weight capacity of your vehicle.

#### **CAUTION :**

**Do not load your vehicle any heavier than the GVWR or the maximum front and rear GAWRs. If you do, changes to the vehicle may occur, or it can change the way your vehicle handles. These could cause you to lose control. Also, overloading can shorten the life of your vehicle.**

## DRIVING TIPS

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**\* NOTICE :**

Your warranty does not cover parts or components that fail because of overloading.

### **OVERLOADING**

**⚠ CAUTION :**

The gross axle weight rating (GAWR) and the gross vehicle weight rating (GVWR) for your vehicle are on the manufacturer's label attached to the passenger's door. Exceeding these ratings can cause an accident or vehicle damage. You can calculate the weight of your load by weighing the items (or people) before putting them in the vehicle. Be careful not to overload your vehicle.

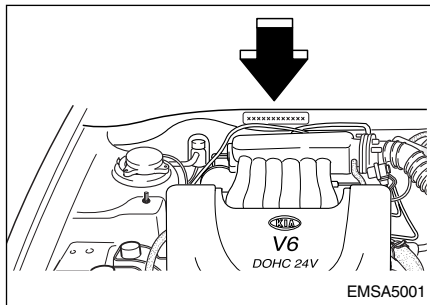
## DRIVING TIPS

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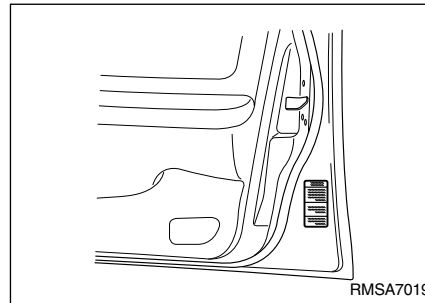
### LABEL INFORMATION

There are several important labels and identification numbers located on your vehicle. The label locations are identified in the illustrations as follows:

#### *Vehicle Identification Number (VIN)*



#### *Tyre Specification/ Pressure Label*



This can be found on the driver side door.

## IN CASE OF AN EMERGENCY

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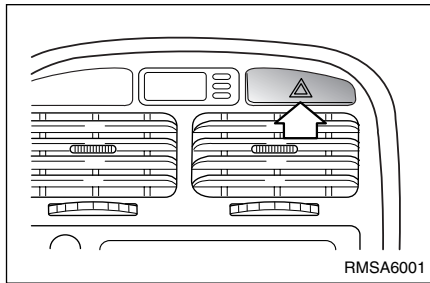
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## IN CASE OF AN EMERGENCY

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### ROAD WARNING

#### *Hazard Warning Flasher*



The hazard warning flasher serves as a warning to other drivers to exercise extreme caution when approaching, overtaking, or passing your vehicle. It should be used whenever emergency repairs are being made or when the vehicle is stopped near the edge of a roadway.

Depress the flasher switch with the ignition switch in any position. All turn signal lights will flash simultaneously.

- The hazard warning flasher will operate whether your vehicle is running or not.
- The turn signals do not operate when the hazard flasher is on.
- Care must be taken when using the hazard warning flasher while the vehicle is being towed. Local regulations may prohibit using it in this manner.

## IN CASE OF AN EMERGENCY

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### OVERHEATING

If your temperature gauge indicates overheating, if you experience a loss of power, or if you hear a loud knocking or pinging noise, the engine has probably overheated. You should follow these procedures if you experience any of these symptoms.

1. Turn the hazard warning flasher on, then drive to the nearest safe location and stop your vehicle; set the automatic transaxle in P (Park), or shift the manual transaxle to neutral and apply the parking brake.
2. Make sure the air conditioner is off.
3. If coolant or steam is boiling out of the radiator, stop the engine, then turn the ignition switch to the "ON" position. Do not restart the engine. The radiator cooling fan will automatically operate with the ignition switch in the "ON" position. If the cooling fan does not operate, call an Authorized Kia Dealer or other competent repair shop for assistance.

If coolant is not boiling out, allow the engine to idle and open the hood to permit the engine to cool gradually. If the temperature does not go down with the engine idling, stop the engine and allow sufficient time for it to cool.

4. The coolant level should then be checked. If the level in the reservoir is low, look for leaks at the radiator hoses and connections, heater hoses and connections, radiator, and water pump. If you find a major leak or another problem that may have caused the engine to overheat, do not operate the engine until the problem has been corrected. Call an Authorized Kia Dealer or other competent repair shop for assistance. If you do not find a leak or other problem, carefully add coolant to the reservoir.

### **WARNING : REMOVING RADIATOR CAP**

**Do not remove the radiator cap when the engine and radiator are hot. Scalding hot coolant and steam may blow out under pressure. This could cause serious injury.**

*If the engine frequently overheats, have the cooling system checked and repaired.*



## IN CASE OF AN EMERGENCY

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### EMERGENCY STARTING

#### *Jump Starting*

Jump starting can be dangerous if done incorrectly. Therefore, to avoid harm to yourself or damage to your vehicle or battery, follow the jump starting procedures on the next page. If in doubt, we strongly recommend that you have a competent technician or towing service jump start your vehicle.

#### \* NOTICE :

**Use only a 12volt jumper system. You can damage a 12volt starting motor, ignition system, and other electrical parts by using a 24-volt power supply (two 12-volt batteries in series or a 24-volt motor generator set).**

#### WARNING : BATTERY

- **Keep all flames or sparks away from the battery. The battery produces hydrogen gas which may explode if exposed to flame or sparks.**
- **Do not attempt to jump start vehicle if the discharged battery is frozen or if the electrolyte level is low; the battery may rupture or explode.**

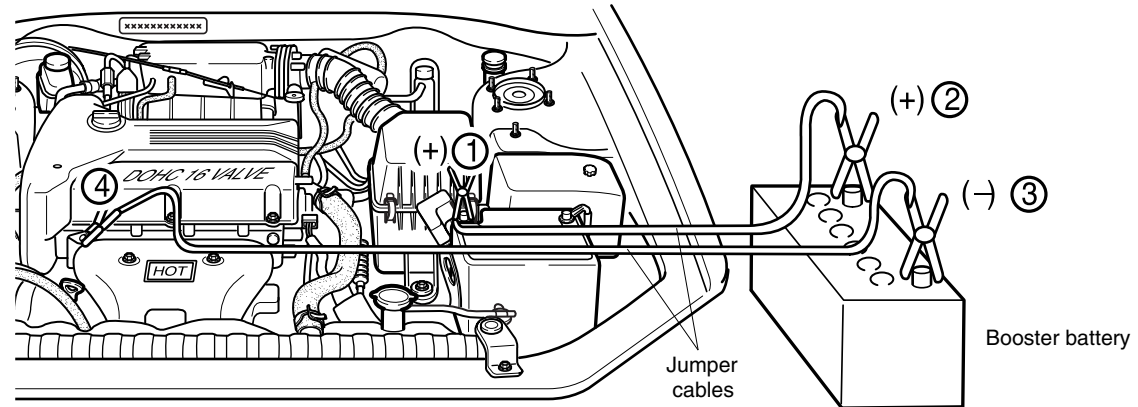
#### *Jump Starting Procedure*

1. Make sure the booster battery is 12 volts and that its negative terminal is grounded.
2. Check the electrolyte level of each of the battery cells.
3. If the booster battery is in another vehicle, do not allow the vehicles to touch.

## IN CASE OF AN EMERGENCY

### Connecting jumper cables

Connect cables in numerical order  
and disconnect in reverse order.



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## IN CASE OF AN EMERGENCY

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4. Turn off all unnecessary electrical loads.
5. Connect the jumper cables in the exact sequence shown in the illustration on the previous page. First, connect one end of a jumper cable to the positive terminal (+) of the discharged battery ①, then the other end of the same cable to the positive terminal (+) on the booster battery ②. Next, connect one end of the other jumper cable to the negative terminal (-) of the booster battery ③, then the other end to a solid, stationary, metallic point (for example, the engine lifting bracket) ④ away from the battery. Do not connect the jumper cable to or near any part that moves when the engine is cranked. Do not connect the jumper cable from the negative terminal (-) of the booster battery to the negative terminal (-) of the discharged battery.

Do not allow the jumper cables to contact anything except the correct battery terminals or the correct ground. Do not lean over the battery when making connections.

6. Start the engine of the vehicle with the booster battery and run it at 2,000 rpm. Then, start the engine of the vehicle with the discharged battery.

*If the cause of your battery discharging is not apparent (for example, having left the lights on accidentally), you should have your vehicle checked by an Authorized Kia Dealer.*

### ***Push-Starting***

A vehicle equipped with an automatic transaxle cannot be started by pushing. A vehicle equipped with a manual transaxle should not be push-started because it could damage the emission control system. Follow the directions for jump starting.

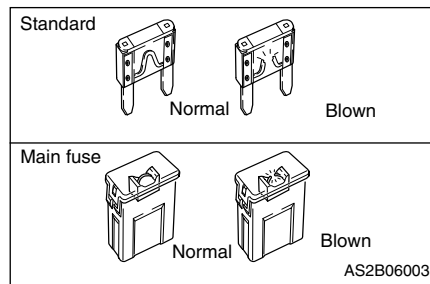
### **CAUTION :**

**Never tow a vehicle to start it. A sudden surge forward when the engine starts could cause a collision with the tow vehicle.**

## IN CASE OF AN EMERGENCY

### ELECTRICAL CIRCUIT PROTECTION

#### Fuses



A vehicle's electrical system is protected from electrical overload damage by fuses.

This vehicle has two fuse panels, one located in the driver's side kick panel, the other in the engine compartment near the battery. A fuse panel chart is provided later in this section.

If any of your vehicle's lights, accessories, or controls do not work, check the appropriate circuit fuse. If a fuse has blown, the element inside the fuse will be melted. Always replace a blown fuse with one of the same rating. If the replacement fuse blows out, this indicates an electrical problem. Avoid using the system involved and immediately consult an Authorized Kia Dealer.

Two kinds of fuses are used: standard for lower amperage rating, and main for higher amperage ratings.

#### Fuse Replacement

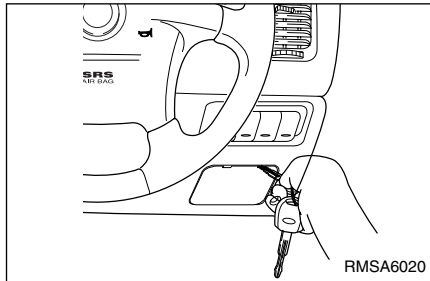
#### **⚠ WARNING : FUSE REPLACEMENT**

- **Never replace a fuse with anything but another fuse of the same type and rating.**
- **A higher capacity fuse could cause damage and possibly a fire.**
- **Never install a wire in place of the proper fuse - even as a temporary repair. It may cause extensive wiring damage and possibly a fire.**
- **Do not use a screwdriver or any other metal object to remove fuses because it may cause a short circuit and damage the system.**

If the electrical system does not work, first check the driver's side fuse panel.

## IN CASE OF AN EMERGENCY

1. Turn the ignition switch and all other switches off.



2. Pull the suspected fuse straight out. Use the removal tool provided on the main fuse box in the engine compartment. Refer to the fuse panel chart on the fuse panel cover to identify the likely problem fuse or electrical circuit.
3. Check the removed fuse; replace if it is blown.  
Four (4) spare fuses are provided in the engine compartment fuse panel cover.
4. Push in a new fuse of the same rating, and make sure it fits tightly in the clips.

If it fits loosely, consult an Authorized Kia Dealer.

