

## ***Kia, THE COMPANY***

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Thank you for becoming the owner of a new Kia vehicle.

As a global car manufacturer focused on building high-quality, value for money prices, Kia Motors is dedicated to providing you with a customer service experience that exceeds your expectations.

At all of our Kia dealerships you will be treated with warmth, hospitality and professionalism by people who care based on our **“Family-like Care”** promise.

All information contained in this Owner’s Manual is accurate at the time of publication. However, Kia reserves the right to make changes at any time so that our policy of continual product improvement can be carried out.

This manual applies to all models of this vehicle and includes descriptions and explanations of optional as well as standard equipment. As a result, you may encounter material in this manual that is not applicable to your specific Kia vehicle.

***Enjoy your vehicle and Kia’s “Family-like Care” experience!***

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## **FOREWORD**

Thank you for choosing a Kia vehicle.

This manual will familiarize you with operational, maintenance and safety information about your new vehicle. It is supplemented by a Warranty and Maintenance book that provides important information on all warranties regarding your vehicle. Kia urges 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, some of the equipment described in this manual, along with the various illustrations, may not be applicable to your particular vehicle.

The information and specifications provided in this manual were accurate at the time of printing. Kia 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 authorized Kia dealer.

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

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Printed in Korea



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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 recommend that you read the entire manual. In order to minimize the chance of death or injury, you must read the WARNING and CAUTION sections in the manual.

Illustrations complement the words in this manual to best explain how to enjoy your vehicle. By reading your manual, you learn about features, important safety information, and driving tips under various road conditions.

The general layout of the manual is provided in the Table of Contents. Use the index when looking for a specific area or subject; it has an alphabetical listing of all information in your manual.

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

You will find various WARNINGS, CAUTIONs, and NOTICEs in this manual. These WARNINGS were prepared to enhance your personal safety. 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 harm, serious bodily injury or death could result if the warning is ignored.**

#### **CAUTION**

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

#### **\* NOTICE**

**A NOTICE indicates interesting or helpful information is being provided.**

## FUEL REQUIREMENTS

### Gasoline engine

#### Unleaded

##### For Europe

For the optimal vehicle performance, we recommend you to use unleaded gasoline with an octane rating of RON (Research Octane Number) 95 / AKI (Anti Knock Index) 91 or higher.

You may use unleaded gasoline with an octane rating of RON 91~94 / AKI 87~90 but it may result in slight performance reduction of the vehicle. (Do not use methanol blended fuels.)

##### Except Europe

Your new Kia vehicle is designed to use only unleaded fuel having an Octane Rating of RON (Research Octane Number) 91 / AKI (Anti-Knock Index) 87 or higher. (Do not use methanol blended fuels.)

Your new vehicle is designed to obtain maximum performance with UNLEADED FUEL, as well as minimize exhaust emissions and spark plug fouling.

#### CAUTION

**NEVER USE LEADED FUEL. The use of leaded fuel is detrimental to the catalytic converter and will damage the engine control system's oxygen sensor and affect emission control.**

**Never add any fuel system cleaning agents to the fuel tank other than what has been specified. (We recommend that you consult an authorized Kia dealer for details.)**

#### WARNING

- Do not "top off" after the nozzle automatically shuts off when refueling.
- Always check that the fuel cap is installed securely to prevent fuel spillage in the event of an accident.

#### Leaded (if equipped)

For some countries, your vehicle is designed to use leaded gasoline. When you are going to use leaded gasoline, we recommend that you ask an authorized Kia dealer whether leaded gasoline in your vehicle is available or not.

Octane Rating of leaded gasoline is same with unleaded one.

### ***Gasoline containing alcohol and methanol***

Gasohol, a mixture of gasoline and ethanol (also known as grain alcohol), and gasoline or gasohol containing methanol (also known as wood alcohol) are being marketed along with or instead of leaded or unleaded gasoline.

Do not use gasohol containing more than 10% ethanol, and do not use gasoline or gasohol containing any methanol. Either of these fuels may cause drivability problems and damage to the fuel system, engine control system and emission control system.

Discontinue using gasohol of any kind if drivability problems occur.

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

1. Gasohol containing more than 10% ethanol.
2. Gasoline or gasohol containing methanol.
3. Leaded fuel or leaded gasohol.



### **CAUTION**

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

### ***Other fuels***

Using fuels such as

- Silicone (Si) contained fuel,
- MMT (Manganese, Mn) contained fuel,
- Ferrocene (Fe) contained fuel, and
- Other metallic additives contained fuels,

may cause vehicle and engine damage or cause plugging, misfiring, poor acceleration, engine stalling, catalyst melting, abnormal corrosion, life cycle reduction, etc.

Also, the Malfunction Indicator Lamp (MIL) may illuminate.

### **\* NOTICE**

**Damage to the fuel system or performance problem caused by the use of these fuels may not be covered by your New Vehicle Limited Warranty.**

**Use of MTBE**

Kia recommends avoiding fuels containing MTBE (Methyl Tertiary Butyl Ether) over 15.0% vol. (Oxygen Content 2.7% weight) in your vehicle. Fuel containing MTBE over 15.0% vol. (Oxygen Content 2.7% weight) may reduce vehicle performance and produce vapor lock or hard starting.

**CAUTION**

***Your New Vehicle Limited Warranty may not cover damage to the fuel system and any performance problems that are caused by the use of fuels containing methanol or fuels containing MTBE (Methyl Tertiary Butyl Ether) over 15.0% vol. (Oxygen Content 2.7% weight.)***

**Do not use methanol**

Fuels containing methanol (wood alcohol) should not be used in your vehicle. This type of fuel can reduce vehicle performance and damage components of the fuel system, engine control system and emission control system.

**Fuel Additives**

Kia recommends that you use unleaded gasoline which has an octane rating of RON (Research Octane Number) 95 / AKI (Anti Knock Index) 91 or higher (for Europe) or Octane Rating of RON (Research Octane Number) 91 / AKI (Anti-Knock Index) 87 or higher (except Europe).

For customers who do not use good quality gasolines including fuel additives regularly, and have problems starting or the engine does not run smoothly, one bottle of additives added to the fuel tank at every 15,000km (For Europe)/ 10,000km (Except Europe). Additives are available from your authorized Kia dealer along with information on how to use them. Do not mix other additives.

**Operation in foreign countries**

If you are going to drive your vehicle in another country, be sure to:

- Observe all regulations regarding registration and insurance.
- Determine that acceptable fuel is available.

### Diesel engine

#### Diesel fuel

Diesel engine must be operated only on commercially available diesel fuel that complies with EN 590 or comparable standard. (EN stands for "European Norm"). Do not use marine diesel fuel, heating oils, or non-approved fuel additives, as this will increase wear and cause damage to the engine and fuel system. The use of non-approved fuels and / or fuel additives will result in a limitation of your warranty rights.

Diesel fuel of above cetane 51 is used in your vehicle. If two types of diesel fuel are available, use summer or winter fuel properly according to the following temperature conditions.

- Above -5°C (23°F) ... Summer type diesel fuel.
- Below -5°C (23°F) ... Winter type diesel fuel.

Watch the fuel level in the tank very carefully : If the engine stops through fuel failure, the circuits must be completely purged to restart.

#### CAUTION

***Do not let any gasoline or water enter the tank. This would make it necessary to drain it out and to bleed the lines to avoid jamming the injection pump and damaging the engine.***

#### CAUTION - Diesel Fuel (if equipped with DPF)

***It is recommended to use the regulated automotive diesel fuel for diesel vehicle equipped with the DPF system.***

***If you use diesel fuel including high sulfur (more than 50 ppm sulfur) and unspecified additives, it can cause the DPF system to be damaged and white smoke can be emitted.***

### Biodiesel

Commercially supplied Diesel blends of no more than 7% biodiesel, commonly known as "B7 Diesel" may be used in your vehicle if Biodiesel meets EN 14214 or equivalent specifications. (EN stands for "European Norm"). The use of biofuels exceeding 7% made from rapeseed methyl ester (RME), fatty acid methyl ester (FAME), vegetable oil methyl ester (VME) etc. or mixing diesel exceeding 7% with biodiesel will cause increased wear or damage to the engine and fuel system. Repair or replacement of worn or damaged components due to the use of non approved fuels will not be covered by the manufactures warranty.

#### CAUTION

- ***Never use any fuel, whether diesel or B7 biodiesel or otherwise, that fails to meet the latest petroleum industry specification.***
- ***Never use any fuel additives or treatments that are not recommended or approved by the vehicle manufacturer.***

## VEHICLE HANDLING INSTRUCTIONS

As with other vehicles of this type, failure to operate this vehicle correctly may result in loss of control, an accident or vehicle rollover.

Specific design characteristics (higher ground clearance, track, etc.) give this vehicle a higher center of gravity than other types of vehicles. In other words they are not designed for cornering at the same speeds as conventional 2-wheel drive vehicles. Avoid sharp turns or abrupt maneuvers. Again, failure to operate this vehicle correctly may result in loss of control, an accident or vehicle rollover. **Be sure to read the “Reducing the risk of a rollover” driving guidelines, in chapter 6 of this manual.**

## VEHICLE BREAK-IN PROCESS

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

- Do not race the engine.
- While driving, keep your engine speed (rpm, or revolutions per minute) between 2,000 rpm and 4,000 rpm.
- Do not maintain a single speed for long periods of time, either fast or slow. Varying engine speed is needed to properly break-in the engine.
- Avoid hard stops, except in emergencies, to allow the brakes to seat properly.
- Don't tow a trailer during the first 2,000 km (1,200 miles) of operation.



## Your vehicle at a glance

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\* The actual shape may differ from the illustration.

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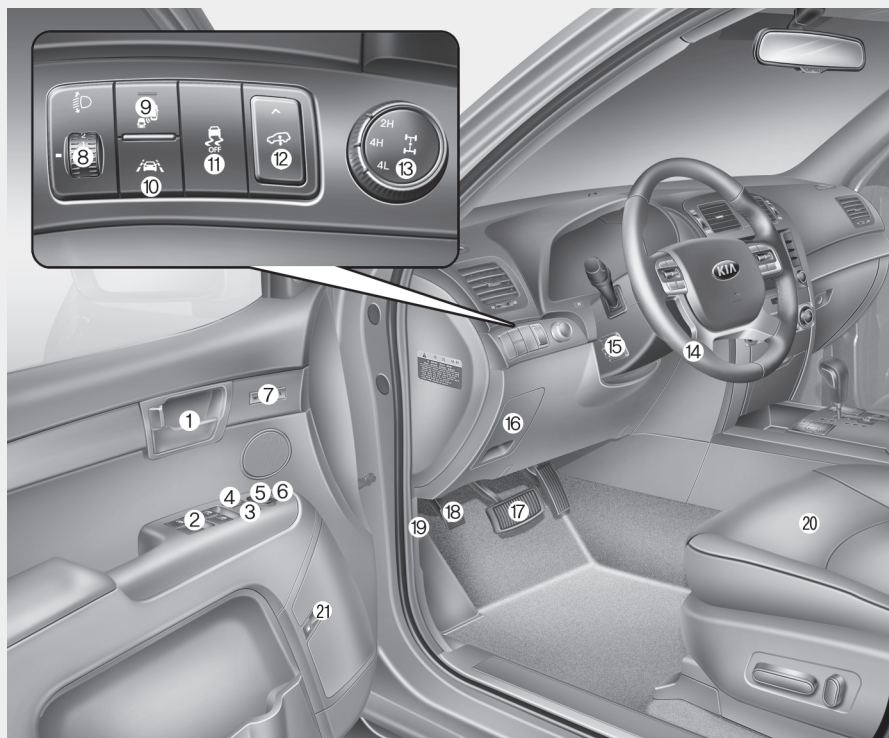


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✱ The actual shape may differ from the illustration.

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## INTERIOR OVERVIEW

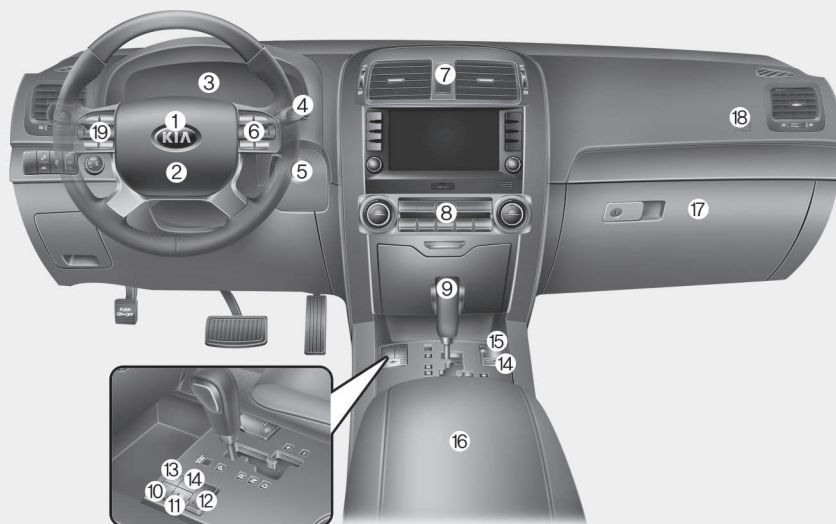


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\* The actual shape may differ from the illustration.

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## INSTRUMENT PANEL OVERVIEW



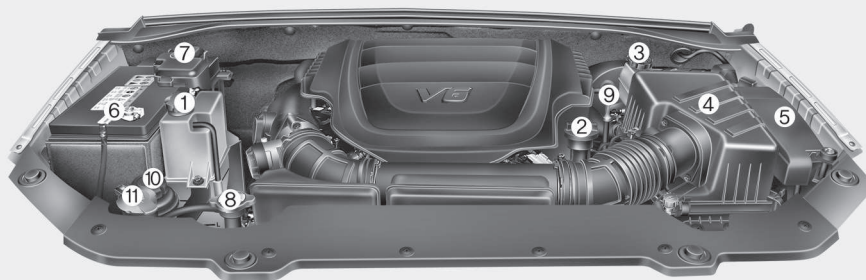
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\* The actual shape may differ from the illustration.

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## ENGINE COMPARTMENT

### ■ Gasoline Engine (Lambda 3.8L) - MPI

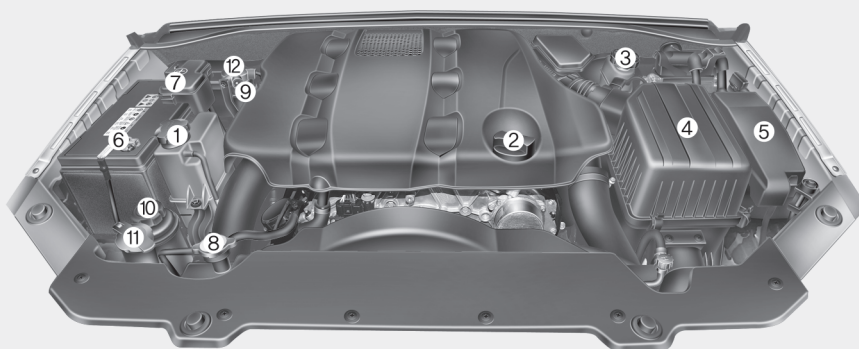


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✱ The actual engine compartment in the vehicle may differ from the illustration.

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■ Diesel Engine (3.0L)



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- 2. Engine oil filler cap.....8-22
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✱ The actual engine compartment in the vehicle may differ from the illustration.

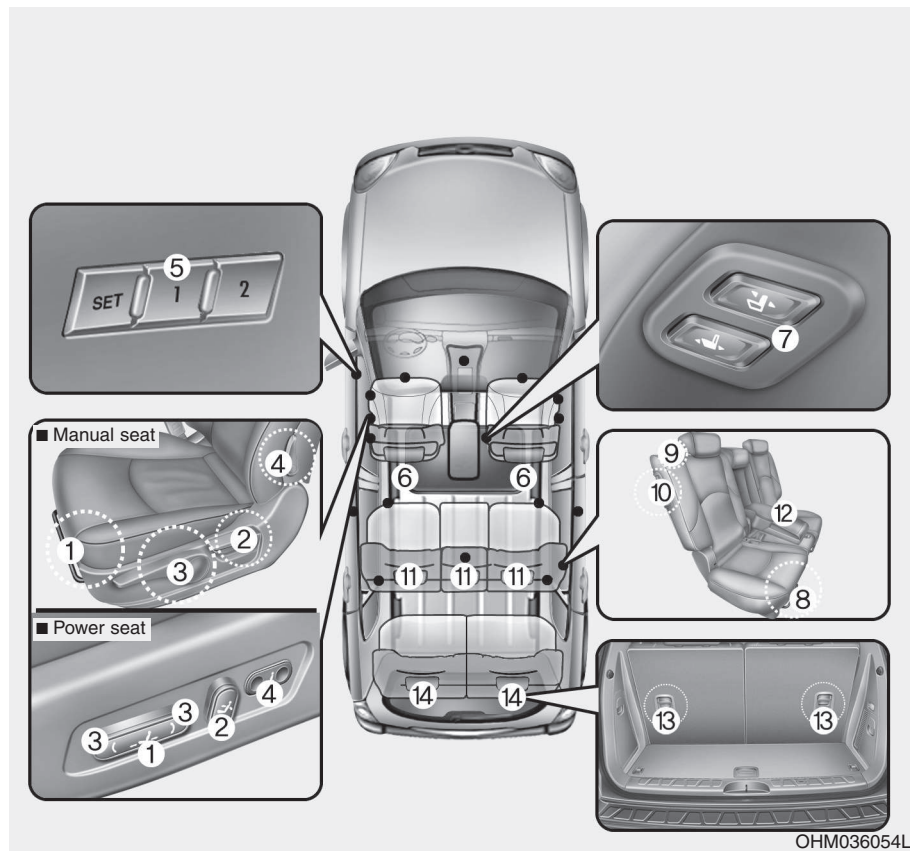
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## Safety features of your vehicle

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## SEATS



### Front seat

- (1) Forward and backward
- (2) Seatback angle
- (3) Seat cushion height (Driver's seat)
- (4) Lumbar support (Driver's seat)
- (5) Driver position memory system\*
- (6) Headrest
- (7) Walk-in switch (passenger's seat)\*

### 2<sup>nd</sup> row seat

- (8) Forward and backward
- (9) Seatback angle and folding
- (10) Walk-in seat lever\*
- (11) Headrest
- (12) Armrest

### 3<sup>rd</sup> row seat

- (13) Seatback folding
- (14) Headrest

\* : if equipped

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**⚠ WARNING - Loose objects**

Loose objects in the driver's foot area could interfere with the operation of the foot pedals, possibly causing an accident. Do not place anything under the front seats.

**⚠ WARNING - Uprighting seat**

When you return the seatback to its upright position, hold the seatback and return it slowly and be sure there are no other occupants around the seat. If the seatback is returned without being held and controlled, the back of the seat could spring forward resulting in accidental injury to a person struck by the seatback.

**⚠ WARNING - Driver responsibility for passengers**

Riding in a vehicle with the seatback reclined could lead to serious or fatal injury in an accident. If a seat is reclined during an accident, the occupant's hips may slide under the lap portion of the seat belt applying great force to the unprotected abdomen. Serious or fatal internal injuries could result. The driver must advise the passenger to keep the seatback in an upright position whenever the vehicle is in motion.

**⚠ WARNING**

Do not use a sitting cushion that reduces friction between the seat and passenger. The passenger's hips may slide under the lap portion of the seat belt during an accident or a sudden stop. Serious or fatal internal injuries could result because the seat belt cannot operate normally.

### **WARNING - Driver's seat**

- 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 allow anything to interfere with the normal position of the seatback. Storing items against a seatback or in any other way interfering with proper locking of a seatback could result in serious or fatal injury in a sudden stop or collision.
- Always drive and ride with your seatback upright and the lap portion of the seat belt snug and low across the hips. This is the best position to protect you in case of an accident.

(Continued)

### (Continued)

- In order to avoid unnecessary and perhaps severe air bag injuries, always sit as far back as possible from the steering wheel while maintaining comfortable control of the vehicle. We recommend that your chest be at least 25 cm (10 inches) away from the steering wheel.

### **WARNING - Rear seatbacks**

- The rear seatback must be securely latched. If not, passengers and objects could be thrown forward resulting in serious injury or death in the event of a sudden stop or collision.
- Luggage and other cargo should be laid flat in the cargo area. If objects are large, heavy, or must be piled, they must be secured.

Under no circumstances should cargo be piled higher than the seatbacks. Failure to follow these warnings could result in serious injury or death in the event of a sudden stop, collision or rollover.

(Continued)

**(Continued)**

- No passenger should ride in the cargo area or sit or lie on folded seatbacks while the vehicle is moving. All passengers must be properly seated in seats and restrained properly while riding.
- When resetting the seatback to the upright position, make sure it is securely latched by pushing it forward and backwards.
- To avoid the possibility of burns, do not remove the carpet in the cargo area.

Emission control devices beneath this floor generate high temperatures.

**⚠ WARNING**

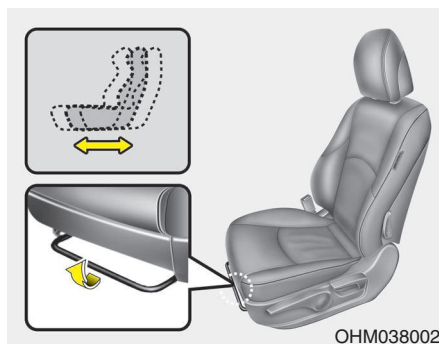
After adjusting the seat, always check that it is securely locked into place by attempting to move the seat forward or backward without using the lock release lever. Sudden or unexpected movement of the driver's seat could cause you to lose control of the vehicle resulting in an accident.

**⚠ WARNING**

- Do not adjust the seat while wearing seat belts. Moving the seat cushion forward may cause strong pressure on the abdomen.
- Use extreme caution so that hands or other objects are not caught in the seat mechanisms while the seat is moving.
- Do not put a cigarette lighter on the floor or seat. When you operate the seat, gas may gush out of the lighter and cause fire.
- If there are occupants in the rear seats, be careful while adjusting the front seat position.
- Use extreme caution when picking small objects trapped under the seats or between the seat and the center console. Your hands might be cut or injured by the sharp edges of the seat mechanism.

### Front seat adjustment - manual

#### Forward and backward

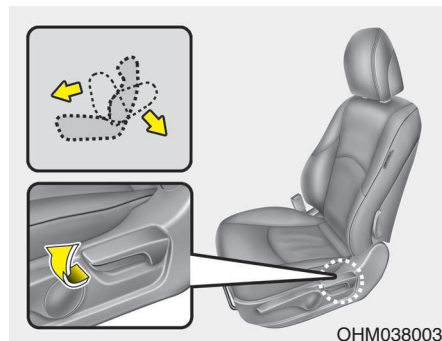


To move the seat forward or backward:

1. Pull the seat slide adjustment lever 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.

Adjust the seat before driving, and make sure the seat is locked securely by trying to move forward and backward without using the lever. If the seat moves, it is not locked properly.

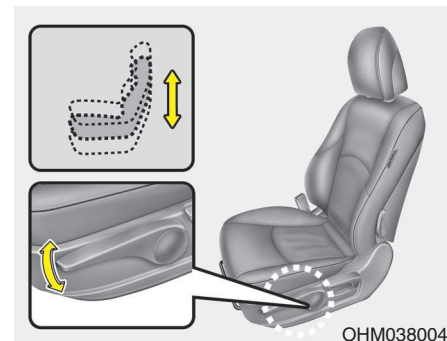
#### Seatback angle



To recline the seatback:

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

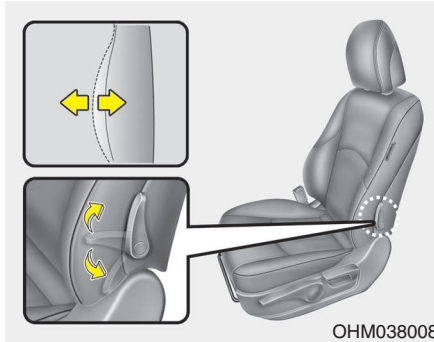
#### Seat height (for driver's seat)



To change the height of the seat, push the lever upwards or downwards.

- To lower the seat cushion, push the lever down several times.
- To raise the seat cushion, pull the lever up several times.

### Lumbar support (for driver's seat)



The lumbar support can be adjusted by moving the lever. Pivoting the lever increases or decreases lumbar support.

### Front seat adjustment - power (if equipped)

The front seat can be adjusted by using the control switches located on the outside of the seat cushion. Before driving, adjust the seat to the proper position so you can easily control the steering wheel, pedals and switches on the instrument panel.

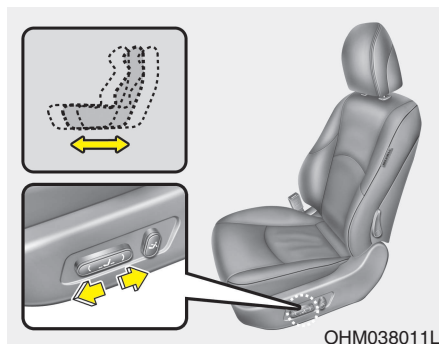
#### **⚠ WARNING**

**The power seat is operable with the ignition OFF.  
Therefore, children should never be left unattended in the vehicle.**

#### **⚠ CAUTION**

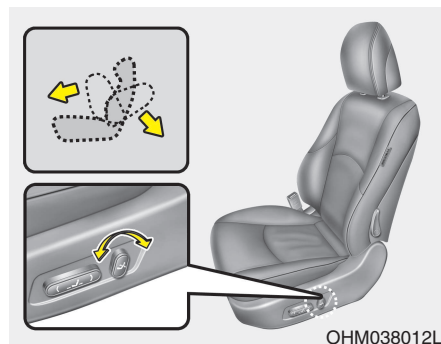
- *The power seat is driven by an electric motor. Stop operating once the adjustment is completed. Excessive operation may damage the electrical equipment.*
- *When in operation, the power seat consumes a large amount of electrical power. To prevent unnecessary charging system drain, don't adjust the power seat longer than necessary while the engine is not running.*
- *Do not operate two or more power seat control switches at the same time. Doing so may result in power seat motor or electrical component malfunction.*

### Forward and backward



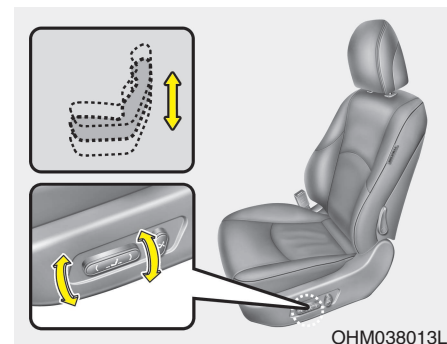
Push the control switch forward or backward to move the seat to the desired position. Release the switch once the seat reaches the desired position.

### Seatback angle



Push the control switch forward or backward to move the seatback to the desired angle. Release the switch once the seat reaches the desired position.

### Seat height (for driver's seat)



Pull the front portion of the control switch up to raise or press down to lower the front part of the seat cushion. Pull the rear portion of the control switch up to raise or press down to lower the rear part of the seat cushion. Release the switch once the seat reaches the desired position.

**Walk-in Seat (for front passenger seat, if equipped)**



The switch is located on the left side of the front passenger's seatback.

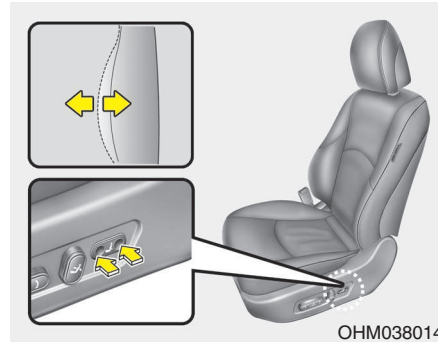
To adjust the position of front passenger's seat ;

Press the control switch forward (1) or rearward (2) to move the seat to the desired position.

Press the control switch forward (3) or rearward (4) to move the seatback to the desired angle.

Do not use these switches while the front passenger seat is occupied.

**Lumbar support (for driver's seat)**



The lumbar support can be adjusted by pressing the lumbar support switch on the side of the seat.

1. Press the front portion of the switch to increase support, or the rear portion of the switch, to decrease support.
2. Release the switch once it reaches the desired position.

**Driver position memory system (if equipped, for power seat)**



A driver position memory system is provided to store and recall the driver seat and outside rearview mirror and steering wheel position with a simple button operation. By saving the desired position into the system memory, different drivers can reposition the driver seat based upon their driving preference.

If the battery is disconnected, the position memory will be erased and the driving position should be restored in the system.



### **WARNING**

**Never attempt to operate the driver position memory system while the vehicle is moving.**

**This could result in loss of control, and an accident causing death, serious injury, or property damage.**

### *Storing positions into memory using the buttons on the door*

#### **Storing driver's seat positions**

1. Shift the shift lever into P (Park) while the engine start/stop button is ON or ignition switch ON.
2. Adjust the driver's seat and outside rearview mirror and steering wheel to position comfortable for the driver.
3. Press SET button on the control panel. The system will beep once.
4. Press one of the memory buttons (1 or 2) within 4 seconds after pressing the SET button. The system will beep twice when memory has been successfully stored.

### **Recalling positions from memory**

1. Shift the transmission shift lever into P (Park).
2. To recall the position in memory, press the desired memory button (1 or 2). The system will beep once, then the driver seat, outside rearview mirror and steering wheel will automatically adjust to the stored positions.

Adjusting one of the control switches for the driver seat, outside rearview mirror and steering wheel while the system is recalling the stored positions will cause the movement for that component to stop and move in the direction that the control switch is moved. Other components will continue to the recalled position.

**⚠ WARNING**

Use caution when recalling the adjustment memory while sitting in the vehicle. Push the seat position control switch to the desired position immediately if the seat moves too far in any direction.

***Easy access function (if equipped)***

With the shift lever in P (Park) position, the system will move the driver's seat and the steering wheel forward or rearward automatically so you can comfortably enter and exit the vehicle.

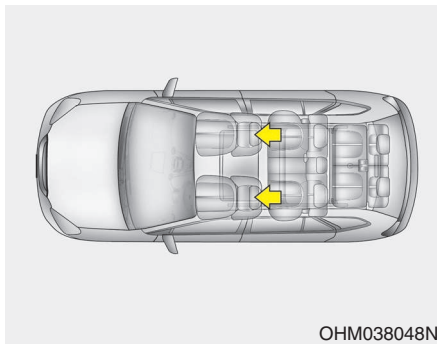
- Without smart key system
  - The steering wheel will move away from the driver and the seat will move rearward, when the ignition key is removed.
  - The steering wheel will move toward the driver and the seat will move forward, when the ignition key is inserted.
- With smart key system
  - For driver's comfort when getting on and off the vehicle, turn off the engine when the shift lever is in P (Park). Then, the driver seat will move rearward when the driver's door is opened.
  - The steering wheel will move away from the driver and the seat will move rearward, when the ENGINE START/ STOP button is in the OFF position.

- The steering wheel will move toward the driver and the seat will move forward, when the ENGINE START/ STOP button is in the ACC position.

The amount of distance the driver seat can move rearward can be set through the user settings on LCD mode of instrument cluster.

For more details, please refer to 'User settings mode' in chapter 4.

### Headrest (for front seat)



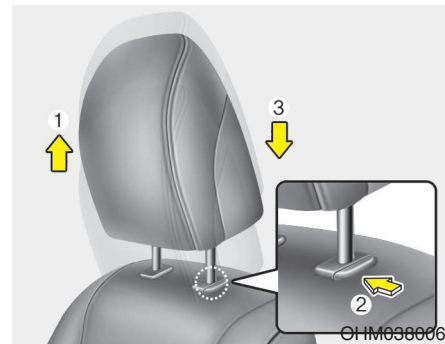
The driver's and front passenger's seats are equipped with a headrest for the occupant's safety and comfort.

The headrest not only provides comfort for the driver and front passenger, but also helps protect the head and neck in the event of a collision.

### **⚠ WARNING**

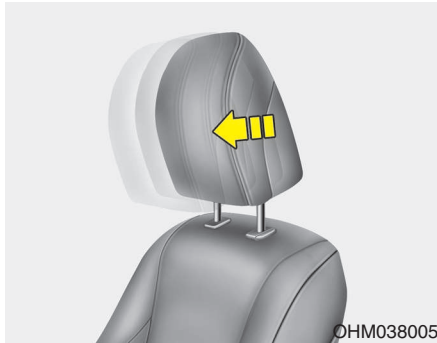
- For maximum effectiveness in case of an accident, the headrest should be adjusted so the middle of the headrest is at the same height of the center of gravity of an occupant's head. Generally, the center of gravity of most people's head is similar with the height of the top of their eyes. Also, adjust the headrest as close to your head as possible. For this reason, **the use of a cushion that holds the body away from the seat-back is not recommended.**
- **Do not operate the vehicle with the headrests removed. Severe injury to the occupants may occur in the event of an accident. Headrests may provide protection against neck injuries when properly adjusted.**
- **Do not adjust the headrest position of the driver's seat while the vehicle is in motion.**

### *Adjusting the height up and down*



To raise the headrest, pull it up to the desired position (1). To lower the headrest, push and hold the release button (2) and lower the headrest to the desired position (3).

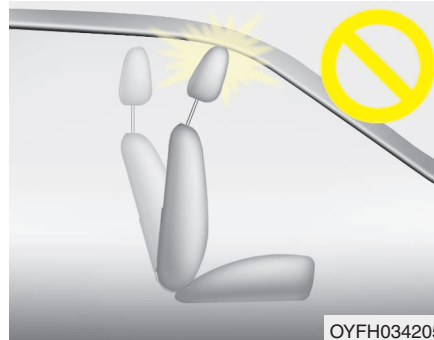
### Forward and backward adjustment (if equipped)



The headrest may be adjusted forward to 3 different positions by pulling the headrest forward to the desired detent.

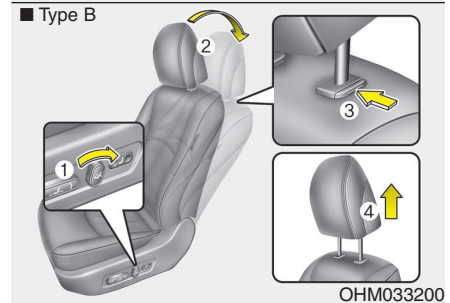
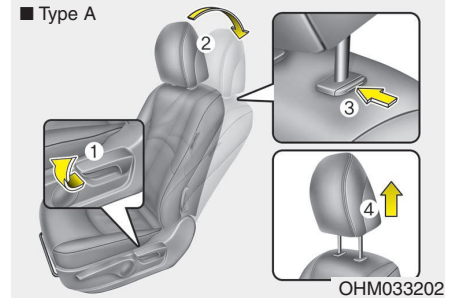
To adjust the headrest to its furthest backwards position, pull the headrest fully forward to the farthest position and release it.

Adjust the headrest so that it properly supports the head and neck.



### CAUTION

***If you recline the seatback towards the front with the headrest and seat cushion raised, the headrest may come in contact with the sunvisor or other parts of the vehicle.***



### Removal/Reinstall

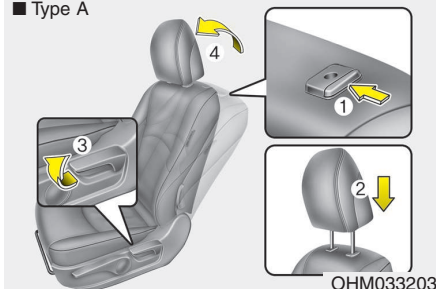
To remove the headrest:

1. Recline the seatback (2) with the recline lever or switch (1).
2. Raise headrest as far as it can go.
3. Press the headrest release button (3) while pulling the headrest up (4).

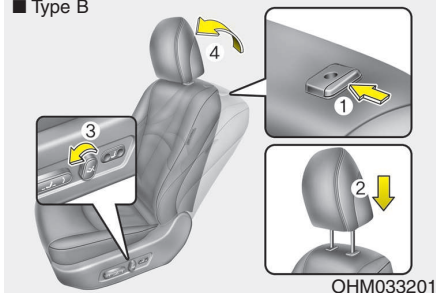
### **⚠ WARNING**

**NEVER** allow anyone to ride in a seat with the headrest removed.

#### ■ Type A



#### ■ Type B

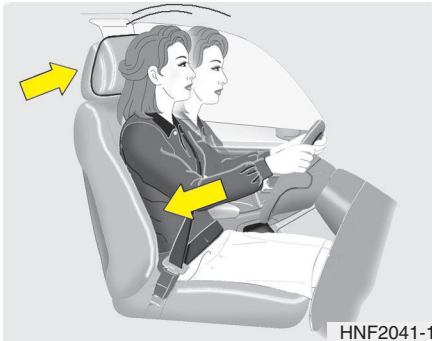


### **⚠ WARNING**

**Always** make sure the headrest locks into position after reinstalling and adjusting it properly.

To reinstall the headrest:

1. Put the headrest poles (2) into the holes while pressing the release button (1).
2. Recline the seatback(4) with the recline lever or switch (3).
3. Adjust the headrest to the appropriate height.



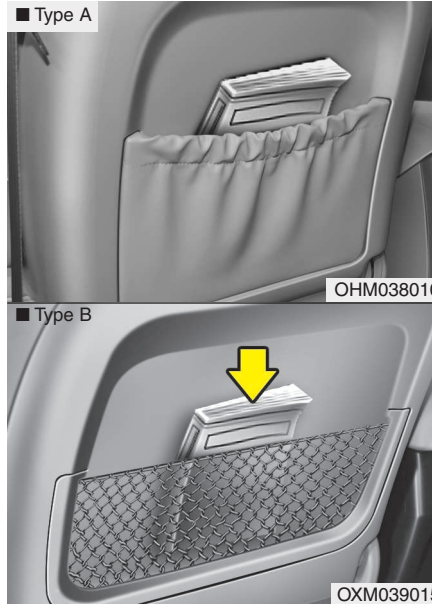
#### Active headrest (if equipped)

The active headrest is designed to move forward and upward during a rear impact. This helps prevent the driver's and front passenger's heads from moving backward and thus helps minimize neck injuries.

#### **⚠ WARNING**

A gap between the seat and the headrest release button may appear when seating on the seat or when you push or pull the seat. Be careful not to get your finger, etc. caught in the gap.

#### Seatback pocket



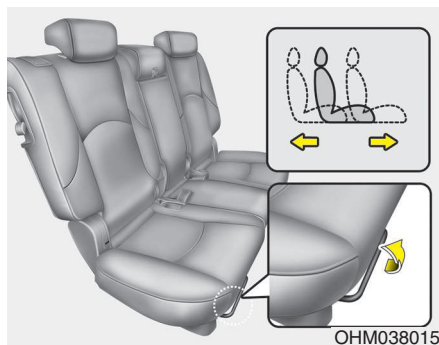
The seatback pocket is provided on the back of the front passenger's and driver's seatbacks.

#### **⚠ WARNING - Seatback pockets**

Do not put heavy or sharp objects in the seatback pockets. In an accident they could come loose from the pocket and injure vehicle occupants.

### Rear seat adjustment

#### Forward and backward (2nd row seat)



To move the seat forward or backward:

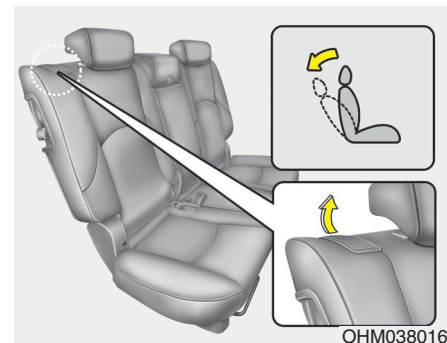
1. Pull the seat slide adjustment lever up and hold it.
2. Slide the seat to the position you desire.
3. Release the lever and make sure the seat is locked in place.

Adjust the seat before driving, and make sure the seat is locked securely by trying to move forward and backward without using the lever. If the seat moves, it is not locked properly.

#### **⚠ WARNING**

**Do not put your hands underneath the seat while adjusting it.**

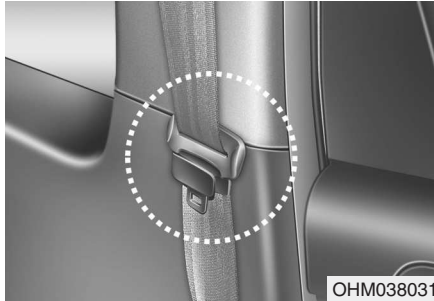
### Seatback angle (2nd row seat)



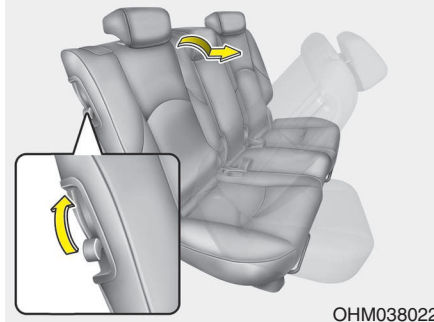
To recline the seatback:

1. Pull up the seatback recline lever.
2. Hold the lever and adjust the seatback of the seat to the position you desire.
3. Release the lever and make sure the seatback is locked in place. (The lever **MUST** return to its original position for the seatback to lock.)

### Walk-in seat (2nd row seat)



OHM038031



OHM038022

To get in or out of the 3rd row seat:

1. Routing the seat belt webbing through the rear seat belt guide clip. After inserting the seat belt, tighten the belt webbing by pulling it up.

2. Pull up the walk-in lever on the 2nd row seatback.

3. The 2nd row seatback will fold and the seat will slide forward.

Move the seat to the farthest forward position.

After getting in or out, slide the 2nd row seat to the farthest rearward position and pull the seatback firmly backward until it clicks into place. Make sure that the seat is locked in place.

### ⚠ WARNING

- Never attempt to adjust while the vehicle is moving or the 2nd row seat is occupied as the seat may suddenly move and cause the passenger on the seat to be injured.
- Do not put your hands underneath the seat while adjusting it.

### Folding the rear seat

The rear seatbacks can be folded to facilitate carrying long items or to increase the luggage capacity of the vehicle.

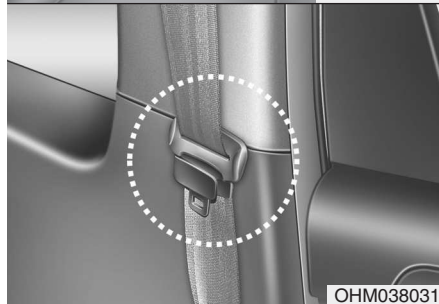
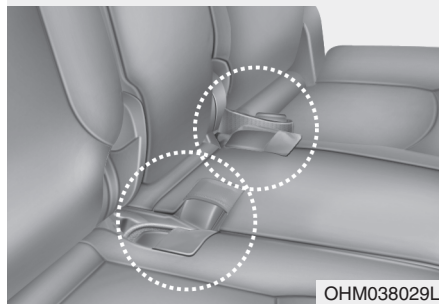
### ⚠ WARNING

The purpose of the fold-down rear seatbacks is to allow you to carry longer objects that could not be accommodated in the cargo area.

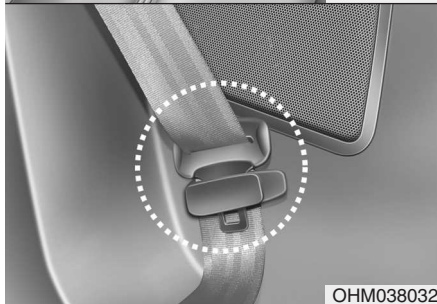
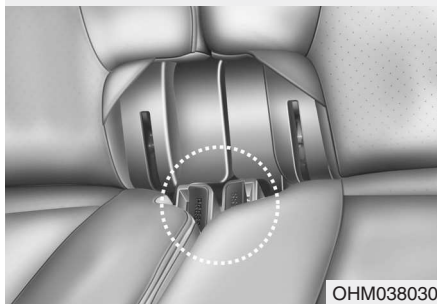
Never allow passengers to sit on top of the folded down seatback while the vehicle is moving. This is not a proper seating position and no seat belts are available for use. This could result in serious injury or death in case of an accident or sudden stop. Objects carried on the folded down seatback should not extend higher than the top of the front seatbacks. This could allow cargo to slide forward and cause injury or damage during sudden stops.



■ 2nd row seat



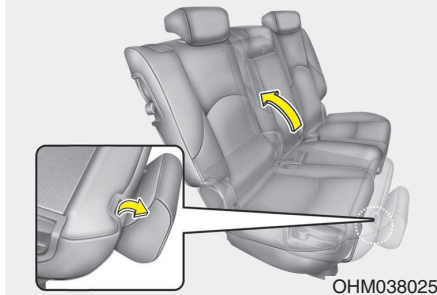
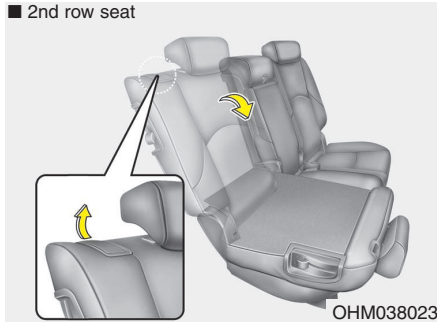
■ 3rd row seat



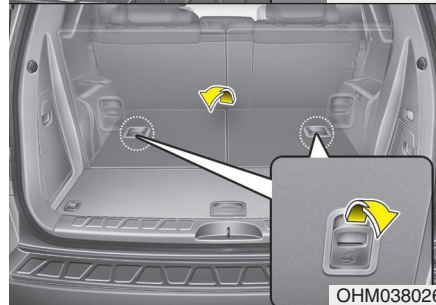
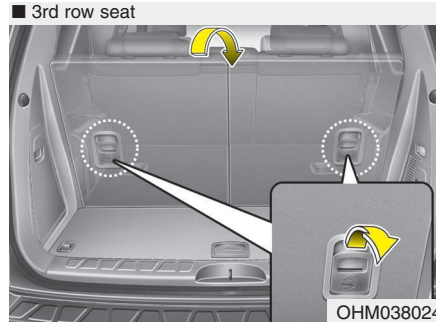
### To fold down the rear seatback

1. Insert the rear seat belt buckle in the pocket between the rear seatback and cushion, and insert the rear seat belt webbing in the guide to prevent the seat belt from being damaged.
2. Set the front (or 2nd row) seatback to the upright position and if necessary, slide the front (or 2nd row) seat forward.
3. Lower the rear headrests to the lowest position.

■ 2nd row seat



■ 3rd row seat

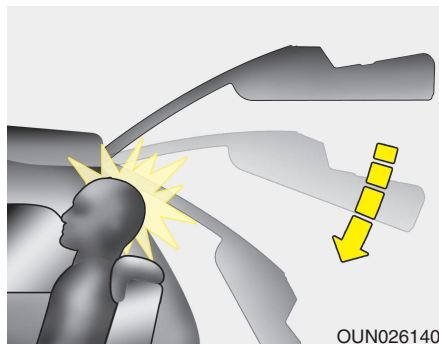


4. Pull on the seatback folding lever, then fold the seat toward the front of the vehicle. When you return the seatback to its upright position, always be sure it has locked into position by pushing on the top of the seatback.
5. To use the rear seat, lift and pull the seatback backward by pulling on the folding lever.  
Pull the seatback firmly until it clicks into place.  
Make sure the seatback is locked in place.
6. Return the rear seat belt to the proper position.

### **⚠ WARNING**

When you return the rear seatback to its upright position after being folded down:

Be careful not to damage the seat belt webbing or buckle. Do not allow the seat belt webbing or buckle to get caught or pinched in the rear seat. Ensure that the seatback is completely locked into its upright position by pushing on the top of the seatback. Otherwise, in an accident or sudden stop, the seat could fold down and allow cargo to enter the passenger compartment, which could result in serious injury or death.



### **⚠ WARNING - 3rd row seat**

The headrest on the 3rd row seat should be adjusted so the middle of the headrest is at the same height of the top of the occupant's eyes.

If the tailgate is pushed down to close it when a passenger's head is not against a properly adjusted headrest or a tall person is seated, the tailgate may hit the occupant's head, which could cause injury.

### **⚠ WARNING - Uprighting seat**

When you return the seatback to its upright position, hold the seatback and return it slowly. If the seatback is returned without holding it, the back of the seat could spring forward resulting in injury caused by being struck by the seatback.

**⚠ CAUTION - Damaging rear seat belt buckles**

*When you fold the rear (2nd and/or 3rd row) seatback, insert the buckle in the pocket between the rear seatback and cushion. Doing so can prevent the buckle from being damaged by the rear seatback.*

**⚠ CAUTION - Rear seat belts**

*When returning the rear (2nd and/or 3rd row) seatbacks to the upright position, remember to return the rear shoulder belts to their proper position. Routing the seat belt webbing through the rear seat belt guides will help keep the belts from being trapped behind or under the seats.*

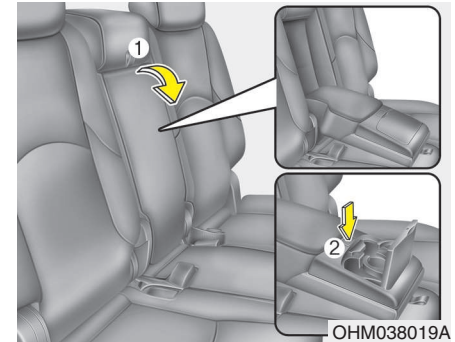
**⚠ WARNING - Cargo**

Cargo should always be secured to prevent it from being thrown about the vehicle in a collision and causing injury to the vehicle occupants. Do not place objects in the rear (2nd and/or 3rd row) seats, since they cannot be properly secured and may hit the front seat occupants in a collision.

**⚠ WARNING - Cargo loading**

Make sure the engine is off, the automatic transaxle is in P (Park), and the parking brake is securely applied whenever loading or unloading cargo. Failure to take these steps may allow the vehicle to move if the shift lever is inadvertently moved to another position.