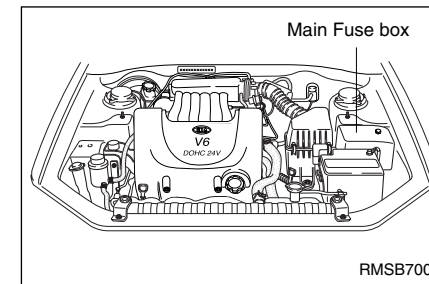
*If you do not have a spare, use a fuse of the same rating from a circuit you may not need for operating the vehicle, such as the radio or clock (Room) fuse.*

If the headlights or other electrical components do not work and the fuses are OK, check the fuse box in the engine compartment. If a fuse is blown, it must be replaced.

1. Turn the ignition switch and all other switches OFF.
2. Remove the fuse box cover by turning the plastic knob located in the cover counterclockwise until the cover can be removed.
3. Check the fuses. If one is blown, replace it with a new one of the same rating.

### **CAUTION :**

**After checking the fuse box in the engine compartment, please securely install the fuse box cover. If not, some electrical failures may occur causing from the water.**

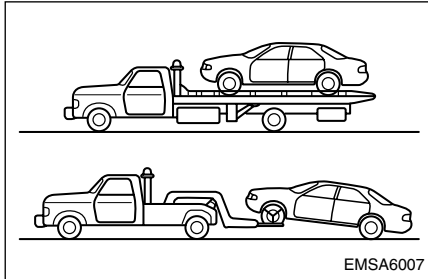


### **\* NOTICE :**

**Inside the cover, you can find the fuse label describing fuse name and capacity.**

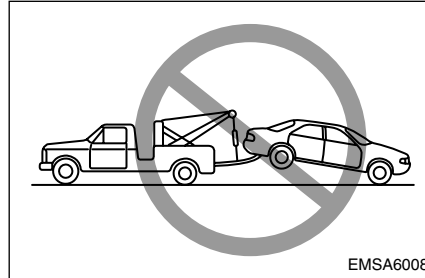
## IN CASE OF AN EMERGENCY

### TOWING



If emergency towing is necessary, we recommend having it done by an Authorized Kia Dealer or a competent tow-truck service. Proper lifting and towing procedures are necessary to prevent damage to the vehicle. State and local laws applicable to towing vehicles must be followed.

As a general rule, towed vehicles should be pulled with the driving wheels off the ground. If excessive damage or other conditions prevent towing the vehicle with the driving wheels off the ground, use wheel dollies.



With either an automatic or manual transaxle:

1. Set the ignition switch in the ACC position;
2. Place the shift lever in N (Neutral);
3. Release the parking brake.

#### \* NOTICE :

**Do not tow the vehicle backward with the front wheels on the ground. This may cause internal damage to the transaxle.**

#### \* NOTICE :

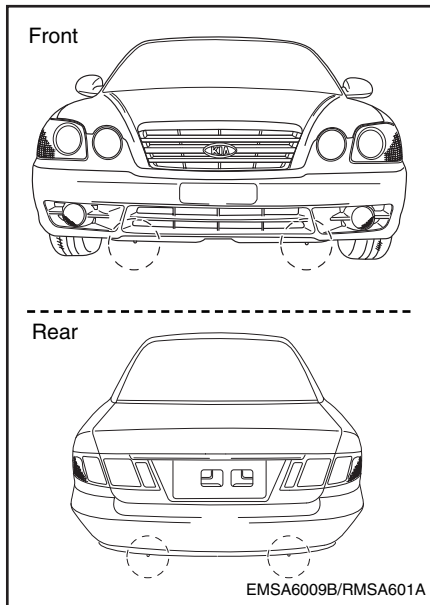
**Do not tow with sling-type equipment. Use wheel lift or flatbed equipment.**

#### CAUTION :

**Do not use the hooks under the front or rear of the vehicle for towing purposes. These hooks are designed ONLY for transport tie-down. If the tie-down hooks are used for towing, the front/rear bumper will be damaged and the vehicle may break free from the tow vehicle.**

## IN CASE OF AN EMERGENCY

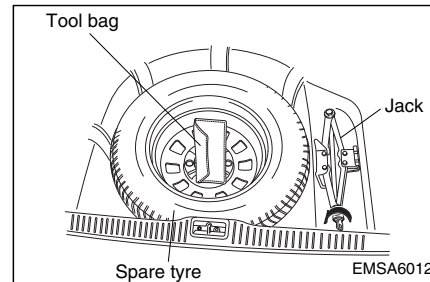
### *Tie-Down Hooks (for flatbed towing)*



### **IF YOU HAVE A FLAT TYRE**

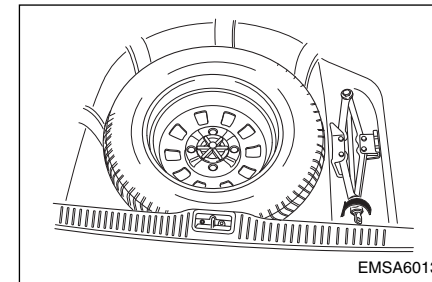
#### *Storing the Spare Tyre, Jack and Tools*

The spare tyre, tool bag, jack and jack handle are stored in the trunk compartment. Move the carpet out of the way to reach this equipment.



#### *To remove the jack:*

Turn the jack socket counterclockwise.



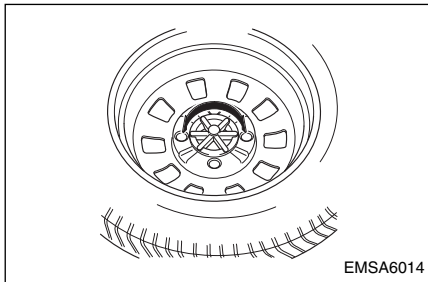
## IN CASE OF AN EMERGENCY

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### *To remove spare tyre:*

Turn the tyre hold-down wing bolt counterclockwise.

Store the tyre in the reverse order of removal.



*To prevent the jack, jack handle, and tool bag from “rattling” while the vehicle is in motion, store them properly.*

### *Changing Tyres*

#### **Jacking Instructions**

The jack is provided for emergency tyre changing only. Follow jacking instructions to reduce the possibility of personal injury.

#### **⚠ WARNING : CHANGING TYRES**

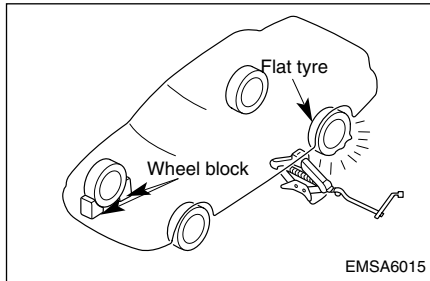
- **Never attempt vehicle repairs or a tyre change in the traffic lanes of a public road or highway. Always move the vehicle completely off the road and onto the shoulder before trying to change a tyre. If you cannot find a firm, level place off the road, call a towing service company for assistance.**
- **Do not exceed the maximum permissible load of the jack: 600kg(1,320lbs).**

- **Be sure to use the correct front or rear jacking positions on the vehicle; never use the bumpers or any other part of the vehicle for jack support.**
- **Never allow any portion of your body to get beneath the vehicle while using the jack.**
- **Do not start or run the engine while the vehicle is supported by the jack.**



## IN CASE OF AN EMERGENCY

### Tyre Replacement

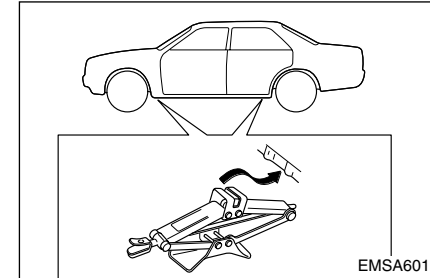


1. Park on a level surface and set the parking brake firmly.
2. Set the automatic transaxle in P (Park), or shift the manual transaxle into R (Reverse).
3. Activate the hazard warning flasher.
4. Remove the wheel lug nut wrench, jack, jack handle, and spare tyre from the vehicle.
5. Block both the front and rear of the wheel that is diagonally opposite the jack position.

### **⚠ WARNING : CHANGING A FRONT TYRE**

**When one front wheel is lifted off the ground, neither the automatic transaxle P (Park) position nor the manual transaxle R (Reverse) position will prevent the vehicle from moving and possibly slipping off the jack, even if these positions are properly engaged. To prevent vehicle movements while changing a tyre, always set the parking brake fully, and always block the wheel diagonally opposite the wheel being changed.**

6. For models with alloy wheels, remove the centre cap.
7. Loosen the four lug nuts counter-clockwise one turn each, but do not remove any nut until the tyre has been raised off the ground.



8. Place the jack at the front or rear jacking position closest to the tyre you are changing. Place the jack under the side sill at the designated location.

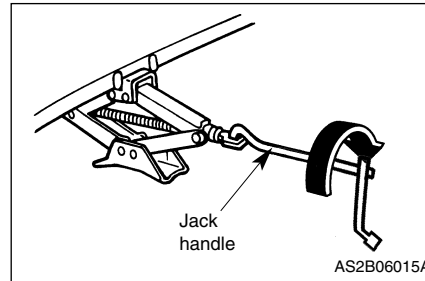
## IN CASE OF AN EMERGENCY

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**⚠ WARNING : JACK  
LOCATION**

**To reduce the possibility of injury, be sure to use only the jack provided with the vehicle and in the correct jack position; never use any other part of the vehicle for jack support.**

9. Insert the jack handle into the jack and turn it clockwise, raising the vehicle until the tyre just clears the ground, approximately 1.2 in. (30 mm). Before removing the lug nuts, make sure the vehicle is stable and that there is no chance for it to slip or move.



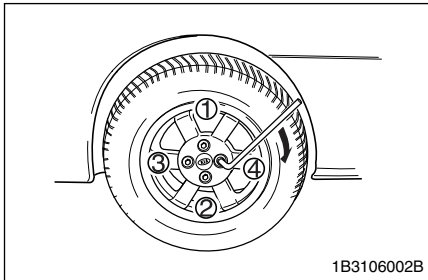
10. Remove the lug nuts by turning them counterclockwise, then remove the wheel.

11. Mount the spare tyre into position and tighten the nuts by hand. Install the lug nuts with the beveled edge inward.

## IN CASE OF AN EMERGENCY

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12. Turn the jack handle counter-clockwise and lower the vehicle until it touches the ground. Tighten the lug nuts firmly in an “X” pattern.



Once the lug nuts have been tightened, lower the vehicle fully to the ground and continue to tighten the lug nuts until they are completely secured.

If you are unsure of the tightness of the wheel lug nuts, have them checked at the nearest service station. The specified tightening torque is 76 ft. lb. (103 N•m).

### **⚠ WARNING : WHEEL STUDS**

**If the studs are damaged, they may lose their ability to retain the wheel. This could lead to the loss of the wheel and a collision.**

### **\* NOTICE :**

**Check the inflation pressures as soon as possible after installing the spare tyre. Adjust it to the specified pressure, if necessary.**

*To prevent the jack, jack handle, wheel lug nut, wrench and spare tyre from rattling while the vehicle is in motion, store them properly.*

## MAINTENANCE

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## MAINTENANCE

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## MAINTENANCE

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### MAINTENANCE SERVICES

You should exercise the utmost care to prevent damage to your vehicle and/or injury to yourself whenever performing any maintenance or inspection procedures.

Should you have any doubts concerning the inspection or servicing of your vehicle, we strongly recommend that you have a reliable and qualified service shop perform this work, preferably an Authorized Kia Dealer.

An Authorized Kia Dealer has factory-trained technicians and genuine Kia parts to service your vehicle properly. For expert advice and quality service, see an Authorized Kia Dealer.

Inadequate, incomplete or insufficient servicing may result in operational problems with your vehicle that could lead to vehicle damage, an accident or personal injury.

### *Owner's Responsibility Maintenance Service and Record Retention are the owner's responsibility.*

You should retain documents to show that proper maintenance has been performed on your vehicle in accordance with the scheduled maintenance service charts shown on the following pages. You need this information to be able to establish your compliance with the servicing and maintenance requirements of your Kia warranties.

Detailed warranty information is provided in your Warranty Information Manual. Repairs and adjustments required as a result of improper maintenance or a lack of required maintenance are not covered.

We recommend that such maintenance be performed by an Authorized Kia Dealer using genuine Kia parts. However, such maintenance may be performed by any competent automotive repair establishment using only genuine Kia replacement parts.

## MAINTENANCE

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### *Scheduled Maintenance Service*

Follow Schedule - Maintenance if the vehicle is usually operated where none of the following conditions apply.

- Repeated short distance driving.
- Driving in dusty conditions.
- Driving with an extensive use of brakes.
- Driving in areas where salt or other corrosive materials are being used.
- Driving on rough or muddy roads.
- Extended periods of idling or low-speed operation.
- Driving for a prolonged period in cold temperatures and/or extremely humid climates.

*After 48/96 months or 80,000/120,000 km (80,000 miles) continue to follow the prescribed maintenance intervals.*

## MAINTENANCE

### MAINTENANCE SCHEDULE (FOR AUSTRALIA) I : Inspect and if necessary correct, clean or replace R : Replace or change    A : Adjust    T : Tighten

MAINTENANCE INTERVALS MAINTENANCE ITEM	Number of months or kilometers, whichever comes first								
	Months	12	24	36	48	60	72	84	96
Km	15,000	30,000	45,000	60,000	75,000	90,000	105,000	120,000	
Drive Belt 1)*	I	I	I	I	I	I	I	I	I
Engine oil 3)*	R	R	R	R	R	R	R	R	R
Engine oil filter	R	R	R	R	R	R	R	R	R
Engine timing belt 2)*	Replace every 90,000 km								
Air cleaner element *	I	R	I	R	I	R	I	R	I
Spark plugs *	Replace every 100,000 km								
Cooling system (including coolant level adjustment)	I	I	I	I	I	I	I	I	I
Engine coolant 3)*	At first, replace at 90,000 km or 60 months: after that, replace every 45,000 km or 24 months								
Fuel filter *					R				R
Fuel lines and hoses	I	I	I	I	I	I	I	I	I
Idle speed	I	I	I	I	I	I	I	I	I
Initial ignition timing		I		I		I		I	
Battery condition	I	I	I	I	I	I	I	I	I
All electrical systems	I	I	I	I	I	I	I	I	I
Headlight alignment	I	I	I	I	I	I	I	I	I

1) Adjust alternator and water pump drive belt, power steering and airconditioner drive belt, if equipped.

2) Replacement of engine timing belt is required at every 90,000 km.

Failure to replace this belt may result in damage to the engine.

3) Check the level and add proper fluid / lubricant if necessary.

\* If the vehicle is operated continuously under severe condition, it is suggested those (\*) items should be changed more frequently.



## MAINTENANCE

I : Inspect and if necessary correct, clean or replace  
R : Replace or change    A : Adjust    T : Tighten

MAINTENANCE INTERVALS MAINTENANCE ITEM	Number of months or kilometers, whichever comes first								
	Months	12	24	36	48	60	72	84	96
Km	15,000	30,000	45,000	60,000	75,000	90,000	105,000	120,000	
Brake lines, hoses and connections	I	I	I	I	I	I	I	I	I
Brake pedal	I	I	I	I	I	I	I	I	I
Parking brake	I	I	I	I	I	I	I	I	I
Clutch pedal	I	I	I	I	I	I	I	I	I
Brake and clutch fluid 4)	I	R	I	R	I	R	I	R	R
Drum brakes			I			I			
Disc brakes	I	I	I	I	I	I	I	I	I
Power steering fluid	I	I	I	I	I	I	I	I	I
Power steering system and hoses	I	I	I	I	I	I	I	I	I
Front suspension ball joints		I		I		I		I	
Driveshaft dust boots	I	I	I	I	I	I	I	I	I
Bolt and nuts on chassis and body				T			T		
Exhaust system heat shield	I		I		I		I		
Airconditioner refrigerant (if equipped)	Inspect refrigerant amount annually								
Airconditioner refrigerant (if equipped)	Inspect operation annually								
Airconditioner filter	R	R	R	R	R	R	R	R	R
Manual transaxle oil 3) 5)	I	I	I	I	I	I	I	I	I
Automatic transaxle fluid level 3) 6)	I	I	I	I	I	I	R	I	I

- 3) Check the level and proper fluid /lubricant if necessary.  
 4) If there is continuous hard driving, or if the brakes are used extensively or the vehicle is operated in extremely humid climates, the brakes fluid should be changed annually.  
 5) If the vehicle is operated continuously under severe condition, replace every 100,000km.  
 6) If the vehicle is operated continuously under severe condition, replace every 40,000km.

## MAINTENANCE

### Maintenance Schedule (Except Europe)

I : Inspect and if necessary correct, clean or replace  
 R : Replace or change    A : Adjust

MAINTENANCE INTERVALS	Number of months or kilometers, whichever comes first									
	Months	–	6	12	18	24	30	36	42	48
MAINTENANCE ITEM	Km	1,000	10,000	20,000	30,000	40,000	50,000	60,000	70,000	80,000
Drive belts 1)*				A		A		A		A
Engine oil 3)*		<b>General Region : 1,000 km Replacement</b>								
Engine oil filter		<b>Replace every 12 months or 10,000 km (Whichever comes first)</b>								
Engine timing belt 2)*		<b>Replace every 90,000 km</b>								
Air cleaner element*				I		R		I		R
Spark plugs *	2.0 Engine					R				R
	2.5 Engine	<b>Replace every 100,000 km</b>								
Cooling system 3)* (including coolant level adjustment)				I		I		I		I
Engine coolant *		<b>At first, replace at 90,000 km or 60 months: after that, replace every 45,000 km or 24 months</b>								
Fuel filter						R				R
Fuel lines and hoses				I		I		I		I
Idle speed						A				A
Initial ignition timing				I		I		I		I

- 1) Adjust alternator and water pump drive belt, power steering and air conditioner drive belt, if equipped.
- 2) Replacement of the engine timing belt is required at every 90,000 km.  
Failure to replace this belt may result in damage to the engine.
- 3) Check the level and add proper fluid / lubricant if necessary.

\* If the vehicle is operated continuously under severe condition, it is suggested those (\*) items should be changed more frequently.

## MAINTENANCE

I : Inspect and if necessary correct, clean or replace  
 R : Replace or change    A : Adjust

MAINTENANCE INTERVALS MAINTENANCE ITEM	Number of months or kilometers, whichever comes first									
	Months	–	6	12	18	24	30	36	42	48
	Km	1,000	10,000	20,000	30,000	40,000	50,000	60,000	70,000	80,000
E.G.R system				I		I		I		I
Evaporative system				I		I		I		I
Battery condition				I		I		I		I
All electrical systems			I	I	I	I	I	I	I	I
Headlight alignment				A		A		A		A
Brake lines, hoses and connections				I		I		I		I
Brake pedal			I	I	I	I	I	I	I	I
Parking brake				A		A		A		A
Clutch pedal			I	I	I	I	I	I	I	I
Brake and clutch fluid 4)			I	I	I	R	I	I	I	R
Drum brakes				I		I		I		I
Disc brakes				I		I		I		I

4) If there has been continuous of hard driving, mountain driving, or if the brakes are used extensively or the vehicle is operated in extremely humid climates, the brake fluid should be changed annually.

## MAINTENANCE

I : Inspect and if necessary correct, clean or replace

R : Replace or change    A : Adjust

MAINTENANCE INTERVALS	Number of months or kilometers, whichever comes first									
	Months	–	6	12	18	24	30	36	42	48
MAINTENANCE ITEM	Km	1,000	10,000	20,000	30,000	40,000	50,000	60,000	70,000	80,000
Power steering fluid			I	I	I	I	I	I	I	I
Power steering system and hoses				I		I		I		I
Front suspension ball joints						I				I
Driveshaft dust boots						I				I
Bolt and nuts on chassis and body				T		T		T		T
Exhaust system heat shield		I				I				I
Air conditioner refrigerant (if equipped)	Inspect refrigerant amount annually									
Air conditioner compressor (if equipped)	Inspect operation annually									
Air conditioner filter	Replace every 15,000km									
Manual transaxle oil 3) 5)			I	I	I	I	I	I	I	I
Automatic transaxle fluid level 3) 6)	Replace every 90,000km									

3) Check the level and add proper fluid / lubricant if necessary.

5) If the vehicle is operated continuously under severe condition, replace every 100,000km.

6) If the vehicle is operated continuously under severe condition, replace every 40,000km.

## MAINTENANCE

### Maintenance Schedule (For Europe)

I : Inspect and if necessary correct, clean or replace  
 R : Replace or change    A : Adjust    T : Tighten

INTERVALS ITEM	Number of Months or Miles, whichever comes first									
	Months		12	24	36	48	60	72	84	96
	×1000	Miles	10	20	30	40	50	60	70	80
Drive belt 1)*				A		A		A		A
Engine oil 2)*			R	R	R	R	R	R	R	R
Engine oil filter			R	R	R	R	R	R	R	R
Engine timing belt 3)*									R	
Air cleaner element				R		R		R		R
Spark plugs	2000cc Engine				R			R		
	2500cc Engine			I		I		R		I
Cooling system(Including coolant level adjustment)				I		I		I		I
Engine coolant	<b>At first, replace at 60,000 miles or 60 months: after that, replace every 30,000 miles or 24 months</b>									
Fuel filter						R				R
Fuel lines and hoses				I		I		I		I
Idle speed					I			I		
Initial ignition timing				I		I		I		I
E.G.R system				I		I		I		I
Evaporative system				I		I		I		I
Battery condition				I		I		I		I
All electrical systems			I	I	I	I	I	I	I	I
Headlight alignment				A		A		A		A
Brake lines, hoses and connections				I		I		I		I

## MAINTENANCE

I : Inspect and if necessary correct, clean or replace  
R : Replace or change    A : Adjust    T : Tighten

INTERVALS	Number of Months or Miles, whichever comes first									
	Months		12	24	36	48	60	72	84	96
	x1000	Miles	10	20	30	40	50	60	70	80
ITEM										
Brake pedal					I			I		I
Parking brake				A		A		A		A
Clutch pedal				I		I		I		I
Brake and clutch fluid			I	I	I	I	I	I	I	I
Drum brakes				I		I		I		I
Disc brakes			I	I	I	I	I	I	I	I
Power steering fluid			I	I	I	I	I	I	I	I
Power steering system and hoses				I		I		I		I
Tyre (Pressure & Tread wear)			I	I	I	I	I	I	I	I
Front suspension ball joints				I		I		I		I
Driveshaft dust boots			I	I	I	I	I	I	I	I
Bolt and nuts on chassis and body					T			T		
Exhaust system heat shield					I			I		
Air conditioner refrigerant (If equipped)			I	I	I	I	I	I	I	I
Air filter (If equipped)			R	R	R	R	R	R	R	R
Manual transaxle oil *			I	I	I	I	I	I	I	I
Auto transaxle fluid *			I	I	I	I	R	I	I	I

1) : Adjust alternator and water pump drive belt, power steering and airconditioner drive belt (if equipped). Inspect and if necessary correct or replace.