**Armrest (2nd row seat)**

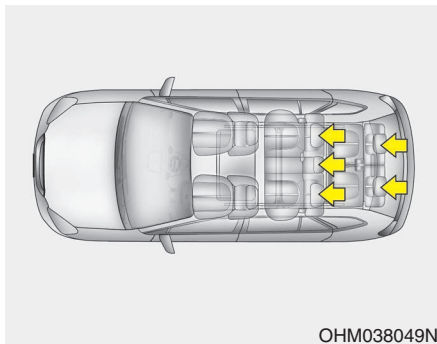


To use the armrest, pull the strap (1) forward from the seatback.

**Cup holder**

To use the cup holder, push the button (2). Close the cover after use.

### Headrest (for rear seat)



The rear seat(s) is equipped with headrests in all the seating positions for the occupant's safety and comfort.

The headrest not only provides comfort for passengers, but also helps protect the head and neck in the event of a collision.

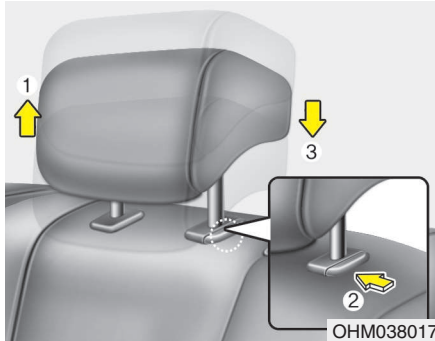
#### **⚠ WARNING**

- For maximum effectiveness in case of an accident, the headrest should be adjusted so the middle of the headrest is at the same height of the center of gravity of an occupant's head. Generally, the center of gravity of most people's head is similar with the height of the top of their eyes. Also adjust the headrest as close to your head as possible. For this reason, the use of a cushion that holds the body away from the seatback is not recommended.
- Do not operate the vehicle with the headrests removed. Severe injury to an occupant may occur in the event of an accident. Headrests may provide protection against severe neck injuries when properly adjusted.

#### **⚠ CAUTION**

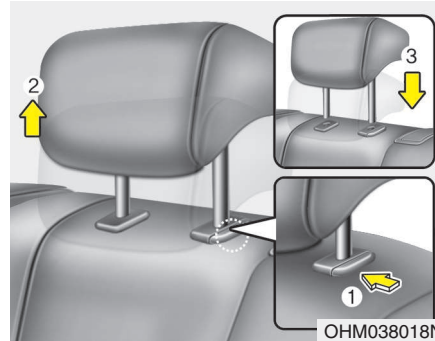
*When there is no occupant in the rear seats, adjust the height of the headrest to the lowest position. The rear seat headrest can reduce the visibility of the rear area.*

### Adjusting the height up and down



To raise the headrest, pull it up to the desired position (1). To lower the headrest, push and hold the release button (2) on the headrest support and lower the headrest to the desired position (3).

### Removal



To remove the headrest, raise it as far as it can go then press the release button (1) while pulling the headrest up (2).

To reinstall the headrest, put the headrest poles (3) into the holes while pressing the release button (1). Then adjust it to the appropriate height.

### **⚠ WARNING**

**Make sure the headrest locks in position after adjusting it to properly protect the occupants.**

## SEAT BELTS

### Seat belt restraint system

#### **WARNING**

- For maximum restraint system protection, the seat belts must always be used whenever the vehicle is moving.
- Seat belts are most effective when seatbacks are in the upright position.
- Children age 12 and under must always be properly restrained in the rear seat. Never allow children to ride in the front passenger seat. If a child over 12 must be seated in the front seat, he/she must be properly belted and the seat should be moved as far back as possible.
- Never wear the shoulder belt under your arm or behind your back. An improperly positioned shoulder belt can cause serious injuries in a crash.

(Continued)

#### (Continued)

- The shoulder belt should be positioned midway over your shoulder across your collarbone.
- Never wear a seat belt over fragile objects. If there is a sudden stop or impact, the seat belt can damage it.
- Avoid wearing twisted seat belts. A twisted belt can't do its job well. In a collision, it could even cut into you. Be sure the belt webbing is straight and not twisted.
- Be careful not to damage the belt webbing or hardware. If the belt webbing or hardware is damaged, replace it.

#### **WARNING**

Seat belts 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.

Seat belts 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.

(Continued)

**(Continued)**

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 belt should be replaced if webbing becomes frayed, contaminated or damaged. It is essential to replace the entire assembly after it has been worn in a 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.

**⚠ WARNING**

- 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.
- When you fasten the seat belt, be careful not to latch the seat belt in buckles of other seat. It's very dangerous and you may not be protected by the seat belt properly.
- Do not unfasten the seat belt and do not fasten and unfasten the seat belt repeatedly while driving. This could result in loss of control, and an accident causing death, serious injury, or property damage.

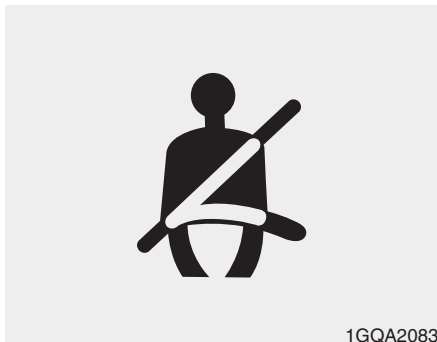
**(Continued)**

**(Continued)**

- When fastening the seat belt, make sure that the seat belt does not pass over objects that are hard or can break easily.
- Make sure there is nothing in the buckle. The seat belt may not be fastened securely.



### Seat belt warning



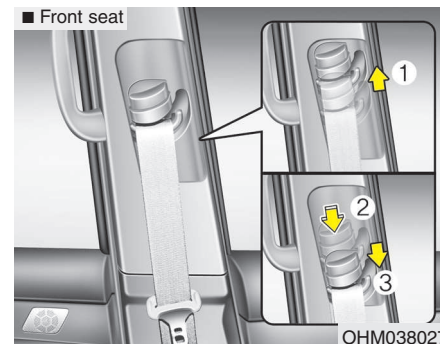
As a reminder to the driver, the seat belt warning light will illuminate for approximately 6 seconds each time you turn the ignition switch ON regardless of belt fastening.

If the driver's seat belt is not fastened when the ignition switch is turned ON or if it is disconnected after the ignition switch is turned ON, the seat belt warning light will illuminate until the belt is fastened.

If you continue not to fasten the seat belt and you drive over 9km/h, the illuminated warning light will start to blink until you drive under 6km/h.

If you continue not to fasten the seat belt and you drive over 20km/h the seat belt warning chime will sound for approximately 100 seconds and the corresponding warning light will blink.

### Lap/shoulder belt



### Height adjustment

You can adjust the height of the shoulder belt anchor to one of 4 positions for maximum comfort and safety.

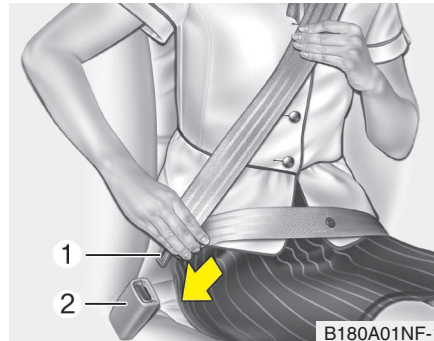
The height of the adjusting seat belt should not be too close to your neck. You will not be getting the most effective protection. The shoulder portion should be adjusted so that it lies across your chest and midway over your shoulder near the door and not your neck.

To adjust the height of the seat belt anchor, lower or raise the height adjuster into an appropriate position.

To raise the height adjuster, pull it up (1). To lower it, push it down (3) while pressing the height adjuster button (2). Release the button to lock the anchor into position. Try sliding the height adjuster to make sure that it has locked into position.

### **⚠ WARNING**

- Verify the shoulder belt anchor is locked into position at the appropriate height. Never position the shoulder belt across your neck or face. Improperly positioned seat belts can cause serious injuries in an accident.
- Failure to replace seat belts after an accident could leave you with damaged seat belts that will not provide protection in the event of another collision leading to personal injury or death. Replace your seat belts after being in an accident as soon as possible.



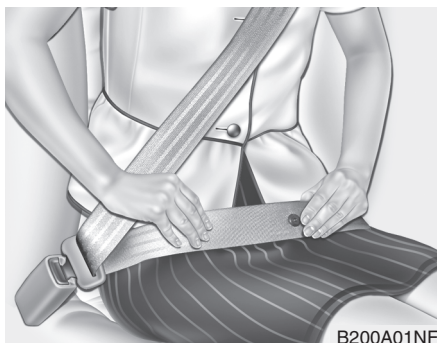
### **To fasten your seat belt:**

To fasten your seat belt, pull it out of the retractor and insert the metal tab (1) into the buckle (2). There will be an audible "click" when the tab locks into the buckle.

The seat belt automatically adjusts to the proper length only after the lap belt portion 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, however, the belt will lock into position. It will also lock if you try to lean forward too quickly.

### **\* NOTICE**

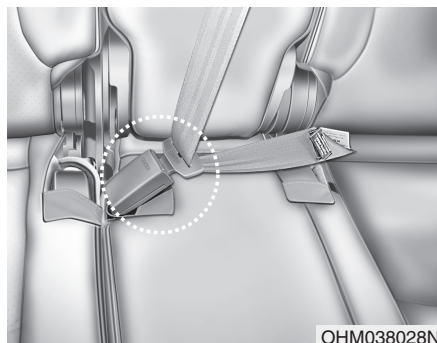
If you are not able to pull out the seat belt from the retractor, firmly pull the belt out and release it. Then you will be able to pull the belt out smoothly.



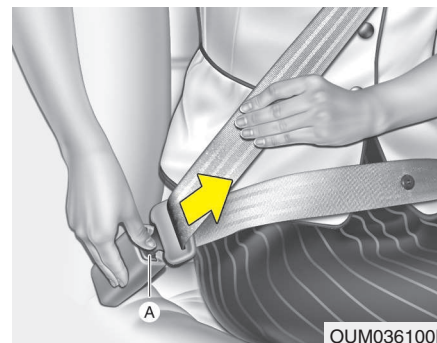
### **⚠ WARNING**

You should place the lap belt portion as low as possible and snugly across your hips, not on your waist. If the lap belt is located too high on your waist, it may increase the chance of injury in the event of a collision. Both arms should not be under or over the belt. Rather, one should be over and the other under, as shown in the illustration.

Never wear the seat belt under the arm near the door.



When using the rear center seat belt, the buckle with the “CENTER” mark must be used. (if equipped)

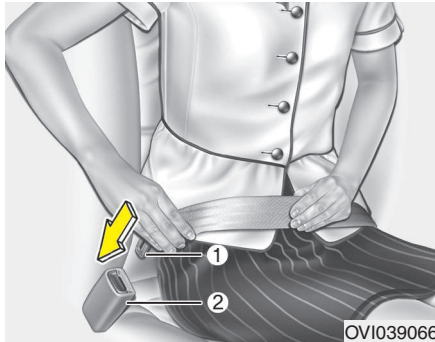


### **To release the seat belt:**

The seat belt is released by pressing the release button (A) in the locking buckle. When it is released, the belt should automatically draw back into the retractor.

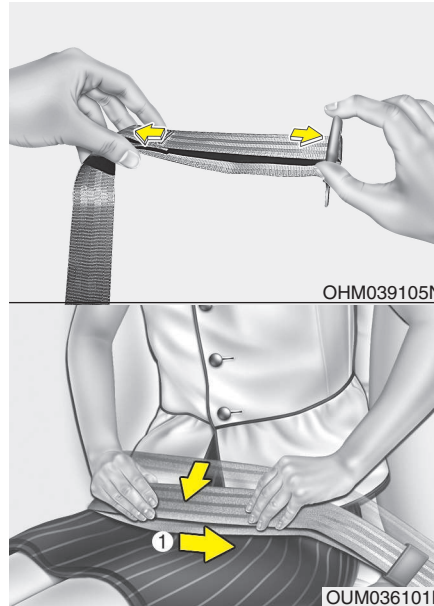
If this does not happen, check the belt to be sure it is not twisted, then try again.

### Lap belt (if equipped)

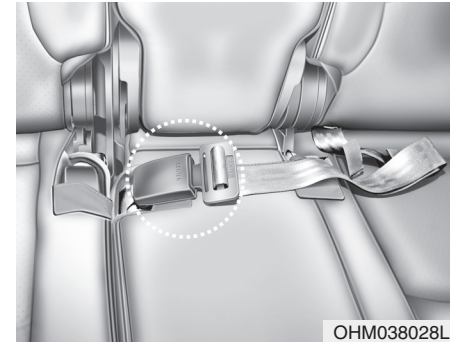


#### To fasten your seat belt:

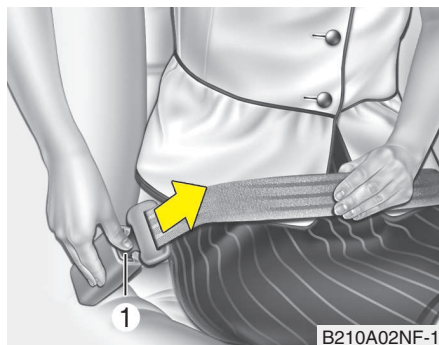
To fasten a 2-point static type belt, insert the metal tab (1) into the locking buckle (2). There will be an audible "click" when the tab locks into the buckle. Check to make sure the belt is properly locked and that the belt is not twisted.



With a 2-point static type seat belt, the length must be adjusted manually so it fits snugly around your body. Fasten the belt and pull on the loose end to tighten. The belt should be placed as low as possible on your hips (1), not on your waist. If the belt is too high, it could increase the possibility of your being injured in an accident.



When using the rear center seat belt, the buckle with the "CENTER" mark must be used.



### To release the seat belt:

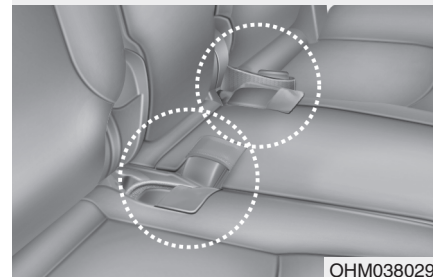
When you want to release the seat belt, press the button (1) in the locking buckle.

### **⚠ WARNING**

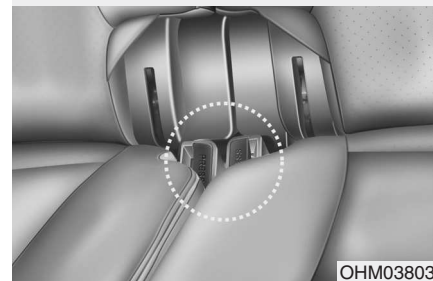
The center lap belt latching mechanism is different from those for the rear seat shoulder belts. When fastening the rear seat shoulder belts or the center lap belt, make sure they are inserted into the correct buckles to obtain maximum protection from the seat belt system and assure proper operation.

### *Stowing the rear seat belt*

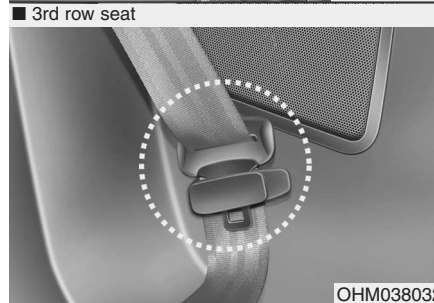
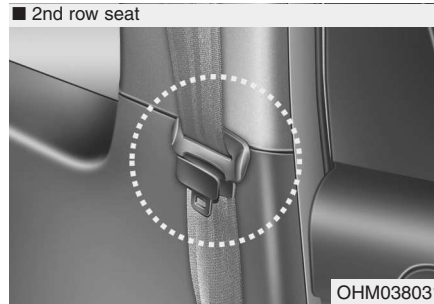
#### ■ 2nd row seat



#### ■ 3rd row seat



- The rear seat belt buckles can be stowed in the pocket between the rear seatback and cushion when not in use.
- The center seat belt can be stowed with the plate and webbing rolled in the pocket between the rear seatback and cushion.



- Routing the seat belt webbing through the rear seat belt guides will help keep the belts from being trapped behind or under the seats. After inserting the seat belt, tighten the belt webbing by pulling it up.



### CAUTION

*When using the seat belt, use it after taking it out of the guides.*

*If you pull the seat belt when it is stored in the guides, it may damage the guides and/or belt webbing.*

### Pre-tensioner seat belt



Your vehicle is equipped with driver's and front passenger's pre-tensioner seat belts (retractor pretensioner). The pre-tensioner seat belts can be activated, where the frontal collision is severe enough, together with the air bags.

When the vehicle stops suddenly, or if the occupant tries to lean forward too quickly, the seat belt retractor will lock into position. In certain frontal collisions, the pre-tensioner will activate and pull the seat belt into tighter contact against the occupant's body.

#### - Retractor Pretensioner

The purpose of the retractor pre-tensioner is to make sure that the shoulder belts fit in tightly against the occupant's upper body in certain frontal collisions.

If the system senses excessive tension on the driver or passenger's seat belt when the pre-tensioner system activates, the load limiter inside the retractor pre-tensioner will release some of the pressure on the affected seat belt. (if equipped)

#### \* NOTICE - if equipped with rollover sensor

The pre-tensioner will activate not only in a frontal collision but also in a side collision or rollover, if the vehicle is equipped with a side or curtain air bag.

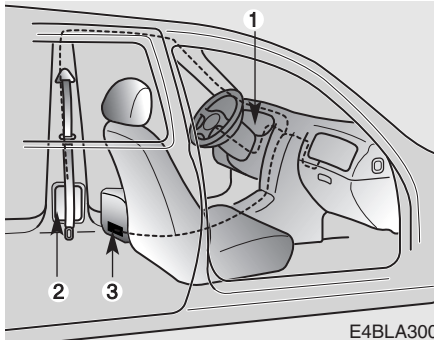
#### \* NOTICE - without rollover sensor

The pre-tensioner will activate not only in a frontal collision but also in a side collision, if the vehicle is equipped with a side or curtain air bag.

#### **⚠ WARNING**

**For your safety, be sure that the belt webbing is not loose or twisted and always sit properly on your seat.**





The seat belt pre-tensioner system consists mainly of the following components. Their locations are shown in the illustration:

- (1) SRS air bag warning light
- (2) Retractor pre-tensioner assembly
- (3) SRS control module

### **⚠ WARNING**

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

- 1. The seatbelt must be worn correctly and adjusted to the proper position. Please read and follow all of the important information and precautions about your vehicle's occupant safety features – including seat belts and air bags – that are provided in this manual.**
- 2. Be sure you and your passengers always wear seat belts properly.**

### **\* NOTICE**

- 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. These are normal operating conditions and are not hazardous.
- Although it is harmless, the fine dust may cause skin irritation and should not be breathed for prolonged periods. Wash all exposed skin areas thoroughly after an accident in which the pre-tensioner seat belts were activated.
- Because the sensor that activates the SRS air bag is connected with the pre-tensioner seat belt, the SRS air bag warning light on the instrument panel will illuminate for approximately 6 seconds after the ignition switch has been turned to the "ON" position, and then it should turn off.



 **CAUTION**

*If the pre-tensioner seat belt is not working properly, the SRS air bag warning light will illuminate even if there is no malfunction of the SRS air bag. If the SRS air bag warning light does not illuminate when the ignition key is turned to ON, or if it remains illuminated after illuminating for approximately 6 seconds, or if it illuminates while the vehicle is being driven, we recommend that the system be inspected by an authorized Kia dealer.*

 **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. We recommend that the system be inspected by an authorized Kia dealer.
- Do not attempt to service or repair the pre-tensioner seat belt system in any manner.

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- Improper handling of the pre-tensioner seat belt assemblies, and failure to heed the warnings not to 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.
- If the vehicle or pre-tensioner seat belt must be discarded, we recommend that you contact an authorized Kia dealer.

 **CAUTION**

*Body work on the front area of the vehicle may damage the pre-tensioner seat belt system. Therefore, we recommend that the system be serviced by an authorized Kia dealer.*

## Seat belt precautions

### **WARNING**

All occupants of the vehicle must wear their seat belts at all times. Seat belts and child restraints reduce the risk of serious or fatal injuries for all occupants in the event of a collision or sudden stop. Without a seat belt, occupants could be shifted too close to a deploying air bag, strike the interior structure or be thrown from the vehicle. Properly worn seat belts greatly reduce these hazards.

Always follow the precautions about seat belts, air bags and occupant seating contained in this manual.

## *Infant or small child*

You should be aware of the specific requirements in your country. Child and/or infant seats must be properly placed and installed in the rear seat. For more information about the use of these restraints, refer to “Child restraint system” in this section.

### **WARNING**

Every person in your vehicle needs to be properly restrained at all times, including infants and children. Never hold a child in your arms or lap when riding in a vehicle. The violent forces created during a crash will tear the child from your arms and throw the child against the interior. Always use a child restraint appropriate for your child's height and weight.

## **\* NOTICE**

Small children are best protected from injury in an accident when properly restrained in the rear seat by a child restraint system that meets the requirements of the Safety Standards of your country. Before buying any child restraint system, make sure that it has a label certifying that it meets Safety Standards of your country. The restraint must be appropriate for your child's height and weight. Check the label on the child restraint for this information. Refer to “Child restraint system” in this section.

### **Larger children**

Children who are too large for child restraint systems should always occupy the rear seat and use the available lap/shoulder belts. The lap portion should be fastened and snugged on the hips and as low as possible. Check if the belt fits periodically. A child's squirming could put the belt out of position. Children are given the most safety in the event of an accident when they are restrained by a proper restraint system in the rear seat. If a larger child (over age 12) must be seated in the front seat, the child should be securely restrained by the available lap/shoulder belt and the seat should be placed in the rearmost position. Children age 12 and under should be restrained securely in the rear seat. NEVER place a child age 12 and under in the front seat. NEVER place a rear facing child seat in the front seat of a vehicle.

If the shoulder belt portion slightly touches the child's neck or face, try placing the child closer to the center of the vehicle. If the shoulder belt still touches their face or neck they need to be returned to a child restraint system.

#### **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 seat belts are not properly worn and adjusted on children, there is a risk of death or serious injury.**

### **Pregnant women**

The use of a seat belt is recommended for pregnant women to lessen the chance of injury in an accident. When a seat belt is used, the lap belt portion should be placed as low and securely as possible on the hips, not across the abdomen. For specific recommendations, consult a physician.

#### **WARNING - Pregnant women**

**Pregnant women must never place the lap portion of the safety belt over the area of the abdomen where the fetus is located or above the abdomen where the belt could crush the fetus during an impact.**

### ***Injured person***

A seat belt should be used when an injured person is being transported. When this is necessary, you should consult a physician for recommendations.

### ***One person per belt***

Two people (including children) should never attempt to use a single seat belt. This could increase the severity of injuries in case of an accident.

### ***Do not lie down***

To reduce the chance of injuries in the event of an accident and to achieve maximum effectiveness of the restraint system, all passengers should be sitting up and the front and rear (2nd and/or 3rd row) seats should be in an upright position when the vehicle is moving. A seat belt cannot provide proper protection if the person is lying down in the rear seat or if the front and rear (2nd and/or 3rd row) seats are in a reclined position.

### **WARNING**

**Riding with a reclined seatback increases your chance of serious or fatal injuries in the event of a collision or sudden stop. The protection of your restraint system (seat belts and air bags) is greatly reduced by reclining your seat. Seat belts must be secured against your hips and chest to work properly. The more the seatback is reclined, the greater the chance an occupant's hips will slide under the lap belt causing serious internal injuries. Also, the shoulder belt may strike the occupant's neck. Drivers and passengers should always sit well back in their seats, properly belted, and with the seatbacks upright.**

### Care of seat belts

Seat belt systems should never be disassembled or modified. In addition, care should be taken to assure that seat belts and belt hardware are not damaged by seat hinges, doors or other abuse.

#### **WARNING**

- **When you return the rear seat-back to its upright position after the rear seatback has been folded down, be careful not to damage the seat belt webbing or buckle. Be sure that the webbing or buckle does not get caught or pinched in the rear seat. A seat belt with damaged webbing or buckle could possibly fail during a collision or sudden stop, resulting in serious injury. If the webbing or buckles are damaged, get them replaced immediately.**
- **Seatbelts can become hot in a vehicle that has been closed up in sunny weather. They could burn infants and children.**

### *Periodic inspection*

All seat belts should be inspected periodically for wear or damage of any kind. Any damaged parts should be replaced as soon as possible.

### *Keep belts clean and dry*

Seat belts should be kept clean and dry. If belts become dirty, they can be cleaned by using a mild soap solution and warm water. Bleach, dye, strong detergents or abrasives should not be used because they may damage and weaken the fabric.

### *When to replace seat belts*

Entire in-use seat belt assembly or assemblies should be replaced if the vehicle has been involved in an accident. This should be done even if no damage is visible. We recommend that you consult an authorized Kia dealer.

## CHILD RESTRAINT SYSTEM

Children riding in the vehicle should sit in 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 not in a child restraint should use one of the seat belts provided.

You should be aware of the specific requirements in your country. Child and/or infant safety seats must be properly placed and installed in the rear seat. You must use a commercially available child restraint system that meets the requirements of the Safety Standards of your country.

Child restraint systems are designed to be secured in vehicle seats by lap belts or the lap belt portion of a lap/shoulder belt, or by a tether anchor and/or ISOFIX anchors (if equipped).

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 vehicle seat and seat belts, and fits your child. Follow all the instructions provided by the manufacturer when installing the child restraint system.

### 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-side air bag 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.**

(Continued)

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- **A seat belt or child restraint system can become very hot if it is left in a closed vehicle on a sunny day, even if the outside temperature does not feel hot. 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 luggage area or fasten it with a seat belt so that it will not be thrown forward in case of a sudden stop or an accident.**
- **Children may be seriously injured or killed by an inflating air bag. All children, even those too large for child restraints, must ride in the rear seat.**

**⚠ WARNING**

To reduce the chance of serious or fatal injuries:

- Children of all ages are safer when restrained in the rear seat. A child riding in the front passenger seat can be forcefully struck by an inflating air bag resulting in serious or fatal injuries.
- Always follow the child restraint system manufacturer's instructions for installation and use of the child restraint.
- Always make sure the child seat is secured properly in the vehicle and your child is securely restrained in the child seat.
- Never hold a child in your arms or lap when riding in a vehicle. The violent forces created during a crash will tear the child from your arms and throw the child against the vehicle's interior.

(Continued)

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- Never put a seat belt over yourself and a child. During a crash, the belt could press deep into the child causing serious internal injuries.
- Never leave children unattended in a vehicle – not even for a short time. The vehicle can heat up very quickly, resulting in serious injuries to children inside. Even very young children may inadvertently cause the vehicle to move, entangle themselves in the windows, or lock themselves or others inside the vehicle.
- Never allow two children, or any two persons, to use the same seat belt.
- Children often squirm and reposition themselves improperly. Never let a child ride with the shoulder belt under their arm or behind their back. Always properly position and secure children in the rear seat.

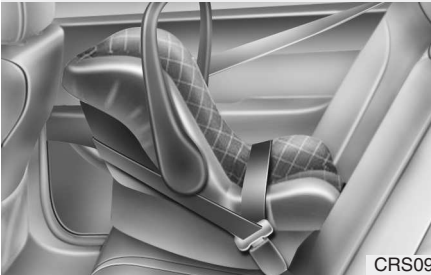
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- Never allow a child to stand-up or kneel on the seat or floor of a moving vehicle. During a collision or sudden stop, the child can be violently thrown against the vehicle's interior, resulting in serious injury.
- Never use an infant carrier or a child safety seat that "hooks" over a seatback, it may not provide adequate security in an accident.
- Seat belts can become very hot, especially when the vehicle is parked in direct sunlight. Always check the seat belt buckles before fastening them over a child.
- After an accident, we recommend the system to be checked by an authorized Kia dealer.
- If there is not enough space to place the child restraint system because of the driver's seat, install the child restraint system in the rear right seat.

## Using a child restraint system

Rearward-facing child restraint system



CRS09

Forward-facing child restraint system



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For small children and babies, the use of a child seat or infant seat is required. 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.

For safety reasons, we recommend that the child restraint system be used in the rear seats.

### **⚠ WARNING**

**Never place a rear-facing child restraint in the front passenger seat, because of the danger an inflating passenger-side air bag could impact the rear-facing child restraint and kill the child.**

### **⚠ WARNING - Child seat installation**

- A child can be seriously injured or killed in a collision if the child restraint is not properly anchored to the vehicle and the child is not properly restrained in the child restraint. Before installing the child restraint system, read the instructions supplied by the child restraint system manufacturer.

**(Continued)**

### **(Continued)**

- If the seat belt does not operate as described in this section, we recommend the system to be checked by an authorized Kia dealer.
- Failure to observe this manual's instructions regarding child restraint systems and the instructions provided with the child restraint system could increase the chance and/or severity of injury in an accident.
- If the vehicle headrest prevents proper installation of a child seat (as described in the child seat system manual), the headrest of the respective seating position shall be readjusted or entirely removed.



### ***Installing a child restraint system with a lap belt (on the center rear seat) (if equipped) - Except Europe***

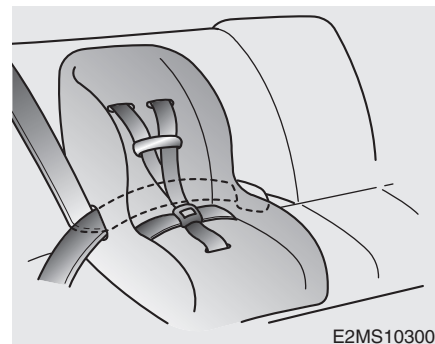


To install a child restraint system on the center rear seats, do the following:

1. Place the child restraint system on the center rear seat.
2. Extend the latch plate tongue of the lap belt.
3. Route the lap belt through the child restraint system according to the child restraint system manufacturer's instructions.

4. Buckle the seat belt and adjust the lap belt for a snug hold on the child restraint system 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.

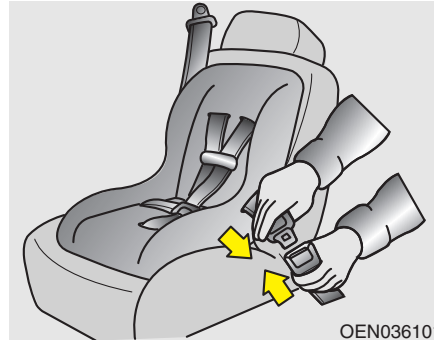
### ***Installing a child restraint system with a lap/shoulder belt***



To install a child restraint system on the seat, do the following:

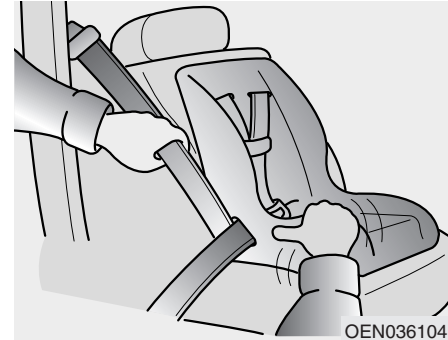
1. For stable and safe installation of child restraint system, adjust the vehicle seat (seatback angle and/or seat forward and backward) so that your child can fit in the child restraint system in a comfortable manner. To properly accommodate child restraint systems in all adjustment positions, the front passenger seat may be moved rearwards with the seat back not passing beyond the seat belt shoulder anchor.

Place the child restraint system in the seat and route the lap/shoulder belt around or through the child restraint system, following the child restraint system manufacturer's instructions. Be sure the seat belt webbing is not twisted.



2. Fasten the lap/shoulder belt latch into the buckle. Listen for the distinct "click" sound.

Position the release button so that it is easy to access in case of an emergency.



3. 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 the 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.

### ***Child seat restraint suitability for seat position using the seat belt - For Europe***

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.

| Age group                                   | Seating position |                |                |              |
|---------------------------------------------|------------------|----------------|----------------|--------------|
|                                             | Front passenger  | 2nd outboard   | 2nd center     | 3rd outboard |
| 0 : Up to 10 kg<br>(0 - 9 months)           | L1, L2           | L1, L2         | L1, L2         | U            |
| 0+ : Up to 13 kg<br>(0 - 2 years)           | L1, L2           | L1, L2         | L1, L2         | U            |
| I : 9 kg to 18 kg<br>(9 months - 4 years)   | L3, L5, L7, L8   | L3, L5, L7, L8 | L3, L5, L7, L8 | U            |
| II & III : 15 kg to 36 kg<br>(4 - 12 years) | L6               | L6             | L6             | U            |

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

L1 : Suitable for Bebe comfort ELIOS (E2 037014) approved for rearward use in this mass group

L2 : Suitable for PegPerego primo Viaggio (E13 030010) approved for rearward use in this mass group

L3 : Suitable for Bebe comfort ISEOS (E2 039014) approved for use in this mass group

L5 : Suitable for Romer Lord Plus (E1 03301136) approved for use in this mass group

L6 : Suitable for Euro Kids Star (E1 03301129) approved for use in this mass group

L7 : Suitable for BeSafe iZi COMFORT (E4 03443206) approved for use in this mass group

L8 : Suitable for MAXI-COSI Priori XP (E1 03301153/E1 0165200) approved for use in this mass group

**Child seat restraint suitability for seat position using the seat belt – Except Europe**

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.

| Mass Group                       | Seating Position |                |                       |          |
|----------------------------------|------------------|----------------|-----------------------|----------|
|                                  | Front passenger  | 2nd row        |                       | 3rd row  |
|                                  |                  | Outboard       | Centre (2 Point Belt) | Outboard |
| Group 0 :<br>(up to 10kg)        | L1, L2           | L1, L2         | X                     | U        |
| Group 0 + :<br>(up to 13kg)      | L1, L2           | L1, L2         | X                     | U        |
| Group I :<br>(9 to 18kg)         | L3, L5, L7, L8   | L3, L5, L7, L8 | X                     | U        |
| Group II & III :<br>(15 to 36kg) | L6               | L6             | X                     | U        |

U = suitable for "universal" category restraints approved for use in this mass group

L1 : Suitable for Bebe comfort ELIOS (E2 037014) approved for rearward use in this mass group

L2 : Suitable for PegPerego primo Viaggio (E13 030010) approved for rearward use in this mass group

L3 : Suitable for Bebe comfort ISEOS (E2 039014) approved for use in this mass group

L5 : Suitable for Romer Lord Plus (E1 03301136) approved for use in this mass group

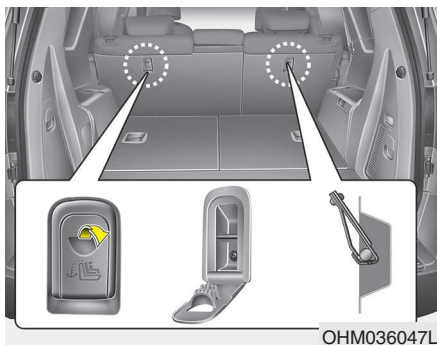
L6 : Suitable for Euro Kids Star (E1 03301129) approved for use in this mass group

L7 : Suitable for BeSafe iZi COMFORT (E4 03443206) approved for use in this mass group

L8 : Suitable for MAXI-COSI Priori XP (E1 03301153/E1 0165200) approved for use in this mass group

X = Seat position not suitable for children in this mass group.

### *Securing a child restraint seat with tether anchor system (if equipped)*



Child restraint hook holders are located on the back of the rear seatbacks.



1. Route the child restraint seat strap over the seatback.

For vehicles with adjustable headrests, route the tether strap under the headrest and between the headrest posts, otherwise route the tether strap over the top of the seatback.

2. Connect the tether strap hook to the appropriate child restraint hook holder and tighten to secure the child restraint seat.

### **⚠ WARNING**

A child can be seriously injured or killed in a collision if the child restraint is not properly anchored to the car and the child is not properly restrained in the child restraint. Always follow the child seat manufacturer's instructions for installation and use.

### **⚠ WARNING - Tether strap**

Never mount more than one child restraint to a single tether or to a single lower anchorage point. The increased load caused by multiple seats may cause the tethers or anchorage points to break, causing serious injury or death.

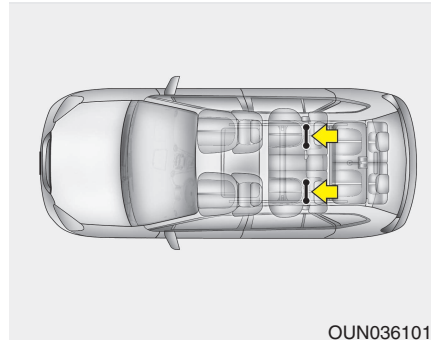
**⚠ WARNING - Child restraint check**

Check that the child restraint system is secure by pushing and pulling it in different directions. Incorrectly fitted child restraints may swing, twist, tip or separate causing death or serious injury.

**⚠ WARNING - Child restraint anchorage**

- Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts or harnesses or for attaching other items or equipment to the vehicle.
- The tether strap may not work properly if attached somewhere other than the correct tether anchor.

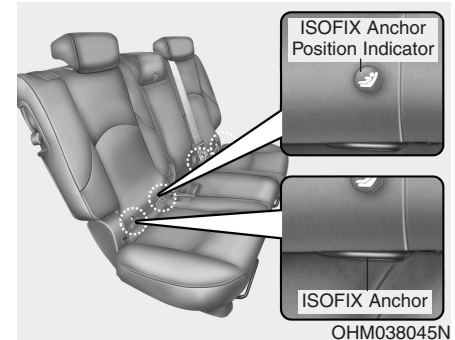
***Securing a child restraint system with “ISOFIX” system and “Tether Anchorage” system (if equipped)***



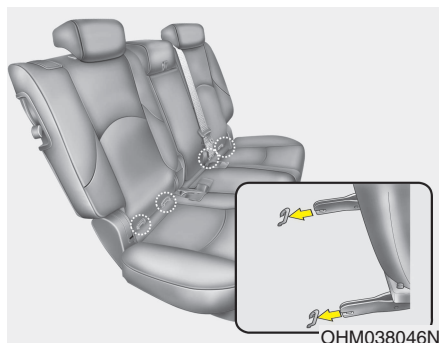
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ISOFIX is a standardised method of fitting child seats that eliminates the need to use the standard adult seat belt to secure the seat in the vehicle. This enables a much more secure and positive location with the added benefit of easier and quicker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

An ISOFIX-seat can only be installed if it has vehicle-specific approval in accordance with the requirements of ECE-R44.



There is a child restraint symbol located on the lower portion of each side of the rear seatbacks. These symbols indicate the position of the lower anchors for child restraints so equipped.



On each side of the rear seat, between the cushion and backrest, are located a pair of ISOFIX anchor-points together with a top tether mounting on the floor behind the rear seats. During the installation, the seat has to be engaged at the anchor-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 back of the rear seatbacks.

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.

### **⚠ WARNING**

**Install the child restraint seat fully rearward against the seat-back with the seatback reclined two positions from the most upright latched position.**

### **⚠ WARNING**

- When using the vehicle's "ISOFIX" system to install a child restraint system in the rear seat, all unused vehicle rear seat belt metal latch plates or tabs must be latched securely in their seat belt buckles and the seat belt webbing must be retracted behind the child restraint to prevent the child from reaching and taking hold of unretracted seat belts. Unlatched metal latch plates or tabs may allow the child to reach the unretracted seat belts which may result in strangulation and a serious injury or death to the child in the child restraint.
- Do not place anything around the lower anchors. Also make sure that the seat belt is not caught in the lower anchors.

### 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.



### CAUTION

***Do not allow the rear seat belt webbing to get scratched or pinched by the ISOFIX-seat latch and ISOFIX anchor during installation.***

2. Connect the tether strap hook to the child restraint hook holder and tighten to secure the seat. (Refer to the previous page.)

### WARNING

- Do not install a child restraint seat at the center 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.

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- 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 vehicle ISOFIX positions - For Europe

| Mass Group      | Size Class | Fixture | Vehicle ISOFIX positions |                            |                               |            |
|-----------------|------------|---------|--------------------------|----------------------------|-------------------------------|------------|
|                 |            |         | Front Passenger          | 2nd Outboard (Driver side) | 2nd Outboard (Passenger side) | 2nd Center |
| Carrycot        | F          | ISO/L1  | -                        | X                          | X                             | -          |
|                 | G          | ISO/L2  | -                        | IUF                        | X                             | -          |
| 0 : UP to 10kg  | E          | ISO/R1  | -                        | IUF                        | IUF                           | -          |
| 0+ : UP to 13kg | F          | ISO/R1  | -                        | IUF                        | IUF                           | -          |
|                 | D          | ISO/R2  | -                        | IUF                        | IUF                           | -          |
|                 | C          | ISO/R3  | -                        | IUF                        | IUF                           | -          |
| I : 9 to 18kg   | D          | ISO/R2  | -                        | IUF                        | IUF                           | -          |
|                 | C          | ISO/R3  | -                        | IUF                        | IUF                           | -          |
|                 | B          | ISO/F2  | -                        | IUF                        | IUF                           | -          |
|                 | B1         | ISO/F2X | -                        | IUF                        | IUF                           | -          |

IUF = Suitable for ISOFIX forward child restraints systems of universal category approved for use in the mass group.

X = ISOFIX position not suitable for ISOFIX child restraint system in this mass group and/or this size class.

\* Both ISO/R2 and ISO/R3 are able to be set up only at the foremost position of the passenger seat.

\* ISOFIX child restraint system size classes and fixtures

A - ISO/F3: Forward-Facing toddler CRS (height 720mm)

B - ISO/F2: Reduced-Height Forward-Facing toddler CRS (height 650mm)

B1 - ISO/F2X: Reduced-Height Second Version Back Surface Shape Forward-Facing toddler CRS (height 650mm)

C - ISO/R3: Full-Size Rearward-Facing toddler CRS

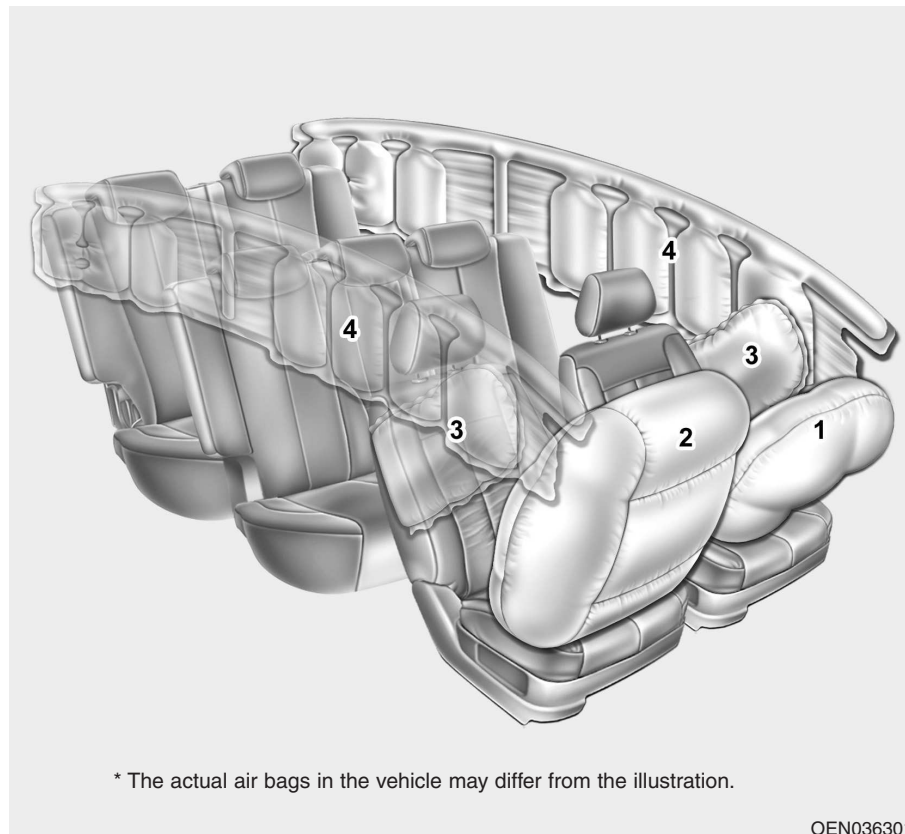
D - ISO/R2: Reduced-Size Rearward-Facing toddler CRS

E - ISO/R1: Infant-Size Rearward-Facing CRS

F - ISO/L1: Left Lateral Facing position CRS (carry-cot)

G - ISO/L2: Right Lateral Facing position CRS (carry-cot)

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



- (1) Driver's front air bag
- (2) Passenger's front air bag\*
- (3) Side air bag\*
- (4) Curtain air bag\*

\* : if equipped

\* The actual air bags in the vehicle may differ from the illustration.

OEN036301

### **WARNING**

- **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.**
- **SRS and pretensioners contain explosive chemicals.**

**If scraping a vehicle without removing SRS and pretensioners from a vehicle, it may cause fire. Before scraping a vehicle, we recommend that you contact an authorized Kia dealer.**

- **Keep the SRS parts and wirings away from water or any liquid. If the SRS components are inoperative due to exposure to water or liquids, it may cause fire or severe injury.**

### **How does the air bag system operate**

- Air bags are activated (able to inflate if necessary) only when the ignition switch is turned to the ON or START position.
- Air bags inflate instantly in the event of a serious frontal collision or side collision (if equipped with a side air bag or curtain air bag) in order to help protect the occupants from serious physical injury.

### **\* NOTICE - For Europe**

**Also, the air bags inflate instantly in the event of a rollover (if equipped with a side air bag or curtain air bag) in order to help protect the occupants from serious physical injury.**

- There is no single speed at which the air bags will inflate.

Generally, air bags are designed to inflate based upon the severity of a collision and its direction. These two factors determine whether the sensors produce an electronic deployment/ inflation signal.

- Air bag deployment depends on a number of factors including vehicle speed, angles of impact and the density and stiffness of the vehicles or objects which your vehicle hits in the collision. The determining factors are not limited to those mentioned above.

- The front air bags will completely inflate and deflate in an instant.

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. The speed of the air bag inflation is a consequence of extremely short time in which a collision occurs and the need to inflate the air bag between the occupant and the vehicle structures before the occupant impacts those structures.

This speed of inflation reduces the risk of serious or life-threatening injuries in a severe collision and is thus a necessary part of the air bag design.

However, air bag inflation can also cause injuries which can include facial abrasions, bruises and broken bones because the inflation speed also causes the air bags to expand with a great deal of force.

- **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.**

### **WARNING**

- **To avoid severe personal injury or death caused by deploying air bags in a collision, the driver should sit as far back from the steering wheel air bag as possible (at least 250 mm (10 inches) away). The front passengers should always move their seats as far back as possible and sit back in their seat.**
- **Air bags inflate instantly in the event of a collision, and passengers may be injured by the air bag expansion force if they are not in a proper position.**
- **Air bag inflation may cause injuries including facial or bodily abrasions, injuries from broken glasses or burns.**

### **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 bag inflates, you may feel substantial discomfort in breathing due to the contact of your chest with both the seat belt and the air bag, as well as from breathing the smoke and powder. **Open your doors and/or windows as soon as possible after the impact in order to reduce discomfort and prevent prolonged exposure to smoke and powder.**

Though the smoke and powder are non-toxic, they may cause irritation to the skin (eyes, nose and throat, etc). If this is the case, wash and rinse with cold water immediately and consult a doctor if the symptom persists.

## ⚠ WARNING

- When the air bags deploy, the air bag related parts in the steering wheel, instrument panel, front seats and/or in both sides of the roof rails above the front and rear doors are very hot. To prevent injury, do not touch the air bag storage area's internal components immediately after an air bag has inflated.
- Do not install or place any accessories near air bag deployment areas, such as the instrument panel, windows, pillars, and roof rails.

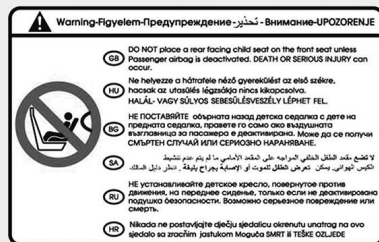
## Front passenger's air bag warning label for child restraint system

### ■ Type A



OYDESA2042

### ■ Type B



OHM036053L

## ⚠ WARNING

Never place a rear facing child restraint in the front passenger seat, unless the passenger-side air bag is deactivated. An inflating passenger-side air bag could impact the rear-facing child restraint and kill the child.

In addition, we recommend that you do not place front-facing child restraints in the front passenger's seat either. If the front passenger air bag inflates, it could cause serious or fatal injuries to the child.

**⚠ WARNING**

- **NEVER** use a rearward facing child restraint on a seat protected by an **ACTIVE AIR BAG** in front of it, **DEATH** or **SERIOUS INJURY** to the **CHILD** can occur.
- When children are seated in the rear outboard seats of a vehicle equipped with side and/or curtain air bags, be sure to install the child restraint system as far away from the door side as possible, and securely lock the child restraint system in position.

**Inflation of side and/or curtain air bags could cause serious injury or death to an infant or child.**

**Air bag warning light**



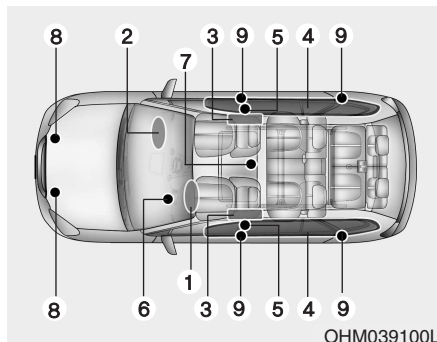
The purpose of the air bag warning light in your instrument panel is to alert you of a potential problem with your air bag - Supplemental Restraint System (SRS).

When the ignition switch is turned ON, the warning light should illuminate for approximately 6 seconds, then go off.

Have the system checked if:

- The light does not turn on briefly when you turn the ignition ON.
- The light stays on after illuminating for approximately 6 seconds.
- The light comes on while the vehicle is in motion.

### SRS components and functions



The SRS consists of the following components:

1. Driver's front air bag module
2. Passenger's front air bag module\*
3. Side impact air bag modules\*
4. Curtain air bag modules\*
5. Retractor pre-tensioner assemblies\*
6. Air bag warning light
7. SRS control module (SRSCM)/Rollover sensor\*
8. Front impact sensors
9. Side impact sensors\*

\* : if equipped

The SRSCM continually monitors all SRS components while the ignition switch is ON to determine if a crash impact is severe enough to require air bag deployment or pre-tensioner seat belt deployment.

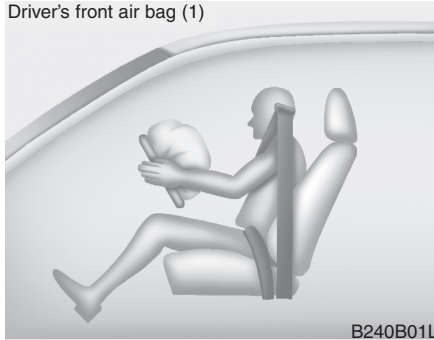
The SRS air bag warning light on the instrument panel will illuminate for about 6 seconds after the ignition switch is turned to the ON position, after which the SRS air bag warning light should go out.

### **⚠ WARNING**

**If any of the following conditions occurs, this indicates a malfunction of the SRS. We recommend that the system be inspected by an authorized Kia dealer.**

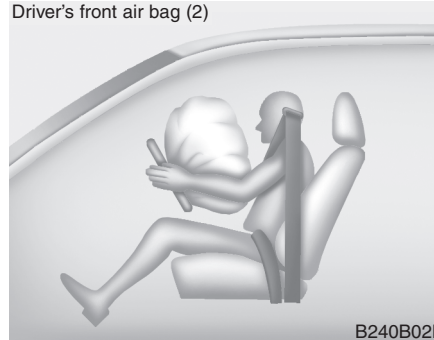
- **The light does not turn on briefly when you turn the ignition ON.**
- **The light stays on after illuminating for approximately 6 seconds.**
- **The light comes on while the vehicle is in motion.**

Driver's front air bag (1)



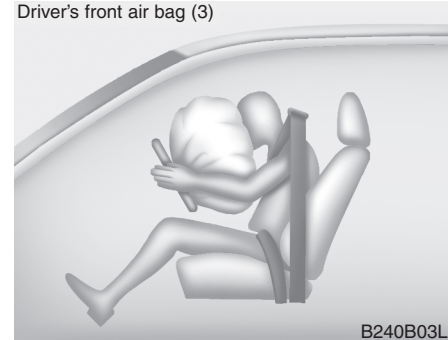
The front air bag modules are located both in the center of the steering wheel and in the front passenger's panel above the glove box. When the SRSCM detects a sufficiently severe impact to the front of the vehicle, it will automatically deploy the front air bags.

Driver's front air bag (2)



Upon deployment, tear seams molded directly into the pad covers will separate under pressure from the expansion of the air bags. Further opening of the covers then allows full inflation of the air bags.

Driver's front air bag (3)

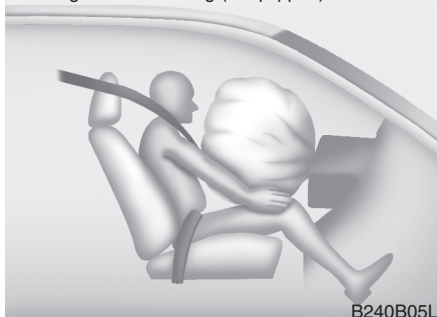


A fully inflated air bag, in combination with a properly worn seat belt, slows the driver's or the passenger's forward motion, reducing the risk of head and chest injury.

After complete inflation, the air bag immediately starts deflating, enabling the driver to maintain forward visibility and the ability to steer or operate other controls.



Passenger's front air bag (if equipped)



### **⚠ WARNING**

- Do not install or place any accessories (drink holder, cassette holder, sticker, etc.) on the front passenger's panel above the glove box in a vehicle with a passenger's air bag. Such objects may become dangerous projectiles and cause injury if the passenger's air bag inflates.
- When installing a container of liquid air freshener inside the vehicle, do not place it near the instrument cluster nor on the instrument panel surface.

(Continued)

### **(Continued)**

It may become a dangerous projectile and cause injury if the passenger's air bag inflates.

### **⚠ WARNING**

- If an air bag deploys, there may be a loud noise followed by a fine dust released in the vehicle. These conditions are normal and are not hazardous - the air bags are packed in this fine powder. The dust generated during air bag deployment may cause skin or eye irritation as well as aggravate asthma for some persons. Always wash all exposed skin areas thoroughly with cold water and mild soap after an accident in which the air bags were deployed.

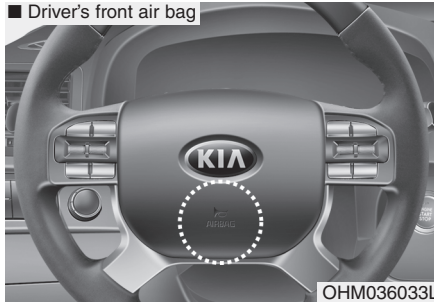
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### **(Continued)**

- The SRS can function only when the ignition key is in the ON position. If the SRS air bag warning light does not illuminate, or continuously remains on after illuminating for about 6 seconds when the ignition key is turned to the ON position, or after the engine is started, comes on while driving, the SRS is not working properly. If this occurs, we recommend that the system be inspected by an authorized Kia dealer.
- Before you replace a fuse or disconnect a battery terminal, turn the ignition switch to the LOCK position and remove the ignition key. Never remove or replace the air bag related fuse(s) when the ignition switch is in the ON position. Failure to heed this warning will cause the SRS air bag warning light to illuminate.

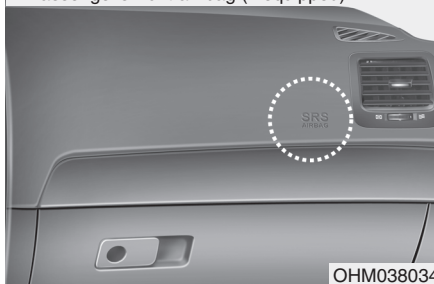
## Driver's and passenger's front air bag

■ Driver's front air bag



OHM036033L

■ Passenger's front air bag (if equipped)



OHM038034

Your vehicle is equipped with a Supplemental Restraint (Air Bag) System and lap/shoulder belts at both the driver and passenger seating positions.

The indicators of the system's presence are the letters "AIR BAG" located on the air bag pad cover on the steering wheel and the passenger's side front panel pad above the glove box.

The SRS consists of air bags installed under the pad covers in the center of the steering wheel and the passenger's side in the front panel above the glove box.

The purpose of the SRS is to provide the vehicle's driver and/or the front passenger with additional protection than that offered by the seat belt system alone in case of a frontal impact of sufficient severity.

## **⚠ WARNING**

**Always use seat belts and child restraints – every trip, every time, everyone! Air bags inflate with considerable force and in the blink of an eye. Seat belts help keep occupants in proper position to obtain maximum benefit from the air bag. Even with air bags, improperly and unbelted occupants can be severely injured when the air bag inflates. Always follow the precautions about seat belts, air bags and occupant safety contained in this manual.**

**To reduce the chance of serious or fatal injuries and receive the maximum safety benefit from your restraint system:**

- **Never place a child in any child or booster seat in the front seat.**
- **ABC – Always Buckle Children in the 2nd row seat. It is the safest place for children of any age to ride.**

**(Continued)**

### (Continued)

- Front and side air bags can injure occupants improperly positioned in the front seats.
- Move your seat as far back as practical from the front air bags, while still maintaining control of the vehicle.
- You and your passengers should never sit or lean unnecessarily close to the air bags. Improperly positioned drivers and passengers can be severely injured by inflating air bags.
- Never lean against the door or center console – always sit in an upright position.
- No objects should be placed over or near the air bag modules on the steering wheel, instrument panel or the front passenger's panel above the glove box, because any such object could cause harm if the vehicle is in a crash severe enough to cause the air bags to deploy.

(Continued)

### (Continued)

- Do not tamper with or disconnect SRS wiring or other components of the SRS system. Doing so could result in injury, due to accidental deployment of the air bags or by rendering the SRS inoperative.
- If the SRS air bag warning light remains illuminated while the vehicle is being driven, we recommend that the system be inspected by an authorized Kia dealer.
- Air bags can only be used once – we recommend that the system be replaced by an authorized Kia dealer.
- The SRS is designed to deploy the front air bags only when an impact is sufficiently severe and when the impact angle is less than 30° from the forward longitudinal axis of the vehicle. Additionally, the air bags will only deploy once. Seat belts must be worn at all times.

(Continued)

### (Continued)

- Front air bags are not intended to deploy in side-impact, rear-impact or rollover crashes. In addition, front air bags will not deploy in frontal crashes below the deployment threshold.
- A child restraint system must never be placed in the front seat. The infant or child could be severely injured or killed by an air bag deployment in case of an accident.
- Children age 12 and under must always be properly restrained in the rear seat. Never allow children to ride in the front passenger seat. If a child over 12 must be seated in the front seat, he or she must be properly belted and the seat should be moved as far back as possible.

(Continued)

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- For maximum safety protection in all types of crashes, all occupants including the driver should always wear their seat belts whether or not an air bag is also provided at their seating position to minimize the risk of severe injury or death in the event of a crash.

Do not sit or lean unnecessarily close to the air bag while the vehicle is in motion.

- Sitting improperly or out of position can result in serious or fatal injury in a crash. All occupants should sit upright with the seat back in an upright position, centered on the seat cushion with their seat belt on, legs comfortably extended and their feet on the floor until the vehicle is parked and the ignition key is removed.

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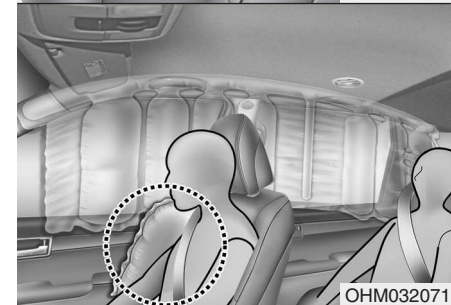
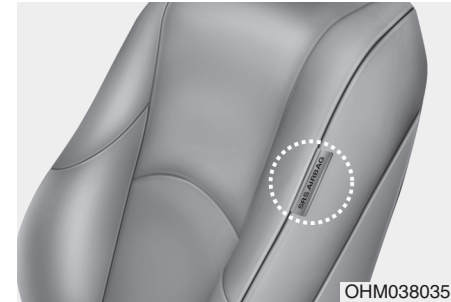
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- The SRS air bag system must deploy very rapidly to provide protection in a crash. If an occupant is out of position because of not wearing a seat belt, the air bag may forcefully contact the occupant causing serious or fatal injuries.

**⚠ WARNING - No attaching objects**

No objects (such as crash pad cover, cellular phone holder, cup holder, perfume or stickers) should be placed over or near the air bag modules on the steering wheel, instrument panel, windshield glass, and the front passenger's panel above the glove box. Such objects could cause harm if the vehicle is in a crash severe enough to cause the air bags to deploy. Do not place any objects over the air bag or between the air bag and yourself.

**Side air bag (if equipped)**



\* The actual air bags in the vehicle may differ from the illustration.

Your vehicle is equipped with a side air bag in each front seat.

The purpose of the air bag is to provide the vehicle's driver and/or the front passenger with additional protection than that offered by the seat belt alone.

The side air bags are designed to deploy only during certain side-impact collisions, depending on the crash severity, angle, speed and point of impact. However, when side deployment threshold is satisfied at front-impact, side air bags may deploy. The side air bags are not designed to deploy in all side impact or rollover situations.

The side air bags may deploy on the side of the impact or on both side.

**\* NOTICE - if equipped with rollover sensor**

- Also, both side of the side air bags deploy in certain rollover situations.
- The side air bag may deploy when the rollover sensor detects the situation as a rollover.

**⚠ WARNING**

**Do not allow the passengers to lean their heads or bodies onto doors, put their arms on the doors, stretch their arms out of the window, or place objects between the doors and passengers when they are seated on seats equipped with side and/or curtain air bags.**

**⚠ WARNING**

- The side air bag is supplemental to the driver's and the passenger's seat belt systems and is not a substitute for them. Therefore your seat belts must be worn at all times while the vehicle is in motion. The air bags deploy only in certain side impact or rollover\*1 conditions severe enough to cause significant injury to the vehicle occupants.

**(Continued)**

\*1 Only vehicle equipped with rollover sensor.

**(Continued)**

- For best protection from the side air bag system and to avoid being injured by the deploying side air bag, 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 positions.

The passenger's arms and hands should be placed on their laps.

- Do not use any accessory seat covers.
- Use of seat covers could reduce or prevent the effectiveness of the system.
- To prevent unexpected deployment of the side air bag that may result in personal injury, avoid impact to the side impact sensor when the ignition switch is on.
- If the seat or seat cover is damaged, we recommend that the system be serviced by an authorized Kia dealer.

**(Continued)**

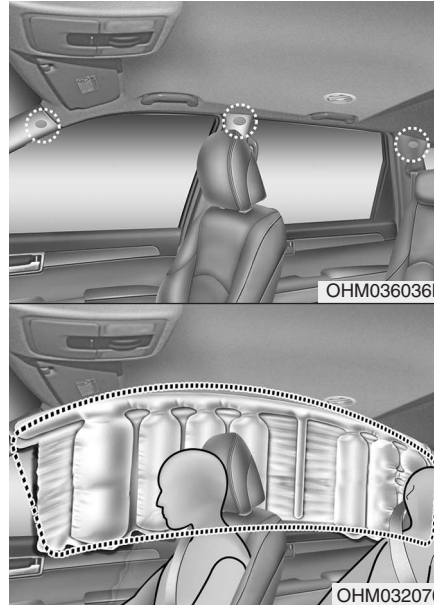
**(Continued)**

- Never place or insert any object into any small opening near side airbag labels attached to the vehicle seats. When the air bag deploys, the object may affect the deployment and result in unexpected accident or bodily harm.

**⚠ WARNING - No attaching objects**

- Do not place any objects over the air bag or between the air bag and yourself. Also, do not attach any objects around the area the air bag inflates such as the door, side door glass, front and rear pillar.
- Do not place any objects between the door and the seat. They may become dangerous projectiles if the side air bag inflates.
- Do not install any accessories on the side or near the side air bags.

**Curtain air bag (if equipped)**



\* The actual air bags in the vehicle may differ from the illustration.

Curtain air bags are located along both sides of the roof rails above the front and rear doors.

They are designed to help protect the heads of the front seat occupants and the rear outboard seat occupants in certain side impact collisions.

The curtain air bags are designed to deploy during certain side impact collisions, depending on the crash severity, angle, speed and point of impact. However, when side deployment threshold is satisfied at front-impact, side air bags may deploy.

The curtain air bags may deploy on the side of the impact or on both side.

The curtain air bags are not designed to deploy in all side impacts or rollover situations.

**\* NOTICE - if equipped with rollover sensor**

- Also, both sides of the curtain air bags deploy in certain rollover situations.
- The curtain air bag may deploy when the rollover sensor detects the situation as a rollover.

**⚠ WARNING - No attaching objects**

- Do not place any objects over the air bag. Also, do not attach any objects around the area the air bag inflates such as the door, side door glass, front and rear pillar, roof side rail.
- Do not hang hard or breakable objects on the coat hook.
- Do not hang heavy items on the coat hooks for safety reasons.

**⚠ WARNING**

- In order for side and curtain air bags to provide the best protection, front seat occupants and outboard rear occupants should sit in an upright position with the seat belts properly fastened. Importantly, children should sit in a proper child restraint system in the rear seat.
- When children are seated in the rear outboard seats, they must be seated in the proper child restraint system. Make sure to position the child restraint system as far away from the door side as possible, and secure the child restraint system in a locked position.

(Continued)

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- Do not allow the passengers to lean their heads or bodies against doors, put their arms on the doors, stretch their arms out of the window or place objects between the doors and passengers when they are seated on seats equipped with side and curtain air bags.
- Never try to open or repair any components of the side curtain air bag system. We recommend that the system be serviced by an authorized Kia dealer.

Failure to follow the above instructions can result in injury or death to the vehicle occupants in an accident.

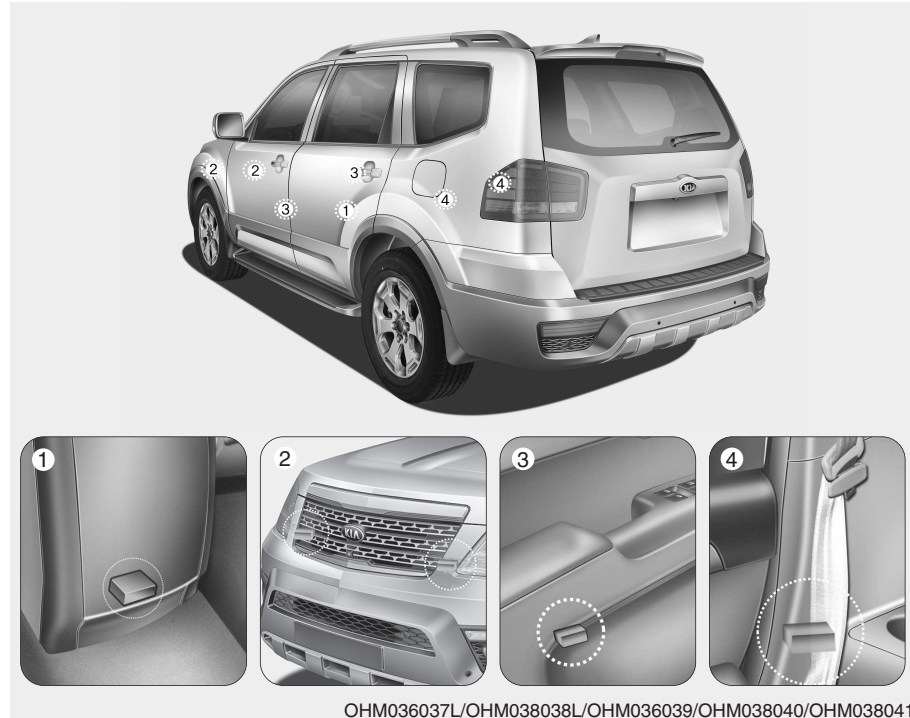


**Why didn't my air bag go off in a collision? (Inflation and non-inflation conditions of the air bag)**

There are many types of accidents in which the air bag would not be expected to provide additional protection.

These include rear impacts, second or third collisions in multiple impact accidents, as well as low speed impacts.

### *Air bag collision sensors*



OHM036037L/OHM038038L/OHM036039/OHM038040/OHM038041

- (1) SRS control module/  
Rollover sensor (if equipped)
- (2) Front impact sensor

- (3) Side impact sensor (if equipped)
- (4) Side impact sensor (if equipped)



### **WARNING**

- Do not hit or allow any objects to impact the locations where air bag or sensors are installed. This may cause unexpected air bag deployment, which could result in serious personal injury or death.
- If the installation location or angle of the sensors is altered in any way, the air bags may deploy when they should not or they may not deploy when they should, causing severe injury or death.

Therefore, do not try to perform maintenance on or around the air bag sensors. We recommend that the system be serviced by an authorized Kia dealer.

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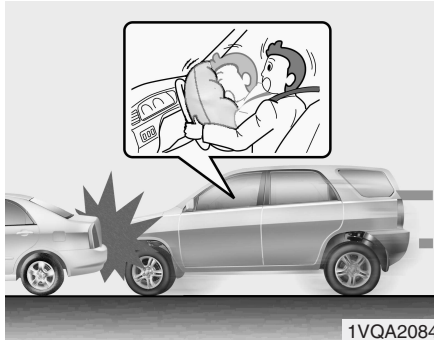
- Problems may arise if the sensor installation angles are changed due to the deformation of the front bumper, body or front door and C pillars where side collision sensors are installed. We recommend that the system be serviced by an authorized Kia dealer.
- Your vehicle has been designed to absorb impact and deploy the air bag(s) in certain collisions. Installing bumper guards or replacing a bumper with non-genuine parts may adversely affect your vehicles collision and air bag deployment performance.

### **WARNING - For Europe**

If your vehicle is equipped with side and curtain air bag, set the ignition switch to OFF or ACC position when the vehicle is being towed.

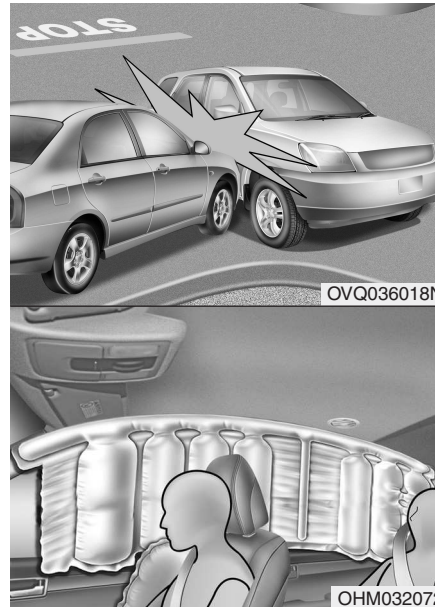
The side and curtain air bag may deploy when the ignitions is ON, and the rollover sensor detects the situation as a rollover.

### Air bag inflation conditions



#### Front air bags

Front air bags are designed to inflate in a frontal collision depending on the intensity, speed or angles of impact of the front collision.



\* The actual air bags in the vehicle may differ from the illustration.

#### Side and curtain air bags (if equipped)

Side and curtain air bags are designed to inflate when an impact is detected by side collision sensors depending on the strength, speed or angles of impact resulting from a side impact collision.

Although the front air bags (driver's and front passenger's air bags) are designed to inflate only in frontal collisions, they also may inflate in other types of collisions if the front impact sensors detect a sufficient impact. Side air bags (side and/or curtain air bags) are designed to inflate only in side impact collisions, but they may inflate in other collisions if the side impact sensors detect a sufficient impact.

If the vehicle chassis is impacted by bumps or objects on unimproved roads or sidewalks, air bags may deploy. Drive carefully on unimproved roads or on surfaces not designed for vehicle traffic to prevent unintended air bag deployment.

#### \* NOTICE - For Europe

Also, the side and curtain air bags are designed to inflate when a rollover is detected by a rollover sensor.

### Air bag non-inflation conditions



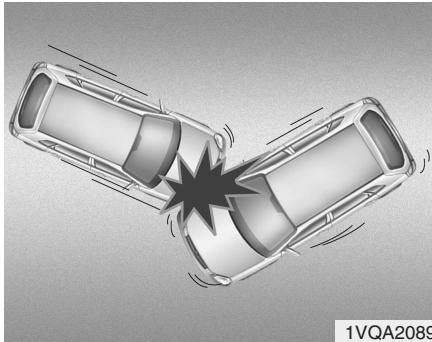
- In certain low-speed collisions the air bags may not deploy. The air bags are designed not to deploy in such cases because they may not provide benefits beyond the protection of the seat belts in such collisions.



- Air bags are not designed to inflate in rear collisions, because occupants are moved backward by the force of the impact. In this case, inflated air bags would not be able to provide any additional benefit.

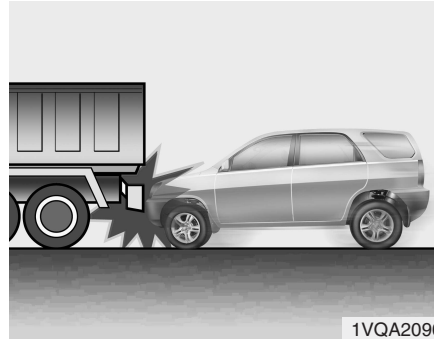


- Front air bags may not inflate in side impact collisions, because occupants move to the direction of the collision, and thus in side impacts, front air bag deployment would not provide additional occupant protection.
- However, if equipped with side and curtain air bags, the air bags may inflate depending on the intensity, vehicle speed and angles of impact.



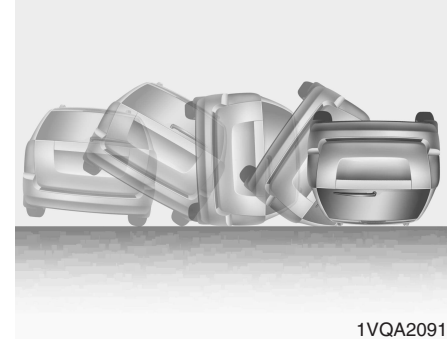
1VQA2089

- In an angled collision, the force of impact may direct the occupants in a direction where the air bags would not be able to provide any additional benefit, and thus the sensors may not deploy any air bags.



1VQA2090

- Just before impact, drivers often brake heavily. Such heavy braking lowers the front portion of the vehicle causing it to “ride” under a vehicle with a higher ground clearance. Air bags may not inflate in this “under-ride” situation because deceleration forces that are detected by sensors may be significantly reduced by such “under-ride” collisions.



1VQA2091

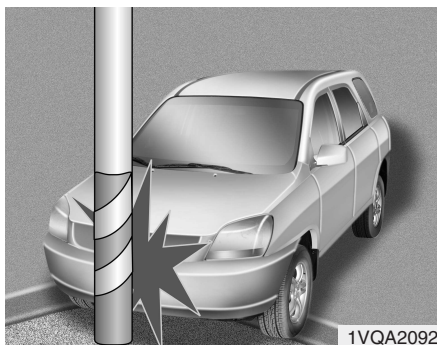
- Front air bags may not inflate in rollover accidents because front air bag deployment would not provide additional occupant protection.

**\* NOTICE - For Europe**

However, if equipped with side and curtain air bags, the air bags may inflate in a rollover, when it is detected by the rollover sensor.

**\* NOTICE - Except Europe**

However, side and/or curtain air bags may inflate when the vehicle is rolled over by a side impact collision, if the vehicle is equipped with side air bags and curtain air bags.



1VQA2092

- Air bags may not inflate if the vehicle collides with objects such as utility poles or trees, where the point of impact is concentrated to one area and the full force of the impact is not delivered to the sensors.

### SRS Care

The SRS is virtually maintenance-free and so there are no parts you can safely service by yourself. If the SRS air bag warning light does not illuminate, or continuously remains on, we recommend that the system be inspected by an authorized Kia dealer.

#### **⚠ WARNING**

- **Modification to SRS components or wiring, including the addition of any kind of badges to the pad covers or modifications to the body structure, can adversely affect SRS performance and lead to possible injury.**
- **For cleaning the air bag pad covers, use only a soft, dry cloth or one which has been moistened with plain water. Solvents or cleaners could adversely affect the air bag covers and proper deployment of the system.**

**(Continued)**

#### **(Continued)**

- **No objects should be placed over or near the air bag modules on the steering wheel, instrument panel, and the front passenger's panel above the glove box, because any such object could cause harm if the vehicle is in a crash severe enough to cause the air bags to inflate.**
- **If the air bags inflate, we recommend that the system be replaced by an authorized Kia dealer.**
- **Do not tamper with or disconnect SRS wiring, or other components of the SRS system. Doing so could result in injury, due to accidental inflation of the air bags or by rendering the SRS inoperative.**

**(Continued)**

(Continued)

- If components of the air bag system must be discarded, or if the vehicle must be scrapped, certain safety precautions must be observed. An authorized Kia dealer knows these precautions and can give you the necessary information. Failure to follow these precautions and procedures could increase the risk of personal injury.
- If your car was flooded and has soaked carpeting or water on flooring, you shouldn't try to start the engine; we recommend that you contact an authorized Kia dealer.

**Additional safety precautions**

- **Never let passengers ride in the cargo area or on top of a folded-down back seat.** All occupants should sit upright, fully back in their seats with their seat belts on and their feet on the floor.
- **Passengers should not move out of or change seats while the vehicle is moving.** A passenger who is not wearing a seat belt during a crash or emergency stop can be thrown against the inside of the vehicle, against other occupants, or out of the vehicle.
- **Each seat belt is designed to restrain one occupant.** If more than one person uses the same seat belt, they could be seriously injured or killed in a collision.
- **Do not use any accessories on seat belts.** Devices claiming to improve occupant comfort or reposition the seat belt can reduce the protection provided by the seat belt and increase the chance of serious injury in a crash.
- **Passengers should not place hard or sharp objects between themselves and the air bags.** Carrying hard or sharp objects on your lap or in your mouth can result in injuries if an air bag inflates.
- **Keep occupants away from the air bag covers.** All occupants should sit upright, fully back in their seats with their seat belts on and their feet on the floor. If occupants are too close to the air bag covers, they could be injured if the air bags inflate.
- **Do not attach or place objects on or near the air bag covers.** Any object attached to or placed on the front or side air bag covers could interfere with the proper operation of the air bags.
- **Do not modify the front seats.** Modification of the front seats could interfere with the operation of the supplemental restraint system sensing components or side air bags.

- **Do not place items under the front seats.** Placing items under the front seats could interfere with the operation of the supplemental restraint system sensing components and wiring harnesses.
- **Never hold an infant or child on your lap.** The infant or child could be seriously injured or killed in the event of a crash. All infants and children should be properly restrained in appropriate child safety seats or seat belts in the rear seat.

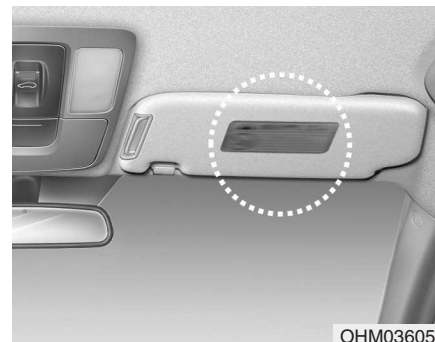
### **⚠ WARNING**

- **Sitting improperly or out of position can cause occupants to be shifted too close to a deploying air bag, strike the interior structure or be thrown from the vehicle resulting in serious injury or death.**
- **Always sit upright with the seatback in an upright position, centered on the seat cushion with your seat belt on, legs comfortably extended and your feet on the floor.**

### **Adding equipment to or modifying your air bag-equipped vehicle**

If you modify your vehicle by changing your vehicle's frame, bumper system, front end or side sheet metal or ride height, this may affect the operation of your vehicle's air bag system.

### **Air bag warning label**



Air bag warning labels are attached to alert the passengers of the potential risk of the air bag system.

Note that these government warnings focus on the risk of children. We also want you to be aware of the risks which adults are exposed to that have been described in previous pages.

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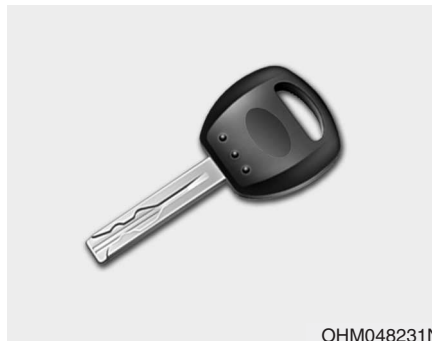
### KEYS

#### Record your key number



The key code number is stamped on the key code tag attached to the key set. Should you lose your keys, we recommend that you contact an authorized Kia dealer. Remove the key code tag and store it in a safe place. Also, record the key code number and keep it in a safe place (not in the vehicle).

#### Key operations



- Used to start the engine.
- Used to lock and unlock the doors.
- Used to lock and unlock the glove box.

#### **⚠ WARNING - Ignition key (smart key)**

Leaving children unattended in a vehicle with the ignition key (smart key) is dangerous even if the key is not in the ignition or start button is ACC or ON position. Children copy adults and they could place the key in the ignition or press the start button. The ignition key (smart 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, when the engine is running.

**⚠ WARNING**

We recommend that you use parts for replacement from an authorized Kia dealer. 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.

**Immobilizer system  
(if equipped)**

Your vehicle may be equipped with an electronic engine immobilizer system to reduce the risk of unauthorized vehicle use.

Your immobilizer system is comprised of a small transponder in the ignition key and electronic devices inside the vehicle.

With the immobilizer system, whenever you insert your ignition key into the ignition switch and turn it to ON or Whenever the engine start/stop button is changed to the ON position, it checks and determines and verifies if the ignition key is valid or not.

If the key is determined to be valid, the engine will start.

If the key is determined to be invalid, the engine will not start.

### ***To activate the immobilizer system:***

Turn the ignition key to the OFF position or change the engine start/stop button to the OFF position. The immobilizer system activates automatically. Without a valid ignition key for your vehicle, the engine will not start.

### ***To deactivate the immobilizer system:***

Insert the ignition key into the key cylinder and turn it to the ON position or change the engine start/stop button to the ON position.

### **⚠ WARNING**

In order to prevent theft of your vehicle, do not leave spare keys anywhere in your vehicle. Your immobilizer password is a customer unique password and should be kept confidential. Do not leave this number anywhere in your vehicle.

### **\* NOTICE**

When starting the engine, do not use the key with other immobilizer keys around. Otherwise the engine may not start or may stop soon after it starts. Keep each key separately in order to avoid a starting malfunction.

### **⚠ CAUTION**

***Do not put metal accessories near the ignition switch. Metal accessories may interrupt the transponder signal and may prevent the engine from being started.***

### **\* NOTICE**

If you need additional keys or lose your keys, we recommend that you consult an authorized Kia dealer.

### **⚠ CAUTION**

***The transponder in your ignition key is an important part of the immobilizer system. It is designed to give years of trouble-free service, however you should avoid exposure to moisture, static electricity and rough handling. Immobilizer system malfunction could occur.***

### **⚠ CAUTION**

***Do not change, alter or adjust the immobilizer system because it could cause the immobilizer system to malfunction. We recommend that the system be serviced by an authorized Kia dealer. Malfunctions caused by improper alterations, adjustments or modifications to the immobilizer system are not covered by your vehicle manufacturer warranty.***

## SMART KEY (IF EQUIPPED)

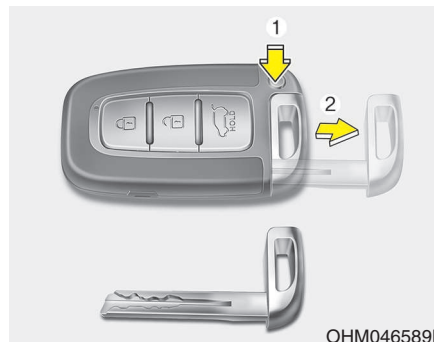


OHM046588L

With a smart key, you can lock or unlock a door (and tailgate) and even start the engine without inserting the key.

The functions of the buttons on a smart key are similar to the remote keyless entry. (Refer to the "Remote keyless entry" in this chapter.)

### Smart key operation



OHM046589L

To remove the mechanical key, press and hold the release button (1) and remove the mechanical key (2).

To reinstall the mechanical key, put the key into the hole and push it until a click sound is heard.

### Smart key functions

Carrying the smart key, you may lock and unlock the vehicle doors (and tailgate). Also, you may start the engine. Refer to the following, for more details.

### Locking



OHM048002

Pressing the button of the front outside door handles with all doors (and tailgate) closed and any door unlocked, locks all the doors (and tailgate). The hazard warning lights will blink once to indicate that all doors (and tailgate) are locked. The button will only operate when the smart key is within 0.7 ~ 1m (28 ~ 39.3 in) from the outside door handle. If you want to make sure that a door has locked or not, you should check the door lock button inside the vehicle or pull the outside door handle.

Even though you press the button, the doors will not lock and the chime sounds if any of the following occurs:

- The smart key is in the vehicle.
- The ENGINE START/STOP button is in the ACC or ON position.
- Any door except the tailgate is opened.

### ***Unlocking***

Pressing the button of the front outside door handles with all doors (and tailgate) closed and locked, unlocks all the doors (and tailgate). The hazard warning lights will blink twice to indicate that all doors (and tailgate) are unlocked. The button will only operate when the smart key is within 0.7 ~ 1m (28 ~ 39.3 in) from the outside door handle.

When the smart key is recognized in the area of 0.7 ~ 1m (28 ~ 39.3 in) from the front outside door handle, other people can also open a door without possession of the smart key.

### ***Tailgate unlocking***

If you are within 0.7 ~ 1m (28 ~ 39.3 in) from the outside tailgate handle, with your smart key in possession, the tailgate will unlock and open when you press the tailgate handle switch.

The hazard warning lights will blink twice to indicate that the tailgate is unlocked.

Also, once the tailgate is opened and then closed, the tailgate will lock automatically.

### ***Start-up***

You can start the engine without inserting the key. For detailed information refer to "Starting the engine with a smart key" in chapter 6.

## Smart key precautions

### \* NOTICE

- If, for some reason, you happen to lose your smart key, you will not be able to start the engine. Tow the vehicle, if necessary, and contact an authorized Kia dealer.
- A maximum of 2 smart keys can be registered to a single vehicle. If you lose a smart key, you should immediately take the vehicle and key to your authorized Kia dealer to protect it from potential theft.
- The smart key will not work if any of the following occurs:
  - The smart key is close to a radio transmitter such as a radio station or an airport which can interfere with normal operation of the smart key.
  - The smart key is near a mobile two-way radio system or a cellular phone.
  - Another vehicle's smart key is being operated close to your vehicle.

(Continued)

(Continued)

When the smart key does not work properly, open and close the door with the mechanical key. If you have a problem with the smart key, contact an authorized Kia dealer.

- If the smart key is in close proximity to your cell phone or smart phone, the signal from the smart key could be blocked by normal operation of your cell phone or smart phone. This is especially important when the phone is active such as making call, receiving calls, text messaging, and/or sending/receiving emails. Avoid placing the smart key and your cell phone or smart phone in the same pants or jacket pocket and maintain adequate distance between the two devices.

### CAUTION

*Keep the smart key away from water or any liquid. If the keyless entry system is inoperative due to exposure to water or liquids, it will not be covered by your manufacturer's vehicle warranty.*

### CAUTION

*Keep the smart key away from electromagnetic materials that blocks electromagnetic waves to the key surface.*



### Restrictions in handling keys

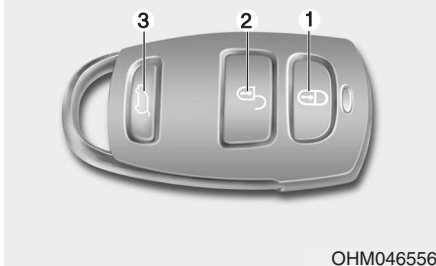


When leaving keys with parking lot and valet attendants, the following procedures will ensure that your vehicle's glove box compartment can not be opened in your absence.

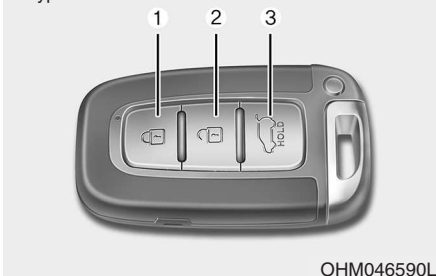
1. Press and hold the release button (1) and remove the mechanical key (2).
2. Close and then lock the glove box using the mechanical key.
3. Leave the smart key with the attendant. The glove box can not be opened without the mechanical key.

### Remote keyless entry system operations

#### ■ Type A



#### ■ Type B



### Lock (1)

All doors (and tailgate) are locked if the lock button is pressed.

If all doors (and tailgate) are closed, the hazard warning lights will blink once to indicate that all doors (and tailgate) are locked.

However, if any door (or tailgate) remains open, the hazard warning lights will not operate. But if all doors (and tailgate) are closed after the lock button is pressed, the hazard warning lights will blink once.

### Unlock (2)

All doors (and tailgate) are unlocked if the unlock button is pressed.

The hazard warning lights will blink twice to indicate that all doors (and tailgate) are unlocked.

However, after pressing this button, the doors (and tailgate) will lock automatically unless you open any door within 30 seconds.

### ***Tailgate unlock (3) (if equipped)***

The tailgate is unlocked if the button is pressed for more than 1 second.

The hazard warning lights will blink twice to indicate that the tailgate is unlocked.

However, after pressing this button, the tailgate will lock automatically unless you open the tailgate within 30 seconds.

Also, once the tailgate is opened and then closed, the tailgate will lock automatically.

### **Transmitter precautions**

The transmitter will not work if any of the following occurs:

- The ignition key is in the ignition switch.
- You exceed the operating distance limit (about 10 m [30 feet]).
- The battery in the transmitter is weak.
- Other vehicles or objects may be blocking the signal.
- The weather is extremely cold.
- The transmitter is close to a radio transmitter such as a radio station or an airport which can interfere with normal operation of the transmitter.
- If the transmitter is in close proximity to your cell phone or smart phone, the signal from the transmitter could be blocked by normal operation of your cell phone or smart phone. This is especially important when the phone is active such as making call, receiving calls, text messaging, and/or sending/ receiving emails.

Avoid placing the transmitter and your cell phone or smart phone in the same pants or jacket pocket and maintain adequate distance between the two devices.

When the transmitter does not work correctly, open and close the door with the mechanical key. If you have a problem with the transmitter, we recommend that you contact an authorized Kia dealer.

### CAUTION

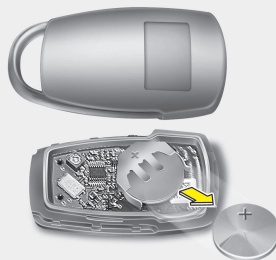
***Keep the transmitter away from water or any liquid. If the keyless entry system is inoperative due to exposure to water or other liquids, it will not be covered by your manufacturer's vehicle warranty.***

### CAUTION

***Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. If the keyless entry system is inoperative due to changes or modifications not expressly approved by the party responsible for compliance, it will not be covered by your manufacturer's vehicle warranty.***

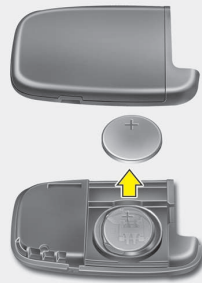
## Battery replacement

### ■ Type A



OEN046004

### ■ Type B



OHM048005

A transmitter uses a 3 volt lithium battery which will normally last for several years. When replacement is necessary, use the following procedure.

1. Pry open the transmitter or smart key cover.
2. Replace the battery with a new battery (CR2032). When replacing the battery, make sure the battery position.
3. Install the battery in the reverse order of removal.

For transmitter replacement, we recommend that you contact an authorized Kia dealer.

 **CAUTION**

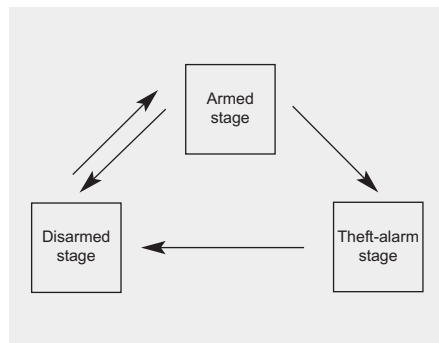
- *The keyless entry system transmitter is designed to give you years of trouble-free use, however it can malfunction if exposed to moisture or static electricity. If you are unsure how to use or replace the battery, we recommend that you contact an authorized Kia dealer.*
- *Using the wrong battery can cause the transmitter to malfunction. Be sure to use the correct battery.*
- *To avoid damaging the transmitter, don't drop it, get it wet, or expose it to heat or sunlight.*

**\* NOTICE**

An inappropriately disposed battery can be harmful to the environment and human health.

Dispose the battery according to your local law(s) or regulation.

### THEFT-ALARM SYSTEM (IF EQUIPPED)



This system is designed to provide protection from unauthorized entry into the vehicle. This system is operated in three stages: the first is the "Armed" stage, the second is the "Theft-alarm" stage, and the third is the "Disarmed" stage. If triggered, the system provides an audible alarm with blinking of the hazard warning lights.

#### Armed stage

Park the vehicle and stop the engine. Arm the system as described below.

1. Remove the ignition key from the ignition switch and exit the vehicle.
2. Make sure that all doors (and tailgate) and engine hood are closed and latched.
3. Lock the doors using the transmitter of the keyless entry system (or smart key).

After completion of the steps above, the hazard warning lights will blink once to indicate that the system is armed.

If any door (or tailgate) or engine hood remains open, the hazard warning lights will not operate and the theft-alarm will not arm. If all doors (and tailgate) and engine hood are closed after the lock button is pressed, the hazard warning lights will blink once.

**Do not arm the system until all passengers have left the vehicle. If the system is armed while a passenger(s) remains in the vehicle, the alarm may be activated when the remaining passenger(s) leaves the vehicle. If any door (or tailgate) or engine hood is opened within 30 seconds after the system enters the armed stage, the system will be disarmed to prevent unnecessary alarm.**

### Theft-alarm stage

The alarm will be activated if any of the following occurs while the system is armed.

- A front or rear door is opened without using the transmitter (or smart key).
- The tailgate is opened without using the transmitter (or smart key).
- The engine hood is opened.

The horn will sound and the hazard warning lights will blink continuously for approximately 30 seconds. To turn off the system, unlock the doors with the transmitter (or smart key).

### Disarmed stage

The system will be disarmed when:

#### *Transmitter*

- The door unlock button is pressed.

#### *Smart key*

- The door unlock button is pressed.
- The button of the front outside door is pressed while carrying the smart key.
- The tailgate unlock button is pressed.
- The tailgate is opened while carrying the smart key.

After the doors are unlocked, the hazard warning lights will blink twice to indicate that the system is disarmed.

After pressing the unlock button, if any door (or tailgate) is not opened within 30 seconds, the system will be rearmed.

### \* NOTICE

- **Avoid trying to start the engine while the alarm is activated. The vehicle starting motor is disabled during the theft-alarm stage.**  
If the system is not disarmed with the transmitter, insert the key into the ignition switch, turn the ignition switch to the ON position and wait for 30 seconds. Then the system will be disarmed. (except China)
- If you lose your keys, we recommend that you consult an authorized Kia dealer.



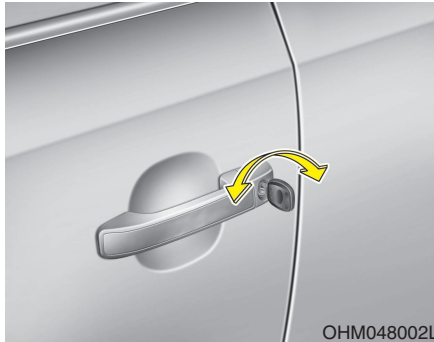
### **CAUTION**

***Do not change, alter or adjust the theft-alarm system because it could cause the theft-alarm system to malfunction and we recommend that the system be serviced by an authorized Kia dealer.***

***Malfunctions caused by improper alterations, adjustments or modifications to the theft-alarm system are not covered by your vehicle manufacturer warranty.***

## DOOR LOCKS

### Operating door locks from outside the vehicle



- Turn the key toward the rear of the vehicle to unlock and toward the front of the vehicle to lock.
- If you lock/unlock the driver's door with a key, all vehicle doors will lock/unlock automatically.
- Doors can also be locked and unlocked with the transmitter. (or smart key). (if equipped)
- Once the doors are unlocked, they may be opened by pulling the door handle.

- When closing the door, push the door by hand. Make sure the doors are closed securely.

### \* NOTICE

- In cold and wet climates, door lock and door mechanisms may not work properly due to freezing conditions.
- If the door is locked/unlocked multiple times in rapid succession with either the vehicle key or door lock switch, the system may stop operating temporarily in order to protect the circuit and prevent damage to system components.

### ⚠ WARNING

- If you don't close the door securely, the door may open again.
- Be careful that someone's body and hands are not trapped when closing the door.

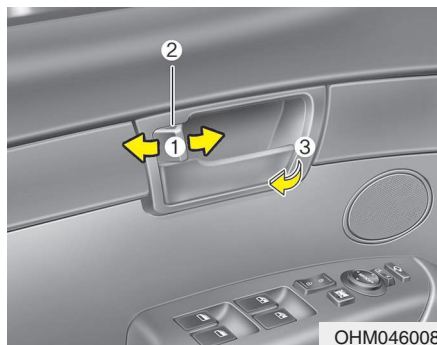
### ⚠ WARNING

If people must spend a longer time in the vehicle while it is very hot or cold outside, there is risk of injuries or danger to life. Do not lock the vehicle from the outside when there are people in it.



### Operating door locks from inside the vehicle

*With the door lock button*



- To unlock a door, pull the door lock button (1) to the “Unlock” position. The red mark (2) on the button will be visible.
- To lock a door, push the door lock button (1) to the “Lock” position. If the door is locked properly, the red mark (2) on the door lock button will not be visible.
- To open a door, pull the door handle outward.

- If the inner door handle of the driver's (or front passenger's) door is pulled when the door lock button is in the lock position, the button will unlock and the door will open. (if equipped)
- Front door cannot be locked if the ignition key is in the ignition switch (or if the smart key is in the vehicle) and the front door is opened.

#### **⚠ WARNING - Door lock malfunction**

**If a power door lock ever fails to function while you are in the vehicle, try one or more of the following techniques to exit:**

- **Operate the door unlock feature repeatedly (both electronic and manual) while simultaneously pulling on the door handle.**
- **Operate the other door locks and handles, front and rear.**
- **Lower a front window and use the key to unlock the door from outside.**
- **Move to the cargo area and open the tailgate.**

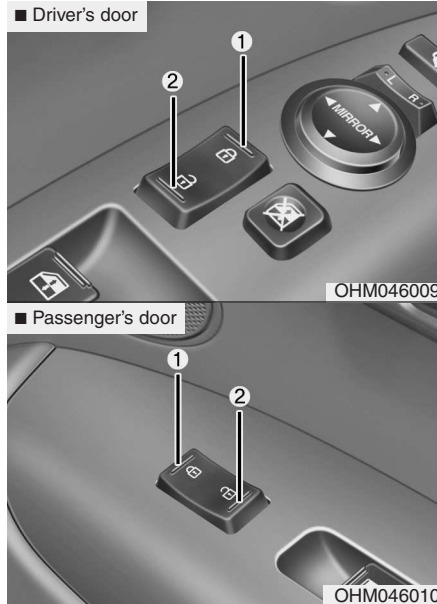
#### **⚠ WARNING**

**Do not pull the inner door handle of driver's (or passenger's) door while the vehicle is moving.**

#### **⚠ CAUTION**

***Do not frequently repeat opening and closing of doors, or apply excessive force to a door while the door closer is operating.***

### With central door lock switch



Operate by pressing the central door lock switch.

- When pressing the front portion (1) of the switch, all vehicle doors will lock.

- When pressing the rear portion (2) of the switch, all vehicle doors will unlock.
- If the key is in the ignition switch (or if the smart key is in the vehicle) and any door is opened, the doors will not lock even though the front portion (1) of the central door lock switch is pressed.