2) : Check the level and proper fluid / lubricant if necessary.

3) : Failure to replace this belt may result in damage to the engine.

\* : If the vehicle is operated continuously under severe condition, It is suggested those(\*) items should be changed more frequently.

## MAINTENANCE

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### *Maintenance under severe usage conditions*

The following items must be serviced more frequently on cars normally used under severe driving conditions.

Refer to the chart below for the appropriate maintenance intervals.

Maintenance item	Maintenance operation	Maintenance intervals	Driving condition
Automatic transaxle fluid	R	Every 25,000 Miles	A, C, E, F, G, H, I
Manual transaxle fluid	R	Every 60,000 Miles	C, D, E, G, H, I, J

### **Severe Driving Conditions**

A : Repeated short distance driving

B : Extensive idling

C : Driving in dusty, rough roads

D : Driving in areas using salt or other corrosive materials or in very cold weather

E : Driving in sandy areas

F : More than 50% driving in heavy city traffic during hot weather above 32°C (90°F)

G : Driving in mountainous areas

H : Towing a trailer

I : Driving for patrol car, taxi, commercial car or vehicle towing.

J : Driving over 170 km/h (106 mile/h)

## MAINTENANCE

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### OWNER MAINTENANCE

#### *Owner Maintenance Schedule*

The following lists are vehicle checks and inspections that should be performed by the owner or qualified service technician at the frequencies indicated to help ensure safe, dependable operation of your vehicle.

Any adverse conditions should be brought to the attention of your dealer or qualified service technician for service advice as soon as possible.

These Owner Maintenance Checks are generally not covered by warranties and you may be charged for labor, parts and lubricants used.

#### ***When you stop for fuel:***

- Check the engine oil level.
- Check coolant level in coolant reservoir.
- Check the windshield washer fluid level.
- Look for low or under-inflated tyres.

#### ***While operating your vehicle:***

- Note any changes in the sound of the exhaust or any smell of exhaust fumes in the vehicle.
- Check for vibrations in the steering wheel. Notice any increased steering effort or looseness in the steering wheel, or change in its straight-ahead position.
- Notice if your vehicle constant turns slightly or “pulls” to one side when travelling on smooth, level roads.
- When stopping, listen and check for strange sounds, pulling to one side, increased brake pedal travel or “hard-to-push” brake pedal.
- If any slipping or changes in the operation of your transaxle occurs, check the transaxle fluid level.
- Check automatic transaxle P (Park) function.
- Check parking brake.
- Check for fluid leaks under your vehicle (water dripping from the air conditioning system after use is normal).

#### ***At least monthly***

- Check coolant level in the coolant recovery reservoir.
- Check the operation of all exterior lamps, including the brake lamps, turn signals and hazard warning flashers.



## MAINTENANCE

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### ***At least twice a year (i.e. every Spring and Fall):***

- Check radiator, heater and air conditioning hoses for leaks or damage.
- Check windshield washer spray and wiper operation. Clean wiper blades with clean cloth dampened with washer fluid.
- Check headlamp alignment.
- Inspect halfshaft dust boots.
- Check muffler, exhaust pipes, shields and clamps.
- Check the lap/shoulder belts for wear and function.
- Check air pressure in spare tyre.
- Check for worn tyres and loose wheel lug nuts.

### ***At least once a year:***

- Clean body and door drain holes.
- Lubricate door hinges and checks, and hood hinges.
- Lubricate door and hood locks and latches.
- Lubricate door rubber weatherstrips.
- Check the air conditioning system before the warm weather season.
- Check the power steering fluid level.
- Inspect and lubricate automatic transaxle linkage and controls.
- Clean battery terminals, check electrolyte level on low maintenance (auxiliary and replacement) batteries.
- Check the brake fluid level.

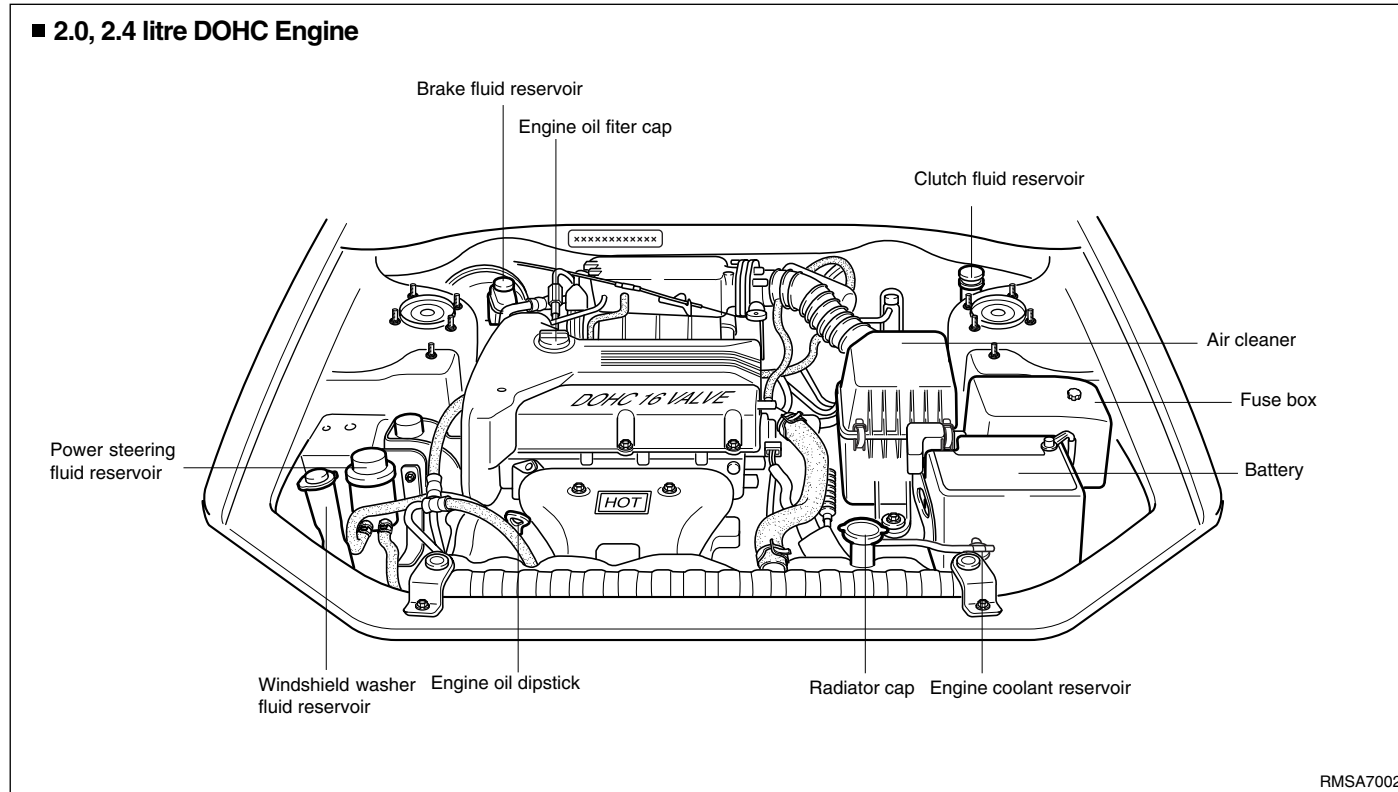
### **WARNING : MAINTENANCE WORK**

- **Performing maintenance work on a vehicle can be dangerous. You can be seriously injured while performing some maintenance procedures. If you lack sufficient knowledge and experience or the proper tools and equipment to do the work, have it done by a qualified technician.**
- **Working under the hood with the engine running is dangerous. It becomes even more dangerous when you wear jewellery or loose clothing. These can become entangled in moving parts and result in injury. Therefore, if you must run the engine while working under the hood, make certain that you remove all jewellery (especially rings, bracelets, watches, and necklaces) and all neckties, scarves, and similar loose clothing before getting near the engine or cooling fans.**

# MAINTENANCE

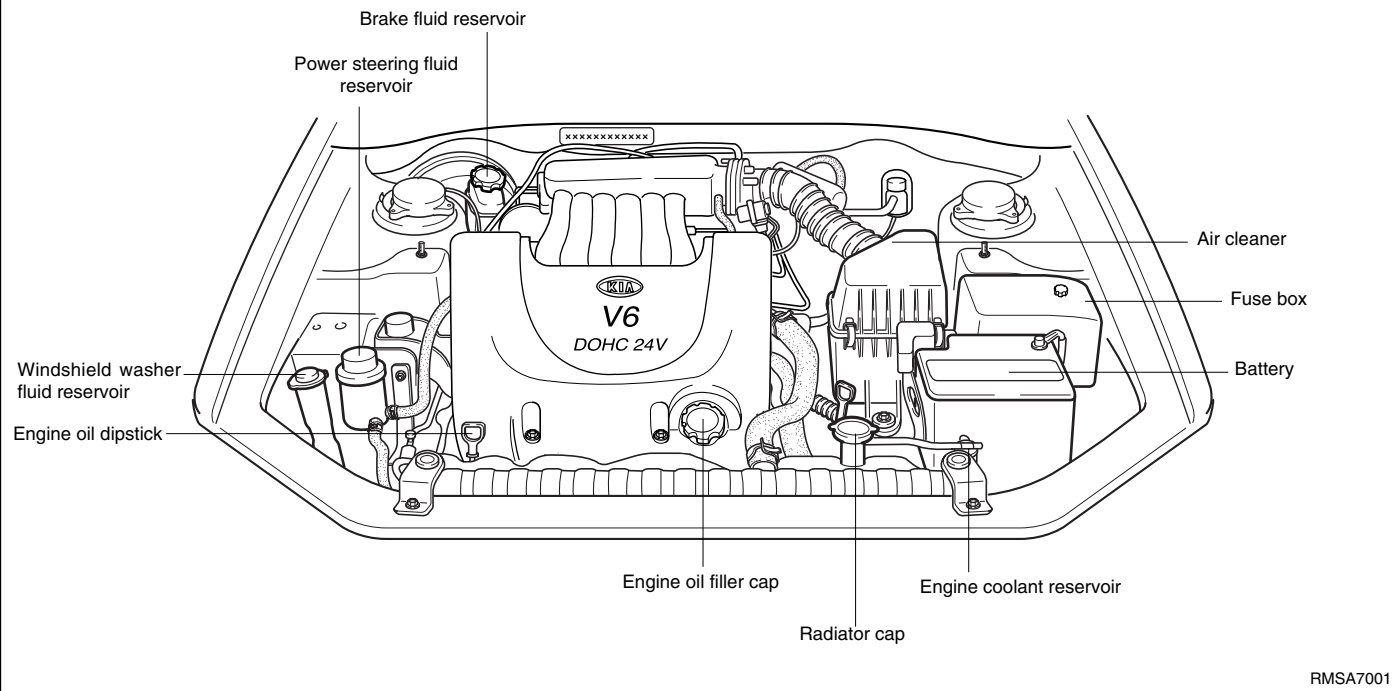
## ENGINE COMPARTMENT

### ■ 2.0, 2.4 litre DOHC Engine



# MAINTENANCE

## ■ 2.5, 2.7 litre DOHC Engine



## MAINTENANCE

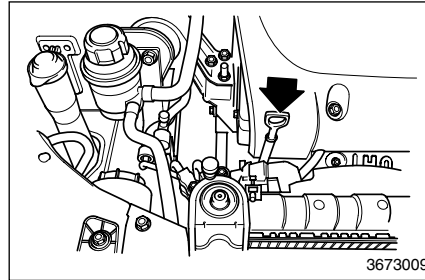
### ENGINE OIL AND OIL FILTER

#### *Checking the Engine Oil Level*

1. Be sure the vehicle is on level ground.
2. Start the engine and allow it to reach normal operating temperature.
3. Turn the engine off and wait a few minutes for the oil to return to the oil pan.
4. Pull out the dipstick, wipe it clean, and re-insert it fully.
5. Pull the dipstick out again and check the level. The level should be between F and L.