### **⚠ WARNING - Doors**

- The doors should always be fully closed and locked while the vehicle is in motion to prevent accidental opening of the door. Locked doors will also discourage potential intruders when the vehicle stops or slows down.
- Be careful when opening doors and watch for vehicles, motorcycles, bicycles or pedestrians approaching the vehicle in the path of the door. Opening a door when something is approaching can cause damage or injury.

### **⚠ WARNING - Unlocked vehicles**

Leaving your vehicle unlocked can invite theft or possible harm to you or others from someone hiding in your vehicle while you are gone. Always remove the ignition key, engage the parking brake, close all windows and lock all doors when leaving your vehicle unattended.

### **⚠ WARNING - Unattended children**

An enclosed vehicle can become extremely hot, causing death or severe injury to unattended children or animals who cannot escape the vehicle. Furthermore, children might operate features of the vehicle that could injure them, or they could encounter other harm, possibly from someone gaining entry to the vehicle. Never leave children or animals unattended in your vehicle.

### Door lock/unlock features

#### *Impact sensing door unlock system*

All doors will automatically unlock when an impact causes the air bags to deploy.

However, automatic door unlock will not operate if the side airbag is not equipped.

### \* NOTICE

An authorized Kia dealer can activate or deactivate some auto door lock/unlock features as follows;

- Auto door unlock by using the driver's door lock button
- Speed sensing auto door lock
- Auto door lock/unlock by shifting the transmission shift lever out of P (Park) or into P (Park)
- Auto door unlock when the ignition key is removed from the ignition switch (for smart key, when the ENGINE START/STOP button is changed to the OFF position)

If you want to activate or deactivate some door lock/unlock feature, we recommend that you consult an authorized Kia dealer.

### Child-protector rear door lock



The child safety lock is provided to help prevent children from accidentally opening the rear doors from inside the vehicle. The rear door safety locks should be used whenever children are in the vehicle.

1. Open the rear door.
2. Push the child safety lock located on the rear edge of the door to the lock (  ) position. When the child safety lock is in the lock position, the rear door will not open even though the inner door handle is pulled.

3. Close the rear door.

To open the rear door, pull the outside door handle (1) .

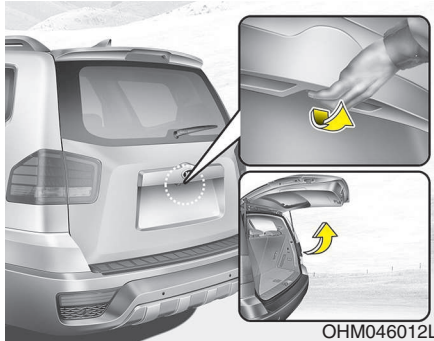
Even though the doors may be unlocked, the rear door will not open by pulling the inner door handle (2) until the rear door child safety lock is unlocked (  ).

### **WARNING - Rear door locks**

**If children accidentally open the rear doors while the vehicle is in motion, they could fall out and be severely injured or killed. 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.**

## TAILGATE

### Opening the tailgate



- The tailgate is locked or unlocked when all doors are locked or unlocked with the key, transmitter (or smart key) or central door lock switch.
- Only the tailgate is unlocked if the tailgate unlock button on the transmitter (or smart key) is pressed. Once the tailgate is opened and then closed, the tailgate is locked automatically.
- If unlocked, the tailgate can be opened by pressing the handle switch and then pulling the handle up.

### \* NOTICE

In cold and wet climates, door lock and door mechanisms may not work properly due to freezing conditions.

### ⚠ WARNING

**The tailgate swings upward. Make sure no objects or people are near the rear of the vehicle when opening the tailgate.**

### ⚠ CAUTION

***Make certain that you close the tailgate before driving your vehicle. Possible damage may occur to the tailgate lift cylinders and attached hardware if the tailgate is not closed prior to driving.***

### Closing the tailgate

To close the tailgate, lower and push down the tailgate to the first detent. Then it will close and lock automatically. Make sure that the tailgate is securely latched.

### \* NOTICE

- You do not have to close the tailgate with excessive strength. The tailgate will close and lock automatically if it is pulled down to the first detent.
- The tailgate may not close and lock automatically even though the tailgate was lowered down to the first detent if you close and open the tailgate repeatedly several times. If this happens, close the tailgate manually and wait for about 10 seconds to operate normally.

### CAUTION

*Make sure nothing is near the tailgate latch and striker while closing the tailgate. It may damage the tailgate's power latch.*

### WARNING - Exhaust fumes

If you drive with the tailgate opened, you will draw dangerous exhaust fumes into your vehicle which can cause serious injury or death to vehicle occupants.

If you must drive with the tailgate opened, keep the air vents and all windows open so that additional outside air comes into the vehicle.

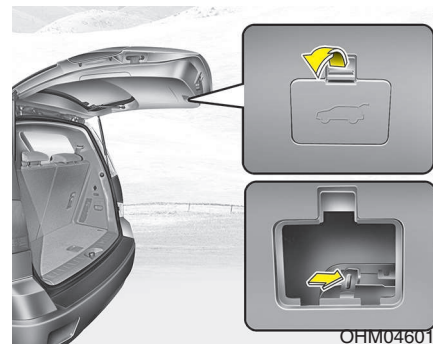
### WARNING

Make sure your hands, feet and other parts of your body are safely out of the way before closing the tailgate.

### WARNING - Rear cargo area

Occupants should never ride in the rear cargo area where no restraints are available. To avoid injury in the event of an accident or sudden stops, occupants should always be properly restrained.

### Emergency tailgate safety release



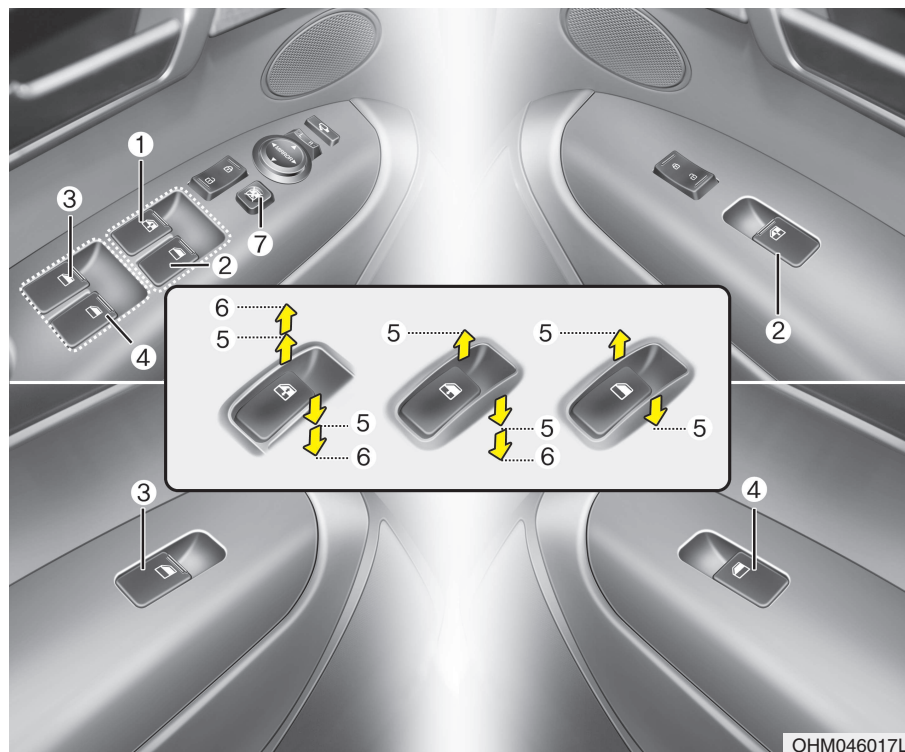
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Your vehicle is equipped with the emergency tailgate safety release lever located on the bottom of the tailgate. When someone is inadvertently locked in the luggage compartment, the tailgate can be opened by pushing the release lever and pushing open the tailgate.

**⚠ WARNING**

- For emergencies, be fully aware of the location of the emergency tailgate safety release lever in the vehicle and how to open the tailgate if you are accidentally locked in the luggage compartment.
- No one should be allowed to occupy the luggage compartment of the vehicle at any time. The luggage compartment is a very dangerous location in the event of a crash.
- Use the release lever for emergencies only. Use with extreme caution, especially while the vehicle is in motion.

## WINDOWS



- (1) Driver's door power window switch
- (2) Front passenger's door power window switch
- (3) Rear door (left) power window switch
- (4) Rear door (right) power window switch
- (5) Window opening and closing
- (6) Automatic power window up\*/down\*
- (7) Power window lock switch

\* if equipped

### \* NOTICE

In cold and wet climates, power windows may not work properly due to freezing conditions.

## Power windows

The ignition switch must be in the ON position for power windows to operate.

Each door has a power window switch that controls the door's window. The driver has a power window lock button which can block the operation of passenger windows. The power windows can be operated for approximately 30 seconds after the ignition key is removed or turned to the ACC or LOCK position. However, if the front doors are opened, the power windows cannot be operated even within the 30 second period.

The driver's door has a master power window switch that controls all the windows in the vehicle.

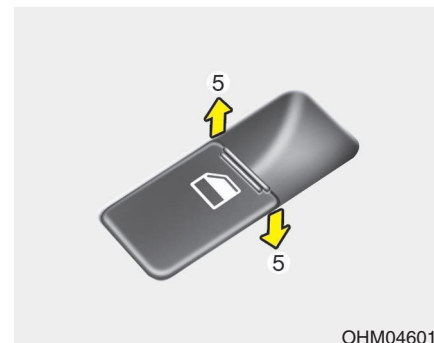
## \* NOTICE

While driving with the rear windows down or with the sunroof (if equipped) in an open (or partially open position), your vehicle may demonstrate a wind buffeting or pulsation noise. This noise is a normal occurrence and can be reduced or eliminated by taking the following actions. If the noise occurs with one or both of the rear windows down, partially lower both front windows approximately one inch. If you experience the noise with the sunroof open, slightly reduce the size of the sunroof opening.

### WARNING

Do not install any accessories in the area of windows. It may impact jam protection.

## Window opening and closing

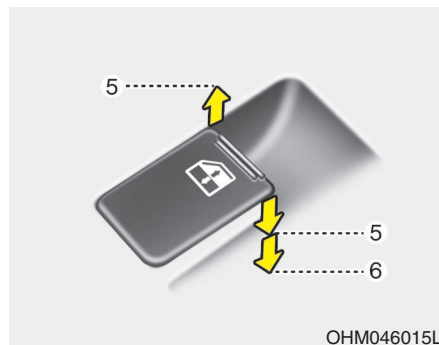


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To open or close a window, press down or pull up the front portion of the corresponding switch to the first detent position (5).

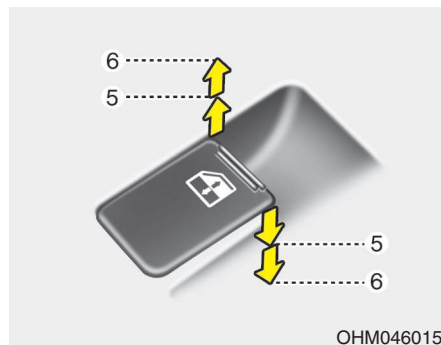


### ***Auto down window (if equipped) (Driver's window)***



Pressing the power window switch momentarily to the second detent position (6) completely lowers the window even when the switch is released. To stop the window at the desired position while the window is in operation, pull up the switch momentarily to the opposite direction of the window movement.

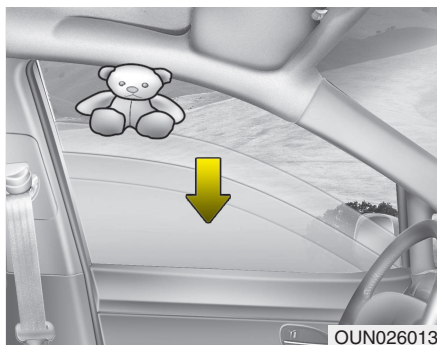
### ***Auto up/down window (if equipped)***



Pressing or pulling up the power window switch momentarily to the second detent position (6) completely lowers or raises the window even when the switch is released. To stop the window at the desired position while the window is in operation, pull up or press down and release the switch.

If the power window does not operate normally, the automatic power window system must be reset as follows:

1. Turn the ignition switch to the ON position.
2. Close the window and continue pulling up the power window switch for at least 1 second after the window is completely closed.



### Automatic reversal

If the upward movement of the window is blocked by an object or part of the body, the window will detect the resistance and will stop upward movement. The window will then lower approximately 30 cm (11.8 in.) to allow the object to be cleared.

If the window detects the resistance while the power window switch is pulled up continuously, the window will stop upward movement then lower approximately 2.5 cm (1 in.).

And if the power window switch is pulled up continuously again within 5 seconds after the window is lowered by the automatic window reversal feature, the automatic window reversal will not operate.

### \* NOTICE

The automatic reverse feature for the window is only active when the “auto up” feature is used by fully pulling up the switch. The automatic reverse feature will not operate if the window is raised using the halfway position on the power window switch.

### **⚠ WARNING**

**Always check for obstructions before raising any window to avoid injuries or vehicle damage. If an object less than 4 mm (0.16 in.) in diameter is caught between the window glass and the upper window channel, the automatic reverse window may not detect the resistance and will not stop and reverse direction.**

### **⚠ WARNING**

**The automatic reverse feature doesn't active while resetting power window system.**

**Make sure body parts or other objects are safely out of the way before closing the windows to avoid injuries or vehicle damage.**

### Power window lock button



The driver can disable the power window switches on the rear passengers' doors by pressing the power window lock switch to the lock position (pressed).

When the power window lock switch is pressed :

- The driver's master control can operate the front passenger's power window and the rear passengers' power windows.
- The front passenger's control can operate the front passenger's power window.

- The rear passengers' control cannot operate the rear passengers' power window.

#### **CAUTION**

- *To prevent possible damage to the power window system, do not open or close two windows or more at the same time. This will also ensure the longevity of the fuse.*
- *Never try to operate the main switch on the driver's door and the individual door window switch in opposite directions at the same time. If this is done, the window will stop and cannot be opened or closed.*

#### **WARNING - Windows**

- **NEVER** leave the keys in your vehicle with unsupervised children, when the engine is running.

**(Continued)**

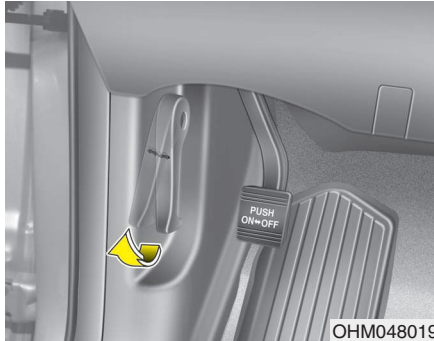
#### **(Continued)**

- **NEVER** leave any child unattended in the vehicle. Even very young children may inadvertently cause the vehicle to move, entangle themselves in the windows, or otherwise injure themselves or others.
- Always double check to make sure all arms, hands, head and other obstructions are safely out of the way before closing a window.
- Do not allow children play with the power windows. Keep the driver's door power window lock button in the LOCK position (pressed). Serious injury can result from unintentional window operation by the child.
- Do not extend heads or any limbs outside the window while the vehicle is in motion.

If the window cannot be close because it is blocked by objects, remove the objects and close the window.

## HOOD

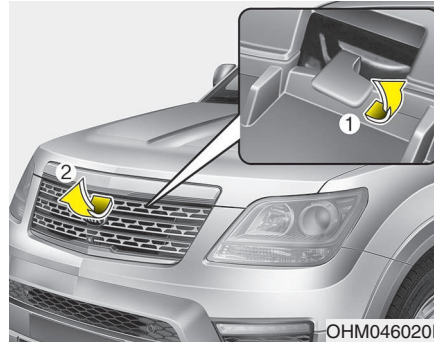
### Opening the hood



1. Pull the release lever to unlatch the hood. The hood should pop open slightly.

### **⚠ WARNING**

Open the hood after turning off the engine on a flat surface, shifting the shift lever to the P(Park) position, and setting the parking brake.



2. Go to the front of the vehicle, raise the hood slightly, push the secondary latch (1) left side and lift the hood (2).
3. Raise the hood. It will completely rise by itself after it has been raised about halfway.

### Closing the hood

1. Before closing the hood, check the following:
  - All filler caps in the engine compartment must be correctly installed.
  - Gloves, rags or any other combustible material must be removed from the engine compartment.
2. Lower the hood halfway and push down to securely lock in place.
  - Then double check to be sure the hood is secure.
  - If the hood can be lifted with a slight force, open the hood again and close it more firmly.

### **WARNING**

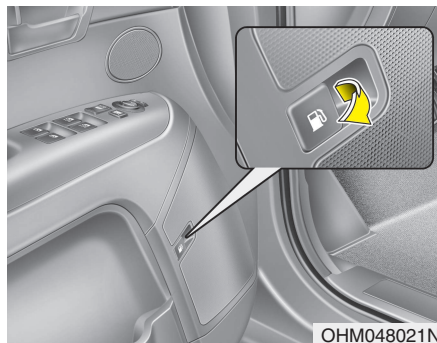
- Before closing the hood, ensure that all obstructions are removed from the hood opening. Closing the hood with an obstruction present in the hood opening may result in property damage or severe personal injury.
- Do not leave gloves, rags or any other combustible material in the engine compartment. Doing so may cause a heat-induced fire.

### **WARNING**

- Always double check to be sure that the hood is firmly latched before driving away. If it is not latched, the hood could open while the vehicle is being driven, causing total loss of visibility, which might result in an accident.
- Do not move the vehicle with the hood raised. The view will be blocked and the hood could fall or be damaged.

## FUEL FILLER LID

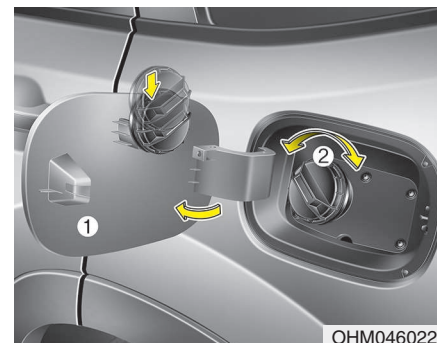
### Opening the fuel filler lid



The fuel filler lid must be opened from inside the vehicle by pulling out the fuel filler lid opener located on the driver's door.

### \* NOTICE

If the fuel filler lid does not open because ice has formed around it, tap lightly or push on the lid to break the ice and release the lid. Do not pry on the lid. If necessary, spray around the lid with an approved de-icer fluid (do not use radiator anti-freeze) or move the vehicle to a warm place and allow the ice to melt.



1. Stop the engine.
2. To open the fuel filler lid, pull the fuel filler lid opener up.
3. Pull open the fuel filler lid (1).
4. To remove the cap, turn the fuel filler cap (2) counterclockwise.
5. Refuel as needed.

### Closing the fuel filler lid

1. To install the cap, turn it clockwise until it "clicks". This indicates that the cap is securely tightened.
2. Close the fuel filler lid and push it lightly and make sure that it is securely closed.

#### **WARNING - Refueling**

- If pressurized fuel sprays out, it can cover your clothes or skin and subject you to the risk of fire and burns. Always remove the fuel cap carefully and slowly. If the cap is venting fuel or if you hear a hissing sound, wait until the condition stops before completely removing the cap.
- Do not "top off" after the nozzle automatically shuts off when refueling.
- Always check that the fuel cap is installed securely to prevent fuel spillage in the event of an accident.

#### **WARNING - Refueling dangers**

Automotive fuels are flammable materials. When refueling, please note the following guidelines carefully. Failure to follow these guidelines may result in severe personal injury, severe burns or death by fire or explosion.

- Read and follow all warning posted at the gas station facility.
- Before refueling note the location of the Emergency Gasoline Shut-Off, if available, at the gas station facility.
- Before touching the fuel nozzle, you should eliminate potentially dangerous static electricity discharge by touching another metal part of the vehicle, a safe distance away from the fuel filler neck, nozzle, or other gas source.

(Continued)

#### **(Continued)**

- Do not get back into a vehicle once you have begun refueling since you can generate static electricity by touching, rubbing or sliding against any item or fabric (polyester, satin, nylon, etc.) capable of producing static electricity. Static electricity discharge can ignite fuel vapors resulting in rapid burning. If you must re-enter the vehicle, you should once again eliminate potentially dangerous static electricity discharge by touching a metal part of the vehicle, away from the fuel filler neck, nozzle or other gasoline source.
- When using an approved portable fuel container, be sure to place the container on the ground prior to refueling. Static electricity discharge from the container can ignite fuel vapors causing a fire.

(Continued)

**(Continued)**

Once refueling has begun, contact with the vehicle should be maintained until the filling is complete.

Use only approved portable plastic fuel containers designed to carry and store gasoline.

- Do not use cellular phones while refueling. Electric current and/or electronic interference from cellular phones can potentially ignite fuel vapors causing a fire.
- When refueling, always shut the engine off. Sparks produced by electrical components related to the engine can ignite fuel vapors causing a fire. Once refueling is complete, check to make sure the filler cap and filler door are securely closed, before starting the engine.

**(Continued)**

**(Continued)**

- **DO NOT** use matches or a lighter and **DO NOT SMOKE** or leave a lit cigarette in your vehicle while at a gas station especially during refueling. Automotive fuel is highly flammable and can, when ignited, result in fire.
- If a fire breaks out during refueling, leave the vicinity of the vehicle, and immediately contact the manager of the gas station and then contact the local fire department. Follow any safety instructions they provide.

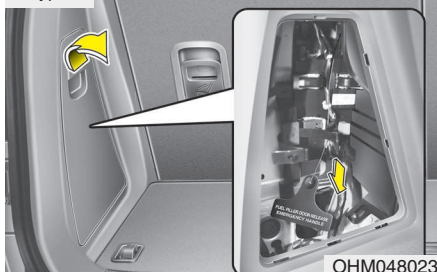
**CAUTION**

- *Make sure to refuel your vehicle according to the "Fuel requirements" suggested in chapter 1.*
- *If the fuel filler cap requires replacement, please make sure that you use parts designed for replacement in your vehicle. An incorrect fuel filler cap can result in a serious malfunction of the fuel system or emission control system. For more detailed information, we recommend that you contact an authorized Kia dealer.*
- *Do not spill fuel on the exterior surfaces of the vehicle. Any type of fuel spilled on painted surfaces may damage the paint.*
- *After refueling, make sure the fuel cap is installed securely to prevent fuel spillage in the event of an accident.*

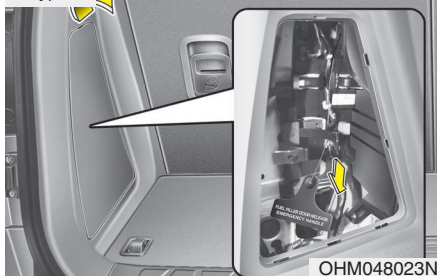


### Emergency fuel filler lid release

■ Type A



■ Type B



#### CAUTION

*Do not pull the handle excessively, otherwise the luggage compartment area trim or release handle may be damaged.*

If the fuel filler lid does not open using the remote fuel filler lid release, you can open it manually. Remove the panel in the cargo area. Pull the handle out slightly.

## SUNROOF (IF EQUIPPED)



If your vehicle is equipped with a sunroof, you can slide or tilt your sunroof with the sunroof control lever located on the overhead console.

The sunroof can only be opened, closed, or tilted when the ignition switch is in the ON position.

### \* NOTICE

- In cold and wet climates, the sunroof may not work properly due to freezing conditions.
- After a vehicle is washed or in a rainstorm be sure to wipe off any water that is on the sunroof before operating it.

### ⚠ CAUTION

***Do not continue to move the sunroof control lever after the sunroof is fully opened, closed, or tilted. Damage to the motor or system components could occur.***

### \* NOTICE

- The sunroof cannot slide when it is in the tilt position nor can it be tilted while in an open or slide position.
- While driving the vehicle, it is recommended that you use the sunroof in the first detent position to reduce possible wind noise.

### ⚠ WARNING

**Never adjust the sunroof or sunshade while driving. This could result in loss of control and an accident that may cause death, serious injury, or property damage.**

### ⚠ WARNING

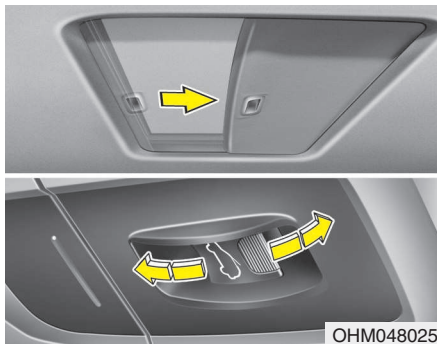
**In order to prevent accidental operation of the sunroof, especially by a child, do not let a child operate the sunroof.**

### ⚠ WARNING

**Do not sit on the top of the vehicle. It may cause vehicle damage.**

### Sliding the sunroof

To open or close the sunroof (manu-



al slide feature), pull or push the sunroof control lever backward or forward to the first detent position.

Pulling the control lever downward also closes the sunroof.

#### ***To open the sunroof automatically:***

Pull the sunroof control lever backward to the second detent position and then release it. The sunroof will slide open automatically but will not open all the way. If you would like to completely open the sunroof, pull the lever once more. However, the second time the lever is pulled the sunroof will open only while the lever is pulled.

To stop the sunroof sliding at any point, pull or push the sunroof control lever momentarily.

#### ***To close the sunroof automatically:***

Push the sunroof control lever forward to the second detent position and then release it. The sunroof will automatically close all the way.

To stop the sunroof sliding at any point, pull or push the sunroof control lever momentarily.

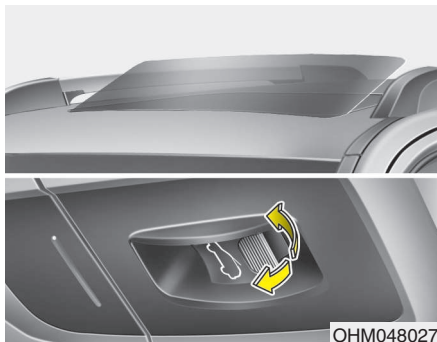
### ***Automatic reversal***



If an object or part of the body is detected while the sunroof is closing automatically, it will reverse the direction, and then stop.

The auto reverse function does not work if a tiny obstacle is between the sliding glass and the sunroof sash. You should always check that all passengers and objects are away from the sunroof before closing it.

## Tilting the sunroof



To open the sunroof (autotilt feature), push the sunroof control lever upward to the second detent. The sunroof will tilt all the way open. To stop the sunroof tilting at any point, operate the control lever.

To close the sunroof, pull the sunroof lever downward until the sunroof moves to the desired position.

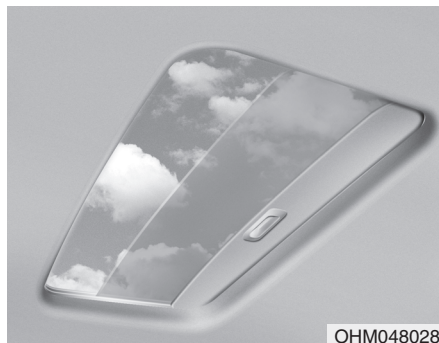
### **⚠ WARNING - Sunroof**

- Be careful that no head, hands and body parts are obstructed by a closing sunroof.
- Do not extend the face, neck, arms or body outside the sunroof while driving.
- Make sure your hands and head are safely out of the way before closing a sunroof.

### **⚠ CAUTION**

- Periodically remove any dirt that may accumulate on the guide rail.
- If you try to open the sunroof when the temperature is below freezing or when the sunroof is covered with snow or ice, the glass or the motor could be damaged.
- While using sunroof for a long time, a dust between sunroof and roof panel can make a noise.  
*Open the sunroof and remove regularly the dust using clean cloth.*
- The sunroof is made to slide together with the sunshade. Do not leave the sunshade closed while the sunroof is opened.

### Sunshade



The sunshade will automatically open with the glass panel when the glass panel is moved. Close it manually if you want it closed.

### Resetting the sunroof

Whenever the vehicle battery is disconnected or discharged, you must reset your sunroof system as follows:

1. Turn the ignition switch to the ON position.

2. According to the position of the sunroof, do the following.

1) In case the sunroof is closed completely or tilted:

Push the sunroof control lever upward until the sunroof tilts completely upward.

2) In case the sunroof is open:

Push the sunroof control lever forward until the sunroof closes completely. Push the sunroof control lever upward until the sunroof tilts completely upward.

3. Release the sunroof control lever.

4. Push the sunroof control lever upward (about 10 seconds) until the sunroof has returned to the original tilt position after it is raised a little higher than the maximum tilt position. Then, release the lever.

5. Push the sunroof control lever upward (about 6 seconds) until the sunroof operates as follows;

TILT DOWN → SLIDE OPEN →  
SLIDE CLOSE

Then, release the lever.

When this is complete, the sunroof system has been reset.

### CAUTION

***If the sunroof is not reset when the vehicle battery is disconnected or discharged, or related fuse is blown, the sunroof may operate improperly.***

## 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, we recommend that the system be checked by an authorized Kia dealer.

#### CAUTION

***Never hold the steering wheel to the extreme right or left for more than 5 seconds with the engine running. Holding the steering wheel for more than 5 seconds in either position may cause damage to the power steering pump.***

### \* NOTICE

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

### \* NOTICE

**If the vehicle is parked for extended periods outside in cold weather (below -10°C(14°F)), the power steering may require increased effort when the engine is first started. This is caused by increased fluid viscosity due to the cold weather and does not indicate a malfunction.**

When this happens, increase the engine RPM by depressing the accelerator until the RPM reaches 1,500 rpm then release or let the engine idle for two or three minutes to warm up the fluid.

### Tilt steering

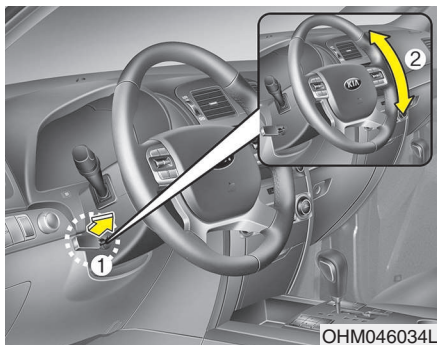
Tilt steering allows you to adjust the steering wheel before you drive. You can also raise it to give your legs more room when you exit and enter the vehicle.

The steering wheel should be positioned so that it is comfortable for you to drive, while permitting you to see the instrument panel warning lights and gauges.

#### WARNING

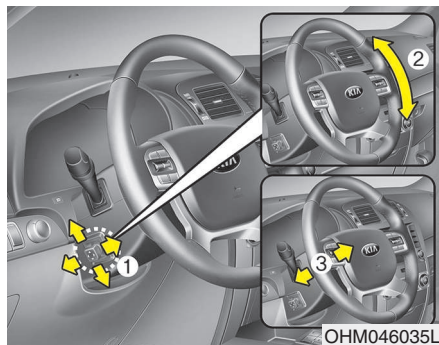
- **Never adjust the angle of the steering wheel while driving. You may lose steering control and cause severe personal injury, death or accidents.**
- **After adjusting, push the steering wheel both up and down to be certain it is locked in position.**

### Manual type (if equipped)



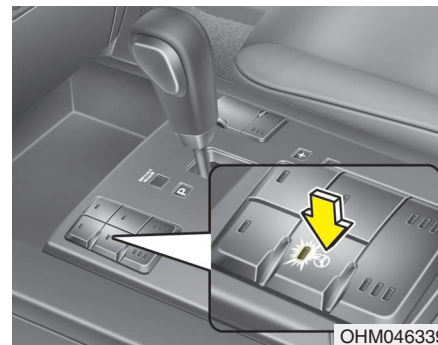
To change the steering wheel angle, adjust the steering wheel to the desired angle (2) while pulling the lock-release lever (1) and then release the lock-release lever to lock the steering wheel in place. Be sure to adjust the steering wheel to the desired position before driving.

### Electric type (if equipped)



Adjust the steering wheel angle (2) and position (3) with the control switch (1). Never adjust the position of the steering wheel while driving.

### Heated steering wheel (if equipped)



With the ignition switch in the ON position, pressing the heated steering wheel button warms the steering wheel. The indicator on the button will illuminate.

To turn the heated steering wheel off, press the button once again. The indicator on the button will turn off.

### \* NOTICE

The heated steering wheel will turn off automatically approximately 30 minutes after the heated steering wheel is turned on.

**⚠ CAUTION**

*Do not install any grip to operate the steering wheel. This causes damage to the heated steering wheel system.*

**Horn**



To sound the horn, press the horn symbol on your steering wheel. Check the horn regularly to be sure it operates properly.

**⚠ CAUTION**

*Do not strike the horn severely to operate it, or hit it with your fist. Do not press on the horn with a sharp-pointed object.*

**\* NOTICE**

To sound the horn, press the area indicated by the horn symbol on your steering wheel (see illustration). The horn will operate only when this area is pressed.



### MIRRORS

#### Inside rearview mirror

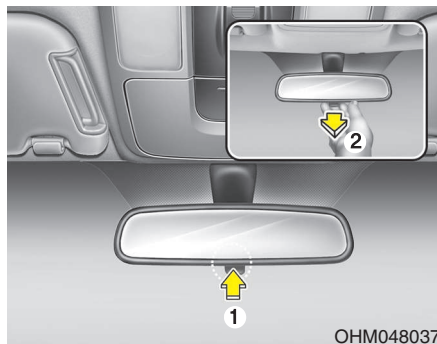
Adjust the rearview mirror so that the center view through the rear window is seen. Make this adjustment before you start driving.

**⚠ WARNING - Rear visibility**  
Do not place objects in the rear seat or cargo area which would interfere with your vision through the rear window.

**⚠ WARNING**  
Do not adjust the rearview mirror while the vehicle is moving. This could result in loss of control, and an accident which could cause death, serious injury or property damage.

**⚠ WARNING**  
Do not modify the inside mirror and don't install a wide mirror. It could result in injury, during an accident or deployment of the air bag.

#### Day/night rearview mirror (if equipped)

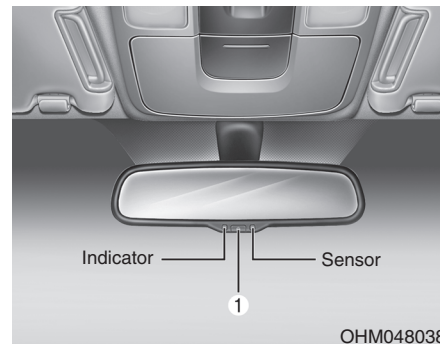


Make this adjustment before you start driving and while the day/night lever is in the day position (1).

Pull the day/night lever toward you (2) to reduce the glare from the headlights of the vehicles behind you during night driving.

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

#### Electrochromic mirror (ECM) (if equipped)



The electric rearview mirror automatically controls the glare from the headlights of the vehicles behind you in nighttime or low light driving conditions. The sensor mounted in the mirror senses the light level around the vehicle, and automatically controls the headlight glare from the vehicles behind you.

When the engine is running, the glare is automatically controlled by the sensor mounted in the rearview mirror.

Whenever the shift lever is shifted into reverse (R), the mirror will automatically go to the brightest setting in order to improve the drivers view behind the vehicle.



### CAUTION

***When cleaning the mirror, use a paper towel or similar material dampened with glass cleaner. Do not spray glass cleaner directly on the mirror. It may cause the liquid cleaner to enter the mirror housing.***

#### To operate the electric rearview mirror:

- The mirror defaults to the ON position whenever the ignition switch is turned on.
- Press the ON/OFF button (1) to turn the automatic dimming function off. The mirror indicator light will turn off.

Press the ON/OFF button (1) to turn the automatic dimming function on. The mirror indicator light will illuminate.

#### Outside rearview mirror

Be sure to adjust the mirror angles before driving.

Your vehicle is equipped with both left-hand and right-hand outside rearview mirrors. The mirrors can be adjusted remotely with the remote switch. The mirror heads can be folded back to prevent damage during an automatic car wash or when passing through a narrow street.



### WARNING - Rearview mirrors

- The outside rearview mirror is convex. Objects seen in the mirror are closer than they appear.
- Use your interior rearview mirror or direct observation to determine the actual distance of following vehicles when changing lanes.

### CAUTION

*Do not scrape ice off the mirror face; this may damage the surface of the glass. If ice should restrict the movement of the mirror, do not force the mirror for adjustment. To remove ice, use a deicer spray, or a sponge or soft cloth with warm water.*

### CAUTION

*If the mirror is jammed with ice, do not adjust the mirror by force. Use an approved spray de-icer (not radiator antifreeze) to release the frozen mechanism or move the vehicle to a warm place and allow the ice to melt.*

### WARNING

**Do not adjust or fold the outside rearview mirrors while the vehicle is moving. This could result in loss of control, and an accident which could cause death, serious injury or property damage.**

### Remote control



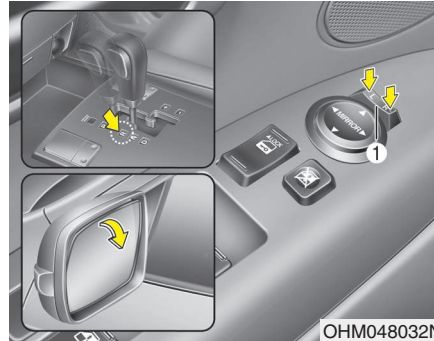
The electric remote control mirror switch allows you to adjust the position of the left and right outside rearview mirrors. To adjust the position of either mirror the ignition switch should be in the ACC position. Push the switch (1) to R or L to select the right side mirror or the left side mirror, then press a corresponding point on the mirror adjustment control to position the selected mirror up, down, left or right.

After the adjustment, put the switch into the neutral (center) position to prevent inadvertent adjustment.

## ⚠ CAUTION

- *The mirrors stop moving when they reach the maximum adjusting angles, but the motor continues to operate while the switch is pressed. Do not press the switch longer than necessary, the motor may be damaged.*
- *Do not attempt to adjust the outside rearview mirror by hand. Doing so may damage the parts.*

## Reverse parking aid function (if equipped)



While the vehicle is moving backward, the outside rearview mirror(s) will move downward to aid reverse parking. According to the position of the outside rearview mirror switch (1), the outside rearview mirror(s) will operate as follows:

**L/R** : When the remote control outside rearview mirror switch is selected to the L (left) or R (right) position, both outside rearview mirrors will move downward.

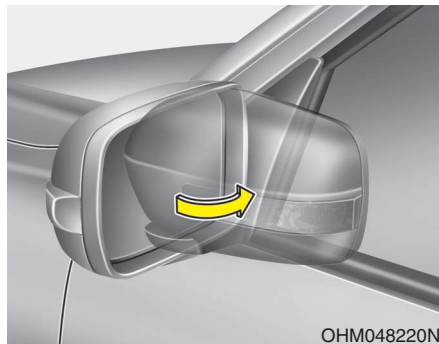
**Neutral** : When the remote control out-side rearview mirror switch is placed in the middle position, the outside rearview mirrors will not operate while the vehicle is moving backward.

## \* NOTICE

The outside rearview mirrors will automatically revert to their original positions under the following conditions:

1. Ignition switch is in the **LOCK** position.
2. Shift lever is moved to any position except **R**.
3. Remote control outside rearview mirror switch is placed in the middle position.

### Folding the outside rearview mirror



#### Manual type

To fold the outside rearview mirror, grasp the housing of the mirror and then fold it toward the rear of the vehicle.



#### Electric type

To fold the outside rearview mirror, press the button.

To unfold it, press the button again.



#### CAUTION

- *The electric type outside rearview mirror operates even though the ignition switch is in the LOCK position. However, to prevent unnecessary battery discharge, do not adjust the mirrors longer than necessary while the engine is not running.*
- *In case it is an electric type outside rearview mirror, don't fold it by hand. It could cause motor failure.*

## INSTRUMENT CLUSTER

### Gasoline Engine

#### ■ Type A



#### ■ Type B



1. Tachometer
2. Speedometer
3. Engine coolant temperature gauge
4. Fuel gauge
5. LCD display
6. Warning and indicator lights

※ The actual cluster in the vehicle may differ from the illustration.  
For more details, refer to the "Gauges" in this chapter.

OHM046561L/OHM046564L

## Features of your vehicle

### Diesel Engine

#### ■ Type A



#### ■ Type B



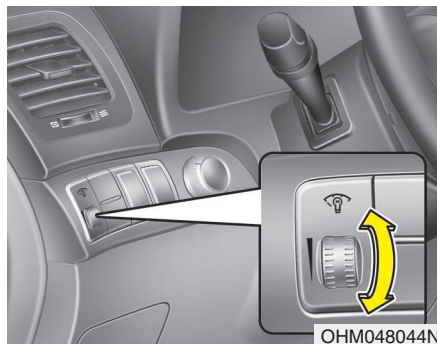
1. Tachometer
2. Speedometer
3. Engine coolant temperature gauge
4. Fuel gauge
5. LCD display
6. Warning and indicator lights

※ The actual cluster in the vehicle may differ from the illustration.  
For more details, refer to the "Gauges" in this chapter.

OHM046562L/OHM046563L

## Instrument Cluster Control

### *Adjusting Instrument Cluster Illumination (if equipped)*



#### **⚠ WARNING**

Never adjust the instrument cluster while driving. This could result in loss of control and lead to an accident that may cause death, serious injury, or property damage.

The brightness of the instrument panel illumination is changed by rotating the control knob when the ignition switch or Engine Start/Stop button is ON, or the tail lights are turned on.

## LCD Display Control



The LCD display modes can be changed by using the control buttons on the steering wheel.

- (1) : MODE button for change the LCD MODES
- (2) : MOVE scroll switch for select the items
- (3) OK : SET/RESET button for set the items or reset the items

\* For the LCD modes, refer to “LCD Display” in this chapter.



### Gauges

#### Speedometer

■ Type A (km/h)



OHM046548

■ Type B (MPH, km/h)



OHM046549

The speedometer indicates the speed of the vehicle and is calibrated in miles per hour (mph) and/or kilometers per hour (km/h).

#### Tachometer

■ Diesel



OHM046551

■ Gasoline



OHM046550

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

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



#### CAUTION

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

## Engine Coolant Temperature Gauge



OHM046552



OHM046553

This gauge indicates the temperature of the engine coolant when the ignition switch or Engine Start/Stop button is ON.

### CAUTION

*If the gauge pointer moves beyond the normal range area toward the “130 or H” position, it indicates overheating that may damage the engine.*

*Do not continue driving with an overheated engine. If your vehicle overheats, refer to “If the Engine Overheats” in chapter 7.*

### WARNING

**Never remove the radiator cap when the engine is hot. The engine coolant is under pressure and could severely burn. Wait until the engine is cool before adding coolant to the reservoir.**

### Fuel Gauge



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

### \* NOTICE

- The fuel tank capacity is given in chapter 9.
- The fuel gauge is supplemented by a low fuel warning light, which will illuminate when the fuel tank is nearly empty.
- On inclines or curves, the fuel gauge pointer may fluctuate or the low fuel warning light may come on earlier than usual due to the movement of fuel in the tank.

### ⚠ WARNING - Fuel Gauge

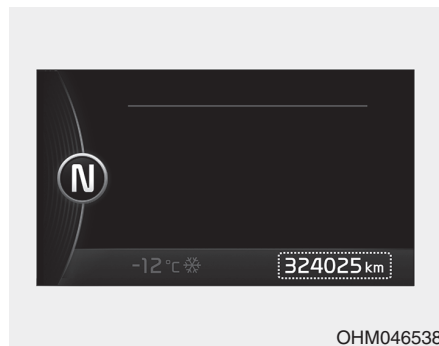
Running out of fuel can expose vehicle occupants to danger.

You must stop and obtain additional fuel as soon as possible after the warning light comes on or when the gauge indicator comes close to the “0 or E (Empty)” level.



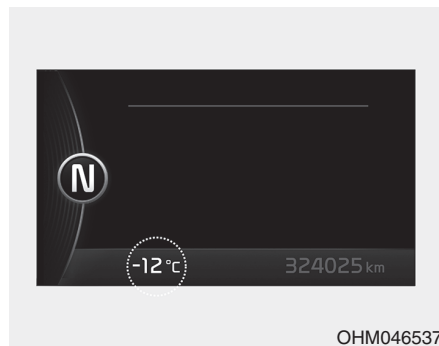
### CAUTION

*Avoid driving with a extremely low fuel level. Running out of fuel could cause the engine to misfire damaging the catalytic converter.*

**Odometer**

The odometer Indicates the total distance that the vehicle has been driven and should be used to determine when periodic maintenance should be performed.

- Odometer range : 0 ~ 1,599,999 kilometers or 0 ~ 999,999 miles.

**Outside Temperature Gauge**

This gauge indicates the current outside air temperatures by 1°C (1°F).

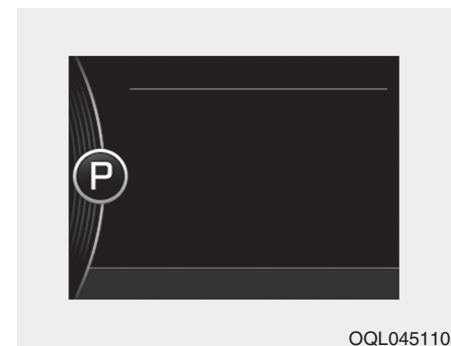
- Temperature range : -40°C ~ 85°C (-40°F ~ 185°F)

The outside temperature on the display may not change immediately like a general thermometer to prevent the driver from being inattentive. The temperature unit can be changed by using the "User Settings" mode of the LCD display.

※ For more details, refer to "LCD Display" in this chapter.

**Transaxle Shift Indicator**

**Automatic Transaxle Shift Indicator (if equipped)**



This indicator displays which automatic transaxle shift lever is selected.

- Park : P
- Reverse : R
- Neutral : N
- Drive : D
- Sports Mode
  - 5 automatic transaxle shift : 1, 2, 3, 4, 5
  - 8 automatic transaxle shift : 1, 2, 3, 4, 5, 6, 7, 8

## LCD DISPLAY (IF EQUIPPED)

### LCD Modes

| Modes                         | Symbol                                                                            | Explanation                                                                                                                                               |
|-------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Trip Computer                 |  | This mode displays driving information like the tripmeter, fuel economy, and so on. For more details, refer to "Trip Computer" in this chapter.           |
| Turn By Turn<br>(if equipped) |  | This mode displays the state of the navigation.                                                                                                           |
| LDWS<br>(if equipped)         |  | This mode displays the state of the Lane Departure Warning System (LDWS). For more details, refer to "Lane Departure Warning System (LDWS)" in chapter 6. |
| A/V<br>(if equipped)          |  | This mode displays the state of the A/V system.                                                                                                           |
| Service                       |  | This mode informs of service interval (mileage or days) and pressure status of each tire.                                                                 |
|                               |  | This mode informs of warning messages related to washer fluid or malfunction of Blind Spot Detection system (BSD) and so on.                              |
|                               |  | When the any door is not closed securely, this symbol illuminated.                                                                                        |
| User Settings                 |  | On this mode, you can change settings of the doors, lamps and so on.                                                                                      |

✱ For controlling the LCD modes, refer to "LCD Display Control" in this chapter.

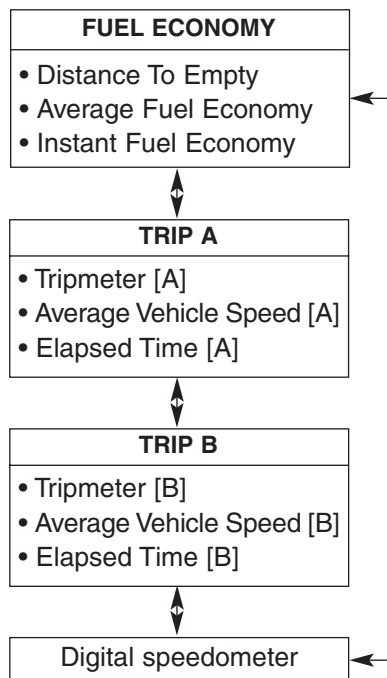
## Trip modes (Trip computer)

The trip computer is a microcomputer-controlled driver information system that displays information related to driving.

### \* NOTICE

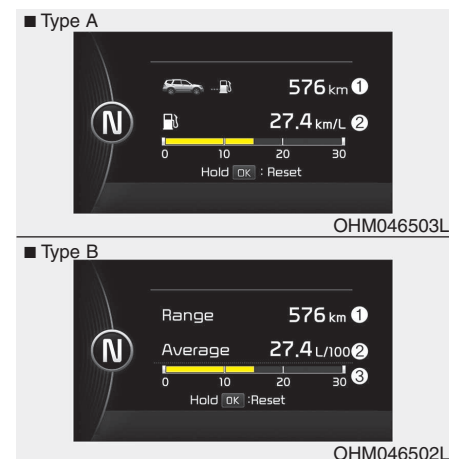
Some driving information stored in the trip computer (for example Average Vehicle Speed) resets if the battery is disconnected.

## Trip modes



To change the trip mode, scroll the MOVE scroll switch (Λ/∇) in the trip computer mode.

## Fuel Economy



### Distance To Empty (1)

- The distance to empty is the estimated distance the vehicle can be driven with the remaining fuel.
  - Distance range: 1~9,999 km or 1~9,999 mi.
- If the estimated distance is below 1 km (1 mi.), the trip computer will display "---" as distance to empty.

### \* NOTICE

- If the vehicle is not on level ground or the battery power has been interrupted, the distance to empty function may not operate correctly.
- The distance to empty may differ from the actual driving distance as it is an estimate of the available driving distance.
- The trip computer may not register additional fuel if less than 6 liters (1.6 gallons) of fuel are added to the vehicle.
- The fuel economy and distance to empty may vary significantly based on driving conditions, driving habits, and condition of the vehicle.

### Average Fuel Economy (2)

- The average fuel economy is calculated by the total driving distance and fuel consumption since the last average fuel economy reset.
  - Fuel economy range: 0.0 ~ 99.9 L/100km or MPG
- The average fuel economy can be reset both manually and automatically.

### Manual reset

To clear the average fuel economy manually, press the OK button (reset) on the steering wheel for more than 1 second when the average fuel economy is displayed.

### Automatic reset

To make the average fuel economy be reset automatically whenever refueling, select the "Fuel economy auto reset" mode in User Setting menu of the LCD display (Refer to "LCD Display").

- OFF - You may set to default manually by using the trip switch reset button.
- When driving - The vehicle will automatically set to default once 4 hours pass after the Ignition is in OFF.
- When refueling - After refueling more than 6 liters and driving over 1km/h, the vehicle will reset to default automatically.

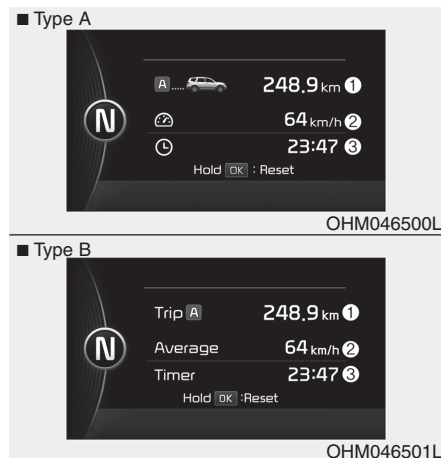
### \* NOTICE

The average fuel economy is not displayed for more accurate calculation if the vehicle does not drive more than 10 seconds or 50 meters (0.03 miles) since the ignition switch or Engine Start/Stop button is turned to ON.

## Instant Fuel Economy (3)

- This mode displays the instant fuel economy during the last few seconds when the vehicle speed is more than 10 km/h (6.2 MPH).
- Fuel economy range: 0.0 ~ 30 L/100km or 0.0 ~ 50.0 MPG

## Trip A/B



## Tripmeter (1)

- The tripmeter is the total driving distance since the last tripmeter reset.
  - Distance range: 0.0 ~ 9999.9 km or mi.
- To reset the tripmeter, press the OK button (reset) on the steering wheel for more than 1 second when the tripmeter is displayed.



### Average Vehicle Speed (2)

- The average vehicle speed is calculated by the total driving distance and driving time since the last average vehicle speed reset.
  - Speed range: 0 ~ 999 km/h or MPH
- To reset the average vehicle speed, press the OK button (reset) on the steering wheel for more than 1 second when the average vehicle speed is displayed.

### \* NOTICE

- The average vehicle speed is not displayed if the driving distance has been less than 300 meters (0.19 miles) or the driving time has been less than 10 seconds since the ignition switch or Engine Start/Stop button was turned to ON.
- Even if the vehicle is not in motion, the average vehicle speed keeps going while the engine is running.

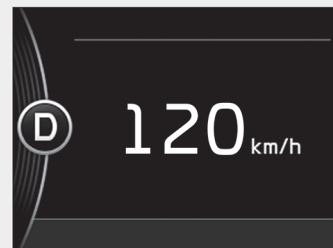
### Elapsed Time (3)

- The elapsed time is the total driving time since the last elapsed time reset.
  - Time range (hh:mm): 00:00 ~ 99:59
- To reset the elapsed time, press the OK button (reset) on the steering wheel for more than 1 second when the elapsed time is displayed.

### \* NOTICE

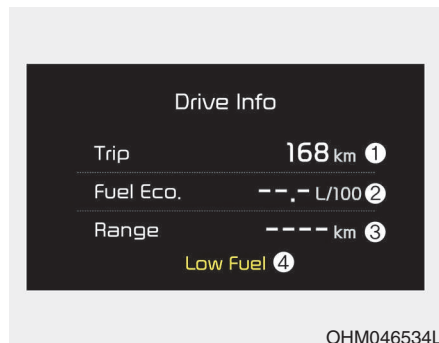
Even if the vehicle is not in motion, the elapsed time keeps going while the engine is running.

### Digital speedometer



OQLE045143

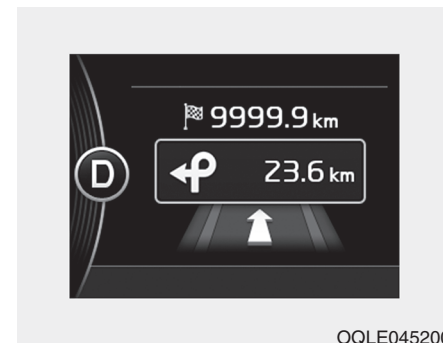
This mode displays the current speed of the vehicle.

**One time driving information mode**

This display shows trip distance (1), average fuel economy (2) and the vehicle can be driven with the remaining fuel (3).

This information is displayed for a few seconds when you turn off the engine and then goes off automatically. The information provided is calculated according to each trip.

If the estimated distance is below 1km (1mi.), the distance to empty (3) will display as "----" and a refuel message will appear (4).

**Turn By Turn Mode (if equipped)**

This mode displays the state of the navigation.

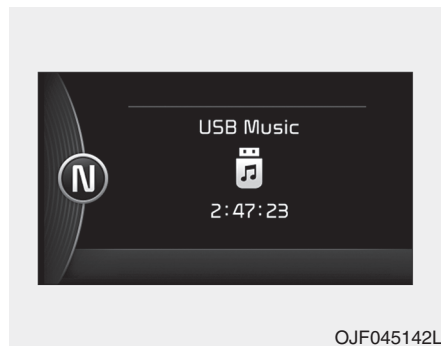
### LDWS Mode (if equipped)



This mode displays the state of the Lane Departure Warning System (LDWS).

For more information, refer to "Lane Departure Warning System (LDWS)" in chapter 6.

### A/V Mode (if equipped)



This mode displays the state of the A/V system.

### Service Mode

#### *Tire Pressure (if equipped)*

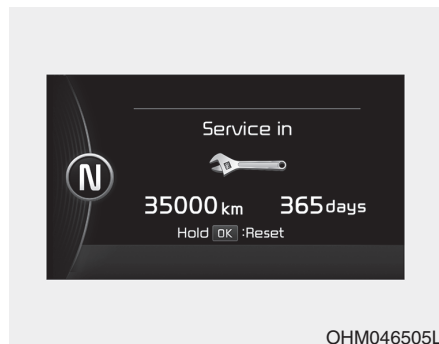


This mode displays the pressure status of each tire.

You can change the tire pressure unit in "User settings" mode.

\* For more details, refer to "User Settings mode" in this chapter.

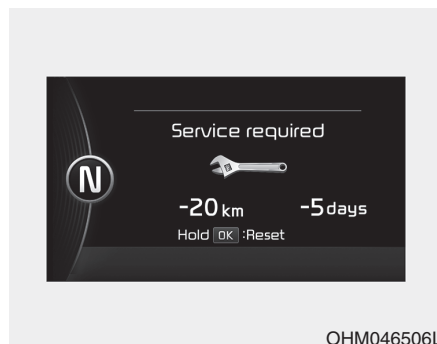
## Service Interval



### Service in

It calculates and displays when you need a scheduled maintenance service (mileage or days).

If the remaining mileage or time reaches 1,500 km (1,500 mi.) or 30 days, "Service in" message is displayed for several seconds each time you set the ignition switch or Engine Start/Stop Button to the ON position.

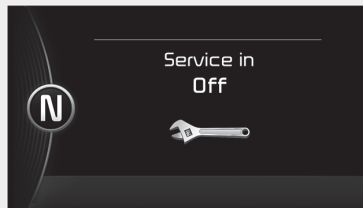


### Service required

If you do not have your vehicle serviced according to the already inputted service interval, "Service required" message is displayed for several seconds each time you set the ignition switch or Engine Start/Stop Button to the ON position.

To reset the service interval to the mileage and days you inputted before:

- Activate the reset mode by pressing the OK button (reset) for more than 5 second, then press the OK button (reset) again for more than 1 second (Europe).
- Press the OK button (reset) for more than 1 second (Except Europe).



OHM046507L

### Service in OFF

If the service interval is not set, "Service in OFF" message is displayed on the LCD display.

### \* NOTICE

If any of the following conditions occurs, the mileage and days may be incorrect.

- The battery cable is disconnected.
- The fuse switch is turned off.
- The battery is discharged.

### Master Warning Mode (if equipped)



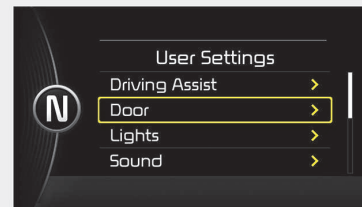
- This warning light informs the driver the following situations
  - Blind Spot Detection (BSD) malfunction (if equipped)
  - Tire Pressure Monitoring System (TPMS) malfunction or Low tire pressure warning (if equipped)
  - Blind Spot Detection (BSD) system automatically cancellation (if equipped)
  - High Beam Assist (HBA) malfunction (if equipped) and so on.

The Master Warning Light illuminates when more than one of the above warning situations occur. At this time, the LCD Modes Icon will change from (⚙) to (⚠).

If the warning situation is solved, the master warning light will be turned off and the LCD Modes Icon will be

### User Settings Mode

#### Description



OHM046508L

On this mode, you can change setting of the doors, lamps, and so on.

### ⚠ WARNING

**Do not adjust the User Setting while driving. You may lose your steering control and cause severe personal injury or accidents.**

**Driving Assist (if equipped)**

| Items                                       | Explanation                                                                                                                                                 |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rear Cross Traffic Alert<br>(if equipped)   | If this item is checked, the rear cross traffic alert function will be activated.<br>For more details, refer to "Blind Spot Detection System" in chapter 6. |
| BSD (Blind Spot Detection)<br>(if equipped) | If this item is checked, the rear cross traffic alert function will be activated.<br>For more details, refer to "Blind Spot Detection System" in chapter 6. |

**Door**

| Items                            | Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Automatically Lock               | <ul style="list-style-type: none"> <li>• Off : The auto door lock operation will be deactivated.</li> <li>• Enable on Speed: All doors will be automatically locked when the vehicle speed exceeds 15km/h (9.3mph).</li> <li>• Enable on Shift: All doors will be automatically locked if the automatic transaxle/dual clutch transmission shift lever is shifted from the P (Park) position to the R (Reverse), N (Neutral), or D (Drive) position.</li> </ul>                                                                                                                                |
| Automatically Unlock             | <ul style="list-style-type: none"> <li>• Off : The auto door unlock operation will be canceled.</li> <li>• Vehicle Off/On key out : All doors will be automatically unlocked when the ignition key is removed from the ignition switch or the Engine Star/Stop button is set to the OFF position.</li> <li>• Driver Door Unlock: All doors will be automatically unlocked if the driver's door is unlocked.</li> <li>• On Shift to P: All doors will be automatically unlocked if the automatic transaxle/dual clutch transmission shift lever is shifted to the P (Park) position.</li> </ul> |
| Door Lock Sound<br>(if equipped) | If this item checked, the door lock sound function will be activated when locking doors.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

### *Lights*

| Items                            | Explanation                                                                                                                                                                       |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| One Touch Turn Signal            | <ul style="list-style-type: none"><li>• If this item checked, the one touch turn signal function will be activated. For more details, refer to "Light" in this chapter.</li></ul> |
| Welcome Light<br>(If equipped)   | <ul style="list-style-type: none"><li>• If this item checked, the welcome light function will be activated.</li></ul>                                                             |
| Headlamp Escort<br>(if equipped) | <ul style="list-style-type: none"><li>• If this item checked, the head lamp delay function will be activated.</li></ul>                                                           |

### *Sound*

| Items                                             | Explanation                                                                                                                                                                                      |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BSD (Blind Spot Detection)<br>Sound (if equipped) | <ul style="list-style-type: none"><li>• If this item checked, the blind spot detection sound will be activated. For more details, refer to "Blind Spot Detection System" in chapter 6.</li></ul> |
| Welcome Sound<br>(if equipped)                    | <ul style="list-style-type: none"><li>• If this item checked, the welcome sound function will be activated.</li></ul>                                                                            |

**Convenience**

| Items                             | Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Seat Easy Access<br>(if equipped) | <ul style="list-style-type: none"> <li>• None: The seat easy access function will be deactivated.</li> <li>• Normal/Extended: <ul style="list-style-type: none"> <li>- When you turn off the engine, the driver's seat will automatically move rearward short (Normal) or long (Extended) for you to enter or exit the vehicle more comfortably.</li> <li>- If you change the Engine Start/Stop button from OFF position to the ACC, ON, or START position, the driver's seat will return to the original position.</li> </ul> </li> </ul> <p>For more details, refer to "Driver Position Memory System" in chapter 3.</p> |
| Steering Easy Access              | <p>If this item is checked, the warning function regarding the steering wheel alignment will be activated.</p> <p>For more details, refer to "Warning Messages" in this chapter.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                       |

**Service interval**

| Items            | Explanation                                                                                                                                                                                                                                                                                                                                                             |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Service Interval | <p>On this mode, you can activate the service interval function with mileage (km or mi.) and period (months).</p> <ul style="list-style-type: none"> <li>• Off : The service interval function will be deactivated.</li> <li>• On : You can set the service interval (mileage and months).</li> </ul> <p>For more details, refer to "Service Mode" in this chapter.</p> |

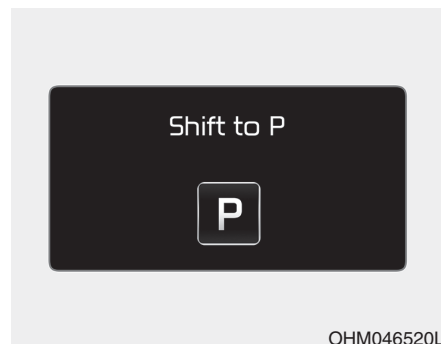


### *Other features*

| Items                               | Explanation                                                                                                                                                                                                                                                                            |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fuel Economy Auto Reset             | <ul style="list-style-type: none"><li>• Off</li><li>• When driving : If this item checked, the average fuel economy will reset automatically when driving.</li><li>• When refueling: If this item checked, the average fuel economy will reset automatically when refueling.</li></ul> |
| Fuel Economy Unit                   | Choose the fuel economy unit. (Km/L, L/100)                                                                                                                                                                                                                                            |
| Temperature Unit                    | Choose the temperature unit. (°C, °F)                                                                                                                                                                                                                                                  |
| Tire Pressure Unit<br>(if equipped) | Choose the tire pressure unit. (psi, kPa, Bar)                                                                                                                                                                                                                                         |

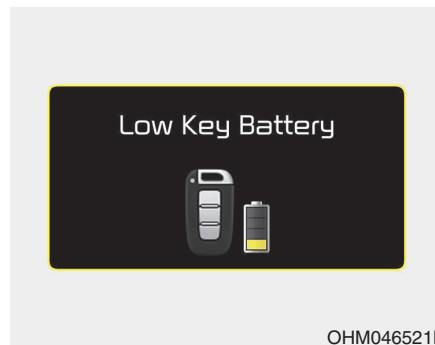
## Warning Messages (if equipped)

*Shift to P (for smart key system and automatic transaxle)*



- This warning message illuminates if you try to turn off the engine without the shift lever in P (Park) position.
- At this time, the Engine Start/Stop Button turns to the ACC position (If you press the Engine Start/Stop Button once more, it will turn to the ON position).

## Low Key Battery (for smart key system)



- This warning message illuminates if the battery of the smart key is discharged when the Engine Start/Stop Button changes to the OFF position.

## Press START button while turning wheel (for smart key system)



- This warning message illuminates if the steering wheel does not unlock normally when the Engine Start/Stop Button is pressed.
- It means that you should press the Engine Start/Stop Button while turning the steering wheel right and left.

### ***Steering wheel unlocked (for smart key system)***



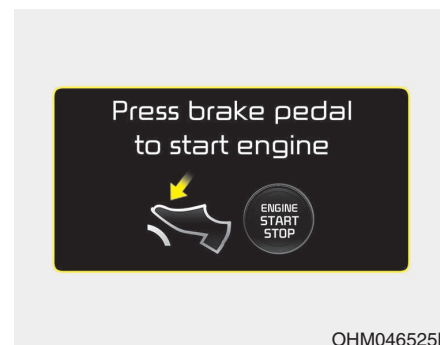
- This warning message illuminates if the steering wheel does not lock when the Engine Start/Stop Button changes to the OFF position.

### ***Check steering wheel lock system (for smart key system)***



- This warning message illuminates if the steering wheel does not lock normally when the Engine Start/Stop Button changes to the OFF position.

### ***Press brake pedal to start engine (for smart key system and auto- matic transaxle)***



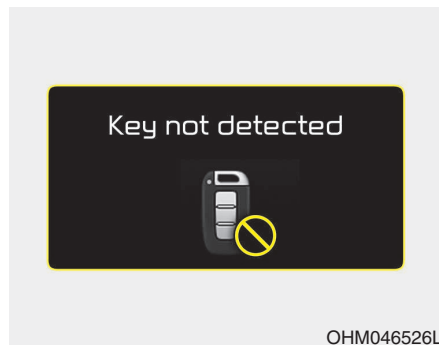
- This warning message illuminates if the Engine Start/Stop Button changes to the ACC position twice by pressing the button repeatedly without depressing the brake pedal.
- It means that you should depress the brake pedal to start the engine.

**Key not in vehicle  
(for smart key system)**



- This warning message illuminates if the smart key is not in the vehicle when you press the Engine Start/Stop Button.
- It means that you should always have the smart key with you.

**Key not detected  
(for smart key system)**



- This warning message illuminates if the smart key is not detected when you press the Engine Start/Stop Button.

**Press START button again  
(for smart key system)**



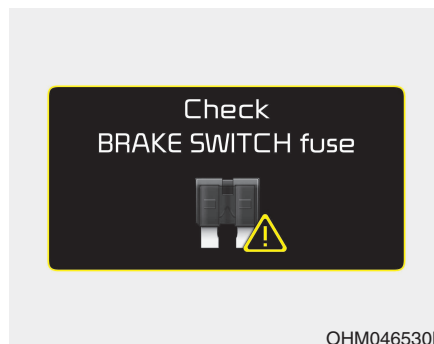
- This warning message illuminates if you can not operate the Engine Start/Stop Button when there is a problem with the Engine Start/Stop Button system.
- It means that you could start the engine by pressing the Engine Start/ Stop Button once more.
- If the warning illuminates each time you press the Engine Start/Stop Button, we recommend that you have the vehicle inspected by an authorized Kia dealer.

### *Press START button with key (for smart key system)*



- This warning message illuminates if you press the Engine Start/Stop Button while the warning message "Key not detected" is illuminating.
- At this time, the immobilizer indicator light blinks.

### *Check BRAKE SWITCH fuse (for smart key system and auto- matic transaxle)*



- This warning message illuminates if the brake switch fuse is disconnected.
- It means that you should replace the fuse with a new one. If that is not possible, you can start the engine by pressing the Engine Start/Stop Button for 10 seconds in the ACC position.

### *Shift to P or N to start engine (for smart key system and auto- matic transaxle)*



- This warning message illuminates if you try to start the engine with the shift lever not in the P (Park) or N (Neutral) position.

### **\* NOTICE**

You can start the engine with the shift lever in the N (Neutral) position. But, for your safety, we recommend that you start the engine with the shift lever in the P (Park) position.

### *Door and Tailgate open*



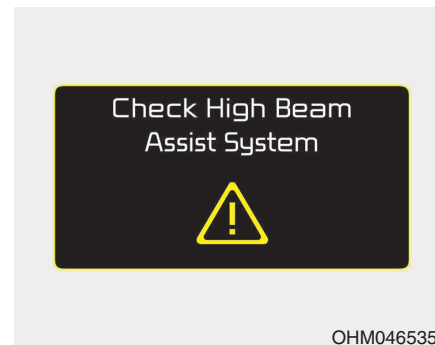
- It means that any door, door or tailgate open

### *Low Washer Fluid (if equipped)*



- This warning message illuminates on the service reminder mode if the washer fluid level in the reservoir is nearly empty.
- It means that you should refill the washer fluid.

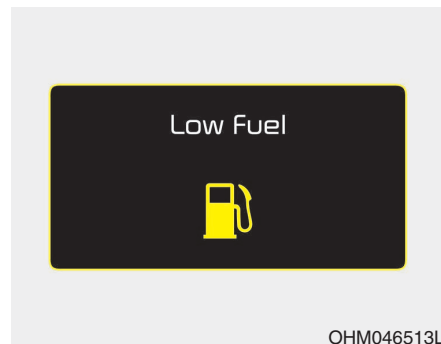
### *Check high beam assist system (if equipped)*



- This warning message illuminates if the high beam assist system has a malfunction.

In this case, we recommend that you have the vehicle inspected by an authorized Kia dealer.

### ***Low Fuel***



- This warning message illuminates if the fuel tank is nearly empty.
  - When the low fuel level warning light is illuminates.Add fuel as soon as possible.

## WARNING AND INDICATOR LIGHTS

### Warning lights

#### \* NOTICE - Warning lights

Make sure that all warning lights are OFF after starting the engine. If any light is still ON, this indicates a situation that needs attention.

#### *Air bag Warning Light*



##### **This warning light illuminates:**

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 6 seconds and then goes off.
- When there is a malfunction with the SRS.

In this case, we recommend that you have the vehicle inspected by an authorized Kia dealer.

#### *Seat Belt Warning Light*



This warning light informs the driver that the seat belt is not fastened.

For more details, refer to the “Seat Belts” in chapter 3.



### ***Parking Brake & Brake Fluid Warning Light***



#### **This warning light illuminates:**

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds
  - It remains on if the parking brake is applied.
- When the parking brake is applied.
- When the brake fluid level in the reservoir is low.
  - If the warning light illuminates with the parking brake released, it indicates the brake fluid level in reservoir is low.

#### **If the brake fluid level in the reservoir is low:**

1. Drive carefully to the nearest safe location and stop your vehicle.
2. With the engine stopped, check the brake fluid level immediately and add fluid as required (For more details, refer to “Brake Fluid” in chapter 8). Then check all brake components for fluid leaks. If any leak on the brake system is still found, the warning light remains on, or the brakes do not operate properly, do not drive the vehicle.

In this case, we recommend that you have the vehicle towed to an authorized Kia dealer and inspected.

#### **Dual-diagonal braking system**

Your vehicle is equipped with dual-diagonal braking systems. This means you still have braking on two wheels even if one of the dual systems should fail.

With only one of the dual systems working, more than normal pedal travel and greater pedal pressure are required to stop the vehicle.

Also, the vehicle will not stop in as short a distance with only a portion of the brake system working.

If the brakes fail while you are driving, shift to a lower gear for additional engine braking and stop the vehicle as soon as it is safe to do so.

**⚠ WARNING - Parking  
Brake & Brake Fluid  
Warning Light**

Driving the vehicle with a warning light ON is dangerous. If the Parking Brake & Brake Fluid Warning Light illuminates with the parking brake released, it indicates that the brake fluid level is low.

In this case, we recommend that you have the vehicle inspected by an authorized Kia dealer.

**Anti-lock Brake System  
(ABS) Warning Light**



This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the ABS (The normal braking system will still be operational without the assistance of the anti-lock brake system).

In this case, we recommend that you have the vehicle inspected by an authorized Kia dealer.

**Electronic  
Brake force  
Distribution  
(EBD) System Warning Light**



**These two warning lights illuminate at the same time while driving:**

- When the ABS and regular brake system may not work normally.

In this case, we recommend that you have the vehicle inspected by an authorized Kia dealer.

**⚠ WARNING - Electronic Brake force Distribution (EBD) System Warning Light**

When both ABS and Parking Brake & Brake Fluid Warning Lights are on, the brake system will not work normally and you may experience an unexpected and dangerous situation during sudden braking.

In this case, avoid high speed driving and abrupt braking.

We recommend you have the vehicle inspected by an authorized Kia dealer as soon as possible.

**\* NOTICE - Electronic Brake force Distribution (EBD) System Warning Light**

When the ABS Warning Light is on or both ABS and Parking Brake & Brake Fluid Warning Lights are on, the speedometer, odometer, or trip-meter may not work. Also, the EPS Warning Light may illuminate and the steering effort may increase or decrease.

In this case, we recommend you have the vehicle inspected by an authorized Kia dealer as soon as possible.

**Malfunction Indicator Lamp (MIL)**



**This warning light illuminates:**

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It remains on until the engine is started.
- When there is a malfunction with the emission control system.

In this case, we recommend that you have the vehicle inspected by an authorized Kia dealer.

**⚠ CAUTION - Malfunction Indicator Lamp (MIL)**

*Driving with the Malfunction Indicator Lamp (MIL) on may cause damage to the emission control systems which could effect drivability and/or fuel economy.*

**⚠ CAUTION - Gasoline Engine**

*If the Malfunction Indicator Lamp (MIL) illuminates, potential catalytic converter damage is possible which could result in loss of engine power.*

*In this case, we recommend that you have the vehicle inspected by an authorized Kia dealer as soon as possible.*

**⚠ CAUTION - Diesel Engine**

*If the Malfunction Indicator Lamp (MIL) blinks, some error related to the injection quantity adjustment occurs which could result in loss of engine power, combustion noise and poor emission.*

*In this case, we recommend that you have the engine control system inspected by an authorized Kia dealer.*

**Charging System Warning Light**



This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It remains on until the engine is started.
- When there is a malfunction with either the alternator or electrical charging system.

**If there is a malfunction with either the alternator or electrical charging system:**

1. Drive carefully to the nearest safe location and stop your vehicle.
2. Turn the engine off and check the alternator drive belt for looseness or breakage.

If the belt is adjusted properly, there may be a problem in the electrical charging system.

In this case, we recommend that you have the vehicle inspected by an authorized Kia dealer as soon as possible.

**Engine Oil Pressure Warning Light**



This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It remains on until the engine is started.
- When the engine oil pressure is low.

**If the engine oil pressure is low:**

1. Drive carefully to the nearest safe location and stop your vehicle.
2. Turn the engine off and check the engine oil level (For more details, refer to "Engine Oil" in chapter 8). If the level is low, add oil as required.

If the warning light remains on after adding oil or if oil is not available, we recommend that you have the vehicle inspected by an authorized Kia dealer as soon as possible.

 **CAUTION - Engine Oil Pressure Warning Light**

- *If the engine does not stop immediately after the Engine Oil Pressure Warning Light is illuminated, severe damage could result.*
- *If the warning light stays on while the engine is running, it indicates that there may be serious engine damage or malfunction. In this case,*
  1. *Stop the vehicle as soon as it is safe to do so.*
  2. *Turn off the engine and check the oil level. If the oil level is low, fill the engine oil to the proper level.*
  3. *Start the engine again. If the warning light stays on after the engine is started, turn the engine off immediately. In this case, we recommend that you have the vehicle inspected by an authorized Kia dealer.*

**Low Fuel Level Warning Light**



**This warning light illuminates:**  
When the fuel tank is nearly empty.

**If the fuel tank is nearly empty:**  
Add fuel as soon as possible.

 **CAUTION - Low Fuel Level**

*Driving with the Low Fuel Level warning light on or with the fuel level below “0 or E” can cause the engine to misfire and damage the catalytic converter (if equipped).*

**Low Tire Pressure Warning Light (if equipped)**



**This warning light illuminates:**

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When one or more of your tires are significantly underinflated (The location of the underinflated tires are displayed on the LCD display).  
For more details, refer to “Tire Pressure Monitoring System (TPMS)” in chapter 7.

This warning light remains on after blinking for approximately 60 seconds or repeats blinking and off at the intervals of approximately 3 seconds:

- When there is a malfunction with the TPMS.

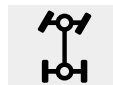
In this case, we recommend that you have the vehicle inspected by an authorized Kia dealer as soon as possible.

For more details, refer to “Tire Pressure Monitoring System (TPMS)” in chapter 7.

### **⚠ WARNING - Safe Stopping**

- The TPMS cannot alert you to severe and sudden tire damage caused by external factors.
- If you notice any vehicle instability, immediately take your foot off the accelerator pedal, apply the brakes gradually with light force, and slowly move to a safe position off the road.

### **4WD System Warning Light (if equipped)**



**This warning light illuminates:**

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the 4WD system.

In this case, we recommend that you have the vehicle inspected by an authorized Kia dealer.

### **Overspeed Warning Light (if equipped)**

**120  
km/h**

**This warning light blinks:**

- When you drive the vehicle more than 120 km/h.
  - This is to prevent you from driving your vehicle with overspeed.
  - The overspeed warning chime also sound for approximately 5 seconds.

### Fuel Filter Warning Light (Diesel Engine)



This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When water has accumulated inside the fuel filter.

In this case, remove the water from the fuel filter.

For more details, refer to “Fuel Filter” in chapter 8.



### CAUTION - Fuel Filter Warning Light

- *When the Fuel Filter Warning Light illuminates, engine power (vehicle speed & idle speed) may decrease.*
- *If you keep driving with the warning light on, engine parts (injector, common rail, high pressure fuel pump) may be damaged. If this occurs, we recommend that you have the vehicle inspected by an authorized Kia dealer as soon as possible.*

### Exhaust system (DPF) warning light (Diesel Engine)



This warning light illuminates:

- When there is a malfunction with Diesel Particulate Filter (DPF) system.
- When this warning light illuminates, it may turn off after driving the vehicle:
  - at more than 60km/h (37 mph), or
  - at more than 2nd gear with 1500 ~ 2000 engine rpm for a certain time (for about 25 minutes).

If the this warning light blink in spite of the procedure (at this time LCD warning message will be displayed), we recommend that you have the DPF system checked by an authorized Kia dealer.



### CAUTION - Diesel Engine with DPF (if equipped)

*If you continue to drive with the DPF warning light blinking for a long time, the DPF system can be damaged and fuel consumption can worsen.*

### ***Ice Warning Light (if equipped)***



This warning light blinks 5 times and then illuminates, and also warning chime sounds 1 time:

- When the temperature on the Outside Temperature Gauge is below approximately 4°C (39.2°F) with the ignition switch or Engine Start/Stop button in the ON position.

### **\* NOTICE**

If the ice warning light appears while driving, you should drive more attentively and safely refraining from over-speeding, rapid acceleration, sudden braking or sharp turning, etc.

### **Indicator Lights**

#### ***Electronic Stability Control (ESC) Indicator Light (if equipped)***



This indicator light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the ESC system.

In this case, we recommend that you have the vehicle inspected by an authorized Kia dealer.

**This indicator light blinks:**

While the ESC is operating.

For more details, refer to “Electronic Stability Control (ESC)” in chapter 6.

#### ***Electronic Stability Control (ESC) OFF Indicator Light (if equipped)***



**This indicator light illuminates:**

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When you deactivate the ESC system by pressing the ESC OFF button.

For more details, refer to “Electronic Stability Control (ESC)” in chapter 6.



### ***Immobilizer Indicator Light (Without Smart Key) (if equipped)***



#### **This indicator light illuminates:**

- When the vehicle detects the immobilizer in your key properly while the ignition switch is ON.
  - At this time, you can start the engine.
  - The indicator light goes off after starting the engine.

#### **This indicator light blinks:**

- When there is a malfunction with the immobilizer system.

In this case, we recommend that you have the vehicle inspected by an authorized Kia dealer.

### ***Immobilizer Indicator Light (With Smart Key) (if equipped)***



#### **This indicator light illuminates for up to 30 seconds:**

- When the vehicle detects the smart key in the vehicle properly while the Engine Start/Stop Button is ACC or ON.
  - At this time, you can start the engine.
  - The indicator light goes off after starting the engine.

#### **This indicator light blinks for a few seconds:**

- When the smart key is not in the vehicle.
  - At this time, you can not start the engine.

#### **This indicator light illuminates for 2 seconds and goes off:**

- When the vehicle can not detect the smart key which is in the vehicle while the Engine Start/Stop Button is ON.

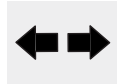
In this case, we recommend that you have the vehicle inspected by an authorized Kia dealer.

#### **This indicator light blinks:**

- When the battery of the smart key is weak.
  - At this time, you can not start the engine. However, you can start the engine if you press the Engine Start/Stop Button with the smart key. (For more details, refer to "Starting the Engine" in chapter 6).
- When there is a malfunction with the immobilizer system.

In this case, we recommend that you have the vehicle inspected by an authorized Kia dealer.

### ***Turn Signal Indicator Light***



#### **This indicator light blinks:**

- When you turn the turn signal light on.

If any of the following occurs, there may be a malfunction with the turn signal system. In this case, we recommend that you have the vehicle inspected by an authorized Kia dealer.

- The indicator light does not blink but illuminates.
- The indicator light blinks more rapidly.
- The indicator light does not illuminate at all.

### ***High Beam Indicator Light***



#### **This indicator light illuminates:**

- When the headlights are on and in the high beam position
- When the turn signal lever is pulled into the Flash-to-Pass position.

### ***Light ON Indicator Light***



#### **This indicator light illuminates:**

- When the tail lights or headlights are on.

### ***Front Fog Indicator Light***



#### **This indicator light illuminates:**

- When the front fog lights are on.

### **High beam assist indicator (if equipped)**



#### **This warning light illuminates :**

- When the high-Beam is on with the light switch in the AUTO light position.
- If your vehicle detects oncoming or preceding vehicles, the high beam assist system will switch the high beam to low beam automatically.

For more details, refer to “High beam assist” in chapter 4.

### **Low Beam Indicator Light (if equipped)**



#### **This indicator light illuminates:**

- When the headlights are on.

### **Glow Indicator Light (Diesel Engine)**



#### **This indicator light illuminates:**

- When the engine is being preheated with the ignition switch or Engine Start/Stop Button in the ON position.
  - The engine can be started after the glow indicator light goes off.
  - The illumination time varies with the engine coolant temperature, air temperature, and battery condition.

If the indicator light remains on or blinks after the engine has warmed up or while driving, there may a malfunction with the engine preheating system.

In this case, we recommend that you have the vehicle inspected by an authorized Kia dealer.

### **\* NOTICE - Engine Preheating**

If the engine does not start within 10 seconds after the preheating is completed, set the ignition switch or Engine Start/Stop Button to the **LOCK** or **OFF** position for 10 seconds and then to the **ON** position in order to preheat the engine again.

### **Lane Departure Warning System (LDWS) Indicator Light (if equipped)**



#### **This indicator light illuminates:**

- [White] When the lane departure warning system does not detect the lane line.
- [Green] When you activate the lane departure warning system by pressing the LDWS button.

When blinking in Green, LDWS is in warning condition.

- [Yellow] When there is a malfunction with the lane departure warning system.

In this case, we recommend that you have the vehicle inspected by an authorized Kia dealer.

✱ For more details, refer to “Lane Departure Warning System (LDWS)” in chapter 6.

### **4WD LOW indicator (if equipped)**

**4WD  
LOW**

When the ignition switch is turned to the ON position, the 4WD LOW indicator will illuminate and then go off in a few seconds. The 4WD LOW indicator illuminates when the transfer shift knob is set to the 4L(Low-speed 4-wheel drive) position.

✱ For more details, refer to “Four wheel drive (4WD)” in chapter 6.

### **4WD HI indicator (if equipped)**

**4WD  
HI**

When the ignition switch is turned to the ON position, the 4WD HI indicator will illuminate and then go off in a few seconds. The 4WD HI indicator illuminates when the transfer shift knob is set to the 4H(High-speed 4-wheel drive) position.

✱ For more details, refer to “Four wheel drive (4WD)” in chapter 6.

### ***ALS (Air Leveling System) indicator (if equipped)***



The rear height of the vehicle is controlled by pressing the top or bottom part of the switch. The corresponding indicator will illuminate in LCD display.

✱ For more details, refer to “Air leveling system” in chapter 6.

### ***Cruise Indicator Light (if equipped)***



**CRUISE**

**This indicator light illuminates:**

- When the cruise control system is enabled.

For more details, refer to “Cruise Control System” in chapter 6.

### ***Cruise SET Indicator Light (if equipped)***

**SET**

**This indicator light illuminates:**

- When the cruise control speed is set.

For more details, refer to “Cruise Control System” in chapter 6.

## REAR PARKING ASSIST SYSTEM (IF EQUIPPED)



The rear parking assist system assists the driver during backward movement of the vehicle by chiming if any object is sensed within a distance of 120 cm (47 in.) behind the vehicle.

This system is a supplemental system and it is not intended to nor does it replace the need for extreme care and attention of the driver. The sensing range and objects detectable by the back sensors are limited. Whenever backing-up, pay as much attention to what is behind you as you would in a vehicle without a rear parking assist system.

### **⚠ WARNING**

**The rear parking assist system is a supplementary function only. The operation of the rear parking assist system can be affected by several factors (including environmental conditions). It is the responsibility of the driver to always check the area behind the vehicle before and while backing up.**

### **Operation of the rear parking assist system**

#### ***Operating condition***

- This system will activate when the indicator on the rear parking assist OFF button is not illuminated. If you desire to deactivate the rear parking assist system, press the rear parking assist OFF button again. (The indicator on the button will illuminate.) To turn the system on, press the button again. (The indicator on the button will go off.)
- This system will activate when backing up with the ignition switch ON.  
  
If the vehicle is moving at a speed over 5 km/h (3 mph), the system may not be activated correctly.
- The sensing distance while the rear parking assist system is in operation is approximately 120 cm (47 in.).
- When more than two objects are sensed at the same time, the closest one will be recognized first.

| Types of warning sound                                                                                     | Indicator*                                                                        |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| When an object is 120 cm to 60 cm (47 in. to 24 in.) from the rear bumper:<br>Buzzer beeps intermittently. |  |
| When an object is 60 cm to 30 cm (24 in. to 12 in.) from the rear bumper:<br>Buzzer beeps more frequently. |  |
| When an object is within 30 cm (12 in.) of the rear bumper:<br>Buzzer sounds continuously.                 |  |

\* if equipped

### \* NOTICE

The indicator may differ from the illustration as objects or sensors status.

If the indicator blinks, we recommend that the system be checked by an authorized Kia dealer.

### Non-operational conditions of rear parking assist system

#### The rear parking assist system may not operate properly when:

1. Moisture is frozen to the sensor. (It will operate normally when the moisture has been cleared.)
2. The sensor is covered with foreign matter, such as snow or water, or the sensor cover is blocked. (It will operate normally when the material is removed or the sensor is no longer blocked.)
3. Driving on uneven road surfaces (unpaved roads, gravel, bumps, gradient).
4. Objects generating excessive noise (vehicle horns, loud motorcycle engines, or truck air brakes) are within range of the sensor.
5. Heavy rain or water spray exists.
6. Wireless transmitters or mobile phones are within range of the sensor.
7. The sensor is covered with snow.
8. Trailer towing

### The detecting range may decrease when:

1. The sensor is stained with foreign matter such as snow or water. (The sensing range will return to normal when removed.)
2. Outside air temperature is extremely hot or cold.

### The following objects may not be recognized by the sensor:

1. Sharp or slim objects such as ropes, chains or small poles.
2. Objects which tend to absorb the sensor frequency such as clothes, spongy material or snow.
3. Undetectable objects smaller than 1 m (40 in.) in height and narrower than 14 cm (6 in.) in diameter.

### Rear parking assist system precautions

- The rear parking assist system may not sound consistently depending on the speed and shapes of the objects detected.
- The rear parking assist system may malfunction if the vehicle bumper height or sensor installation has been modified or damaged. Any non-factory installed equipment or accessories may also interfere with the sensor performance.
- The sensor may not recognize objects less than 40 cm (15 in.) from the sensor, or it may sense an incorrect distance. Use caution.
- When the sensor is frozen or stained with snow, dirt, or water, the sensor may be inoperative until the stains are removed using a soft cloth.
- Do not push, scratch or strike the sensor. Sensor damage could occur.

### \* NOTICE

This system can only sense objects within the range and location of the sensors; It can not detect objects in other areas where sensors are not installed. Also, small or slim objects, such as poles or objects located between sensors may not be detected by the sensors.

Always visually check behind the vehicle when backing up.

Be sure to inform any drivers of the vehicle that may be unfamiliar with the system regarding the systems capabilities and limitations.

### WARNING

Pay close attention when the vehicle is driven close to objects on the road, particularly pedestrians, and especially children. Be aware that some objects may not be detected by the sensors, due to the object's distance, size or material, all of which can limit the effectiveness of the sensor. Always perform a visual inspection to make sure the vehicle is clear of all obstructions before moving the vehicle in any direction.



### Self-diagnosis

If you don't hear an audible warning sound or if the buzzer sounds intermittently when shifting the gear to the R (Reverse) position, this may indicate a malfunction in the rear parking assist system. If this occurs, we recommend that the system be checked by an authorized Kia dealer.

#### **WARNING**

**Your new vehicle warranty does not cover any accidents or damage to the vehicle or injuries to its occupants due to a rear parking assist system malfunction. Always drive safely and cautiously.**

## PARKING ASSIST SYSTEM (IF EQUIPPED)



The parking assist system assists the driver during movement of the vehicle by chiming if any object is sensed within the distance of 100 cm (39 in.) in front and 120 cm (47 in.) behind the vehicle.

This system is a supplemental system and it is not intended to nor does it replace the need for extreme care and attention of the driver.

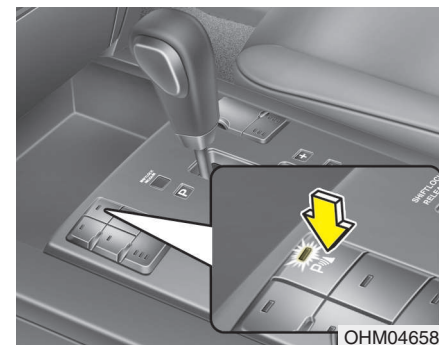
The sensing range and objects detectable by the sensors are limited. Whenever moving pay as much attention to what is in front and behind of you as you would in a vehicle without a parking assist system.

### **⚠ WARNING**

**The parking assist system should only be considered as a supplementary function. The driver must check the front and rear view. The operational function of the parking assist system can be affected by many factors and conditions of the surroundings, so the responsibility rests always with the driver.**

## Operation of the parking assist system

### *Operating condition*



- This system activates when the parking assist system button is pressed with the ignition switch ON.
- The indicator of the parking assist system button turns on automatically and activates the parking assist system when you shift the gear to the R (Reverse) position. It will turn off automatically when you drive above 20 km/h (12.4 mph).

- The sensing distance while backing up is approximately 120 cm (47 in.) when you are driving less than 10 km/h (6.2 mph).
- The sensing distance while moving forward is approximately 100 cm (39 in.) when you are driving less than 10 km/h (6.2 mph).
- When more than two objects are sensed at the same time, the closest one will be recognized first.
- The side sensors are activated when you shift the gear to the R (Reverse) position.
- If the vehicle speed is above 20km/h, the system automatically turns off. To activate again, push the button.

### \* NOTICE

It may not operate if it's distance from the object is already less than approximately 25 cm when the system is ON.

### Type of warning indicator and sound

 : with Warning sound

| Distance from object |       | Warning indicator                                                                 |                                                                                     | Warning sound               |
|----------------------|-------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------|
|                      |       | When driving forward                                                              | When driving rearward                                                               |                             |
| 100cm~61cm           | Front |  | -                                                                                   | Buzzer beeps intermittently |
| 120cm~61cm           | Rear  | -                                                                                 |  | Buzzer beeps intermittently |
| 60cm~31cm            | Front |  |  | Buzzer beeps frequently     |
|                      | Rear  | -                                                                                 |                                                                                     | Buzzer beeps frequently     |
| 30cm                 | Front |  |  | Buzzer sounds continuously  |
|                      | Rear  | -                                                                                 |                                                                                     | Buzzer sounds continuously  |

### \* NOTICE

- The actual warning sound and indicator may differ from the illustration according to objects or sensor status.
- Do not wash the vehicle's sensor with high pressure water.

 **CAUTION**

- ***This system can only sense objects within the range and location of the sensors;***

***It can not detect objects in other areas where sensors are not installed. Also, small or slim objects, such as poles or objects located between sensors may not be detected by the sensors.***

***Always visually check behind the vehicle when backing up.***

- ***Be sure to inform any drivers of the vehicle that may be unfamiliar with the system regarding the systems capabilities and limitations.***

**Non-operational conditions of parking assist system**

***Parking assist system may not operate normally when:***

1. Moisture is frozen to the sensor. (It will operate normally when moisture melts.)
2. Sensor is covered with foreign matter, such as snow or water, or the sensor cover is blocked. (It will operate normally when the material is removed or the sensor is no longer blocked.)
3. Sensor is stained with foreign matter such as snow or water. (Sensing range will return to normal when removed.)
4. The parking assist button is off.

***There is a possibility of parking assist system malfunction when:***

1. Driving on uneven road surfaces such as unpaved roads, gravel, bumps, or gradient.
2. Objects generating excessive noise such as vehicle horns, loud motorcycle engines, or truck air brakes can interfere with the sensor.
3. Heavy rain or water spray.
4. Wireless transmitters or mobile phones present near the sensor.
5. Sensor is covered with snow.

### ***Detecting range may decrease when:***

1. Outside air temperature is extremely hot or cold.
2. Undetectable objects smaller than 1 m and narrower than 14 cm in diameter.

### ***The following objects may not be recognized by the sensor:***

1. Sharp or slim objects such as ropes, chains or small poles.
2. Objects, which tend to absorb sensor frequency such as clothes, spongy material or snow.

### **\* NOTICE**

1. The warning may not sound sequentially depending on the speed and shapes of the objects detected.
2. The parking assist system may malfunction if the vehicle bumper height or sensor installation has been modified. Any non-factory installed equipment or accessories may also interfere with the sensor performance.
3. Sensor may not recognize objects less than 30 cm from the sensor, or it may sense an incorrect distance. Use with caution.
4. When the sensor is frozen or stained with snow or water, the sensor may be inoperative until the stains are removed using a soft cloth.
5. Do not push, scratch or strike the sensor with any hard objects that could damage the surface of the sensor. Sensor damage could occur.

### **\* NOTICE**

This system can only sense objects within the range and location of the sensors, it can not detect objects in other areas where sensors are not installed. Also, small or slim objects, or objects located between sensors may not be detected.

Always visually check in front and behind the vehicle when driving.

Be sure to inform any drivers in the vehicle that may be unfamiliar with the system regarding the systems capabilities and limitations.

**⚠ WARNING**

Pay close attention when the vehicle is driven close to objects on the road, particularly pedestrians, and especially children. Be aware that some objects may not be detected by the sensors, due to the objects distance, size or material, all of which can limit the effectiveness of the sensor. Always perform a visual inspection to make sure the vehicle is clear of all obstructions before moving the vehicle in any direction.

**Self-diagnosis**

When you shift the gear to the R (Reverse) position and if one or more of the below occurs you may have a malfunction in the rear parking assist system.

- You don't hear an audible warning sound or if the buzzer sounds intermittently.



(blinks)

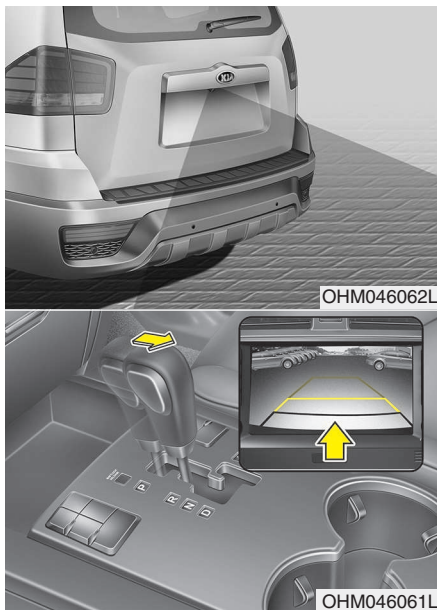
-  is displayed. (if equipped)

If this occurs, we recommend that the system be checked by an authorized Kia dealer.

**⚠ WARNING**

**Your new vehicle warranty does not cover any accidents or damage to the vehicle or injuries to its occupants related to a parking assist system. Always drive safely and cautiously.**

## REARVIEW CAMERA (IF EQUIPPED)



The rearview camera will activate when the back-up light is ON with the ignition switch ON and the shift lever in the R (Reverse) position.

This system is a supplemental system that shows behind the vehicle through the rearview display mirror while backing-up.

### **⚠ WARNING**

- This system is a supplementary function only. It is the responsibility of the driver to always check the inside/outside rearview mirror and the area behind the vehicle before and while backing up because there is a dead zone that can't be seen by the camera.
- Always keep the camera lens clean. If lens is covered with foreign matter, the camera may not operate normally.

\* If your vehicle is equipped with AVN(Audio, Video and Navigation) system, rearview display will show behind the vehicle through the AVN monitor while backing-up. Refer to a separately supplied manual for detailed information.

## SURROUND VIEW MONITORING SYSTEM (IF EQUIPPED)



This is the parking support system to show around circumstance when you park the vehicle in monitor. When you push the button in [ON] position, it is operated. To cancel the system, push again.

### Operating conditions

- When ignition is ON
- When the transaxle is on D, N or R
- When the vehicle speed is not over 20km/h

- When the vehicle speed is over 20km/h, the SVM system is turned off. If the vehicle speed is not over 20km/h after turning off the SVM by over speed, the SVM is not turned on. To operate again, push the button.
- When the vehicle moves backwards, regardless of On/Off of button and vehicle speed, the SVM is operated.
- When the trunk and driver/passenger door are opened and the outside mirror is folded, the warning is illuminated in SVM system.
- If the SVM system is not normally operated, we recommend that you contact an authorized Kia dealer.

\* SVM : Surround View Monitoring



### LIGHTING

#### Battery saver function

- The purpose of this feature is to prevent the battery from being discharged. The system automatically turns off the parking lights when the driver removes the ignition key and opens the driver-side door.
- With this feature, the parking lights will turn off automatically if the driver parks on the side of the road at night. If necessary, to keep the lights on when the ignition key is removed, perform the following:
  - 1) Open the driver-side door.
  - 2) Turn the parking lights OFF and ON again using the light switch on the steering column.

#### CAUTION

***If the driver gets out of the vehicle through other doors (except driver's door), the battery saver function does not operate. Therefore, It causes the battery to be discharged. In this case, make sure to turn off the lamp before getting out of the vehicle.***

#### Daytime running light (if equipped)

The 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, and it is especially helpful after dawn and before sunset.