If it is near or at L, add enough oil to bring the level to F. **Do not overfill.**

The distance between L and F on the dipstick represents 0.7 litre (0.85 US qt.).



*Use only the specified engine oil. (Refer to "Recommended Lubricants" later in this section.)*

#### *Changing the Engine Oil and Filter*

Change engine oil and filter according to the Scheduled Maintenance earlier in this section.

#### **⚠ WARNING : ENGINE OIL**

- **Continuous contact with USED engine oil has caused skin cancer in laboratory mice. Protect your skin by washing with soap and water.**
- **Keep all engine oil out of the reach of children.**

1. Warm the engine up for a few minutes and then turn it off. Remove the oil filler cap.
2. Drain the oil into a suitable container after removing the oil filler cap and drain plug.

## MAINTENANCE

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### **⚠ CAUTION :**

Both the oil and engine are hot. Do not burn yourself.

### **\* NOTICE :**

When installing the replacement oil filter, do not allow the oil filter gasket to remain on the oil filter mounting surface. This will cause oil leakage and engine damage. Remove the old gasket completely so that a new gasket will properly seat and seal.

3. Remove the engine oil filter with an oil filter wrench.
4. Use a clean rag to clean the oil filter mounting surface on the engine.
5. Apply a small amount of engine oil to the new oil filter O-ring seal.
6. Install the oil filter and tighten it. (Refer to the oil filter caution label for tightening instructions.)

7. Replace the drain plug tightly after the oil has thoroughly drained.
8. Refill the engine with new oil to the F mark on the dipstick. Do not overfill.
9. Re-install the oil filler cap securely.
10. Start the engine and inspect around the oil filter seal for leaks. Stop the engine.  
Check the oil level and fill to the F mark, if necessary.

### ***Oil Capacity***

- **2000, 2400cc Engine**
  - **Without filter change** : 4.0 litres
  - **With filter change** : 4.3 litres
- **2500cc, 2700cc Engine**
  - **Without filter change** : 4.5 litres
  - **With filter change** : 4.8 litres

*Use only the specified engine oil. (Refer to "Recommended Lubricants" later in this section.)*

### **\* NOTICE :**

- **Follow these instructions carefully. An improper oil filter installation can cause oil leakage and engine damage.**
- **Although oil filters may have the same external appearance, their internal designs differ significantly. These filters are not interchangeable. To avoid potential engine damage, use only the specified filter. Consult an Authorized Kia Dealer.**

## MAINTENANCE

### ENGINE COOLING SYSTEM

The cooling system is a high-pressure type with a reservoir and is filled with year-round antifreeze coolant at the factory.

Check the antifreeze protection and coolant level at least once a year, at the beginning of the winter season, and before traveling to a colder climate.

#### *Checking the Coolant Level*

#### **⚠ WARNING : REMOVING RADIATOR CAP**

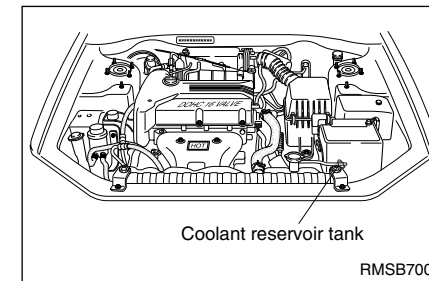
- Never attempt to remove the radiator cap while the engine is operating. Doing so might lead to cooling system and/or engine damage and could result in serious personal injury from escaping hot coolant or steam.

- Turn the engine off and wait until it has cooled. Even then, use extreme care when removing the radiator cap. Wrap a thick towel around it, and turn it counterclockwise slowly to the first stop. Step back while the pressure is released from the cooling system. When you are sure all the pressure has been released, press down on the cap, using a thick towel, and continue turning counterclockwise to remove it.
- Even if the engine is not operating, do not remove the radiator cap or the drain plug while the engine and radiator are hot. Hot coolant and steam may still blow out under pressure, causing serious injury.

Check the condition and connections of all cooling system hoses and heater hoses. Replace any swollen or deteriorated hoses.

The coolant level should be full in the radiator and between F (Full) and L (Low) on the coolant reservoir tank when the engine is cool.

Check the coolant level using the dipstick attached to the reservoir cap.



## MAINTENANCE

If the coolant level is low, add enough specified coolant to provide protection against freezing and corrosion and to bring the level to F in the coolant reservoir. Do not overfill. If frequent additions are required, see an Authorized Kia Dealer for a cooling system inspection.

### **Changing Coolant**

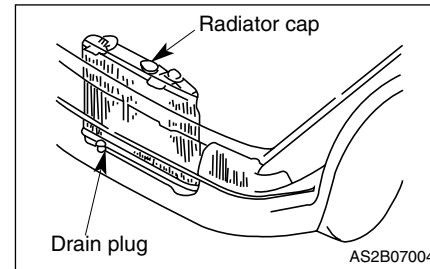
Change coolant according to the Scheduled Maintenance.

- Use only soft (de-mineralized) water in the coolant mixture.
- The engine in your vehicle has aluminum engine parts and must be protected by an ethylene glycol-based coolant to prevent corrosion and freezing.
- DO NOT USE alcohol or methanol coolant and do not mix them with the specified coolant.
- Do not use a solution that contains more than 60 percent coolant or less than 35% coolant, which would reduce the effectiveness of the solution.

For mixture percentages, refer to the following table.

Ambient Temperature	Mixture Percentage (volume)	
	Coolant Solution	Water
-15°C (5°F)	35	65
-25°C (-13°F)	40	60
-35°C (-31°F)	50	50
-45°C (-49°F)	60	40

1. Turn the radiator cap counter clockwise and remove it.
2. Loosen the radiator drain plug and drain the coolant into a suitable container.

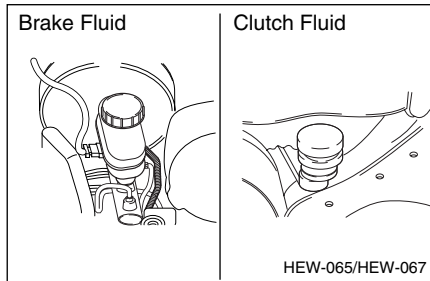


3. With the drain plug loose, flush the system with running water.
4. Drain the system completely and retighten the drain plug. Add the necessary amount of ethylene glycol-based coolant and water to provide the required protection against freezing and corrosion. In extremely cold climates, add the necessary amount of ethylene glycol-based coolant in accordance with the instructions of the coolant manufacturer.
5. Run the engine at idle with the radiator cap off. Slowly add additional coolant if necessary.
6. At this point, wait until the engine reaches normal operating temperature. Depress the accelerator two or three times; then add coolant if required.  
**Be careful not to burn yourself.**
7. Install the radiator cap. Inspect all connections for leaks and recheck the coolant level in the reservoir. Recheck again after a few days of driving and add coolant as necessary.

## MAINTENANCE

### BRAKES AND CLUTCH

#### *Checking Brake/Clutch Fluid Level*



#### ***Brake Fluid Reservoir***

Before adding fluid, thoroughly clean the area around the reservoir cap to prevent brake fluid contamination.

If you add brake/clutch fluid, fill the brake/clutch fluid reservoir to the MAX line. The brake/clutch fluid level will drop with accumulated mileage. This is a normal condition associated with brake/clutch lining wear.

Check the fluid level in the reservoir periodically; it should be between MAX and MIN on the side of the reservoir.

If the fluid level is excessively low, have the brake/clutch system checked by an Authorized Kia Dealer.

*Use only the specified brake/clutch fluid. (Refer to "Recommended Lubricants" later in this section.) Do not mix different types of fluid.*

#### **\* NOTICE :**

**In the event the brake/clutch system requires frequent additions of fluid, the vehicle should be inspected by an Authorized Kia Dealer.**

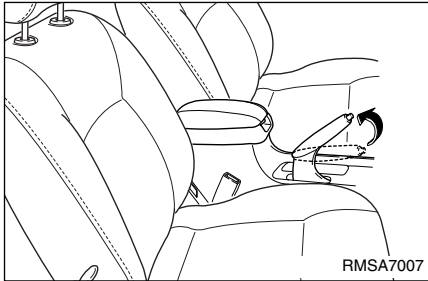


## MAINTENANCE

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### PARKING BRAKE

#### *Checking the Parking Brake*



Check the stroke of the parking brake by counting the number of “clicks” heard while fully applying it from the released position. Also, the parking brake alone should securely hold the vehicle on a fairly steep grade.

If the number of “clicks” is more or less than specified, have the parking brake adjusted by an Authorized Kia Dealer.

#### **Stroke:**

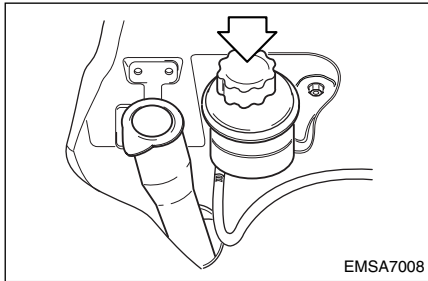
5~9 “clicks” at a force of 22 lbs. (98N).

## MAINTENANCE

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### POWER STEERING

#### *Checking the Power Steering Fluid Level*



The power steering fluid level should be checked periodically.

With the engine off and the vehicle on level ground, check the fluid level in the power steering reservoir; it should be between the MAX and MIN reservoir indicators.

Before adding power steering fluid, thoroughly clean the area around the reservoir cap to prevent power steering fluid contamination.

If the level is low, add fluid to the MAX level.

In the event the power steering system requires frequent addition of fluid, the vehicle should be inspected by an Authorized Kia Dealer.

#### **\* NOTICE :**

**To avoid damage to the power steering pump, do not operate the vehicle for prolonged periods with a low power steering fluid level.**

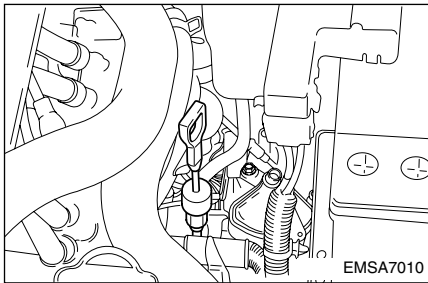
*Use only the specified power steering fluid. (Refer to "Recommended Lubricants" later in this section.)*

## MAINTENANCE

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### **AUTOMATIC TRANSAXLE**

#### *Checking the Automatic Transaxle Fluid Level*



The automatic transaxle fluid level should be checked regularly. Take the following precautions to measure the fluid level properly.

The volume of the transaxle fluid changes with temperature. For that reason, it is best to check the level after having driven the vehicle for 30 minutes. If necessary, however, the fluid can also be checked when the vehicle has not been driven.