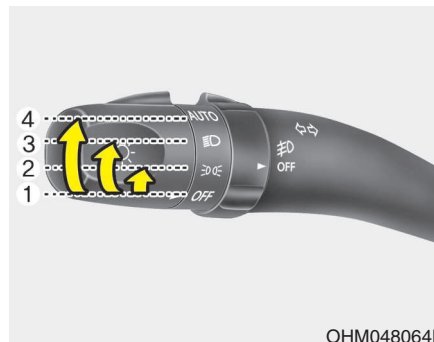
The DRL system will turn the dedicated lamp OFF when:

1. The headlight or fog lamp switch is ON.
2. The engine is OFF.

### ✳ Traffic Change (For Europe)

The low beam light distribution is asymmetric. If you go abroad to a country with opposite traffic direction, this asymmetric part will dazzle oncoming car driver. To prevent dazzle, ECE regulation demand several technical solutions (ex. automatic change system, adhesive sheet, down aiming). This headlamps are designed to adjust in user setting mode in cluster.

### Lighting control



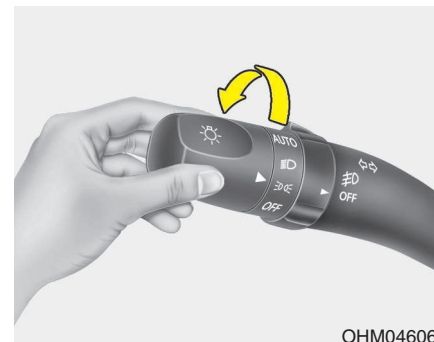
OHM048064L

The light switch has a Headlight and a Parking light position.

To operate the lights, turn the knob at the end of the control lever to one of the following positions:

- (1) OFF Position
- (2) Parking light position
- (3) Headlight position
- (4) Auto light position

### Parking light position (驻车灯)



OHM046065

When the light switch is in the parking light position (2<sup>nd</sup> position), the tail, license and instrument panel lights will turn ON.

### Headlight position ( ㊦ )



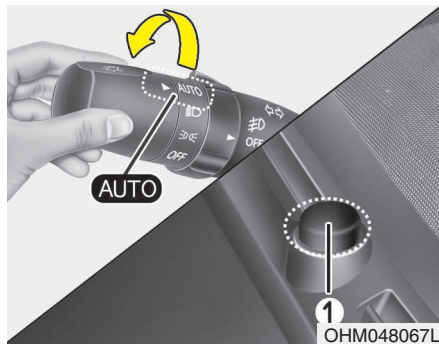
OHM046066

When the light switch is in the headlight position (3rd position), the head, tail, license and instrument panel lights will turn ON.

### \* NOTICE

The ignition switch must be in the ON position to turn on the headlights.

### Auto light position



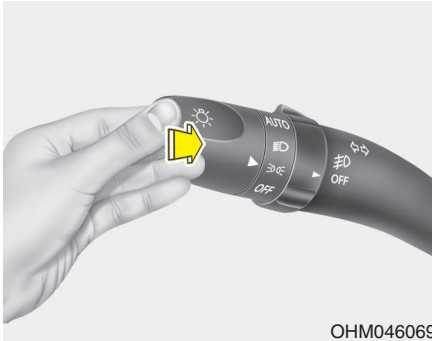
OHM048067L

When the light switch is in the AUTO light position, the taillights and headlights will be turned ON or OFF automatically depending on the amount of light outside the vehicle.

### ⚠ CAUTION

- **Never place anything over the sensor (1) located on the instrument panel. This will ensure better auto-light system control.**
- **Don't clean the sensor using a window cleaner. The cleaner may leave a light film which could interfere with sensor operation.**
- **If your vehicle has window tint or other types of metallic coating on the front windshield, the Auto light system may not work properly.**

## High beam operation

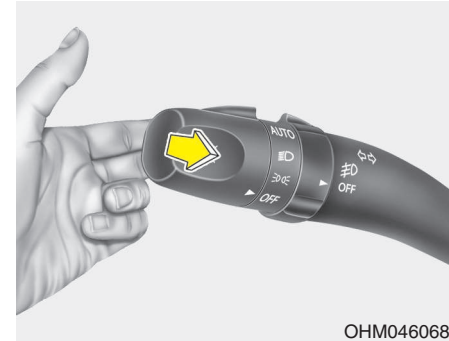


To turn on the high beam headlamp, push the lever away from you. The lever will return to its original position. The high beam indicator will light when the headlight high beams are switched on.

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

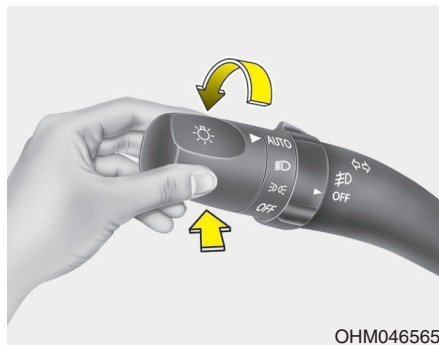
### **⚠ WARNING**

**Do not use high beam when there are other vehicles. Using high beam could obstruct the other driver's vision.**



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

### High Beam Assist (if equipped)



The High Beam Assist is a system that automatically adjusts the headlamp range (switches between high beam and low beam) according to the brightness of other vehicles and road conditions.

#### Operating condition

1. Place the light switch in the AUTO position.

2. Turn on the high beam by pushing the lever away from you.

The High Beam Assist (  ) indicator will illuminate.

3. The High Beam Assist will turn on when vehicle speed is above 45kph (28mph).

- If the lever is pushed away when the High Beam Assist is operating, the High Beam Assist will turn off and the high beam will be on continuously. The High Beam Assist (  ) indicator will turn off.

- If the lever is pulled towards you when the High Beam Assist is operating, the High Beam Assist will turn off.

4. If the light switch is placed to the headlamp position, the High Beam Assist will turn off and the low beam will be on continuously.

The high beam switches to low beam in the below conditions.

- When the High Beam Assist is off.
- When the light switch is not in the AUTO position.
- When the headlamp is detected from the on-coming vehicle.
- When the tail lamp is detected from the front vehicle.
- When the surrounding is bright enough high beams are not needed.
- When streetlights or other lights are detected.
- When vehicle speed is below 35km/h (22 mph).
- When headlamp / taillamp of bicycle/motorcycle is detected.

**⚠ CAUTION**

*The system may not operate normally in the below conditions.*

- *When the light from the on-coming or front vehicle is not detected because of lamp damage, hidden from sight, etc.*
- *When the lamp of the on-coming or front vehicle is covered with dust, snow or water.*
- *When the light from the on-coming or front vehicle is not detected because of exhaust fume, smoke, fog, snow, etc.*
- *When the front window is covered with foreign matters such as ice, dust, fog, or is damaged.*
- *When there is a similar shape lamp with the front vehicle's lamps.*
- *When it is hard to see because of fog, heavy rain or snow.*
- *When the headlamp is not repaired or replaced at an authorized dealer.*

*(Continued)*

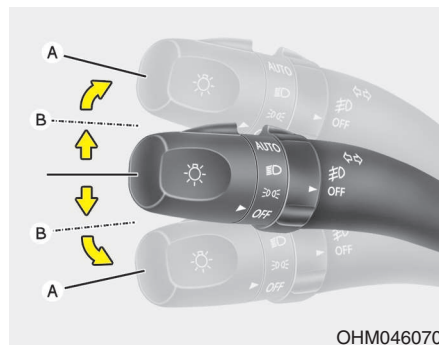
***(Continued)***

- *When headlamp aiming is not properly adjusted.*
- *When driving on a narrow curved road or rough road.*
- *When driving downhill or uphill.*
- *When only part of the vehicle in front is visible on a crossroad or curved road.*
- *When there is a traffic light, reflecting sign, flashing sign or mirror.*
- *When the road conditions are bad such as being wet or covered with snow.*
- *When the front vehicle's headlamps are off but the fog lamps on.*
- *When a vehicle suddenly appears from a curve.*
- *When the vehicle is tilted from a flat tire or being towed.*
- *When the LDWS (lane departure warning system) warning light illuminates. (if equipped)*

**⚠ WARNING**

- **Do not place any accessories, stickers or tint the windshield.**
- **Have the windshield glass replaced from an authorized dealer.**
- **Do not remove or impact related parts of the High Beam Assist system.**
- **Be careful that water doesn't get into the High Beam Assist unit.**
- **Do not place objects on the dashboard that reflects light such as mirrors, white paper, etc. The system may malfunction if sunlight is reflected.**
- **At times, the Smart High Beam system may not work properly, always check the road conditions for your safety. When the system does not operate normally, manually change between the high beam and low beam.**

### Turn signals and lane change signals



The ignition switch must be on for the turn signals to function. To turn on the turn signals, move the lever up or down (A). The green arrow indicators on the instrument panel indicate which turn signal is operating. They will self-cancel after a turn is completed. If the indicator continues to flash after a turn, manually return the lever to the OFF position.

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

If an indicator stays on and does not flash or if it flashes abnormally, one of the turn signal bulbs may be burned out and will require replacement.

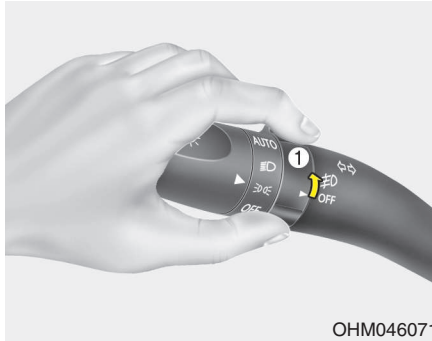
### *One-touch lane change function (if equipped)*

To activate an one-touch lane change function, move the turn signal lever slightly for less than 0.5 second and then release it. The lane change signals will blink 3 times.

### **\* NOTICE**

If an indicator flash is abnormally quick or slow, a bulb may be burned out or have a poor electrical connection in the circuit.

## Front fog light



Fog lights are used to provide improved visibility when visibility is poor due to fog, rain or snow, etc. The fog lights will turn on when the fog light switch (1) is turned on after the parklight is turned on.

To turn off the fog lights, turn the fog light switch (1) to the OFF position.

### CAUTION

***When in operation, the fog lights consume large amounts of vehicle electrical power. Only use the fog lights when visibility is poor.***

## Rear fog light (if equipped)



To turn the rear fog lights on, turn the headlight switch to the headlight on position and press the rear fog light switch (light on switch will illuminate).

The rear fog lights turn on when the rear fog switch is pressed after the front fog switch is turned to the ON position and the headlight switch to the parklight position. (if equipped)

To turn the rear fog lights off, press the rear fog light switch again or turn the headlight switch to the OFF position.

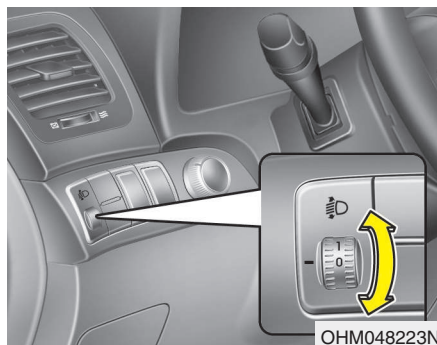
## \* NOTICE

To turn on the rear fog light switch, the ignition switch must be in the ON position.



### Headlight leveling device (if equipped)

#### Manual type



To adjust the headlight beam level according to the number of passengers and loading weight in the luggage area, turn the beam leveling switch.

The higher the number of the switch position, the lower the headlight beam level. Always keep the headlight beam at the proper leveling position, or headlights may dazzle other road users.

Listed below are the examples of proper switch settings. For loading conditions other than those listed below, adjust the switch position so that the beam level may be the nearest as the condition obtained according to the list.

| Loading condition                                                | Switch position |
|------------------------------------------------------------------|-----------------|
| Driver only                                                      | 0               |
| Driver + Front passenger                                         | 0               |
| Driver + Front passenger+<br>3rd row passenger                   | 1               |
| Full passengers<br>(Including driver)                            | 1               |
| Full passengers (including driver) + Maximum permissible loading | 2               |
| Driver + Maximum permissible loading                             | 3               |

#### Automatic type

It automatically adjusts the headlight beam level according to the number of passengers and loading weight in the luggage area.

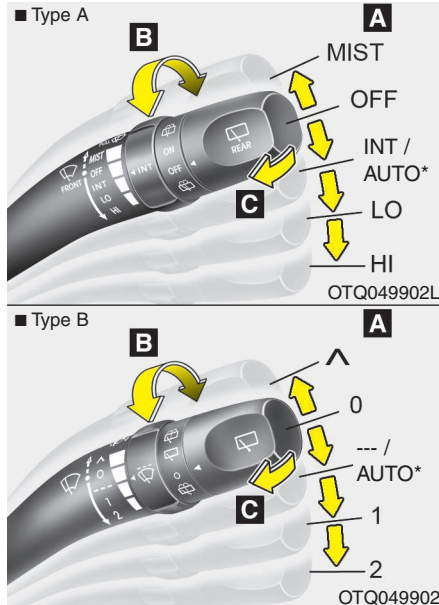
And it offers proper headlight beam under various conditions.

#### **⚠ WARNING**

**If it does not work properly even though your car is inclined backward according to passenger's posture, or the headlight beam is irradiated to the high or low position, we recommend that the system be inspected by an authorized Kia dealer.**

**Do not attempt to inspect or replace the wiring yourself.**

## WIPERS AND WASHERS



### Front windshield wiper and washer

#### A : Wiper speed control

- ^ (MIST) - Single wipe
- OFF (0) - Off
- INT (---) - Intermittent wipe
- AUTO\* - Auto control wipe
- LO (1) - Low wiper speed
- HI (2) - High wiper speed

#### B : Intermittent wipe time adjustment

#### C : Wash with brief wipes\*

\* if equipped

### Windshield wipers

Operates as follows when the ignition switch is turned ON.

MIST / ^ : For a single wiping cycle, move the lever to this (MIST / ^) position and release it. The wipers will operate continuously if the lever is held in this position.

OFF / 0 : Wiper is not in operation

INT / --- : Wiper operates intermittently at the same wiping intervals. Use this mode in light rain or mist. To vary the speed setting, turn the speed control knob.

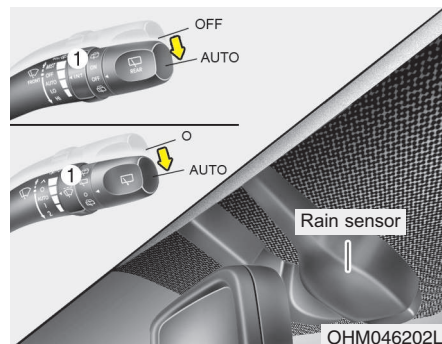
LO / 1 : Normal wiper speed

HI / 2 : Fast wiper speed

### \* NOTICE

If there is heavy accumulation of snow or ice on the windshield, defrost the windshield for about 10 minutes, or until the snow and/or ice is removed before using the windshield wipers to ensure proper operation. If you do not remove the snow and/or ice before using the wiper and washer, it may damage the Wiper and washer system.

### Auto control (if equipped)



The rain sensor located on the upper end of the windshield glass senses the amount of rainfall and controls the wiping cycle for the proper interval. The more it rains, the faster the wiper operates. When the rain stops, the wiper stops.

To vary the speed setting, turn the speed control knob (1).

If the wiper switch is set in AUTO mode when the ignition switch is ON, the wiper will operate once to perform a self-check of the system. Set the wiper to OFF (O) position when the wiper is not in use.



### CAUTION

***When the ignition switch is ON and the windshield wiper switch is placed in the AUTO mode, use caution in the following situations to avoid any injury to the hands or other parts of the body:***

- ***Do not touch the upper end of the windshield glass facing the rain sensor.***
- ***Do not wipe the upper end of the windshield glass with a damp or wet cloth.***
- ***Do not put pressure on the windshield glass.***

 **CAUTION**

- *When washing the vehicle, set the wiper switch in the OFF (O) position to stop the auto wiper operation.*

*The wiper may operate and be damaged if the switch is set in the AUTO mode while washing the vehicle.*

- *Do not remove the sensor cover located on the upper end of the passenger side windshield glass. Damage to system parts could occur and may not be covered by your vehicle warranty.*
- *When starting the vehicle in winter, set the wiper switch in the OFF (O) position. Otherwise, wipers may operate and ice may damage the windshield wiper blades. Always remove all snow and ice and defrost the windshield properly prior to operating the windshield wipers.*

*(Continued)*

**(Continued)**

- *When tinting the windshield, be careful of any fluid getting into the sensor located in the top center of the front windshield. It may damage the related parts.*

**Windshield washers**

In the OFF (O) position, pull the lever gently toward you to spray washer fluid on the windshield and to run the wipers 1-3 cycles.

Use this function when the windshield is dirty.

The spray and wiper operation will continue until you release the lever.

If the washer does not work, check the washer fluid level. If the fluid level is not sufficient, you will need to add 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 side.

 **CAUTION**

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

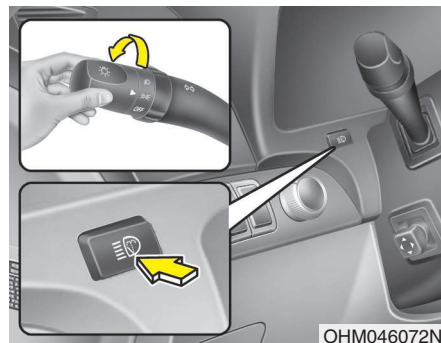
## **⚠ WARNING**

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

## **⚠ CAUTION**

- 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.
- To prevent possible damage to the wipers and washer system, use anti-freezing washer fluids in the winter season or cold weather.

## Headlight washer (if equipped)



To operate the headlight washer, press the headlight washer button. It will operate when the headlight switch is in the first or second position and the ignition switch is in the ON position. The washer fluid will spray on the headlights.

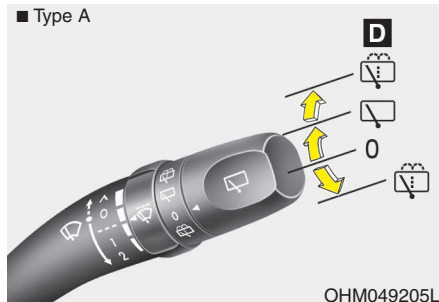
Also, if you pull the wiper lever towards you for about 1 second, when the headlights are on, the headlight washer will operate. (if equipped)

## **\* NOTICE**

- Check the headlight washers periodically to confirm that the washer fluid is being sprayed properly onto the headlight lenses.
- The headlight washer may not work temporarily if it freezes after a car wash, rain or snow in the winter. But it will work normally after it defrosts.

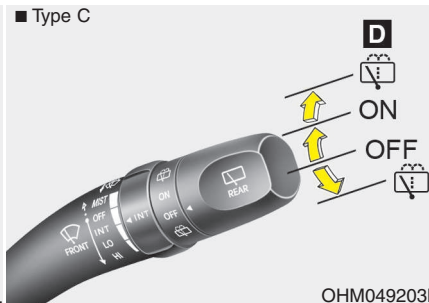
## Rear window wiper and washer switch (if equipped)

■ Type A



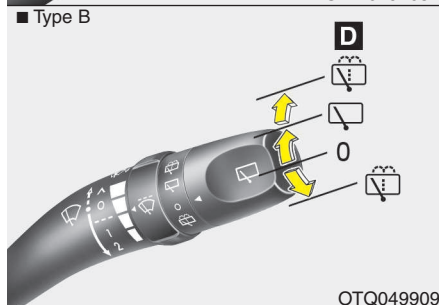
OHM049205L

■ Type C



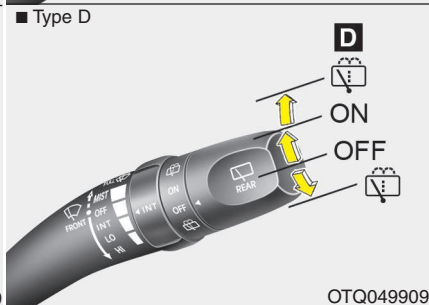
OHM049203K

■ Type B



OTQ049909

■ Type D



OTQ049909L

### D : Rear wiper/washer control

- - Spraying washer fluid
- ON ( ) - Intermittent wipe after some normal wipe
- OFF (0) - Off
- - Wash with brief wipes

The rear window wiper and washer switch is located at the end of the wiper and washer switch lever. Turn the switch to the desired position to operate the rear wiper and washer.

- Spraying washer fluid and wiping
- ON ( ) - Intermittent wiper operation after some normal wiper operation
- OFF (0) - Wiper is not in operation
- Wash with brief wipes

## INTERIOR LIGHT

### CAUTION

*Do not use the interior lights for extended periods when the engine is not running.*

*It may cause battery discharge.*

### WARNING

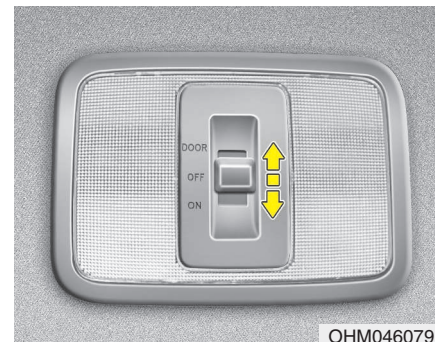
**Do not use the interior lights when driving in the dark. Accidents could happen because the view may be obscured by interior lights.**

### Map lamp



Push the lens to turn the map lamp on or off. This light produces a spot beam for convenient use as a map lamp at night or as a personal lamp for the driver and the front passenger.

### Room lamp



- **DOOR:** The light comes on when any door (or tailgate) is opened regardless of the ignition switch position. When doors are unlocked by the transmitter (or smart key), the light comes on for approximately 30 seconds as long as any door is not opened. The light goes out gradually after approximately 30 seconds if the door is closed. However, if the ignition switch is ON or all doors are locked, the light will turn off immediately.

If a door is opened with the ignition switch in the ACC or LOCK position, the light stays on for about 20 minutes. However, if a door is opened with the ignition switch in the ON position, the light stays on continuously.

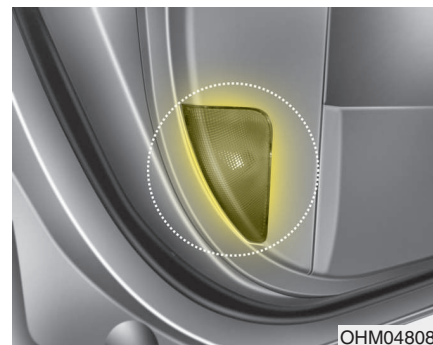
- OFF : The light stays off at all times.
- ON : The light stays on at all times.

### Luggage lamp (if equipped)



- DR : The light comes on when the tailgate is opened.
- OFF : The light stays off at all times.

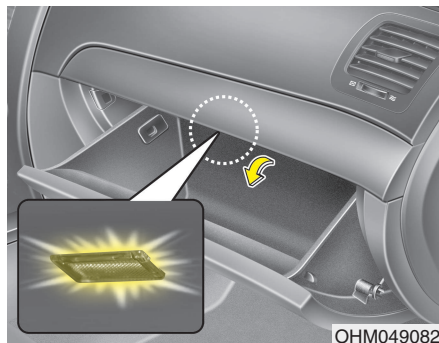
### Door courtesy lamp (if equipped)



The door courtesy lamp comes ON when the door is opened to assist entering or exiting the vehicle. It also serves as a warning to passing vehicles that the vehicle door is open.



### Glove box lamp (if equipped)



The glove box lamp comes on when the glove box is opened.

The parking lights or headlights must be ON for the glove box lamp to function.

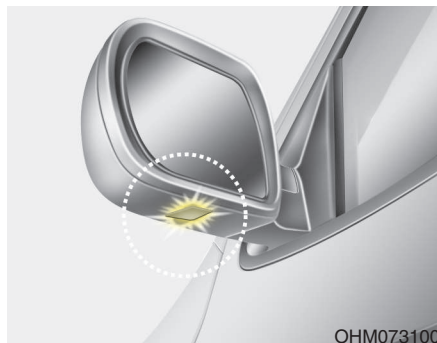
### Vanity mirror lamp (if equipped)



Opening the lid of the vanity mirror will automatically turn on the mirror light.

## WELCOME SYSTEM (IF EQUIPPED)

### Puddle lamp



When all the doors (and tailgate) are locked and closed, the puddle lamp will come on for about 15 seconds if any of the below is performed.

- When the door unlock button is pressed on the smart key.
- When you put your hand into the door handle while carrying the smart key.
- When the vehicle is approached with the smart key in possession.

### Interior light

When the interior light switch is in the DOOR position and all doors (and tailgate) are locked and closed, the room lamp will come on for 15 seconds if any of the below is performed.

- When the door unlock button is pressed on the smart key.
- When the button of the outside door handle is pressed.

At this time, if you press the door lock button, the lamps will turn off immediately.

## DEFROSTER

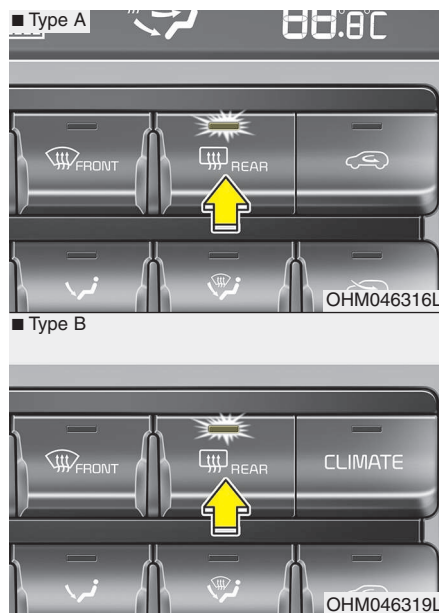
### CAUTION

*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

If you want to defrost and defog the front windshield, refer to “Windshield defrosting and defogging” in this section.

### Rear window defroster



The defroster heats the window to remove frost, fog and thin ice from the rear window, while the engine is running.

To activate the rear window defroster, press the rear window defroster button located in the center facia switch panel. The indicator on the rear window defroster button illuminates when the defroster is ON.

If there is heavy accumulation of snow on the rear window, brush it off before operating the rear defroster.

The rear window defroster automatically turns off after approximately 20 minutes or when the ignition switch is turned off. To turn off the defroster, press the rear window defroster button again.

### *Outside rearview mirror defroster (if equipped)*

If your vehicle is equipped with the outside rearview mirror defrosters, they will operate at the same time you turn on the rear window defroster.

### *Wiper deicer (if equipped)*

If your vehicle is equipped with the wiper deicer, it will operate at the same time you turn on the rear window defroster.

## AUTOMATIC CLIMATE CONTROL SYSTEM (IF EQUIPPED)

### ■ Front climate control (Type A)



1. Driver's temperature control knob
2. Air conditioning button
3. Blower OFF button
4. Front windshield defroster button
5. Rear window defroster button
6. Fan speed control button
7. Mode selection button
8. Air intake control button
9. Passenger's temperature control knob
10. Dual temperature control selection button
11. A/C display
12. 3<sup>rd</sup> row air conditioning ON/OFF button\*
13. 3<sup>rd</sup> row air conditioning fan speed control knob\*
14. AUTO (automatic control) button

\* if equipped

### ■ Front climate control (Type B)



### **⚠ CAUTION**

*Operating the blower when the ignition switch is in the ON position could cause the battery to discharge. Operate the blower when the engine is running.*

OHM046310L/OHM046311L

## Features of your vehicle

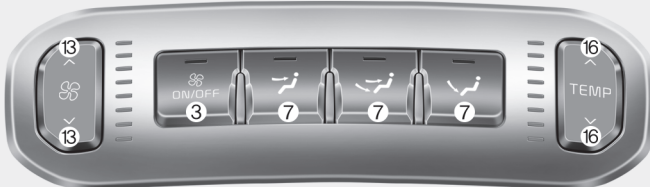
### ■ Front climate control (Type C)



### ■ Front climate control (Type D)



### ■ 3<sup>rd</sup> row air conditioning control (if equipped)



1. Driver's temperature control knob
2. Air conditioning button
3. Blower OFF button
4. Front windshield defroster button
5. Rear window defroster button
6. Fan speed control button
7. Mode selection button
8. Air intake control button
9. Passenger's temperature control knob
10. Dual temperature control selection button
11. A/C display
12. 3<sup>rd</sup> row air conditioning ON/OFF button\*
13. 3<sup>rd</sup> row air conditioning fan speed control knob\*
14. AUTO (automatic control) button
15. Climate information screen selection button
16. 3<sup>rd</sup> row air conditioning temperature control knob\*

\* if equipped

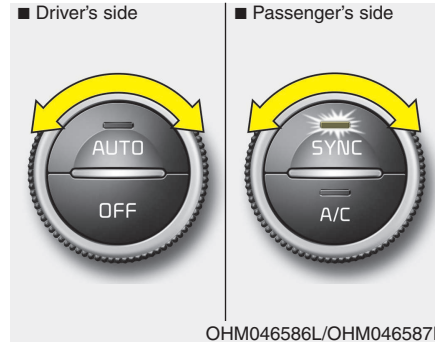
OHM046312L/OHM046313L/OHM046315L

## Automatic heating and air conditioning



OHM046584L

1. Press the AUTO button. The modes, fan speeds, air intake and air-conditioning will be controlled automatically according to the temperature setting.

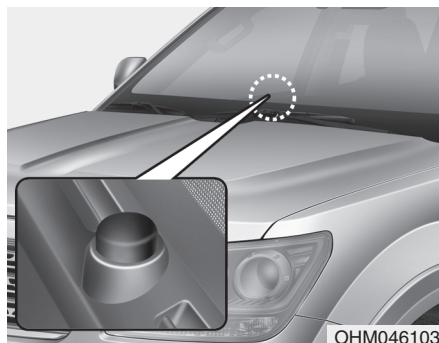


OHM046586L/OHM046587L

2. Turn the temperature control knob to the desired temperature.

## \* NOTICE

- To turn the automatic operation off, select any button or switch of the following:
  - Mode selection button
  - Air conditioning button
  - Front windshield defroster button (Press the button one more time to deselect the front windshield defroster function. The 'AUTO' sign will illuminate on the information display once again.)
  - Air intake control button
  - Fan speed control button
 The selected function will be controlled manually while other functions operate automatically.
- For your convenience and to improve the effectiveness of the climate control, use the AUTO button and set the temperature to 22°C/71°F (23°C/73°F- Except Europe).



### \* NOTICE

Never place anything over the sensor located on the instrument panel to ensure better control of the heating and cooling system.

### Manual heating and air conditioning

The heating and cooling system can be controlled manually by pressing buttons or turning knob(s) other than the AUTO button. In this case, the system works sequentially according to the order of buttons or knob(s) selected.

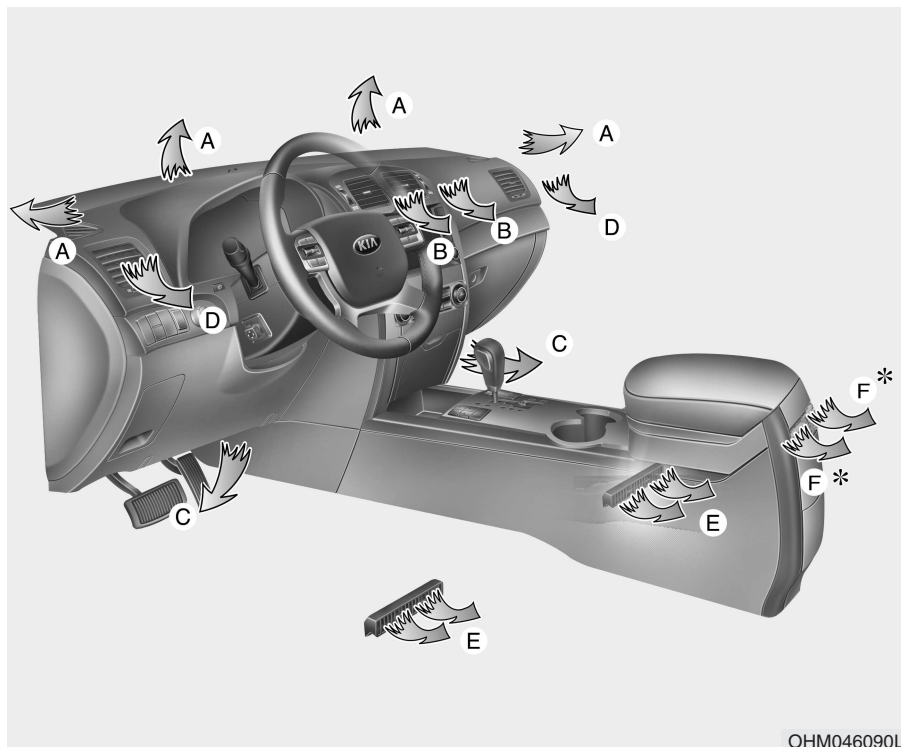
1. Start the engine.
2. Set the mode to the desired position.

For improving the effectiveness of heating and cooling;

- Heating:
- Cooling:

3. Set the temperature control to the desired position.
4. Set the air intake control to the outside (fresh) air position.
5. Set the fan speed control to the desired speed.
6. If air conditioning is desired, turn the air conditioning system on.

Press the AUTO button in order to convert to full automatic control of the system.



OHM046090L

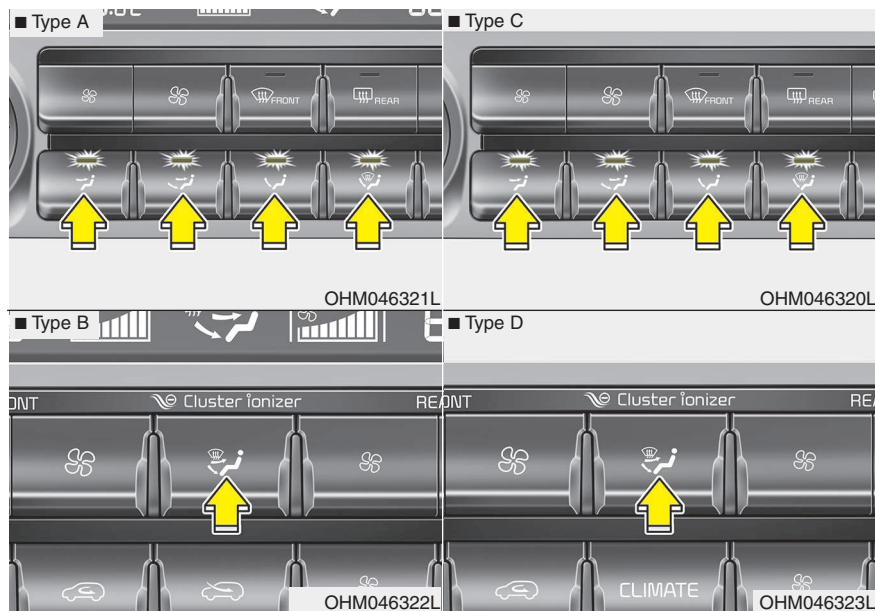
**\* NOTICE - 2nd row outlet vents (E,F\*)**

- The air flow of the 2nd row outlet vents is controlled by the front climate control system and delivered through the inside air duct of the floor (E, F\*).
- The air flow of the 2nd row outlet vents (E, F\*) may be weaker than the instrument panel vents for the long air duct.

\* : if equipped



### Mode selection



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

The air flow outlet port is converted as follows:





### Face-Level (B, C, D, E, F)

Air flow is directed toward the upper body and face. Additionally, each outlet can be controlled to direct the air discharged from the outlet.



### Bi-Level (B, D, E, C, F)

Air flow is directed towards the face and the floor.



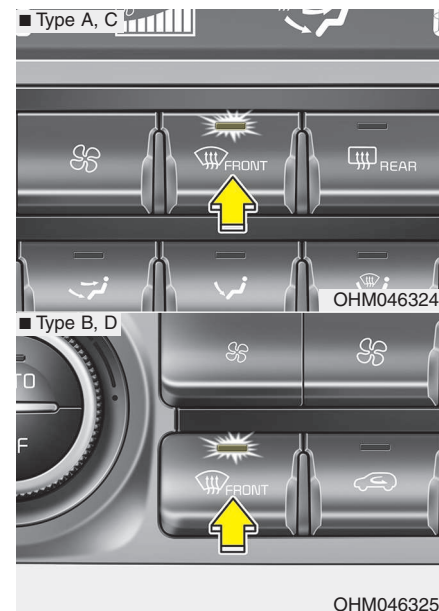
### Floor-Level (C, A, D, E)

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 defrosters.



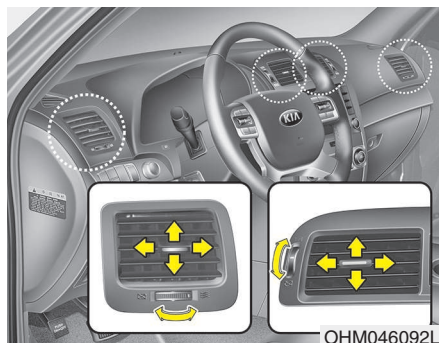
### Floor/Defrost-Level (A, B, D, E)

Most of the air flow is directed to the floor and the windshield with a small amount directed to the side window defrosters.



### Defrost-Level

Most of the air flow is directed to the windshield with a small amount of air directed to the side window defrosters.

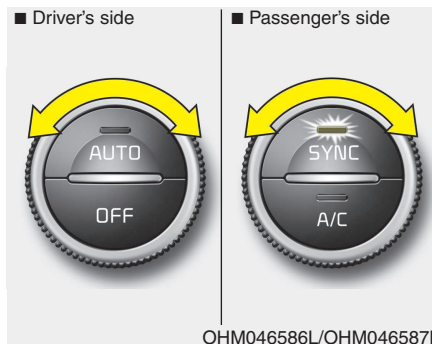


### Instrument panel vents

The outlet vents can be opened or closed separately using the thumb-wheel.

Also, you can adjust the direction of air delivery from these vents using the vent control lever as shown.

### Temperature control



The temperature will increase to the maximum (HI) by turning the knob to the extreme right.

The temperature will decrease to the minimum (Lo) by turning the knob to the extreme left.

When turning the knob, the temperature will increase or decrease by 0.5°C/1°F. When set to the lowest temperature setting, the air conditioning will operate continuously.



### Adjusting the driver and passenger side temperature equally

- Press the "SYNC" button to adjust the driver and passenger side temperature equally.

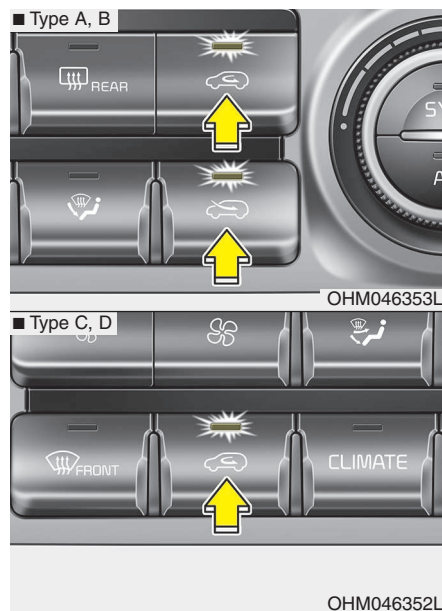
The passenger side temperature will be set to the same temperature as the driver side temperature.

- Turn the driver side temperature control knob. The driver and passenger side temperature will be adjusted equally.
- When the third row's seat heater button is turned ON, the third row's climate and fan speed setting will automatically follow the first row settings.

### Adjusting the driver and passenger side temperature individually

- Press the “SYNC” button again to adjust the driver and passenger side temperature individually. The illumination of button turns off.
- Operate the driver side temperature control knob to adjust the driver side temperature.
- Operate the passenger side temperature control knob to adjust the passenger side temperature.

### Air intake control



This is used to select the outside (fresh) air position or recirculated air position.

To change the air intake control position, push the control button.

### Recirculated air position



With the recirculated air position selected, air from the passenger compartment will be drawn through the heating system and heated or cooled according to the function selected.

### Outside (fresh) air position



With the outside (fresh) air position selected, air enters the vehicle from outside and is heated or cooled according to the function selected.

### \* NOTICE

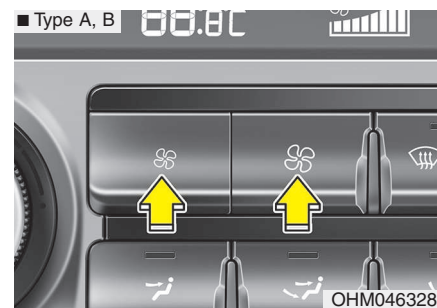
Prolonged operation of the heater in the recirculated air position (without air conditioning selected) may cause fogging of the windshield and side windows and the air within the passenger compartment may become stale.

In addition, prolonged use of the air conditioning with the recirculated air position selected will result in excessively dry air in the passenger compartment.

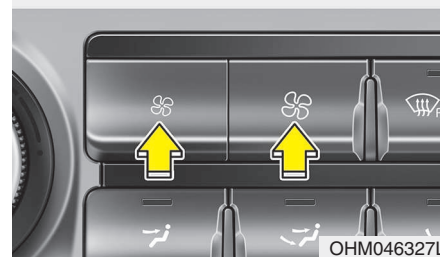
### ⚠ WARNING

- Continue using the climate control system in the recirculated air position may allow humidity to increase inside the vehicle which may fog the glass and obscure visibility.
- Do not sleep in a vehicle with the air conditioning or heating system on. It may cause serious harm or death due to a drop in the oxygen level and/or body temperature.
- Continue using the climate control system in the recirculated air position can cause drowsiness or sleepiness, and loss of vehicle control. Set the air intake control to the outside (fresh) air position as much as possible while driving.

### Fan speed control



■ Type C, D



The fan speed can be set to the desired speed by pushing the fan speed control button.

The higher the fan speed is, the more air is delivered. Pressing the OFF button turns off the fan.

### Air conditioning



Press the A/C button to turn the air conditioning system on (indicator light will illuminate).

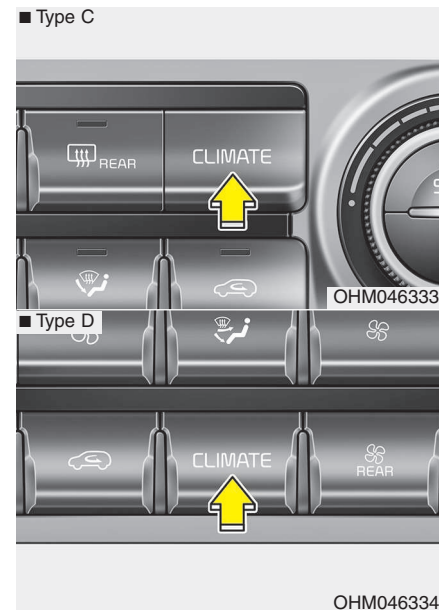
Press the button again to turn the air conditioning system off.

### OFF mode



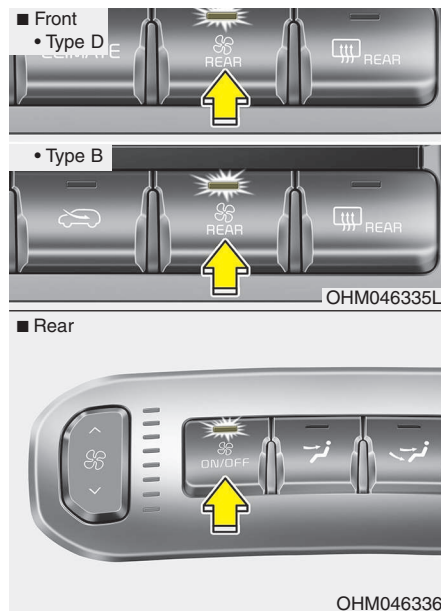
Press the front blower OFF button to turn off the front air climate control system. However, you can still operate the mode and air intake buttons as long as the ignition switch is in the ON position.

### Climate information screen selection (if equipped)



Press the climate information screen selection button to display climate information on the screen.

### Rear heating and air conditioning (if equipped)



To turn on the rear climate control system

1. Press the rear blower ON/OFF button located on the front and rear climate control panel (indicator light will illuminate).

Operating the fan speed switch will also turn on the rear climate control system.

2. Set the fan speed to the desired speed with the front or rear fan speed switch.

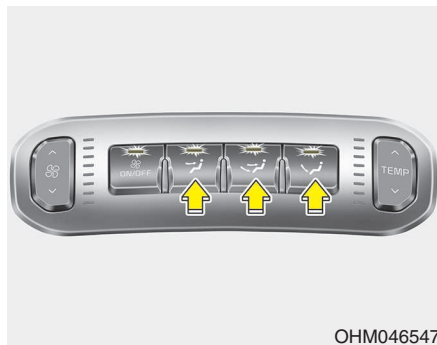
3. The rear temperature and mode is controlled automatically by the front climate control system.

- Rear temperature: same as the front temperature
- Rear mode control
  - Front mode control is : Rear mode control is
  - Front mode control is : Rear mode control is
  - Front mode control is , , , : Rear mode control is

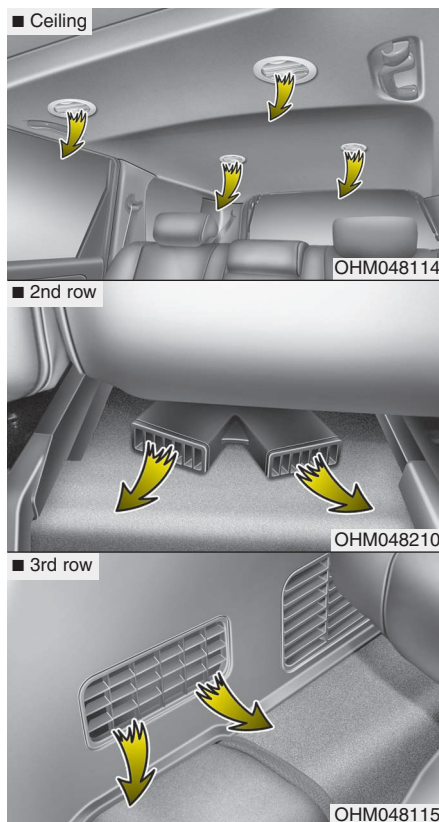
4. To turn off the rear climate control system, press the rear blower ON/OFF button located on the front and rear climate control panel once more (indicator light is not illuminated).

- If you operate the rear temperature or mode on the rear climate control panel, the corresponding rear temperature or mode will operate independently regardless of the front climate control system operation.
- If the ignition switch is turned OFF and ON again, the rear temperature and mode will be controlled automatically by the front climate control system.
- To activate the rear air conditioning, press the A/C button on the front climate control system.

## Rear mode selection

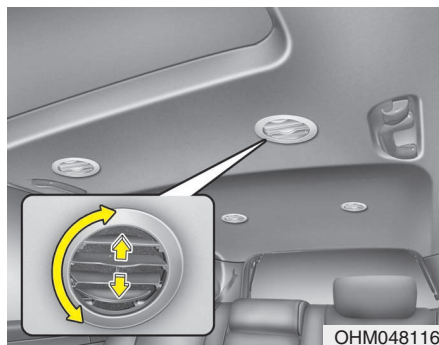


The rear mode is selected by pressing the rear mode selection button on the rear control panel as follows:



- : Rear air blows from the upper vents on the rear ceiling.
- : Rear air blows from the upper vents on the rear ceiling and the lower vents.
- : Rear air blows from the lower vents.





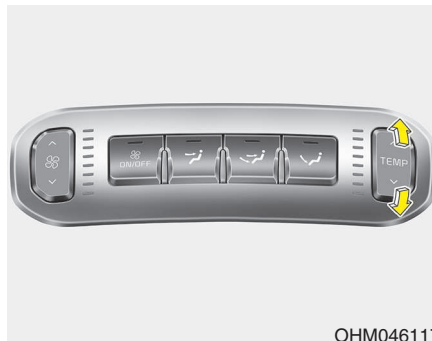
### Rear vents

The vent can be adjusted by rotating the blade.

### \* NOTICE

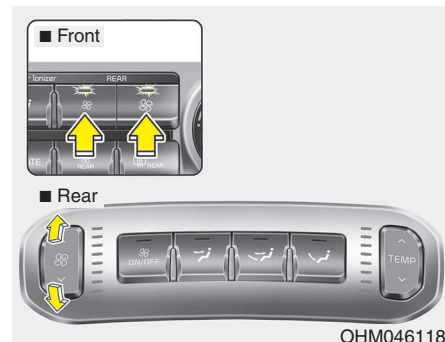
If all the vents are closed, it may cause some noise. Always have more than 2 vents opened.

### Rear temperature control



To change the rear air temperature, press the button (^) for warmer air or press the button (v) for cooler air.

### Rear fan speed control



To change the rear fan speed, press the button (^ or ♣) for higher speed, or press the button (v or ♣) for lower speed.

To turn the fan speed control off, press the rear blower ON/OFF button. (indicator light is not illuminated)

## System operation

### Ventilation

1. Set the mode to the  position.
2. Set the air intake control to the outside (fresh) air position.
3. Set the temperature control to the desired position.
4. Set the fan speed control to the desired speed.

### Heating

1. Set the mode to the  position.
2. Set the air intake control to the outside (fresh) air position.
3. Set the temperature control to the desired position.
4. Set the fan speed control to the desired speed.
5. If dehumidified heating is desired, turn the air conditioning system (if equipped) on.

### Operation Tips

- To keep dust or unpleasant fumes from entering the vehicle through the ventilation system, temporarily set the air intake control to the recirculated air position. Be sure to return the control to the fresh air position when the irritation has passed to keep fresh air in the vehicle. This will help keep the driver alert and comfortable.
- Air for the heating/cooling system is drawn in through the grilles just ahead of the windshield. Care should be taken that these are not blocked by leaves, snow, ice or other obstructions.
- To prevent interior fog on the windshield, set the air intake control to the fresh air position and fan speed to the desired position, turn on the air conditioning system, and adjust the temperature control to desired temperature.
- If the windshield fogs up, set the mode to the  or  position.



### CAUTION

***Operating the blower when the ignition switch is in the ON position could cause the battery to discharge. Operate the blower when the engine is running.***

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

Kia Air Conditioning Systems are filled with environmentally friendly refrigerant\*.

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

\*: Your vehicle is filled with R-134a or R-1234yf according to the regulation in your country at the time of producing. You can find out which air conditioning refrigerant is applied your vehicle at the label inside of engine room. Refer to chapter 9 for more detail location of air conditioning refrigerant label.

### **CAUTION**

- ***The refrigerant system should only be serviced by trained and certified technicians to insure proper and safe operation.***
- ***The refrigerant system should be serviced in a well-ventilated place.***
- ***The air conditioning evaporator (cooling coil) shall never be repaired or replaced with one removed from a used or salvaged vehicle and new replacement MAC evaporators shall be certified (and labeled) as meeting SAE Standard J2842.***

### **\* NOTICE**

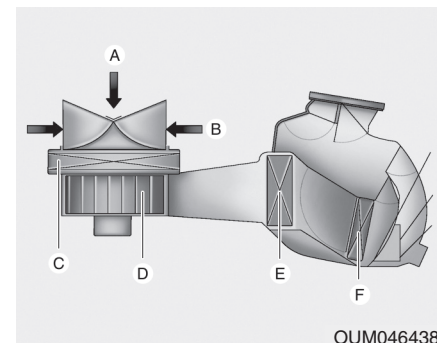
- When using the air conditioning system, monitor the temperature gauge closely while driving up hills or in heavy traffic when outside temperatures are high. Air conditioning system operation may cause engine overheating. Continue to use the blower fan but turn the air conditioning system off if the temperature gauge indicates engine overheating.
- When opening the windows in humid weather air conditioning may create water droplets inside the vehicle. Since excessive water droplets may cause damage to electrical equipment, air conditioning should only be used with the windows closed.

### 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.
- Use air conditioning to reduce humidity and moisture inside the vehicle on rainy or humid days.
- During air conditioning system operation, you may occasionally notice a slight change in engine speed as the air conditioning compressor cycles. This is a normal system operation characteristic.
- Use the air conditioning system every month only for a few minutes to ensure maximum system performance.

- When using 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 characteristic.
- Operating the air conditioning system in the recirculated air position provides maximum cooling, however, continual operation in this mode may cause the air inside the vehicle to become stale.
- During cooling operation, you may occasionally notice a misty air flow because of rapid cooling and humid air intake. This is a normal system operation characteristic.

### Climate control air filter



- |                                |                     |
|--------------------------------|---------------------|
| A : Outside air                | D : Blower          |
| B : Recirculated air           | E : Evaporator core |
| C : Climate control air filter | F : Heater core     |

The climate control air filter installed behind the glove box filters the dust or other pollutants that come into the vehicle from the outside through the heating and air conditioning system.

If dust or other pollutants accumulate in the filter over a period of time, the air flow from the air vents may decrease, resulting in moisture accumulation on the inside of the windshield even when the outside (fresh) air position is selected. If this happens, we recommend that the climate control air filter be replaced by an authorized Kia dealer.

### \* NOTICE

- Replace the filter according to the Maintenance Schedule.  
If the car is being driven in severe conditions such as dusty, rough roads, more frequent climate control air filter inspections and changes are required.
- When the air flow rate suddenly decreases, we recommend that the system be checked by an authorized Kia dealer.

### Checking the amount of air conditioner refrigerant and compressor lubricant

When the amount of refrigerant is low, the performance of the air conditioning is reduced. Overfilling also has a bad influence on the air conditioning system.

Therefore, if abnormal operation is found, we recommend that the system be inspected by an authorized Kia dealer.

\*: Your vehicle is filled with R-134a according to the regulation in your country at the time of producing. You can find out which air conditioning refrigerant is applied your vehicle at the chapter 9, air conditioning system.

#### **WARNING - Vehicles equipped with R-134a\***



Because the refrigerant is at very high pressure, the air conditioning system should only be serviced by trained and certified technicians. It is important that the correct type and amount of oil and refrigerant is used.

Otherwise, it may cause damage to the vehicle and personal injury.

## WINDSHIELD DEFROSTING AND DEFOGGING

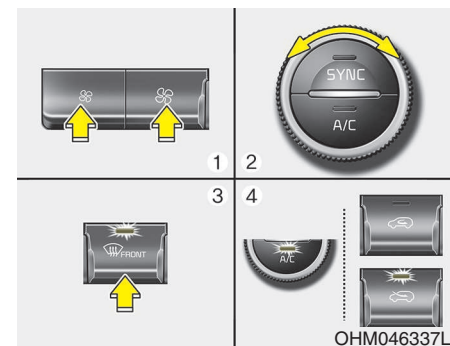
### **⚠ WARNING - Windshield heating**

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

- For maximum defrosting, set the temperature control to the extreme right/hot position and the fan speed control to the highest speed.
- If warm air to the floor is desired while defrosting or defogging, set the mode to the floor-defrost 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 air inlet in the cowl grill to improve heater and defroster efficiency and to reduce the probability of fogging up the inside of the windshield.

### Automatic climate control system

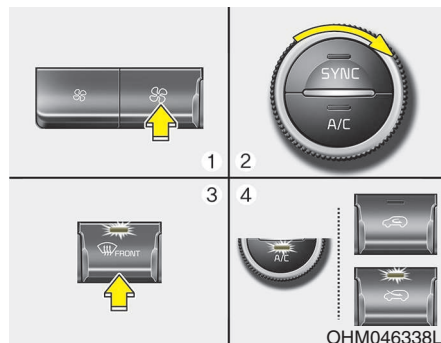
*To defog inside windshield*



1. Set the fan speed to the desired position.
2. Select desired temperature.
3. Press the defroster button (.
4. The air conditioning will turn on according to the detected ambient temperature and outside (fresh) air position will be selected automatically.

If the air conditioning and outside (fresh) air position are not selected automatically, adjust the corresponding button manually. If the  position is selected, lower fan speed is adjusted to a higher fan speed.

### To defrost outside windshield



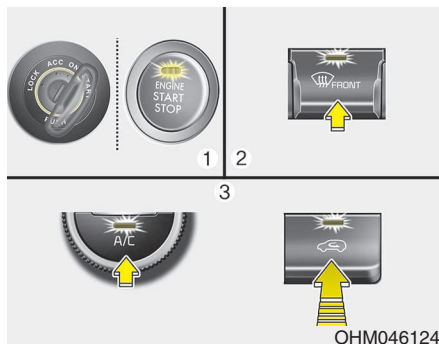
1. Set the fan speed to the highest position.
2. Set the temperature to the extreme hot position.
3. Press the defroster button (.
4. The air conditioning will turn on according to the detected ambient temperature and outside (fresh) air position will be selected automatically.

### Defogging logic

To reduce the possibility of fogging up the inside of the windshield, the air intake or air conditioning are controlled automatically according to certain conditions such as  or  position. To cancel or return to the defogging logic, do the following.

**Automatic climate control system**

If the battery has been discharged or disconnected, it resets to the defog logic status.



1. Turn the ignition switch to the ON position.
2. Select the defroster position pressing the defroster button (  ).
3. While pressing the air conditioning button (A/C), press the air intake control button at least 5 times within 3 seconds.

The A/C display blinks 3 times with 0.5 second of interval. It indicates that the defogging logic is canceled or returned to the programmed status.



### STORAGE COMPARTMENT

These compartments can be used to store small items.

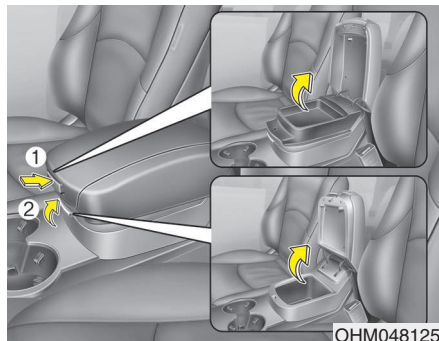
#### CAUTION

- *To avoid possible theft, do not leave valuables in the storage compartment.*
- *Always keep the storage compartment covers closed while driving. Do not attempt to place so many items in the storage compartment that the storage compartment cover cannot close securely.*

#### WARNING - Flammable materials

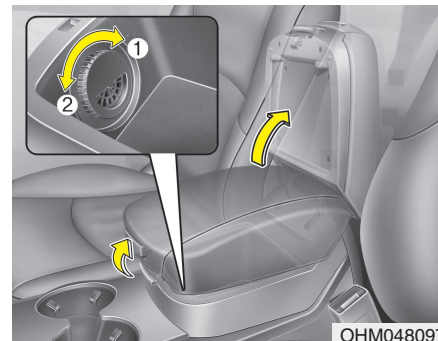
**Do not store cigarette lighters, propane cylinders, or other flammable/explosive materials in the vehicle. These items may catch fire and/or explode if the vehicle is exposed to hot temperatures for extended periods.**

### Center console storage



To open the center console storage, push the button (1) or pull up the lever (2).

### Cool box (if equipped)



You can keep beverage cans or other items warm or cool using the open/close lever of the vent installed in the center console box.

1. Turn on the fan and set the temperature control to the desired position.
2. Set the mode control to the face () or bi-level () position.
3. Turn the open/close lever of the vent installed in the center console box to the open position (2).
4. When the cool box is not used, turn the lever to its closed position (1).

For improving the effectiveness of the cool box, do as follows;

1. Set the temperature to the hot (extreme right) position for warm air or to the cold (extreme left) position for cool air.

Turn on the air conditioning system for cooler air.

2. Set the fan speed to the highest (extreme right) position.
3. Set the mode to the face (  ) position.

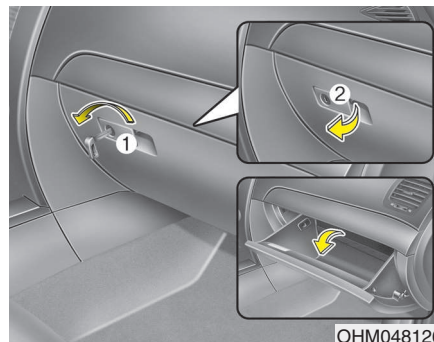
### \* NOTICE

If some items in the cool box block the vent, the warming or cooling effectiveness of the cool box is reduce

### WARNING

Do not put the perishable food in the cool box because it may not be able to maintain the necessary consistent temperature to keep the food fresh.

### Glove box



The glove box can be locked and unlocked with a master key.

To open the glove box, pull the handle and the glove box will automatically open. Close the glove box after use.

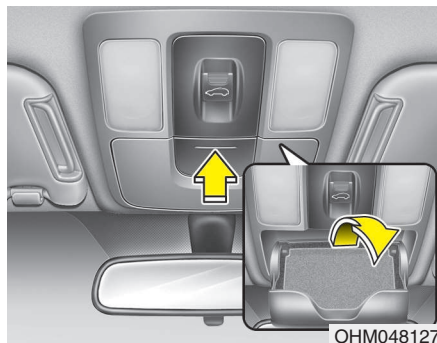
### WARNING

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

### CAUTION

*Do not keep food in the glove box for a long time.*

### Sunglass holder

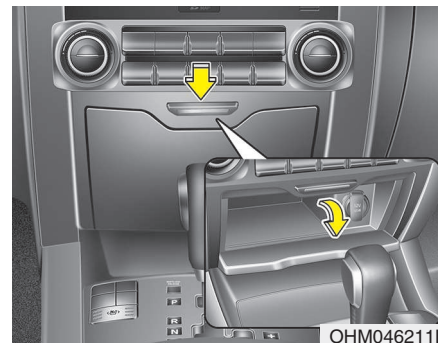


To open the sunglass holder, press the cover and the holder will slowly open. Place your sunglasses with the lenses facing out. To close the sunglass holder, push it up.

### **⚠ WARNING**

- Do not keep objects except sunglasses inside the sunglass holder. Such objects can be thrown from the holder in the event of a sudden stop or an accident, possibly injuring the passengers in the vehicle.
- Do not open the sunglass holder while the vehicle is moving. The rear view mirror of the vehicle can be blocked by an opened sunglass holder.
- Do not put the glasses forcibly into a sunglass holder to prevent breakage or deformation of the glasses. It may cause personal injury if you try to open it forcibly when the glasses are jammed in the holder.

### Multi box (if equipped)



To open the cover, press the button and the cover will slowly open.

## Luggage box



You can place a first aid kit, a reflector triangle, tools, etc. in the box for easy access.

Grasp the handle on the edge of the cover and lift it.

## INTERIOR FEATURES

### Cigarette lighter

For the cigarette lighter to work, the ignition switch must be in the ACC position or the ON position.

To use the cigarette lighter, push it all the way into its socket. When the element has heated, the lighter will pop out to the “ready” position.

We recommend that you use parts for replacement from an authorized Kia dealer.

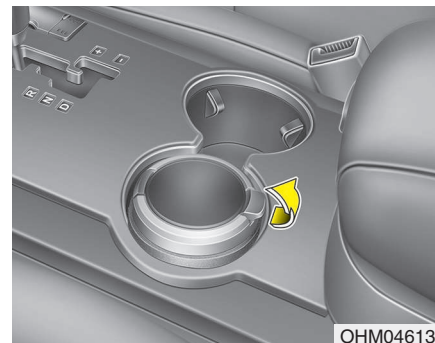
#### WARNING

- Do not hold the lighter in after it is already heated because it will overheat.
- If the lighter does not pop out within 30 seconds, remove it to prevent overheating.
- Do not insert foreign objects into the socket of the cigarette lighter. It may damage the cigarette lighter.

#### CAUTION

*The use of plug-in accessories (shavers, hand-held vacuums, and coffee pots, etc.) may damage the socket or cause electrical failure.*

### Ashtray (if equipped)



To use the ashtray, open the cover.  
To clean or empty the ashtray, pull it out.

#### 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.

## Cup holder

### **WARNING - Hot liquids**

- Do not place uncovered cups of hot liquid in the cup holder while the vehicle is in motion. If the hot liquid spills, you may burn yourself. Such a burn to the driver could lead to loss of control of the vehicle.
- To reduce the risk of a personal injury in the event of a sudden stop or collision, do not place uncovered or unsecured bottles, glasses, cans, etc., in the cup holder while the vehicle is in motion.
- If uncovered cups and cans containing any form of liquid are put into the front/center seat cup holders and the vehicle brakes heavily, the liquid may flow into the narrow openings around cup holders and console, and soak into the vehicle's internal electrical system. To avoid subsequent system malfunction, always firmly cover any container holding liquid.

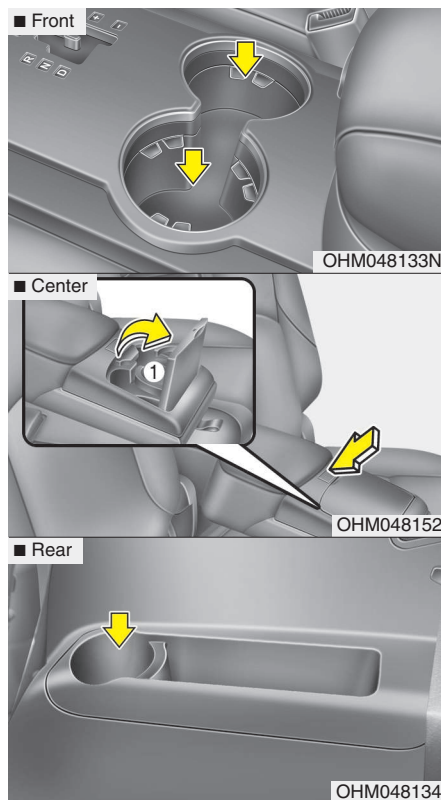
### **WARNING**

Keep cans or bottles out of direct sun light and do not put them in a vehicle that is heated up. It may explode.

### **\* NOTICE**

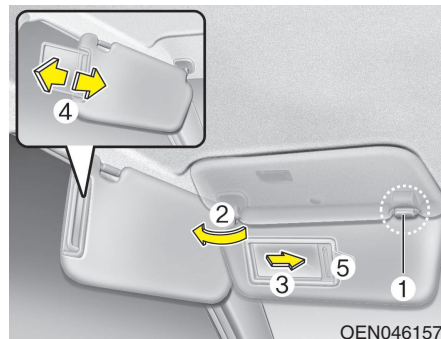
- Keep your drinks sealed while driving to prevent spilling your drink. If liquid spills, it may get into the vehicle's electrical/electronic system and damage electrical/electronic parts.
- When cleaning spilled liquids, do not dry the cup holder at high temperature. This may damage the cup holder.

## Features of your vehicle



Cups or small beverage cans may be placed in the cup holders.

## Sunvisor



Use the sunvisor to shield direct light through the front or side windows.

To use the sunvisor, pull it downward.

To use the sunvisor for the side window, pull it downward, unsnap it from the bracket (1) and swing it to the side (2).

To use the vanity mirror, pull down the visor and slide the mirror cover (3).

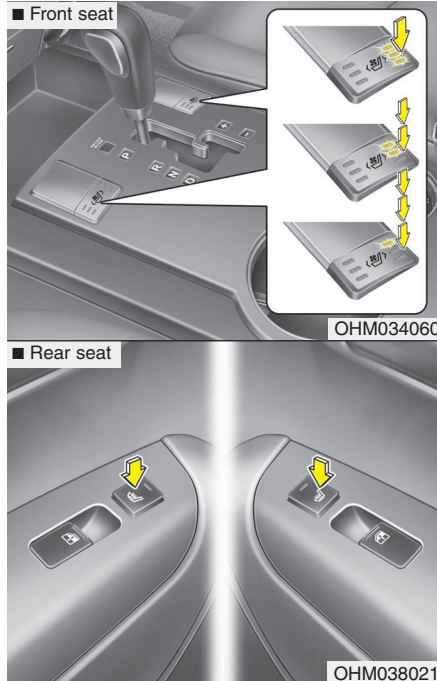
Adjust the sunvisor extension forward or backward (4).

The ticket holder (5) is provided for holding a tollgate ticket. (if equipped)

### **CAUTION - Vanity mirror lamp (if equipped)**

*If you use the vanity mirror lamp, turn off the lamp before returning the sunvisor to its original position, otherwise it could result in battery discharge and possible sunvisor damage.*

## Seat warmer (if equipped)



The seat warmer is provided to warm the seats during cold weather. With the ignition switch in the ON position, push either of the switches to warm the left or right side of the seat.

During mild weather or under conditions where the operation of the seat warmer is not needed, keep the switches in the "OFF" position.

### ■ Front seat

Each time you press the button, the temperature setting of the seat will change as follows:

OFF → HIGH (☼☼☼) → MIDDLE (☼☼) → LOW (☼)  
 ↑

### ■ Rear seat

Each time you press the button, the seat warmer will turn on or off.

- The seat warmer defaults to the OFF position whenever the ignition switch is turned on.

## \* NOTICE

With the seat warmer switch in the ON position, the heating system in the seat turns off or on automatically depending on the seat temperature.

## ⚠ CAUTION

- *When cleaning the seats, do not use an organic solvent such as paint thinner, benzene, alcohol and gasoline. Doing so may damage the surface of the heater or seats.*
- *To prevent overheating the seat warmer, do not place anything on the seats that insulates against heat, such as blankets, cushions or seat covers while the seat warmer is in operation.*
- *Do not place heavy or sharp objects on seats equipped with seat warmers. Damage to the seat warming components could occur.*
- *Do not change the seat cover. It may damage the seat warmer or airventilation system.*



Passengers should use extreme caution when using seat warmers due to the possibility of excess heating or burns. The seat warmer may cause burns even at low temperatures, especially if used for long periods of time. In particular, the driver must exercise extreme care for the following types of passengers:

1. Infants, children, elderly or handicapped persons, or hospital outpatients
2. Persons with sensitive skin or those that burn easily
3. Fatigued individuals
4. Intoxicated individuals
5. Individuals taking medication that can cause drowsiness or sleepiness (sleeping pills, cold tablets, etc.)

The temperature setting of the seat changes according to the switch position.

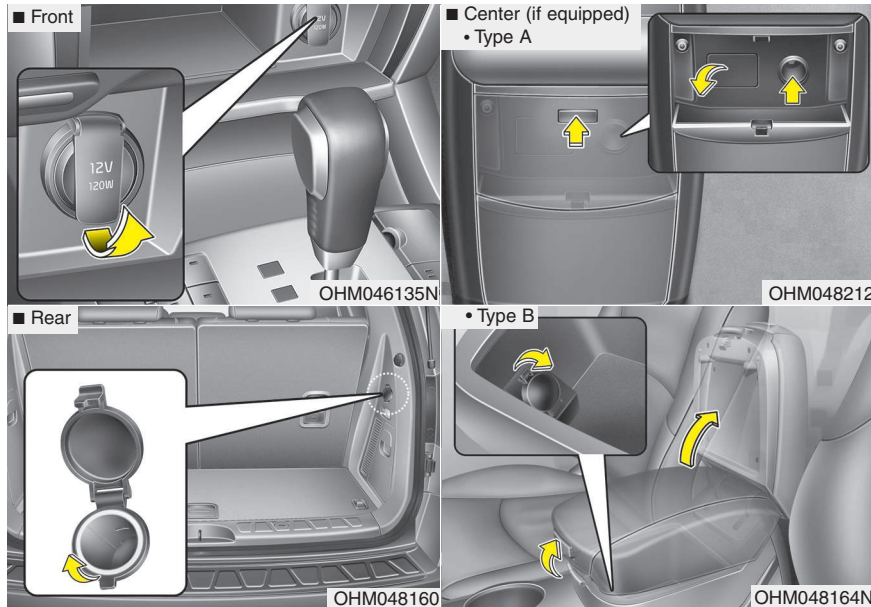
- If you want to warm your seat cushion, press the switch (red color).
- If you want to cool your seat cushion, press the switch (blue color).
- Each time you press the button, the airflow will change as follows:

OFF→HIGH(    )→MIDDLE(   )→LOW(  )

- The seat warmer (with air ventilation) defaults to the OFF position whenever the ignition switch is turned on.

***When cleaning the seats, do not use an organic solvent such as paint thinner, benzene, alcohol and gasoline. Doing so may damage the surface of the heater or seats.***

## Power outlet



The power outlet is designed to provide power for mobile telephones or other devices designed to operate with vehicle electrical systems. The devices should draw less than 10 amps with the engine running.

### **CAUTION**

- **Use the power outlet only when the engine is running and remove the accessory plug after use. Using the accessory plug for prolonged periods of time with the engine off could cause the battery to discharge.**
- **Only use 12V electric accessories which are less than 10A in electric capacity.**
- **Adjust the air-conditioner or heater to the lowest operating level when using the power outlet.**
- **Close the cover 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.**

*(Continued)*

### (Continued)

- *Refrain from using the heater or A/C if you need to use the multipurpose socket. If the heater or A/C has to be used simultaneously, have it to the lowest setting.*
- *Some add-on electrical equipment will induce electromagnetic interference. This will lead to subsequent malfunction or hinder good reception of the Audio/Video and electrical system.*
- *Always make sure that electric add-ons are fully plugged into the multipurpose sockets. Insecure contacts may lead to electrical malfunctions.*

### **⚠ WARNING**

**Do not put a finger or a foreign element (pin, etc.) into a power outlet and do not touch with a wet hand. You may get an electric shock.**

### Coat hook (if equipped)



※ This actual feature may differ from the illustration.

### **⚠ CAUTION**

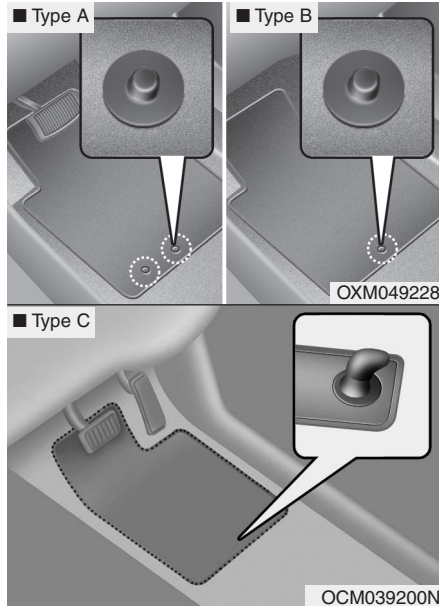
**Do not hang heavy clothes, since those may damage the hook.**

### **⚠ WARNING**



**Do not hang other objects such as hangers or hard objects except clothes. Also, do not put heavy, sharp or breakable objects in the clothes pockets. In an accident or when the curtain air bag is inflated, it may cause vehicle damage or personal injury.**

## Floor mat anchor(s) (if equipped)



When using a floor mat on the front floor carpet, make sure it attaches to the floor mat anchor(s) in your vehicle. This keeps the floor mat from sliding forward.

## **⚠ WARNING**

The following must be observed when installing **ANY** floor mat to the vehicle.

- Ensure that the floor mats are securely attached to the vehicle's floor mat anchor(s) before driving the vehicle.
- Do not use **ANY** floor mat that cannot be firmly attached to the vehicle's floor mat anchors.
- Do not stack floor mats on top of one another (e.g. all-weather rubber mat on top of a carpeted floor mat). Only a single floor mat should be installed in each position.

**IMPORTANT** - Your vehicle was manufactured with driver's side floor mat anchors that are designed to securely hold the floor mat in place. To avoid any interference with pedal operation, Kia recommends that the Kia floor mat designed for use in your vehicle be installed.

## Luggage net holder (if equipped)



To keep items from shifting in the cargo area, you can use the holders located in the cargo area to attach the luggage net.

If necessary, we recommend that you contact an authorized Kia dealer.

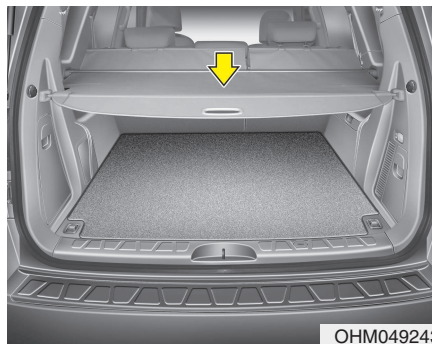
### CAUTION

*To prevent damage to the goods or the vehicle, care should be taken when carrying fragile or bulky objects in the luggage compartment.*

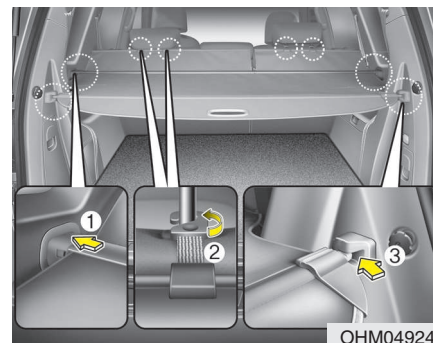
### WARNING

To avoid eye injury, **DO NOT** overstretch the luggage net. **ALWAYS** keep your face and body out of the luggage net's recoil path. **DO NOT** use the luggage net when the strap has visible signs of wear or damage.

### Cargo security screen (if equipped)



Use the cargo security screen to hide items stored in the cargo area.



1. To use the rear shade of the cargo security screen, pull the handle backward and insert the cargo security screen bar into the hole both side of the vehicle.
2. Pull the hook forward and hang the hook on the headrest pole.
3. Pull out the screen and insert the edges into the slots.

 **CAUTION**

*When folding the rear seatback forward, remove the hook from the headrest pole. Otherwise, the front shade of the cargo security screen may be damaged or malformed.*

When not in use, place the cargo security screen on the lower portion of the cargo area.

 **WARNING**

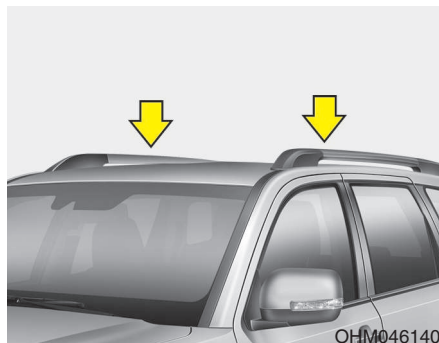
- Do not place objects on the cargo security screen. Such objects may be thrown about inside the vehicle and possibly injure vehicle occupants during an accident or when braking.
- Never allow anyone to ride in the luggage compartment. It is designed for luggage only.
- Maintain the balance of the vehicle and locate the weight as far forward as possible.

 **CAUTION**

*Since the cargo security screen may be damaged or malformed, do not put the luggage on it when it is used.*

## EXTERIOR FEATURES

### Roof rack (if equipped)



If the vehicle has a roof rack, you can load cargo on top of your vehicle.

Crossbars and fixing components needed to install the roof rack on your vehicle may be obtained from an authorized Kia dealer or other qualified shop.

### \* NOTICE

- The crossbars (if equipped) should be placed in the proper load carrying positions prior to placing items onto the roof rack.
- If the vehicle is equipped with a sunroof, be sure not to position cargo onto the roof rack in such a way that it could interfere with sunroof operation.
- When the roof rack is not being used to carry cargo, the crossbars may need to be repositioned if wind noise is detected.

### ⚠ CAUTION

- *When carrying cargo on the roof rack, take the necessary precautions to make sure the cargo does not damage the roof of the vehicle.*
- *When carrying large objects on the roof rack, make sure they do not exceed the overall roof length or width.*
- *When you are carrying cargo on the roof rack, do not operate the sunroof (if equipped).*

### ⚠ WARNING

- The following specification is the maximum weight that can be loaded onto the roof rack. Distribute the load as evenly as possible across the crossbars (if equipped) and roof rack and secure the load firmly.

|              |                                         |
|--------------|-----------------------------------------|
| ROOF<br>RACK | 100 kg (220 lbs.)<br>EVENLY DISTRIBUTED |
|--------------|-----------------------------------------|

Loading cargo or luggage in excess of the specified weight limit on the roof rack may damage your vehicle.

- The vehicle center of gravity will be higher when items are loaded onto the roof rack. Avoid sudden starts, braking, sharp turns, abrupt maneuvers or high speeds that may result in loss of vehicle control or rollover resulting in an accident.

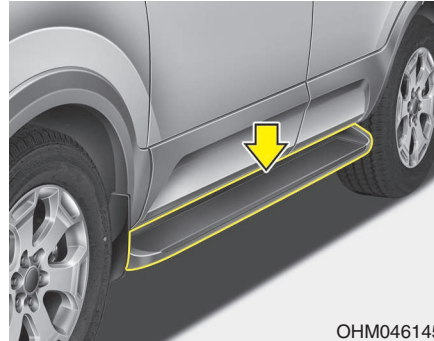
(Continued)



**(Continued)**

- Always drive slowly and turn corners carefully when carrying items on the roof rack. Severe wind updrafts, caused by passing vehicles or natural causes, can cause sudden upward pressure on items loaded on the roof rack. This is especially true when carrying large, flat items such as wood panels or mattresses. This could cause the items to fall off the roof rack and cause damage to your vehicle or others around you.
- To prevent damage or loss of cargo while driving, check frequently before or while driving to make sure the items on the roof rack are securely fastened.

**Side step (if equipped)**



When entering or exiting the vehicle, use the side step for your convenience.

**⚠ WARNING**

- Watch your steps so as not to slip on a slippery side step when it is rainy or snowy.
- If you try to open the door when the temperature is below freezing or when the side step is covered with snow or ice, the door could be damaged. Remove any snow that may accumulate on the side steps.



# Audio system

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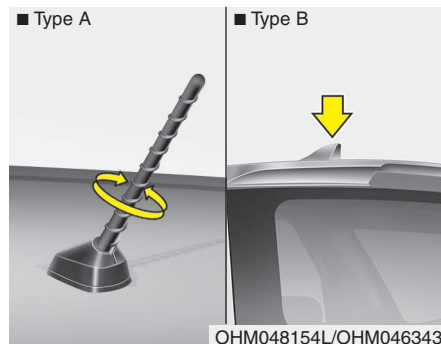
## AUDIO SYSTEM

### \* NOTICE

If you install an after market HID head lamp, your vehicle's audio and electronic device may malfunction.

\* If your vehicle is equipped with AVN(Audio, Video and Navigation) system, refer to a separately supplied manual for detailed information.

### Antenna



#### *Pole type antenna*

Your vehicle uses a roof antenna to receive both AM and FM broadcast signals. This antenna pole is removable. To remove the antenna pole, turn it counterclockwise. To install the antenna, turn it clockwise.

#### *Shark fin antenna (if equipped)*

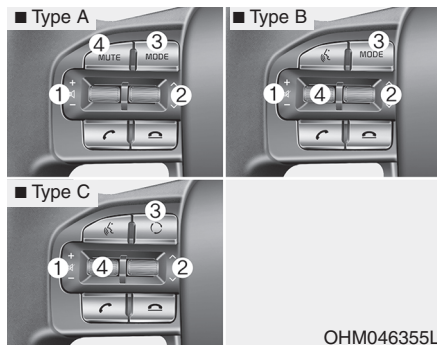
The shark fin antenna will receive the transmit data.



#### **CAUTION - Pole type antenna**

- ***Before entering a place with a low height clearance or a car wash, remove the antenna pole by rotating it counterclockwise. If not, the antenna may be damaged.***
- ***When reinstalling your antenna pole, it is important that it is fully tightened and adjusted to the upright position to ensure proper reception. But it could be removed when parking the vehicle or when loading cargo on the roof rack.***
- ***When cargo is loaded on the roof rack, do not place the cargo near the antenna pole to ensure proper reception.***

## Steering wheel audio controls (if equipped)



The steering wheel may incorporate audio control buttons.



### CAUTION

***Do not operate audio remote control buttons simultaneously.***

### **VOLUME (+ / -) (1)**

- Press the lever upward (+) to increase the volume.
- Press the lever downward (-) to decrease the volume.

### **SEEK/PRESET (^ / v) (2)**

The SEEK/PRESET lever has different functions based on the system mode. For the following functions the lever should be pressed for 0.8 seconds or more.

#### **RADIO mode**

It will function as the AUTO SEEK select button. It will SEEK until you release the button.

#### **MEDIA mode**

It will function as the FF/REW button.

If the SEEK/PRESET button is pressed for less than 0.8 seconds, it will work as follows in each mode.

#### **RADIO mode**

It will function as the PRESET STATION buttons.

#### **MEDIA mode**

It will function as TRACK UP/DOWN button.

### **MODE (○) (3)**

Press the button to change audio source.

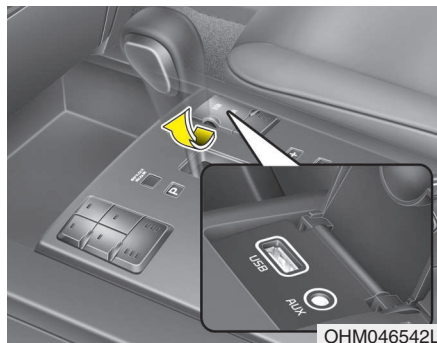
FM → AM → CD → USB/iPod® → AUX → MY MUSIC → *Bluetooth®* wireless technology audio

### **MUTE (M) (4)**

- Press the button to mute the sound.
- Press the button to turn off the microphone during a telephone call.

Detailed information for audio control buttons are described in the following pages in this section.

### Aux, USB port



You can use an aux port to connect audio devices and an USB port to plug in an USB or iPod®.

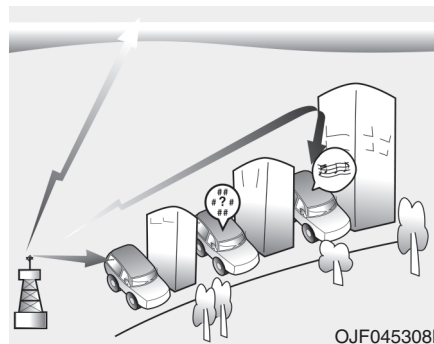
### \* NOTICE

When using a portable audio device connected to the power outlet, noise may occur during playback. If this happens, use the power source of the portable audio device.

\* iPod® is a trademark of Apple Inc.

### How vehicle radio works

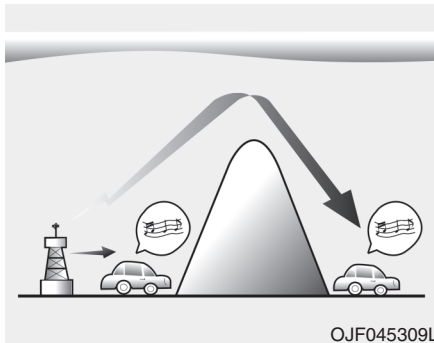
#### FM reception



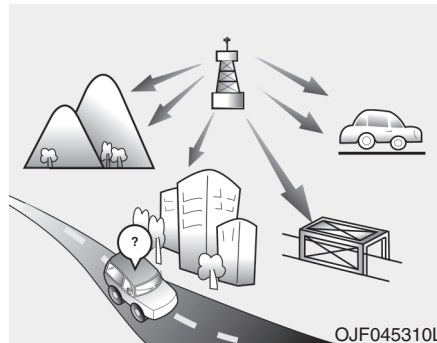
AM and FM radio signals are broadcast from transmitter towers located around your city. They are intercepted by the radio antenna on your vehicle. This signal is then received by the radio and sent to your vehicle speakers.

When a strong radio signal has reached your vehicle, the precise engineering of your audio system ensures the best possible quality reproduction. However, in some cases the signal coming to your vehicle may not be strong and clear.

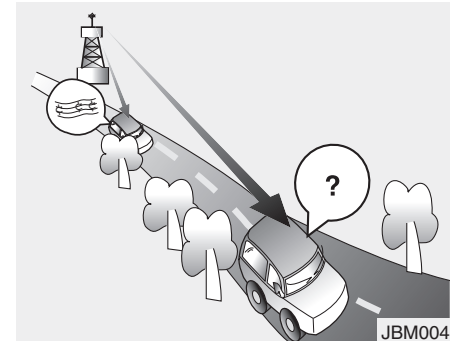
This can be due to factors, such as the distance from the radio station, closeness of other strong radio stations or the presence of buildings, bridges or other large obstructions in the area.

**AM (MW, LW) reception**

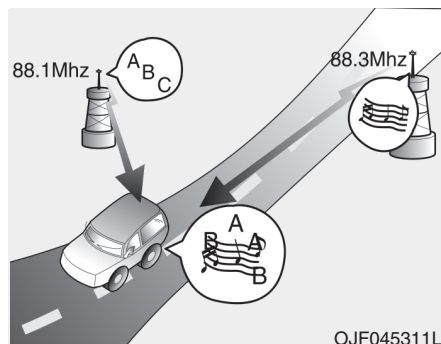
AM broadcasts can be received at greater distances than FM broadcasts. This is because AM radio waves are transmitted at low frequencies. These long, low frequency radio waves can follow the curvature of the earth rather than travelling straight out into the atmosphere. In addition, they curve around obstructions so that they can provide better signal coverage.

**FM radio station**

FM broadcasts are transmitted at high frequencies and do not bend to follow the earth's surface. Because of this, FM broadcasts generally begin to fade at short distances from the station. Also, FM signals are easily affected by buildings, mountains, or other obstructions. These can result in certain listening conditions which might lead you to believe a problem exists with your radio. The following conditions are normal and do not indicate radio trouble:



- **Fading** - As your vehicle moves away from the radio station, the signal will weaken and sound will begin to fade. When this occurs, we suggest that you select another stronger station.
- **Flutter/Static** - Weak FM signals or large obstructions between the transmitter and your radio can disturb the signal causing static or fluttering noises to occur. Reducing the treble level may lessen this effect until the disturbance clears.



- **Station Swapping** - As a FM signal weakens, another more powerful signal near the same frequency may begin to play. This is because your radio is designed to lock onto the clearest signal. If this occurs, select another station with a stronger signal.
- **Multi-Path Cancellation** - Radio signals being received from several directions can cause distortion or fluttering. This can be caused by a direct and reflected signal from the same station, or by signals from two stations with close frequencies. If this occurs, select another station until the condition has passed.

### ***Using a cellular phone or a two-way radio***

When a cellular phone is used inside the vehicle, noise may be produced from the audio system. This does not mean that something is wrong with the audio equipment. In such a case, use the cellular phone at a place as far as possible from the audio equipment.

### **⚠ CAUTION**

***When using a communication system such as a cellular phone or a radio set inside the vehicle, a separate external antenna must be fitted. When a cellular phone or a radio set is used with an internal antenna alone, it may interfere with the vehicle's electrical system and adversely affect safe operation of the vehicle.***

### **⚠ WARNING**

**Do not use a cellular phone while driving. Stop at a safe location to use a cellular phone.**

**AUDIO (With Touch Screen)**

■ Type-1



■ Type-2



(With *Bluetooth®* Wireless Technology)

HMH3F0000EE/HMH3F0001EE

### Features of Your Audio



#### (1) **EJECT**

- Ejects the disc.

#### (2) **RADIO**

- Changes to FM/AM mode.
- Each time the button is pressed, the mode is changed in the order of FM1 → FM2 → FMA → AM → AMA.

#### (3) **MEDIA**

- Changes to CD/USB(iPod®)/AUX /My Music/Bluetooth® Audio mode.
- Each time the button is pressed, the mode is changed in the order of CD → USB(iPod®) → AUX → My Music → BT(Bluetooth®) Audio.

#### (4) **PHONE**

- Changes to Phone mode.
- When a phone is not connected, the connection screen is displayed.

#### (5) **POWER/VOL** knob

- Power knob : Turns power On/Off by pressing the knob.
- Volume knob : Sets volume by turning the knob left/right.

#### (6) **SEEK TRACK**

When pressed briefly

- Radio mode : plays previous/next frequency.
- CD, USB, iPod®, My Music, BT Audio mode : changes the track, Song(file).

When pressed and held

- Radio mode : continuously changes the frequency. Upon release, plays the current frequency.
- CD, USB, iPod®, My Music mode : rewinds or fast forwards the track or file.
- During a Handsfree call, controls the call volume.



**(7) DISP**

- Each time the button is shortly pressed, sets Screen Off → Screen On → Screen Off.
- Audio operation is maintained and only the screen will be turned Off.
- In the Screen Off state, press any button to turn the Screen On again.

**(8) CLOCK**

- Displays the time/date/day.

**(9) TA/SCAN**

- Radio mode
  - Shortly press the button : TA On/Off
  - Press and hold the button : Previews each broadcast for 5 seconds each.
- CD, USB, My Music mode
  - Press and hold the button : Previews each song (file) for 10 seconds each.
  - Press and hold the button again to continue listening to the current song (file).

**(10) SETUP**

- Changes to Setup mode.

**(11) TUNE knob**

- Radio mode : turn to change broadcast frequencies.
- CD, USB, iPod®, My Music mode : turn to search tracks/channels/ files.

**(12) FOLDER**

- MP3 CD/USB mode : Folder Search.

**(13) SCAN**

- Radio mode
  - Press the button : Previews each broadcast for 5 seconds each.
- CD, USB, My Music mode
  - Press the button : Previews each song (file) for 10 seconds each.
  - Press the button again to continue listening to the current song (file).

**\* NOTICE - Using Compact Discs**

- This device has been manufactured to be compatible with software bearing the following logo marks.
- Do not clean discs with chemical solutions, such as record sprays, antistatic sprays, antistatic liquids, benzene, or thinners.
- After using a disc, put the disc back in its original case to prevent disc scratches.
- Hold discs by their edges or within the center hole to prevent damage to disc surfaces.
- Do not introduce foreign substances into the disc insert/eject slot. Introducing foreign substances could damage the device interior.
- Do not insert two discs simultaneously.
- When using CD-R/CD-RW discs, differences in disc reading and playing times may occur depending on the disc manufacturer, production method and the recording method used.

(Continued)

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- Clean fingerprints and dust off the disc surface (coated side) with a soft cloth.
- The use of CD-R/CD-RW discs attached with labels may result in disc slot jams or difficulties in disc removal. Such discs may also result in noise while playing.
- Some CD-R/CD-RW discs may not properly operate depending on the disc manufacturer, production method and the recording method used. If problems persist, trying using a different CD as continued use may result in malfunctions.
- The performance of this product may differ depending on the CDRW Drive Software.
- Copy-protected CDs such as Style CDs may not function in the device. DATA discs cannot be played. (However, such discs may still operate but will do so abnormally.)

(Continued)

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- Do not use abnormally shaped discs (8cm, heart-shaped, octagon-shaped) as such discs could lead to malfunctions.
- If the disc is straddled on the disc slot without removal for 10 seconds, the disc will automatically be re-inserted into the disc player.
- Only genuine audio CDs are supported. Other discs may result in recognition failure (e.g. copy CDR, CDs with labels)

## MP3 File Information

### • Supported Audio Formats

|                   |                                   |
|-------------------|-----------------------------------|
| File System       | ISO 9660 Level 1                  |
|                   | ISO 9660 Level 2                  |
|                   | Romeo / Juliet (128 characters)   |
| Audio Compression | MPEG1 Audio Layer3                |
|                   | MPEG2 Audio Layer3                |
|                   | MPEG2.5 Audio Layer3              |
|                   | Windows Media Audio Ver 7.X & 8.X |

※ File formats that do not comply with the above formats may not be properly recognized or play without properly displaying file names or other information.

### • Support for Compressed Files

#### 1. Supported Bitrates (Kbps)

| BIT RATE(kbps) | MPEG1  | MPEG2  | MPEG2.5 | WMA        |
|----------------|--------|--------|---------|------------|
|                | Layer3 | Layer3 | Layer3  | High Range |
|                | 32     | 8      | 8       | 48         |
|                | 40     | 16     | 16      | 64         |
|                | 48     | 24     | 24      | 80         |
|                | 56     | 32     | 32      | 96         |
|                | 64     | 40     | 40      | 128        |
|                | 80     | 48     | 48      | 160        |
|                | 96     | 56     | 56      | 192        |
|                | 112    | 64     | 64      |            |
|                | 128    | 80     | 80      |            |
|                | 160    | 96     | 96      |            |
|                | 192    | 112    | 112     |            |
|                | 224    | 128    | 128     |            |
|                | 256    | 144    | 144     |            |
|                | 320    | 160    | 160     |            |

#### 2. Sampling Frequencies (Hz)

| MPEG1 | MPEG2 | MPEG2.5 | WMA   |
|-------|-------|---------|-------|
| 44100 | 22050 | 11025   | 32000 |
| 48000 | 24000 | 12000   | 44100 |
| 3000  | 16000 | 8000    | 48000 |

• For MP3/WMA compression files, differences in sound quality will occur depending on the bitrate. (Higher sound quality can be experienced with higher bitrates.)

• This device only recognizes files with MP3/WMA extensions. Other file extensions may not be properly recognized.

#### 3. Maximum number of recognized folders and files

- Folder : 255 folders for CD, 2,000 folders for USB
- File : 999 files for CD, 6,000 files for USB

※ There are no limitations to the number of recognized folder levels

- Language Support (Unicode Support)

1. English : 94 characters

2. Special characters and Symbols : 986 characters

※ Languages other than Korean and English (including Chinese) are not included.

3. Text Display (Based on Unicode)

- File name : Maximum 64 English characters

- Folder name : Max 32 English characters

※ Using the scroll feature allows you to see the entire name of files with names that are too long to be displayed at once.

- Compatibility by Disc Type

1. Playing MIXED CDs : First plays the audio CD, then plays the compressed file(s).

2. Playing EXTRA CDs : First plays the audio CD, then plays the compressed file(s).

3. Playing multisession CDs : Plays in order of sessions

- MIXED CD : CD type in which both MP3 and audio CD files are recognized in one disc.

- Multisession CD : CD type that includes more than two sessions. Different from Extra CDs, multisession CDs are recorded by sessions and have no media limitation.

- Precautions upon Writing CDs

1. In all cases except when creating multisession discs, check the close session option before creating the disc. Though product malfunctions will not occur, some time may be required for the device to check whether the session state is closed (approximately 25 seconds). (Additional time may also be required depending on the number of folders or files.)

2. Changing the MP3/WMA file extensions or changing files of other extensions to MP3/WMA may result in product malfunction.

3. When naming files with MP3/WMA file extensions, write using only Korean and English. (Languages other than Korean and English are not supported and are displayed as blank.)

4. Unauthorized use or duplication of music files are prohibited by law.

5. Prolonged use of CD-R/CD-RW discs that do not satisfy related standards and/or specifications could result in product malfunction.

### \* NOTICE - Using the USB Devices

- Connect the USB device after turning on the engine. The USB device may become damaged if it is already connected when the ignition is turned on. The USB device may not operate properly if the car ignition is turned on or off with the USB device connected.
- Be careful for static electricity when connecting/disconnecting USB devices.
- Encoded MP3 Players will not be recognized when connected as an external device.
- When connecting an external USB device, the vehicle's audio system may not recognize the USB depending on what firmware is used by USB device or what files are on the USB.
- Only products formatted with byte/sectors under 64Kbyte will be recognized.
- This device recognizes USB devices formatted in FAT 12/16/32 file formats. This device does not recognize files in NTFS file format.

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- Some USB devices may not be supported due to compatibility issues.
- Avoid contact between the USB connector and bodily parts or foreign objects.
- Repeated connecting/disconnecting of USB devices within short periods of time may result in product malfunction.
- A strange noise may occur when disconnecting the USB.
- Make sure to connect/disconnect external USB devices with the audio power turned off.
- The amount of time required to recognize the USB device may differ depending on the type, size or file formats stored on the USB. Such differences in time are not indications of malfunctions.
- The vehicle audio system only supports USB devices designed to play music files.
- USB images and videos are not supported.

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- Do not use the USB I/F to charge batteries or USB accessories that generate heat. Doing so may lead to worsened performance or damage to the audio system.
- The audio system may not recognize the USB device if separately purchased USB hubs and extension cables are being used. Connect the USB device directly with the USB port of the vehicle.
- When using mass storage USB devices with separate logical drives, only files saved to the root drive can be played.
- Files may not properly operate if application programs are installed on the USBs.
- The audio system may not operate normally if MP3 Players, cellular phones, digital cameras, or other electronic devices (USB devices not recognized as portable disk drives) are connected with the audio system.

(Continued)

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- Charging through the USB may not work for some mobile devices.
- The device may not support normal operation when using an atypical USB memory device (miniature, keychain, etc.). For best results, use a typical USB device that has a metal case.
- The device may not support normal operation when using formats such as HDD Type, CF, or SD Memory.
- The device will not support files locked by DRM (Digital Rights Management.)
- USB memory sticks used by connecting an Adaptor (SD Type or CF Type) may not be properly recognized.
- The device may not operate properly when using USB HDDs or USBs subject to connection failures caused by vehicle vibrations. (e.g. i-stick type)

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- Avoid use of USB memory products that can also be used as key chains or mobile phone accessories. Use of such products may cause damage to the USB jack.
- Connecting an MP3 device or phone through various channels, such as AUX/BT or Audio/USB mode may result in pop noises or abnormal operation.