#### **CAUTION :**

- **Low fluid level causes transaxle slippage. Overfilling can cause foaming, loss of fluid, and transaxle malfunction.**
- **The use of a non-specified fluid could result in transaxle malfunction and failure.**

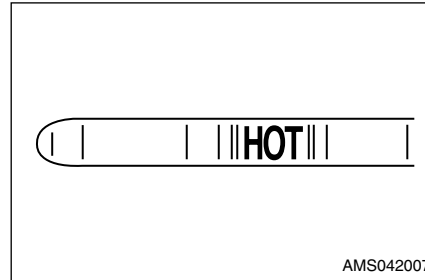
#### **WARNING : PARKING BRAKE**

**To avoid sudden movement of the vehicle, set the parking brake and depress the brake pedal while shifting the shift lever.**

## MAINTENANCE

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1. Park the vehicle on level ground and set the parking brake firmly.
  2. Allow the engine to idle for about 2 minutes, then depress the brake pedal. Move the shift lever slowly through all ranges then set it in the N (Neutral) position.
  3. With the engine still idling, pull the dipstick out, wipe it clean, and reinsert it fully.
  4. Pull the dipstick out again.
- The fluid level is checked as follows:



### **Using the hot fluid scale:**

If the vehicle has been driven and the fluid is warmed to the normal operating temperature of approximately 158~176°F (70~80°C), the fluid level should be within “HOT” range.

- Use the cold scale as a rough reference only.
- If the outside temperature is lower than 68°F (20°C), start the engine and measure the fluid level after letting the engine reach operating temperature.
- If the vehicle has been driven for an extended period at high speeds or in city traffic in hot weather, it is usually best to measure the fluid level after stopping the engine and allowing the fluid to cool for 30 minutes.

When inserting the dipstick, be sure to insert it completely. When adding fluid, measure frequently with the dipstick to make sure the fluid level does not go above the Full position. Do not overfill. Use only the specified automatic transaxle fluid. (Refer to “Recommended Lubricants” later in this section.)

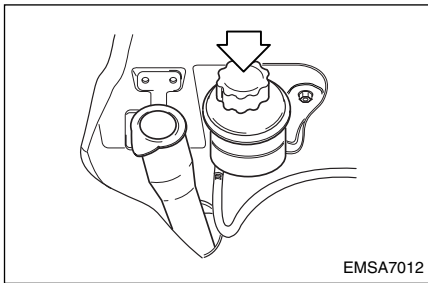
## MAINTENANCE

### LUBRICANTS AND FLUIDS

#### *Checking the Washer Fluid Level*

Check the fluid level in the washer fluid reservoir and add fluid if necessary.

Plain water may be used if washer fluid is not available. However, use windshield washer solvent with antifreeze characteristics in cold climates to prevent freezing.



#### **CAUTION :**

- **Do not use radiator coolant or antifreeze in the washer fluid reservoir.**
- **Radiator coolant can severely obscure visibility when sprayed on the windshield and may cause loss of vehicle control or damage to paint and body trim.**

#### *Body Lubrication*

All moving points of the body, such as doors, hood hinges and locks, should be lubricated each time the engine oil is changed.

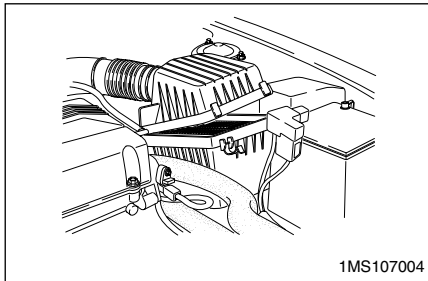
Use a non-freezing lubricant on locks during cold weather.

Make sure the engine hood secondary latch keeps the hood from opening when the primary latch is released.

## MAINTENANCE

### AIR CLEANER

#### *Element Replacement*



A paper air cleaner filter is used. It must be replaced when necessary, and should not be cleaned and reused.

1. Remove the four (4) air cleaner cover attaching clips.
2. Wipe the inside of the air cleaner housing with a clean, damp cloth.
3. Replace the air cleaner element.

4. Re-install in the reverse order of removal.

Replace the element according to the Scheduled Maintenance.

*If the vehicle is operated in extremely dusty or sandy areas, replace the element more often than at the usual recommended intervals.*

#### **CAUTION :**

- **Do not drive with the air cleaner removed; this will result in excessive engine wear.**
- **Driving without an air cleaner encourages backfiring, which could cause a fire in the engine compartment.**

## MAINTENANCE

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### WIPER BLADES

#### *Wiper Blade Maintenance*

**\* NOTICE :**

**Commercial hot waxes applied by automatic car washes have been known to make the windshield difficult to clean.**

Contamination of either the windshield or the wiper blades with foreign matter can reduce the effectiveness of the windshield wipers. Common sources of contamination are insects, tree sap, and hot wax treatments used by some commercial car washes. If the blades are not wiping properly, clean both the window and the blades with a good cleaner or mild detergent, and thoroughly rinse with clear water.

**\* NOTICE:**

**To prevent damage to the wiper blades, do not use gasoline, kerosene, paint thinner, or other solvents on or near them.**

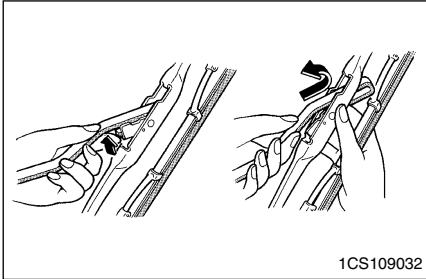
#### *Windshield Wiper Blade Replacement*

When the wipers no longer clean adequately, the wiper blades may be worn or cracked, requiring replacement.

**\* NOTICE :**

**To prevent damage to the wiper arms or other components, do not attempt to move the wipers manually.**

## MAINTENANCE



1. Raise the wiper arm and turn the wiper blade assembly to expose the plastic locking clip. Compress the clip and slide the blade assembly toward the windshield, then slide it off the arm.

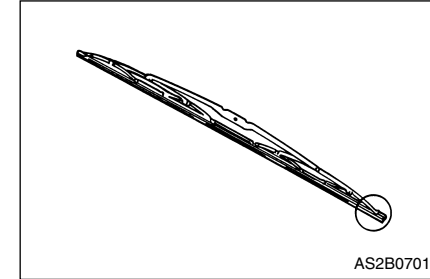
**\* NOTICE :**

**Do not allow the wiper arm to fall against the windshield.**

2. Firmly grasp the end of the rubber blade and pull until the tabs are free of the metal support.
3. Remove the metal retainers from the rubber blade and install them in the new rubber blade.

**\* NOTICE :**

**Do not bend the metal retainers.**



4. Carefully insert a new rubber blade and re-install the blade assembly in the reverse order of removal. Install the blade with the tabs facing towards the bottom of the wiper arm.



## MAINTENANCE

### BATTERY

#### **WARNING : BATTERY DANGERS**



Always read the following instructions carefully when handling a battery.



Keep lighted cigarettes and all other flames or sparks away from the battery.



Hydrogen, which is a highly combustible gas, is always present in battery cells and may explode if ignited.



If any electrolyte gets into your eyes, flush your eyes with clean water for at least 15 minutes and get immediate medical attention. If possible, continue to apply water with a sponge or cloth until medical attention is received.

If electrolyte gets on your skin, thoroughly wash the contacted area. If you feel a pain or a burning sensation, get medical attention immediately.

7-30



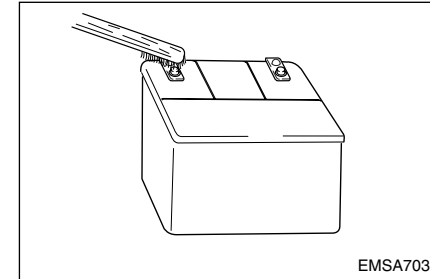
Keep batteries out of the reach of children because batteries contain highly corrosive SULFURIC ACID. Do not allow battery acid to contact your skin, eyes, clothing or paint finish.



Wear eye protection when charging or working near a battery. Always provide ventilation when working in an enclosed space.

- When lifting a plastic-cased battery, excessive pressure on the case may cause battery acid to leak, resulting in personal injury. Lift with a battery carrier or with your hands on opposite corners.
- Never attempt to charge the battery when the battery cables are connected.
- The electrical ignition system works with high voltage. Never touch these components with the engine running or the ignition switched on.

### *Battery Maintenance*



For best battery service:

- Keep the battery securely mounted.
- Keep the battery top clean and dry.
- Keep the terminals and connections clean, tight, and coated with petroleum jelly or terminal grease.
- Immediately rinse any spilled electrolyte from the battery with a solution of water and baking soda.
- If the vehicle is not going to be used for an extended period of time, disconnect the battery cables.

## MAINTENANCE

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### ***Battery Recharging***

Your vehicle has a maintenance-free, calcium-based battery.

- If the battery becomes discharged in a short time (headlights or interior lights were left on while the vehicle was not in use), recharge it by slow (trickle) charging for 10 hours.
- If the battery gradually discharges because of high electric load while the vehicle is being used, recharge it at 20-30A for two hours.

### **WARNING : RECHARGING BATTERY**

**When recharging the battery, observe the following precautions:**

- **The battery must be removed from the vehicle and placed in an area with good ventilation.**
- **Do not allow cigarettes, sparks, or flame near the battery.**
- **Watch the battery during charging, and stop or reduce the charging rate if the battery cells begin gassing (boiling) violently or if the temperature of the electrolyte of any cell exceeds 120°F (49°C).**
- **Wear eye protection when checking the battery during charging.**
- **Disconnect the battery charger in the following order.**
  1. Turn off the battery charger main switch.

2. Unhook the negative clamp from the negative battery terminal.
3. Unhook the positive clamp from the positive battery terminal.

### **\* NOTICE :**

- Before performing battery maintenance or recharging, turn OFF all accessories and stop the engine.
- When remounting the battery, disconnect the negative (-) battery cable first. When re-installing the battery, reconnect the negative (-) battery cable last.

## MAINTENANCE

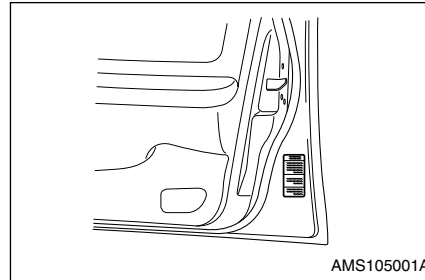
### TYRES AND WHEELS

#### *Tyre Care*

For proper maintenance, safety, and maximum fuel economy, you must always maintain recommended tyre inflation pressures and stay within the load limits and weight distribution recommended for your vehicle.

#### *Inflation Pressures*

Check all tyre pressures (including the spare) monthly when the tyres are cold. "Cold tyres" means the car has not been driven for at least three hours or driven less than one mile (1.6 km). Recommended pressures must be maintained to ensure ride quality, vehicle handling, and minimum tyre wear.



All specifications (sizes and pressures) can be found on a label attached to the front driver's door.

The correct tyre pressure is; 210kPa(2.1kg/cm<sup>2</sup>, 30psi).

#### \* NOTICE :

- Warm tyres normally exceed recommended cold tyre pressures by 4 to 6 psi (28 to 41 kPa). Do not release air from warm tyres to adjust the pressure. The tyres will become underinflated when cold.
- Underinflation results in excessive wear, poor handling, reduced fuel economy, and the possibility of blowouts from overheated tyres. Also, low tyre pressure can cause poor sealing of the tyre bead. If the tyre pressure is excessively low, wheel deformation and/or tyre separation are possible. Keep tyre pressures at the proper levels. If a tyre frequently needs refilling, have it checked by an Authorized Kia Dealer or a tyre shop.
- Overinflation produces a harsh ride, handling problems, excessive wear at the centre of the tyre tread, and a greater possibility of damage from road hazards.

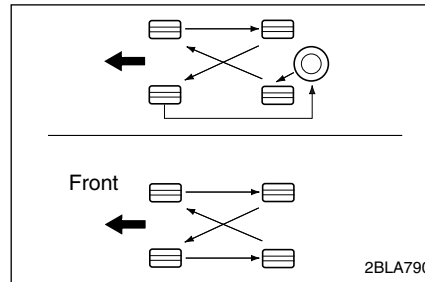
## MAINTENANCE

### **WARNING : TYRE INFLATION**

**Overinflation or underinflation can reduce tyre life, adversely affect vehicle handling, and lead to sudden tyre failure. This could result in loss of vehicle control.**

### ***Tyre Rotation***

To equalize tread wear, it is recommended that the tyres be rotated every 6,000 miles (10,000 km), or sooner if irregular wear develops.



During tyre rotation, check the tyres for correct balance.

Check for uneven wear and damage. Abnormal wear is usually caused by incorrect tyre pressure, improper wheel alignment, an out-of-balance condition, severe braking or severe cornering. Look for bumps or bulges in the tread or side of tyre. Replace the tyre if you

find either of these conditions. Also, replace the tyre if you can see fabric or cord.

After rotation, be sure to bring the front and rear tyre pressures to specification and check lug nut tightness.

*Disc brake pads should be inspected for wear whenever tyres are rotated.*

### **\* NOTICE :**

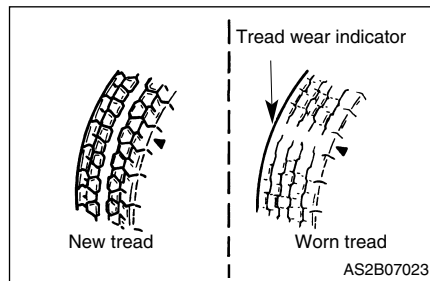
**Rotate radial tyres that have an asymmetric tread pattern from front to rear only and not from right to left.**

## MAINTENANCE

### *Tyre Replacement*

If the tyre is worn evenly, a tread wear indicator will appear as a solid band, 1/2 inch wide (12.7 mm) across the tread. This shows there is less than 1/16 inch (1.6mm) of tread remaining on the tyre. Replace the tyre when this happens.

Do not wait for this band to appear across the entire tread before replacing the tyre.



### *Wheel Alignment and Tyre Balance*

In addition to proper tyre inflation, correct wheel alignment helps to minimize tyre wear. Your vehicle's alignment should be checked every 12 months or 12,000 miles (20,000 km).

Your tyres were properly balanced at the factory, but they may need to be rebalanced before they wear out. If you notice a consistent vibration when driving, have your Kia Dealer inspect your tyres. A tyre should always be rebalanced if it has been removed from the wheel.

#### **\* NOTICE :**

**Improper wheel weights can damage your vehicle's aluminum wheels. Use only approved wheel weights.**

#### **\* NOTICE :**

- **When replacing tyres, never mix radial, bias-belted, and bias-type tyres. All four tyres should be of the same size, design and construction. Use only the tyre sizes listed on the Tyre Label attached to the passenger's door. Make sure that all tyres and wheels are the same size and have the same load-carrying capacity. Use only tyre and wheel combinations recommended on the Tyre Label or by an Authorized Kia Dealer. Failure to follow these precautions can adversely affect the safety and handling of your vehicle.**
- **The use of any other tyre size or type may seriously affect ride, handling, ground clearance, tyre clearance, and speedometer calibration.**

## MAINTENANCE

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- Driving on worn-out tyres is very hazardous and will reduce braking effectiveness, steering accuracy, and traction.
- It is best to replace all four tyres on your vehicle at the same time. If that is not possible, then replace the two front or two rear tyres as a pair. Replacing just one tyre can seriously affect vehicle handling.

### *Wheel Replacement*

When replacing the metal wheels for any reason, make sure the new wheels are equivalent to the original factory units in diameter, rim width and offset.

### **CAUTION :**

A wheel that is not the correct size may adversely affect wheel and bearing life, braking and stopping abilities, handling characteristics, ground clearance, body-to-tyre clearance, snow chain clearance, speedometer calibration, headlight aim and bumper height.

## BULB REPLACEMENT

### *Headlight Bulb Replacement*

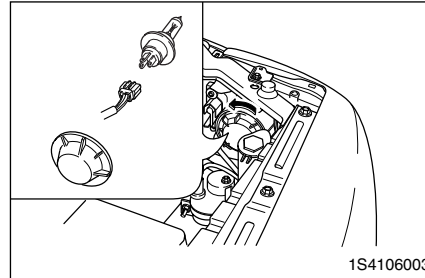
### **\* NOTICE :**

Driving in rain or washing headlamps and tail lamps could result in fogged lenses. This is caused by the difference in temperature between inside and the outside of the lamp lenses. This is not a problem. However, if moisture continues to build up, consult an Authorised Kia Dealer.

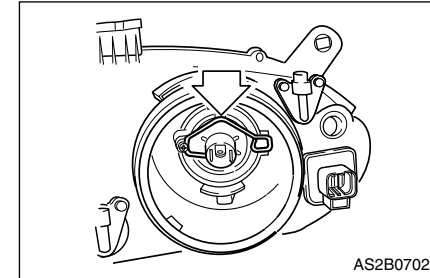
## MAINTENANCE

### **⚠ WARNING : HALOGEN BULBS**

- Wear eye protection when changing a bulb. Allow the bulb to cool before handling it.
- Halogen bulbs contain pressurized gas. If broken, a halogen bulb will explode and will produce flying pieces of glass.
- Always handle halogen bulbs carefully to avoid scratches and abrasion. If the bulbs are lit, avoid contact with liquids. Never touch the glass with bare hands. Residual oil may cause the bulb to overheat and burst when lit. A bulb should be operated only when installed in the headlight assembly.
- If a bulb becomes damaged or cracked, replace it immediately and carefully dispose of it.



1. Remove the headlight bulb cover by turning it counterclockwise.
2. Disconnect the headlight bulb electrical connector.

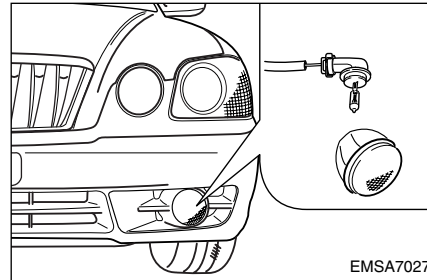


3. Unsnap the headlight bulb retaining wire.
4. Remove the bulb from the three (3) slots on the headlight assembly.

## MAINTENANCE

5. Install a new headlight bulb in the three (3) slots on the headlight assembly and snap the headlight bulb retaining wire into position.
6. Connect the headlight bulb electrical connector.
7. Install the headlight bulb cover by turning it clockwise.

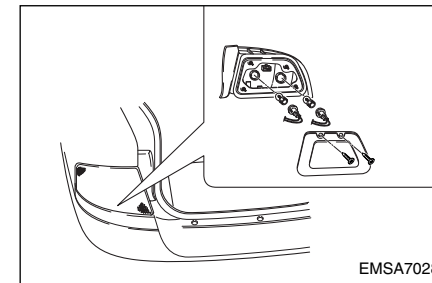
### *Front Fog Light Replacement (If Equipped)*



1. Turn the bulb socket counterclockwise and remove the bulb socket.
2. Insert a new bulb in socket.
3. Install the bulb socket.

### *Rear Combination Light Bulb Replacement*

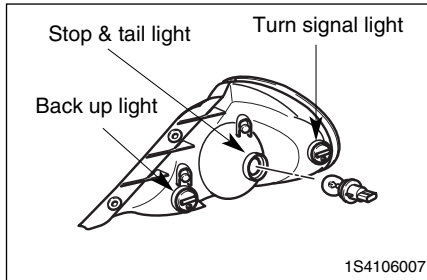
1. Using a cross-tip screwdriver, remove the cover.



2. Turn the bulb socket counterclockwise and remove it from the housing.
3. Push the bulb in, then rotate it one-quarter turn counterclockwise and remove the bulb from the socket.
4. Insert a new bulb in the socket, then push the bulb in and rotate it one-quarter turn clockwise to lock the bulb in place.

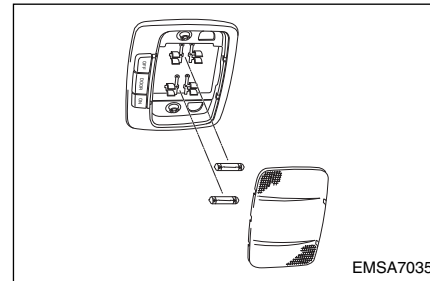


## MAINTENANCE



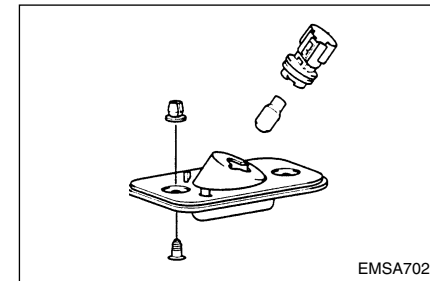
5. Re-install the bulb socket into the rear combination light assembly and rotate it one-quarter turn clockwise to lock the socket in place.
6. Re-install the cover.

### *Dome Light Bulb Replacement*



1. Using a flat-blade screwdriver, gently pry the lens from the dome light housing.
2. Carefully pull the bulb out of the socket.
3. Insert a new bulb in the socket.
4. Align the lens tabs with the dome light housing notches and snap the lens into place.

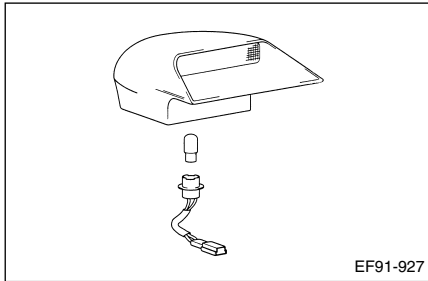
### *Licence Plate Light Bulb Replacement*



1. Using a Phillips screwdriver, remove the two (2) lens mounting screws and the lens.
2. Rotate socket one-quarter turn counterclockwise and carefully pull the socket from the housing.
3. Carefully pull the bulb out of the socket.
4. Insert a new bulb in the socket.
5. Carefully insert the socket into the housing and rotate it one-quarter turn clockwise.
6. Re-install the lens and the two (2) mounting screws.

## MAINTENANCE

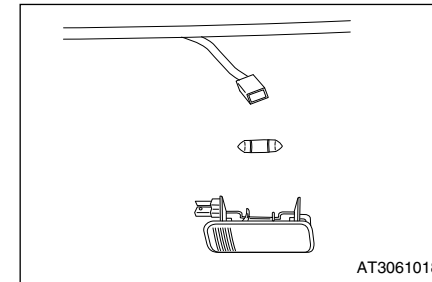
### ***Centre High-Mounted Stoplight Bulb Replacement***



1. Remove the cover and turn the bulb socket counterclockwise and remove it from the housing.
2. Push the bulb in, then rotate it one-quarter turn counterclockwise and remove the bulb from the socket.

3. Insert a new bulb in the socket, then push the bulb in and rotate in one-quarter turn counterclockwise and remove the bulb from the socket.
4. Re-install the bulb socket into the rear combination light assembly and rotate it one-quarter turn clockwise to lock the socket in place.
5. Re-install the cover.

### ***Trunk Room Light Bulb Replacement (If Equipped)***



1. Remove the trunk room lamp cover using flat blade screw driver.
2. After replacement of bulb, install the cover.

## MAINTENANCE

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### LUBRICANT SPECIFICATIONS

#### *Recommended Lubricants*

To help achieve proper engine and powertrain performance and durability, use only lubricants of the proper quality. The correct lubricants also help promote engine efficiency which results in improved fuel economy.

Engine oils labelled Energy Conserving Oil are now available. Along with other additional benefits, they contribute to fuel economy by reducing the amount of fuel necessary to overcome engine friction. Often, these improvements are difficult to measure in everyday driving, but in a year's time they can offer significant cost and energy savings.

These lubricants and fluids are recommended for use in your vehicle.

Lubricant	Classification
Engine oil* <sup>1)</sup>	API Service SG or SH
Manual transaxle oil	API Service GL-4 (SAE 75W-90)
Automatic transaxle fluid	SK ATF SP-III or Diamond ATF SP-III
Power steering fluid	PSF-III
Brake/clutch fluid	SAEJ1703 or FMVSS116 DOT-3 or DOT-4

\*<sup>1)</sup>Refer to the recommended SAE viscosity numbers on the next page.

## MAINTENANCE

### *Recommended SAE Viscosity Number*

**\* NOTICE :**

**Always be sure to clean the area around any filler plug, drain plug, or dipstick before checking or draining any lubricant. This is especially important in dusty or sandy areas and when the vehicle is used on unpaved roads. Cleaning the plug and dipstick areas will prevent dirt and grit from entering the engine and other mechanisms that could be damaged.**

Engine oil viscosity (thickness) has an effect on fuel economy and cold weather operation (starting and oil flow). Lower viscosity engine oils can provide better fuel economy and cold weather performance. However, higher viscosity engine oils are required for satisfactory lubrication in hot weather. Using oils of any viscosity other than those recommended could result in engine damage.

When choosing an oil, consider the range of temperature your vehicle will be operated in before the next oil change. Then select the recommended oil viscosity from the chart.

Temperature Range for SAE Viscosity Numbers												
Temperature	°C	-30	-20	-10	0	10	20	30	40	50		
	(°F)	-20	0	20	40	60	80	100	120			
Engine Oil			5W-30				30					
			5W-20		20W-20			40				
			10W-30									
			10W-40			10W-50						
			20W-40				20W-50					

## MAINTENANCE

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### EXTERIOR CARE

#### *Exterior General Caution*

It is very important to follow the manufacturer's directions when using any chemical cleaner or polish. Read all warning and caution statements that appear on the label.

#### *Finish Maintenance*

##### **Washing**

To help protect your vehicle's finish from rust and deterioration, wash it thoroughly and frequently at least once a month with lukewarm or cold water. Pay special attention to the removal of any accumulation of salt, dirt, mud, or other foreign materials. Make sure the drain holes in the lower edges of the doors and rocker panels are kept clear and clean.

Insects, tar, tree sap, bird droppings, industrial fallout and similar deposits can damage your vehicle's finish if not removed immediately.

Even prompt washing with plain water may not completely remove all these deposits. A mild soap, safe for use on painted surfaces, can be used.

#### **\* NOTICE :**

**Do not use strong soap, chemical detergents or hot water, and do not wash the vehicle in direct sunlight or when the body of the vehicle is warm.**

After washing, rinse the vehicle thoroughly with lukewarm or cold water. Do not allow soap to dry on the finish.

#### **CAUTION :**

**After washing the vehicle, test the brakes while driving slowly to see if they have been affected by water. If braking performance is impaired, dry the brakes by applying them lightly while maintaining a slow forward speed.**

## MAINTENANCE

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### **Waxing**

Wax the vehicle when water will no longer bead on the paint.

Always wash and dry the vehicle before waxing. Use a good quality liquid or paste wax, and follow the manufacturer's instructions. Wax all metal trim as well, to protect it and to maintain its lustre.

*Removing oil, tar, and similar materials with a spot remover will usually strip the wax from the finish. Be sure to re-wax these areas even if the rest of the vehicle does not yet need waxing.*

### **\* NOTICE :**

- **Wiping dust or dirt off the body with a dry cloth will scratch the finish.**
- **Do not use steel wool, abrasive cleaners, or strong detergents containing highly alkaline or caustic agents on chrome-plated or anodized aluminum parts. This may result in damage to the protective coating and cause discoloration or paint deterioration.**

### **Finish Damage Repair**

Deep scratches or stone chips in the painted surface must be repaired promptly. Exposed metal will quickly rust and may develop into a major repair expense.

### **\* NOTICE :**

**If your vehicle is damaged and requires any metal repair or replacement, be sure the body shop applies anti-corrosion materials to the parts repaired or replaced.**

## MAINTENANCE

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### ***Bright-Metal Maintenance***

- To remove road tar and insects, use a tar remover, not a scraper or other sharp object.
- To protect the surfaces of bright-metal parts from corrosion, apply a coating of wax or chrome preservative and rub to a high lustre.
- During winter weather or in coastal areas, cover the bright metal parts with a heavier coating of wax or preservative. If necessary, coat the parts with non-corrosive petroleum jelly or other protective compound.

### ***Underbody Maintenance***

Corrosive materials used for ice and snow removal or dust control may collect on the underbody. If these materials are not removed, accelerated rusting can occur on underbody parts, such as the fuel lines, frame, floor pan and exhaust system, even though they have been treated with rust protection. Thoroughly flush the vehicle underbody and wheel openings with lukewarm or cold water once a month and especially at the end of each winter. Pay special attention to these areas because it is difficult to see all the mud and dirt. The lower edges of doors, rocker panels, and frame members have drain holes that should not be allowed to clog with dirt; trapped water in these areas can cause rusting. It will do more harm than good to wet down the road grime without removing it.

### **CAUTION :**

**After washing the vehicle, test the brakes while driving slowly to see if they have been affected by water.**

### ***Aluminum Wheel Maintenance***

The aluminum wheels are coated with a clear protective finish.

- *Do not use any abrasive cleaner, polishing compound, solvent, or wire brushes on aluminum wheels. They may scratch or damage the finish.*
- *Use only a mild soap or neutral detergent, and rinse thoroughly with water. Also, be sure to clean the wheels after driving on salted roads. This helps prevent corrosion.*
- *Avoid washing the wheels with high-speed car wash brushes.*

## MAINTENANCE

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### INTERIOR CARE

#### *Interior General Precautions*

Prevent caustic solutions such as perfume and cosmetic oil from contacting the dashboard; they may cause damage or discoloration. If they do contact the dashboard, wipe them off immediately.

#### *Upholstery and Interior Trim Cleaning*

##### *Vinyl*

First, remove dust and loose dirt from vinyl with a whisk broom or vacuum cleaner. Then, clean vinyl surfaces with a vinyl cleaner.

##### *Fabric*

First, remove dust and loose dirt from fabric with a whisk broom or vacuum cleaner. Then, clean with a mild soap solution recommended for upholstery or carpets. Remove fresh spots immediately with a fabric spot cleaner. If fresh spots do not receive immediate attention, the fabric may be stained and its colour can be affected. Also, its fire-resistant properties may be reduced if the material is not properly maintained.

##### **CAUTION :**

**Using anything but recommended cleaners and procedures may affect the fabric's appearance and fire-resistant properties.**

#### *Lap/Shoulder Belt Webbing Cleaning*

Clean the belt webbing with any mild soap solution recommended for cleaning upholstery or carpet. Follow the instructions provided with the soap. Do not bleach or re-dye the webbing because this may weaken it.

#### *Interior Window Glass Cleaning*

If the interior glass surfaces of the vehicle become fogged (that is, covered with an oily, greasy or waxy film), they should be cleaned with glass cleaner. Follow the directions on the glass cleaner container.

##### **\* NOTICE :**

**Do not scrape or scratch the inside of the rear window. This could damage the rear window defroster grid.**



# SPECIFICATIONS

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Specifications.....8-2

## SPECIFICATIONS

### SPECIFICATIONS

The specifications given here are for general information only. Please check with an Authorized Kia Dealer for more precise and more up-to-date information.

#### DIMENSIONS

Unit: mm

Item	4Door Sedan
Overall length	4720
Overall width	1815
Overall height	1410
Front tread	1540
Rear tread	1520
Wheelbase	2700

#### AIR CONDITIONER

Refrigerant complies with SAE J639	R134a
Maximum operating charge	680±25g(23~25oz.)

#### WEIGHTS

Unit: kg

Item	4 Door Sedan								
	Engine	2,000cc		2,400cc		2,500cc		2,700cc	
Axle		MT	AT	MT	AT	MT	AT	MT	AT
General	GVWR	1860	1870	-	-	1870	1880	-	-
	Curb Weight	1485	1495	-	-	1495	1505	-	-
Europe	GVWR	1985	1985	-	-	2000	2000	-	-
	Curb Weight	1403~1483	1415~1486	-	-	1412~1489	1425~1502	-	-
Australia	GVWR	-	-	1984	1992	-	-	1968	1983
	Curb Weight	-	-	1470~1525	1478~1533	-	-	1454~1509	1469~1524

## SPECIFICATIONS

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### LIGHT BULBS

Light Bulb		Wattage
Front	Headlights	55
	Turn signal /position lights	21
	Fog lights(If Equipped)	55
	Side turn signal lights (*if equipped)	5
Rear	Stop and tail lights	21/5
	Turn signal lights	21
	Backup lights	16
	Fog lights (if equipped)	21
	High mounted stop lights	21
	Licence plate lights	5
Interior	Interior lights	10
	Luggage compartment light (if equipped)	5

### TYRES

Size		
Tyre	195/70 R14	205/60 R 15
Pressure	Inflation Pressure kPa (kg/cm <sup>2</sup> , psi)	
	210 (2.1, 30)	210 (2.1, 30)

### GEAR RATIO

Item	M/T				A/T			
	2000cc	2400cc	2500cc	2700cc	2000cc	2400cc	2500cc	2700cc
1st	3.455		3.231		2.842			
2nd	1.952		1.952		1.529			
3rd	1.296		1.296		1.000			
4th	0.943		0.943		0.712			
5th	0.775		0.775		-			
Reverse	3.455		3.455		2.480			

## SPECIFICATIONS

### ENGINE

Item	2000cc	2400cc	2500cc	2700cc
Bore*Stroke(mm)	85×88	86.5×100	84×75	86.7×75
Displacement(cc)	1997	2351	2493	2656
Compression Ratio	10±0.2	10±0.2	10±0.2	10±0.2
Firing order	1-3-4-2	1-3-4-2	1-2-3-4-5-6	1-2-3-4-5-6
Idle speed	800±100	800±100	700±100	700±100

Item		2000cc	2400cc	2500cc	2700cc
Engine oil		4.3	4.3	4.8	4.8
Coolant	M/T	6.3	6.3	6.9	6.9
	A/T	6.5	6.5	7.1	7.1
Transaxle oil	M/T	2.1	2.1	2.1	2.1
	A/T	7.8	7.8	7.8	7.8
Fuel tank		65			

### ELECTRICAL SYSTEM

Item		2000cc	2400cc	2500cc	2700cc
Battery		MF 55AH or MF 68AH	MF 68AH	MF 55AH or MF 68AH	MF 68AH
Alternator		13.5V-95A/13.5V-110A (if equipped)			
Starter	M/T	12V-1.2KW	12V-1.2KW	12V-1.2KW	12V-1.2KW
	A/T	12V-1.2KW	12V-1.2KW	12V-1.2KW	12V-1.2KW
Spark Plug	Gap(mm)	1.0~1.1 (0.7~0.8)	1.0~1.1	1.0~1.1 (0.7~0.8)	1.0~1.1
	Type	BPR6ES-11 RN9YC4 (BPR6ES) (RN9YC)	PGR5C-11 RN10PYP4	PFR5N-11 RC10PYPB4 (BKR5ES)	PFR5N-11

### CAPACITIES

(Unit : Litre)

M/T : Manual Transaxle

A/T : Automatic Transaxle

\*Spark Plug Gap and Type:Unleaded (Leaded)

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