### \* NOTICE - Using an iPod®

- iPod® is a registered trademark of Apple Inc.
- In order to use the iPod® with your vehicle's audio system, you must use a dedicated iPod® cable. (the cable that is supplied when purchasing iPod®/iPhone® products)
- If the iPod® is connected to the vehicle while it is playing, a high pitch sound could occur for approximately 1-2 seconds immediately after connecting. If possible, connect the iPod® to the vehicle with the iPod® stopped/paused.
- When the vehicle ignition is set to ACC or ON, connecting the iPod® through the iPod® cable will charge the iPod® through the car audio system.
- When connecting with the iPod® cable, make sure to fully insert the jack to prevent communication interference.

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**(Continued)**

- When the EQ features of an external device, such as the iPod®, and the audio system are both active, EQ effects could overlap and cause sound deterioration and distortion. Whenever possible, turn off the EQ feature within the external device when it is connected to the audio system.
- Noise may occur when an iPod® or AUX device is connected. When such devices are not being used, disconnect the device for storage.
- When the iPod® or AUX device power is connected to the power jack, playing the external device may result in noise. In such cases, disconnect the power connection before use.
- Skipping or improper operation may occur depending on the characteristics of your iPod®/iPhone® device.

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**(Continued)**

- If your iPhone is connected to both the *Bluetooth*® Wireless Technology and USB, the sound may not be properly played. In your iPhone, select the Dock connector or *Bluetooth*® Wireless Technology to change the sound output (source).
- iPod® mode cannot be operated when the iPod® cannot be recognized due to the playing of versions that do not support communication protocols, cases of iPod® abnormalities and defects.
- For fifth generation iPod® Nano devices, the iPod® may not be recognized when the battery level is low. Please charge the iPod® for use.
- The search/play orders shown within the iPod® device may differ from the orders shown within the audio system.
- If the iPod® malfunctions due to an iPod® device defect, reset the iPod® and try again. (To learn more, refer to your iPod® manual)

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- Some iPod®s may not sync with the System depending on the version. If the Media is removed before the Media is recognized, then the system may not properly restore the previously operated mode. (iPad charging is not supported.)
- Use an iPod® cable shorter than 1 meter in length such as the one originally supplied with a new iPod®, longer cables may lead to the audio system not recognizing the iPod®.

**\* NOTICE - Using the  
*Bluetooth*® Wireless  
Technology Audio  
Mode**

- *Bluetooth*® Wireless Technology Audio Mode can be used only when a *Bluetooth*® Wireless Technology phone has been connected.
- *Bluetooth*® Wireless Technology Audio Mode will not be available when connecting mobile phones that do not support this feature.
- If a *Bluetooth*® Wireless Technology Phone is being used to play music and receives an incoming or outgoing phone call, then the music will stop.
- Moving the Track up/down while playing *Bluetooth*® Wireless Technology audio mode may result in pop noises with some mobile phones.
- *Bluetooth*® Wireless Technology streaming audio may not be supported in some mobile phones.

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- When returning to *Bluetooth*® Wireless Technology Audio mode after ending a call, the mode may not automatically restart in some mobile phones.
- Receiving an incoming call or making an outgoing call while playing *Bluetooth*® Wireless Technology Audio may result in audio interference.

**\* NOTICE - Using the  
*Bluetooth*® Wireless  
Technology Cellular  
Phone**

- *Bluetooth*® Wireless Technology Handsfree refers to a device which allows the user to conveniently make phone calls with *Bluetooth*® Wireless Technology mobile phones through the audio system.
- *Bluetooth*® Wireless Technology allows devices to be connected in a short distance, including hands-free devices, stereo headsets, wireless remote controllers, etc. For more information, visit the *Bluetooth*® Wireless Technology website at [www.Bluetooth.com](http://www.Bluetooth.com). Before using *Bluetooth*® Wireless Technology audio features.
- The *Bluetooth*® word mark and logos are registered trademarks owned by *Bluetooth*® SIG, Inc. and any use of such marks by Kia is under license. Other trademarks and trade names are those of their respective owners. A *Bluetooth*® enabled cell phone is required to use *Bluetooth*® Wireless Technology.

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- *Bluetooth*® Wireless Technology features supported within the vehicle are as follows. Some features may not be supported depending on your *Bluetooth*® Wireless Technology device.
  - Answering and placing *Bluetooth*® Wireless Technology Handsfree calls
  - Menu operation during call (Switch to Private, Switch to call waiting, Outgoing volume)
  - Download Call History
  - Download Mobile Phone book
  - Phone book/Call History Auto Download
  - *Bluetooth*® Wireless Technology device auto connection
  - *Bluetooth*® Wireless Technology Audio
- Before using *Bluetooth*® Wireless Technology related features of the audio system, refer your phone's User's Manual for phone-side *Bluetooth*® Wireless Technology operations.

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- The phone must be paired to the audio system to use *Bluetooth*® Wireless Technology related features.
- Pairing and connecting a *Bluetooth*® Wireless Technology enabled mobile phone will work only when the *Bluetooth*® Wireless Technology option within your mobile phone has been turned on. (Methods of turning on the *Bluetooth*® Wireless Technology enabled feature may differ depending on the mobile phone.)
- Do not use a cellular phone or perform *Bluetooth*® Wireless Technology settings (e.g. pairing a phone) while driving.
- Even if the phone supports *Bluetooth*® Wireless Technology, the phone will not be found during device searches if the phone has been set to hidden state or the *Bluetooth*® Wireless Technology has been deactivated. Disable the hidden state or activate the *Bluetooth*® Wireless Technology prior to searching/connecting with the car audio system.

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- You will not be able to use the hands-free feature when your phone (in the car) is outside of the cellular service area. (e.g. in a tunnel, in an underground area, in a mountainous area, etc.)
- If the cellular phone signal is poor or the vehicles interior noise is too loud, it may be difficult to hear the other person's voice during a call.
- Do not place the phone near or inside metallic objects, otherwise communications with *Bluetooth*® Wireless Technology system or cellular service stations can be disturbed.
- Placing the audio system within an electromagnetic environment may result in noise interference.
- Some cellular phones or other devices may cause interference noise or malfunction to the audio system. In this case, storing the device in a different location may resolve the condition.

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- While a phone is connected through *Bluetooth*® Wireless Technology your phone may discharge quicker than usual for additional *Bluetooth*® Wireless Technology-related operations.
- If Priority is set upon vehicle ignition (IGN/ACC ON), the *Bluetooth*® Wireless Technology phone will be automatically connected. Even if you are outside, the *Bluetooth*® Wireless Technology phone will be automatically connected once you are in the vicinity of the vehicle. If you do not want to automatically connect your *Bluetooth*® Wireless Technology phone, try the following.
  - 1) Turn off the *Bluetooth*® Wireless Technology feature in your mobile phone.
  - 2) Turn off the *Bluetooth*® Wireless Technology feature in your car audio system.

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- To turn off the *Bluetooth*® Wireless Technology feature in your car audio system, go to [SETUP] > [Phone] and [turn off] the *Bluetooth*® Wireless Technology feature.
- *Bluetooth*® Wireless Technology connection may become intermittently disconnected in some mobile phones. Follow these steps to try again.
  - 1) Turn the *Bluetooth*® Wireless Technology function within the mobile phone off/on and try again.
  - 2) Turn the mobile phone power Off/On and try again.
  - 3) Completely remove the mobile phone battery, reboot, and then try again.
  - 4) Reboot the audio system and try again.
  - 5) Delete all paired devices, pair and try again.
- It is possible to pair up to five *Bluetooth*® Wireless Technology devices to the car system.

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- Phone contact names should be saved in English or they may not be displayed correctly.
- The Handsfree call volume and quality may differ depending on the mobile phone.
- Only one *Bluetooth*® Wireless Technology device can be connected at a time.
- In some mobile phones, starting the ignition while talking through *Bluetooth*® Wireless Technology enabled handsfree call will result in the call becoming disconnected. (Switch the call back to your mobile phone when starting the ignition.)
- If the mobile phone is not paired or connected, it is not possible to enter Phone mode. Once a phone is paired or connected, the guidance screen will be displayed.

**⚠ CAUTION**

- *Bluetooth® Wireless Technology Handsfree is a feature that enables drivers to practice safe driving. Connecting the car audio system with a Bluetooth® Wireless Technology phone allows the user to conveniently make calls, receive calls, and manage the phone book. Before using the Bluetooth® Wireless Technology, carefully read the contents of this user's manual.*
- *Excessive use or operations while driving may lead to negligent driving practices and be the cause of accidents.*
- *Do not operate the device excessively while driving.*
- *Viewing the screen for prolonged periods of time while driving is dangerous and may lead to accidents.*
- *When driving, view the screen only for short periods of time.*

**\* NOTICE - Using the Voice Recognition (if equipped)**

- When using the voice recognition feature, only commands listed within the user's manual are supported.
- Be aware that during the operation of the voice recognition system, pressing any button other than the  button or touching the screen will terminate voice recognition mode.
- For superior voice recognition performance, position the microphone used for voice recognition above the head of the driver's seat and maintain a proper position when saying commands.
- Within the following situations, voice recognition may not function properly due to external sound.
  - When the windows and sunroof are open
  - When the wind of the cooling/heating device is strong
  - When entering and passing through tunnels
  - When driving on rugged and uneven roads.

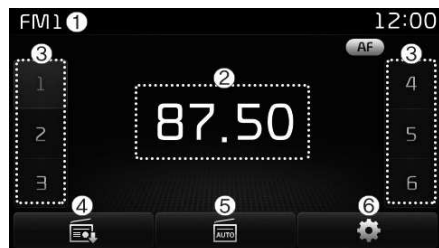
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- During severe rain (heavy rains, windstorms)
- Phone related voice commands can be used only when a *Bluetooth®* Wireless Technology device is connected.
- When making calls by stating a name, the corresponding contact must be downloaded and stored within the audio system.
- After downloading the *Bluetooth®* Wireless Technology phone book, it takes some time to convert the phone book data into voice information. During this time, voice recognition may not properly operate.
- Pronounce the voice commands naturally and clearly as if in a normal conversation.

### Radio Mode (Type-1)

#### Radio Mode Display Controls



#### (1) Mode Display

Displays currently operating mode.

#### (2) Frequency

Displays the current frequency.

#### (3) Preset

Displays current preset number [1] ~ [6].

#### (4) Preset Display

Displays saved presets.

#### (5) Auto store

Automatically saves frequencies with superior reception to Preset buttons.

#### (6) RDS Menu

Displays the RDS Menu.

#### (7) RDS Info

Displays RDS broadcast information.

### With the Radio Mode Button



Pressing the **[RADIO]** button will change the operating mode in the order of FM1 → FM2 → FMA → AM → AMA.

If [Pop-up Mode] is turned on within **[SETUP] ► [Display]**, then pressing the **[RADIO]** button will display the Radio Pop-up Mode screen.

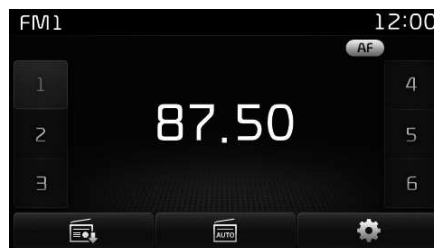
Turn the **TUNE** knob to move the focus. Press the knob to select.

**Seek**

Press the **[SEEK TRACK]** button to play the previous/next frequency.

**Tune**

Turn the **TUNE** knob to select the desired frequency.

**Selecting/Saving Presets**

Press the [1] ~ [6] buttons to play the desired preset.

Press the [Preset] button to display the broadcast information for the frequency saved to each button.

While listening to a frequency you want to save as a preset, press and hold one of the [1] ~ [6] preset buttons to save the current frequency to the selected preset.

**Auto Store**

Press the [Auto store] button to automatically save receivable frequencies to Preset buttons.

While Auto Store is operating, pressing the [Auto store] button again will cancel Auto Store and restore the previous frequency.



### RDS Menu

Press the [RDS Menu] button to set the AF (Alternative Frequency), Region and News features.

The RDS Menu is not supported within AM or AMA mode.

### Scan

Press the **[TA/SCAN]** button :  
Previews each broadcast for 5 seconds each

Once scan is complete, the previous frequency will be restored.

While Scan is operating, pressing and holding the **[TA/SCAN]** button will cancel scanning.

### TA (Traffic Announcement)



Press the **[TA/SCAN]** button to turn the TA (Traffic Announcement) feature On/Off.

## Radio Mode (Type-2)

### Radio Mode Display Controls



### (1) Mode Display

Displays currently operating mode.

### (2) Frequency

Displays the current frequency.

### (3) Preset

Displays current preset number [1] ~ [6].

### (4) Preset Display

Displays preset buttons.

### (5) Auto store

Automatically saves frequencies with superior reception to Preset buttons.

### With the Radio Mode Button



Pressing the **[RADIO]** button will change the operating mode in the order of FM1 → FM2 → AM.

If [Mode Pop-up] is turned on within **[SETUP] ► [Display]**, then pressing the **[RADIO]** button will display the Radio Mode Pop-up screen.

Turn the **TUNE** knob to move the focus. Press the knob to select.

### Seek

Press the **[SEEK TRACK]** button to play the previous/next frequency.

### Tune

Turn the **TUNE** knob to select the desired frequency.



### Selecting /Saving Presets

Press the [Preset] button to display the broadcast information for the frequency saved to each button.

Press the [1] ~ [6] buttons to play the desired preset.

While listening to a frequency you want to save as a preset, press and hold one of the [1] ~ [6] preset buttons to save the current frequency to the selected preset.

### Auto Store

Press the [Auto store] button to automatically save receivable frequencies to Preset buttons.

### Scan

Press the **[SCAN]** button to preview frequencies with superior reception for 5 seconds each.

Press and hold the **[SCAN]** button to preview presets for 5 seconds each. Once scan is complete, the previous frequency will be restored.

While Scan is operating, pressing the **[SCAN]** button will cancel scanning.



## Media Mode

### Media Mode Screen



Pressing the **[MEDIA]** button will change the operating mode in the order of CD → USB(iPod®) → AUX → My Music → BT Audio.

If [Pop-up Mode]/[Mode Pop-up] is turned on within **[SETUP] ► [Display]**, then pressing the **[MEDIA]** button will display the Media Pop-up Mode screen.

Turn the **TUNE** knob to move the focus. Press the knob to select.

The media mode pop up screen can be displayed only when there are two or more media modes turned on.

### Mode Display on the Status Bar



When a *Bluetooth®* Wireless Technology, iPod®, USB or AUX device is connected or a CD is inserted, the corresponding mode icon will be displayed.

| Icon | Title                                 |
|------|---------------------------------------|
|      | <i>Bluetooth®</i> Wireless Technology |
|      | CD                                    |
|      | USB (iPod®)                           |
|      | AUX                                   |

### MENU : Audio CD

#### Audio CD Mode Display Controls

##### ■ Type-1



##### ■ Type-2



#### (1) Mode

Displays currently operating mode.

#### (2) Operation State

From Repeat/Random(Shuffle)/Scan, displays the currently operating function.

#### (3) Track Info

Displays information about the current track.

#### (4) Play/Pause

Changes the play/pause state.

#### (5) Play Time

Displays the current play time.

#### (6) Info

Shows detailed information about the current track.

#### (7) Random(Shuffle)

Turns the Random(Shuffle) feature on/off.

#### (8) Repeat

Turns the Repeat feature on/off.

#### (9) List

Moves to the list screen.

Turn the **TUNE** knob left/right to search for tracks. Once the desired track is displayed, press the knob to select and play.

### With the Audio CD Mode

#### Playing/Pausing CD Tracks

Once an audio CD is inserted, the mode will automatically start and begin playing.

While playing, press the [II] button to pause and press [▶] button to play.

Only genuine audio CDs are supported. Other discs may result in recognition failure (e.g. copy CD-R, CDs with labels)

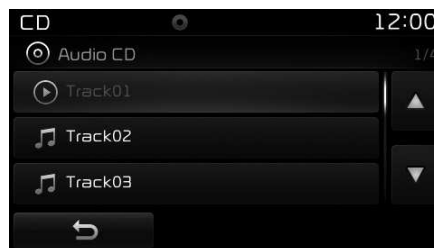
The artist and title information are displayed on the screen if track information is included within the audio CD.

#### Changing Tracks

Press the [SEEK TRACK] button to move to the previous or next track.

Pressing the [SEEK TRACK V] button after the track has been playing for 2 seconds will start the current track from the beginning.

Pressing the [SEEK TRACK V] button before the track has been playing for 1 second will start the previous track.



#### Selecting from the List

Turn the **TUNE** knob left/right to search for the desired track.

Once you find the desired track, press the **TUNE** knob to start playing.

#### Rewinding/Fast-forwarding Tracks

While playing, press and hold the [SEEK TRACK] button to rewind or fast-forward the current track.

#### Scan (With RDS)

Press and hold the [TA/SCAN] button to play the file 10 seconds of each file.

Press and hold the [TA/SCAN] button again to turn off.

#### Scan (Without RDS)

Press the [SCAN] button to play the first 10 seconds of each file.

Press and hold the [SCAN] button again to turn off.

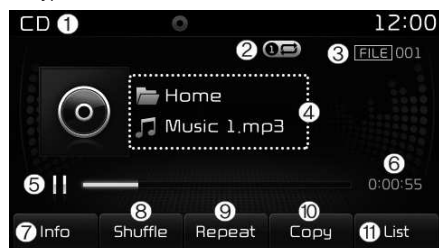
### MENU : MP3 CD

#### MP3 CD Mode Display Controls

##### ■ Type-1



##### ■ Type-2



#### (1) Mode

Displays currently operating mode.

#### (2) Operation State

From Repeat/Random(Shuffle)/Scan, displays the currently operating function.

#### (3) File Index

Displays the current file number.

#### (4) File Info

Displays information about the current file.

#### (5) Play/Pause

Changes the play/pause state.

#### (6) Play Time

Displays the current play time.

#### (7) Info

Shows detailed information about the current file.

When the 'Folder File' option is set as the default display within Display setup, the album/artist/file information are displayed as detailed file information.

When the 'Album Artist Song' option is set as the default display, the folder name/file name are displayed as detailed file information.

The title, artist and album info are displayed only when such information is recorded within the MP3 file ID3 tag.

**(8) Random(Shuffle)**

Turns the Random(Shuffle) feature on/off.

Each time the button is pressed, the feature changes in the order of Random (Shuffle) Folder → Random (Shuffle) All → Off.

- Random(Shuffle) Folder : Plays all files within the current folder in Random (Shuffle) order.
- Random(Shuffle) All : Plays all files in Random(Shuffle) order.

**(9) Repeat**

Turns the Repeat feature on/off.

Each time the button is pressed, the feature changes in the order of Repeat → Repeat Folder → Off.

- Repeat : Repeats the current file.
- Repeat Folder : Repeats all files within the current Folder.

**(10) Copy**

Copies the current file into My Music.

Selecting another feature during copying will display a pop-up asking whether you wish to cancel copying. To cancel, select “Yes”.

**(11) List**

Moves to the list screen.

Turn the **TUNE** knob left/right to search for files. Once the desired file is displayed, press the knob to select and play.

***With the MP3 CD Mode*****Playing/Pausing MP3 Files**

Once an MP3 disc is inserted the mode will automatically start and being playing.

While playing, press the [II] button to pause and press [▶] button to play.

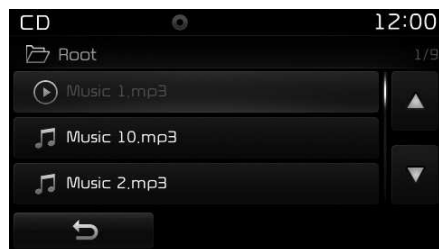
If there are numerous files and folders within the disc, reading time could take more than 10 seconds and the list may not be displayed or song searches may not operate. Once loading is complete, try again.

**Changing Files**

Press the [SEEK TRACK] button to move to the previous or next file.

Pressing the [SEEK TRACK V] button after the file has been playing for 2 seconds will start the current file from the beginning.

Pressing the [SEEK TRACK V] button before the file has been playing for 1 second will start the previous file.



### Selecting from the List

Turn the **TUNE** knob left/right to search for the desired file.

Once you find the desired file, press the **TUNE** knob to start playing.

### Rewinding/Fast-forwarding Files

While playing, press and hold the **[SEEK TRACK]** button to rewind or fast-forward the current file.

### Scan (With RDS)

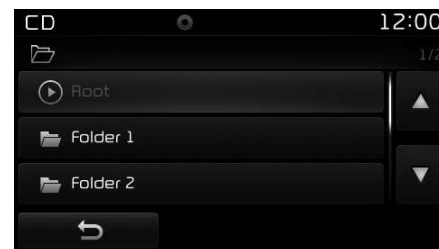
Press and hold the **[TA/SCAN]** button to play the file 10 seconds of each file.

Press and hold the **[TA/SCAN]** button again to turn off.

### Scan (Without RDS)

Press the **[SCAN]** button to play the first 10 seconds of each file.

Press the **[SCAN]** button again to turn off.



### Searching Folders

Press the **[FOLDER]** button to select and search folders.

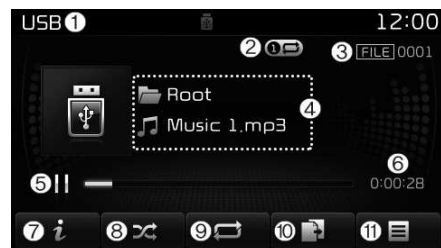
Once the desired folder is displayed, press the **TUNE** knob to select.

The first file within the selected folder will begin playing.

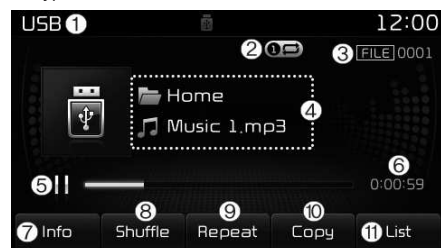
## MENU : USB

### USB Mode Display Controls

#### ■ Type-1



#### ■ Type-2



#### (1) Mode

Displays currently operating mode.

#### (2) Operation State

From Repeat/Random(Shuffle)/Scan, displays the currently operating function.

#### (3) File Index

Displays the current file number.

#### (4) File Info

Displays information about the current file.

#### (5) Play/Pause

Changes the play/pause state.

#### (6) Play Time

Displays the current play time.

#### (7) Info

Displays detailed information for the current file.

When the 'Folder File' option is set as the default display within Display setup, the album/artist/file information are displayed as detailed file information.

When the 'Album Artist Song' option is set as the default display, the folder name/file name are displayed as detailed file information.

The title, artist and album info are displayed only when such information are recorded within the MP3 file ID3 tag.

### (8) Random(Shuffle)

Turns the Random(Shuffle) feature on/off.

Each time the button is pressed, the feature changes in the order of Random(Shuffle) Folder ➡ Random(Shuffle) All ➡ Off.

- Random(Shuffle) Folder : Plays the files in the current folder in random(Shuffle) order.
- Random(Shuffle) All : Plays all files in random(Shuffle) order.

### (9) Repeat

Turns the Repeat feature on/off.

Each time the button is pressed, the feature changes in the order of Repeat ➡ Repeat Folder ➡ Off.

- Repeat : Repeats the current file.
- Repeat Folder : Repeats all files within the current folder.

### (10) Copy

Copies the current file into My Music.

Selecting another feature during copying will display a pop-up asking whether you wish to cancel copying. To cancel, select "Yes".

### (11) List

Moves to the list screen.

Turn the **TUNE** knob left/right to search for files. Once the desired file is displayed, press the knob to select and play.

### *With the USB Mode*

#### **Playing/Pausing USB Files**

Once a USB is connected, the mode will automatically start and begin playing a USB file.

While playing, press the [II] button to pause and press [▶] button to play.

Loading may require additional time if there are many files and folders within the USB and may result in faulty list display or file search. Normal operations will resume once loading is complete.

The device may not support normal operation when using a USB memory type besides (Metal Cover Type) USB Memory.

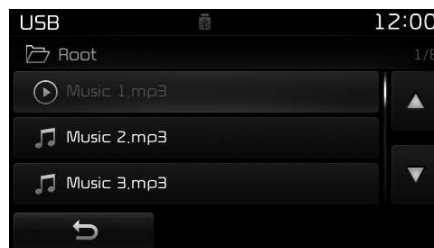


### Changing Files

Press the **[SEEK TRACK]** button to move to the previous or next file.

Pressing the **[SEEK TRACK ∇]** button after the file has been playing for 2 seconds will start the current file from the beginning.

Pressing the **[SEEK TRACK ∇]** button before the file has been playing for 1 second will start the previous file.



### Selecting from the List

Turn the **TUNE** knob left/right to search for the desired file.

Once you find the desired file, press the **TUNE** knob to start playing.

### Rewinding / Fast-forwarding Files

While playing, press and hold the **[SEEK TRACK]** button to rewind or fast-forward the current file.

### Scan (With RDS)

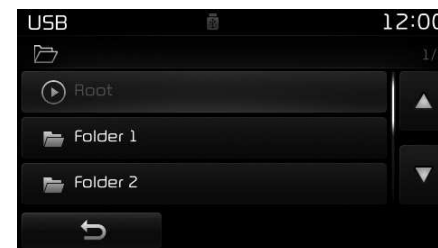
Press and hold the **[TA/SCAN]** button to play the file 10 seconds of each file.

Press and hold the **[TA/SCAN]** button again to turn off.

### Scan (Without RDS)

Press the **[SCAN]** button to play the first 10 seconds of each file.

Press the **[SCAN]** button again to turn off.



### Searching Folders

Press the **[FOLDER]** button to select and search folders.

Once the desired folder is displayed, press the **TUNE** knob to select.

The first file within the selected folder will begin playing.

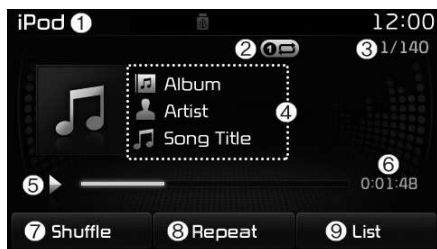
### MENU : iPod®

#### iPod® Mode Display Controls

##### ■ Type-1



##### ■ Type-2



#### (1) Mode

Displays currently operating mode.

#### (2) Operation State

From Repeat/Random(Shuffle), displays the currently operating function.

#### (3) Song Index

Displays the current song/total number of songs.

#### (4) Song Info

Displays information about the current song.

#### (5) Play/Pause

Changes the play/pause state.

#### (6) Play Time

Displays the current play time.

#### (7) Random(Shuffle)

Turns the Random(Shuffle) feature on/off.

- Random(Shuffle) All : Plays all songs in Random(Shuffle) order.

#### (8) Repeat

Turns the Repeat feature on/off.

- Repeat : Repeats the current song

#### (9) List

Moves to the list screen.

Turn the **TUNE** knob left/right to search for the desired category.

Once you find the desired category, press the **TUNE** knob to select and play.

### With the iPod® Mode

#### Playing/Pausing iPod® Songs

Once an iPod® is connected, the mode will automatically start and begin playing an iPod® song.

While playing, press the [II] button to pause and press [▶] button to play.

iPod®s with unsupported communication protocols may not properly operate in the audio system.

#### Changing Songs

Press the [SEEK TRACK] button to move to the previous or next song.

Pressing the [SEEK TRACK ∇] button after the song has been playing for 2 seconds will start the current song from the beginning.

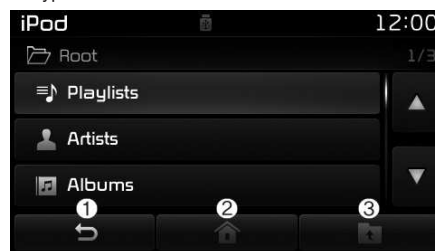
Pressing the [SEEK TRACK ∇] button before the song has been playing for 1 second will start the previous song.

Slight time differences may exist depending your iPod® product.

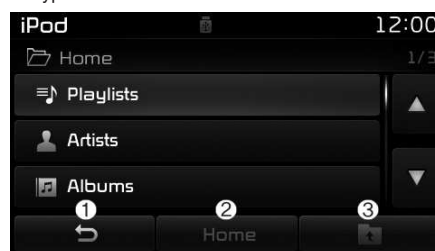
#### Rewinding/Fast-forwarding Songs

While playing, press and hold the [SEEK TRACK] button to rewind or fast-forward the current song.

■ Type-1



■ Type-2



#### Searching Categories

Turn the **TUNE** knob left/right to search for the desired category.

Once you find the desired category, press the **TUNE** knob to select and play.

There are eight categories that can be searched, including Playlists, Artists, Albums, Genres, Songs, Composers, Audiobooks and Podcasts.

#### Category Menu

(1) Displays the play screen.

(2) Moves to the iPod® root category screen.

(3) Moves to the previous category.

If the search mode is accessed while playing a song, the most recently searched category is displayed.

Search steps upon initial connection may differ depending on the type of iPod® device.

### MENU : AUX

#### AUX Mode Display Controls

##### ■ Type-1



##### ■ Type-2



Press the **[MEDIA]** button ► Select **[AUX]**

An external device can be connected to play music.

#### *Connecting an External Device*

External audio players (Camcorders, car VCR, etc.) can be played through a dedicated cable.

If an external device connector is connected with the AUX terminal, then AUX mode will automatically operate. Once the connector is disconnected, the previous mode will be restored.

AUX mode can be used only when an external audio player (camcorder, car VCR, etc.) has been connected.

The AUX volume can be controlled separately from other audio modes.

Connecting a connector jack to the AUX terminal without an external device will convert the system to AUX mode, but only output noise. When an external device is not being used, also remove the connector jack.

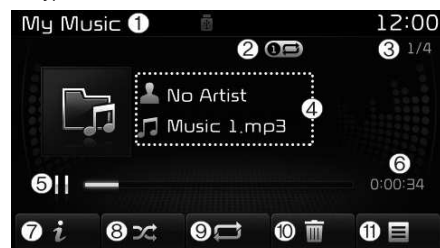
When the external device power is connected to the power jack, playing the external device may output noise. In such cases, disconnect the power connection before use.

Fully insert the AUX cable to the AUX jack upon use.

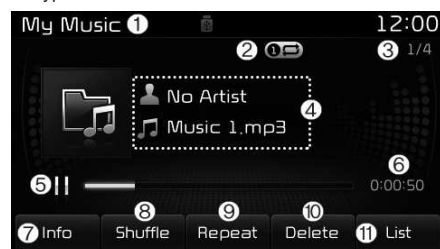
## MENU : My Music Mode

### My Music Mode Display Controls

#### ■ Type-1



#### ■ Type-2



#### (1) Mode

Displays currently operating mode.

#### (2) Operation State

From Repeat/Random(Shuffle)/Scan, displays the currently operating function.

#### (3) File Index

Displays the current file/total number of files.

#### (4) File Info

Displays information about the current file.

#### (5) Play/Pause

Changes the play/pause state.

#### (6) Play Time

Displays the current play time.

#### (7) Info

Displays detailed information for the current file.

The title, artist and album info are displayed only when such information is recorded within the MP3 file ID3 tag.

#### (8) Random(Shuffle)

Turns the Random(Shuffle) feature on/off.

#### (9) Repeat

Turns the Repeat feature on/off.

#### (10) Delete

Deletes the current file.

#### (11) List

Moves to the list screen.

Turn the **TUNE** knob left/right to search for files. Once the desired file is displayed, press the knob to select and play.

### With the My Music Mode

#### Playing/Pausing My Music Files

While playing, press the [II] button to pause and press [▶] button to play.

If there are no files saved within My Music, the [My Music] button will be disabled.

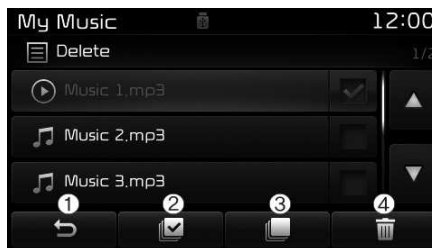
#### Changing Files

Press the [SEEK TRACK] button to move to the previous or next file.

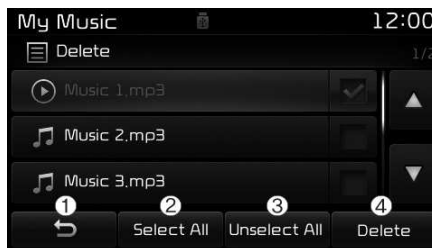
Pressing the [SEEK TRACK ∇] button after the file has been playing for 2 seconds will start the current file from the beginning.

Pressing the [SEEK TRACK ∇] button before the file has been playing for 1 second will start the previous file.

#### ■ Type-1



#### ■ Type-2



#### Selecting from the List

Turn the **TUNE** knob left/right to search for the desired file.

Once you find the desired file, press the **TUNE** knob to start playing.

From the List screen, it is possible to delete files you previously saved into My Music.

#### List Menu

(1) Moves to the previous screen.

(2) Selects all files.

(3) Deselects all selected files.

(4) Deletes selected files.

After selecting the files you want to delete, press the [Delete] button to delete the selected files.

If there is memory available, up to 6,000 files can be saved. Identical files cannot be copied more than 1,000 times.

To check memory information, go to [SETUP] ► [System] ► [Memory Information]

#### Rewinding/Fast-forwarding Files

While playing, press and hold the [SEEK TRACK] button to rewind or fast-forward the current file.

**Scan (With RDS)**

Press and hold the **[TA/SCAN]** button to play the file 10 seconds of each file.

Press and hold the **[TA/SCAN]** button again to turn off.

**Scan (Without RDS)**

Press the **[SCAN]** button to play the first 10 seconds of each file.

Press the **[SCAN]** button again to turn off.

**MENU : *Bluetooth®* Wireless Technology Audio*****Using Bluetooth® Wireless Technology Audio Mode*****Playing/Pausing *Bluetooth®* Wireless Technology Audio**

Once a *Bluetooth®* Wireless Technology device is connected, the mode will automatically start.

While playing, press the **[▶II]** button to pause and press **[▶II]** button to play.

The play/pause feature may operate differently depending on the mobile phone.

**Changing Files**

Press the **[SEEK TRACK]** button to move to the previous or next file.

**Setting Connection**

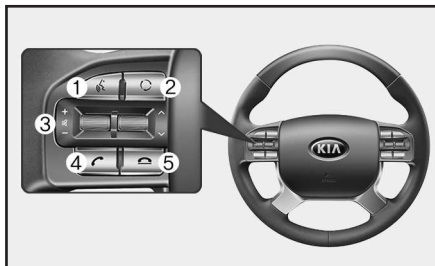
If a *Bluetooth®* Wireless Technology device has not been connected, press the **[SETUP]** button ► **[Phone]** button to display the *Bluetooth®* Wireless Technology connection screen.

It is possible to use the pair phone, connect/disconnect and delete features from your *Bluetooth®* Wireless Technology phone.

If music is not yet playing from your mobile device after converting to *Bluetooth®* Wireless Technology Audio mode, pressing the play button once may start playing the mode. Check to see that music is playing from the *Bluetooth®* Wireless Technology device after converting to *Bluetooth®* Wireless Technology Audio Mode.

### Phone Mode

#### *Making a call using the Steering wheel controls*



\* The actual features in the vehicle may differ from the illustration.

#### (1) When pressed shortly

- Starts voice recognition
- When selecting during a voice prompt, stops the prompt and converts to voice command waiting state

#### When pressed and held

- Ends voice recognition

#### (2) Press the button to change audio source.

(With RDS)

FM1 → FM2 → FMA → AM →  
AMA → CD → USB(iPod®) → AUX  
→ My Music → BT Audio.

(Without RDS)

FM1 → FM2 → AM → CD →  
USB(iPod®) → AUX → My Music  
→ BT Audio.

#### (3) Used to control volume.

#### (4) When pressed shortly

- When pressed in the phone screen, displays call history screen
- When pressed in the dial screen, makes a call
- When pressed in the incoming call screen, answers the call
- When pressed during call waiting, switches to waiting call (Call Waiting)

#### When pressed and held

- When pressed in the *Bluetooth®* Wireless Technology Handsfree wait mode, redials the last call
- When pressed during a *Bluetooth®* Wireless Technology Handsfree call, switches call back to mobile phone (Private)
- When pressed while calling on the mobile phone, switches call back to *Bluetooth®* Wireless Technology Handsfree (Operates only when *Bluetooth®* Wireless Technology Handsfree is connected)

#### (5) Ends phone call



## Bluetooth® Wireless Technology (Type-1)

### When No Devices have been Paired



- ① Press the **[PHONE]** button or the **[CALL]** button on the steering wheel controls. The following screen is displayed.
- ② Press the [OK] button to enter the Pair Phone screen.



- Device : Name of device as shown when searching from your *Bluetooth®* Wireless Technology device
  - Passkey : Passkey used to pair the device
- ③ From your *Bluetooth®* Wireless Technology device (i.e. Mobile Phone), search and select your car audio system.

※ SSP : Secure Simple Pairing

Non SSP supported device :

- ④ After a few moments, a screen is displayed where the passkey is entered.  
Enter the passkey "0000" to pair your *Bluetooth®* Wireless Technology device with the car audio system.



SSP supported device :

- ④ After a few moments, a screen is displayed 6 digits passkey.  
Check the passkey on your *Bluetooth®* Wireless Technology device and confirm.
- ⑤ Once pairing is complete, the following screen is displayed.

Some phones (i.e., iPhone®, Android and Blackberry phones) may offer an option to allow acceptance of all future *Bluetooth®* connection requests by default. Visit <http://www.kia.com/#/blue-tooth> for additional information on pairing your *Bluetooth®*-enabled mobile phone, and to view a phone compatibility list.

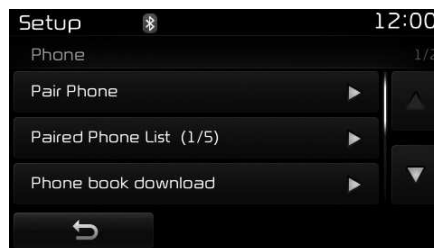
## \* NOTICE



If *Bluetooth*® Wireless Technology devices are paired but none are currently connected, pressing the [PHONE] button or the [CALL] button on the steering wheel controls displays the following screen. Press the [Pair] button to pair a new device or press the [Connect] to connect a previously paired device.

## Pairing through [PHONE] Setup

Press the [SETUP] button ► Select [Phone]



## Pair Phone

The following steps are the same as those described in the section “When No Devices have been Paired” on the previous page.

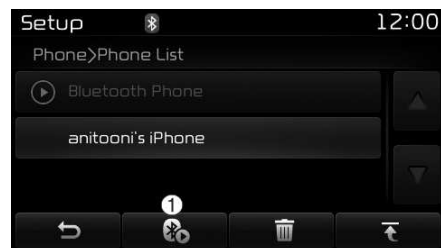
## \* NOTICE

- The waiting period during phone pairing will last for one minute. The pairing process will fail if the device is not paired within the given time. If the pairing process fails, you must start the process from the beginning.
- Generally, most *Bluetooth*® Wireless Technology devices will automatically connect once pairing is complete. However, some devices may require a separate verification process to connect. Check to see whether *Bluetooth*® Wireless Technology has been properly connected within your mobile phone.
- List of paired *Bluetooth*® Wireless Technology devices can be viewed at [SETUP] ► [Phone] ► [Paired Phone List].

### Paired Phone List

Press the **[SETUP]** button ► Select **[Phone]** ► Select **[Paired Phone List]**

- **Connected Phone** : Device that is currently connected.
- **Paired Phone** : Device that is paired but not connected.



#### Connecting a Device

From the paired phone list, select the device you want to connect and press the **[Connect](1)** button.



#### Disconnecting a Device

From the paired phone list, select the currently connected device and press the **[Disconnect](2)** button.

#### Deleting a Device

From the paired phone list, select the device you want to delete and press the **[Delete](3)** button.

### \* NOTICE

- When deleting the currently connected device, the device will automatically be disconnected to proceed with the deleting process.
- If a paired **Bluetooth®** Wireless Technology device is deleted, the device's call history and phone book data will also be deleted.
- To re-use a deleted device, you must pair the device again.

### Changing Priority

It is possible to pair up to five *Bluetooth®* Wireless Technology devices with the car audio system. The “Change Priority” feature is used to set the connection priority of paired phones. However, the most recently connected phone will always be set as the highest priority.

From the paired phone list, select the phone you want to switch to the highest priority, then press the [Change priority](4) button. The selected device will be changed to the highest priority.

When a device is currently connected, even if you change the priority to a different device, the currently connected phone will always be set as the highest priority.

### Phone Menu Screen



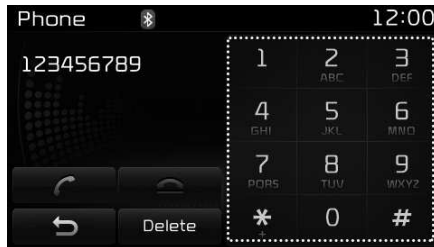
#### Phone Menus

With a *Bluetooth®* Wireless Technology device connected, press the **[PHONE]** button to display the Phone menu screen.

- Dial Number : Displays the dial screen where numbers can be dialed to make calls.
- Call History : Displays the call history list screen.
- Phone book : Displays the Phone book list screen.
- Setup : Displays Phone related settings.

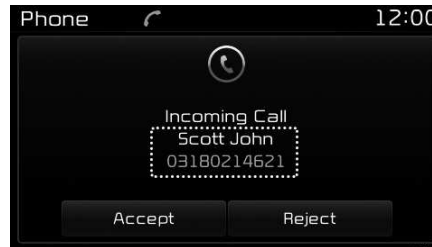
### \* NOTICE

- If you press the [Call History] button but there is no call history data, a prompt is displayed which asks whether to download call history data.
- If you press the [Phone book] button but there is no phone book data, a prompt is displayed which asks whether to download phone book data.
- This feature may not be supported in some mobile phones. For more information on download support, refer to your mobile phone user's manual.



#### Calling by Dialing a Number

- Dial Pad : Used to enter phone number.
- Call : If a number has been entered, calls the number. If no number has been entered, switches to call history screen.
- End : Deletes the entered phone number.
- Delete : Deletes entered numbers one digit at a time.



#### Answering a Call

Answering a call with a *Bluetooth®* Wireless Technology device connected will display the following screen.

- Caller : Displays the other party's name when the incoming caller is saved within your phone book.
- Incoming Number : Displays the incoming number.
- Accept : Accepts the incoming call.
- Reject : Rejects the incoming call.

#### \* NOTICE

- When an incoming call pop-up is displayed, most Audio and SETUP mode features are disabled. Only the call volume will operate.
- The telephone number may not be properly displayed in some mobile phones.
- When a call is answered with the mobile phone, the call mode will automatically revert to Private mode.



### During a Handsfree Call

- **Caller :** Displays the other party's name if the incoming caller is saved within your phone book.
- **Incoming Number :** Displays the incoming number.
- **Call time :** Displays the call time.
- **End :** Ends call.
- **Private :** Converts to Private mode.
- **Out Vol. :** Sets call volume as heard by the other party.
- **Mute :** Turns Mic Mute On/Off.

### \* NOTICE

If the mic is muted, the other party will not be able to hear your voice.



### Call History

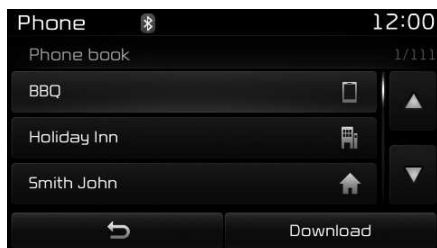
A list of incoming, outgoing and missed calls is displayed.

Press the [Download] button to download the call history.

- **Call History :**
  - Displays recent calls (call history).
  - Connects call upon selection.
- **Download :** Download Recent Call History.

### \* NOTICE

- The call history list will display up to 50 outgoing, incoming, and missed calls.
- Upon downloading call histories, previously saved histories are deleted.
- Incoming calls with hidden caller IDs will not be saved in the call history list.
- Previously saved phone book entries are stored even if a device is disconnected and re-connected.
- The download feature may not be supported in some mobile phones. Check to see that the *Bluetooth®* Wireless Technology device supports the download feature.



### Phone Book

The list of saved phone book entries is displayed. Press the [Download] button to download the call history.

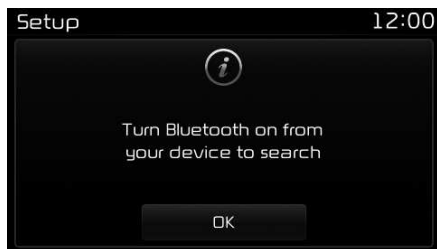
- Contact List :
  - Displays downloaded phone book entries.
  - Connects call upon selection.
- Download : Download phone book entries.

### \* NOTICE

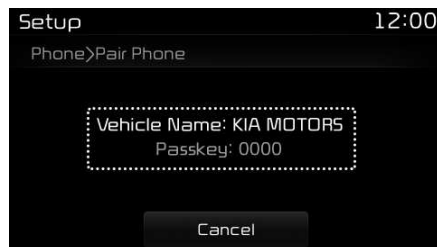
- Up to 1,000 phone book entries can be copied into car phone book.
- Upon downloading phone book data, previously saved phone book data will be deleted.
- Downloading is not possible if the phone book download feature is turned off within the *Bluetooth®* Wireless Technology device. Also, some devices may require device authorization upon attempting to download. If downloading cannot be normally conducted, check the *Bluetooth®* Wireless Technology device setting or the screen state.
- Caller ID information will not be displayed for unsaved callers.
- The download feature may not be supported in some mobile phones. Check to see that the *Bluetooth®* Wireless Technology device supports the download feature.

## Bluetooth® Wireless Technology (Type-2)

### When No Devices have been Paired



- ① Press the **[PHONE]** button or the **[CALL]** button on the steering wheel controls. The following screen is displayed.
- ② Press the [OK] button to enter the Pair Phone screen.

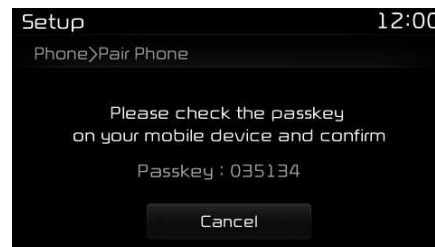


- Vehicle Name : Name of device as shown when searching from your *Bluetooth®* Wireless Technology device
  - Passkey : Passkey used to pair the device
- ③ From your *Bluetooth®* Wireless Technology device (i.e. Mobile Phone), search and select your car audio system.

※ SSP : Secure Simple Pairing

Non SSP supported device :

- ④ After a few moments, a screen is displayed where the passkey is entered.  
Enter the passkey "0000" to pair your *Bluetooth®* Wireless Technology device with the car audio system.



SSP supported device :

- ④ After a few moments, a screen is displayed 6 digits passkey.  
Check the passkey on your *Bluetooth®* Wireless Technology device and confirm.
- ⑤ Once pairing is complete, the following screen is displayed.

Some phones (i.e., iPhone®, Android and Blackberry phones) may offer an option to allow acceptance of all future *Bluetooth®* connection requests by default. Visit <http://www.kia.com/#/bluetooth> for additional information on pairing your *Bluetooth®*-enabled mobile phone, and to view a phone compatibility list.



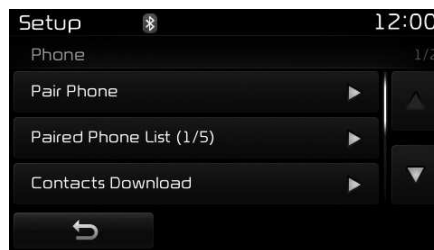
## \* NOTICE



If *Bluetooth*® Wireless Technology devices are paired but none are currently connected, pressing the [PHONE] button or the [CALL] button on the steering wheel controls displays the following screen. Press the [Pair] button to pair a new device or press the [Connect] to connect a previously paired device.

## Pairing through [PHONE] Setup

Press the [SETUP] button ► Select [Phone]



## Pair Phone

The following steps are the same as those described in the section “When No Devices have been Paired” on the previous page.

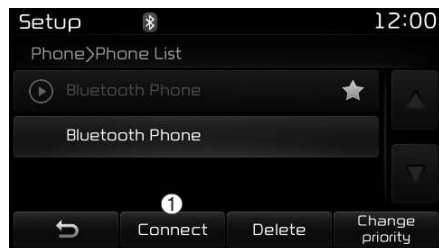
## \* NOTICE

- The waiting period during phone pairing will last for one minute. The pairing process will fail if the device is not paired within the given time. If the pairing process fails, you must start the process from the beginning.
- Generally, most *Bluetooth*® Wireless Technology devices will automatically connect once pairing is complete. However, some devices may require a separate verification process to connect. Check to see whether *Bluetooth*® Wireless Technology has been properly connected within your mobile phone.
- List of paired *Bluetooth*® Wireless Technology devices can be viewed at [SETUP] ► [Phone] ► [Paired Phone List].

### Paired Phone List

Press the **[SETUP]** button ► Select **[Phone]** ► Select **[Paired Phone List]**

- Connected Phone : Device that is currently connected.
- Paired Phone : Device that is paired but not connected.



### Connecting a Device

From the paired phone list, select the device you want to connect and press the **[Connect](1)** button.



### Disconnecting a Device

From the paired phone list, select the currently connected device and press the **[Disconnect](2)** button.

### Deleting a Device

From the paired phone list, select the device you want to delete and press the **[Delete](3)** button.

### \* NOTICE

- When deleting the currently connected device, the device will automatically be disconnected to proceed with the deleting process.
- If a paired **Bluetooth®** Wireless Technology device is deleted, the device's call history and contacts data will also be deleted.
- To re-use a deleted device, you must pair the device again.

### Changing Priority

It is possible to pair up to five *Bluetooth®* Wireless Technology devices with the car audio system. The “Change Priority” feature is used to set the connection priority of paired phones. However, the most recently connected phone will always be set as the highest priority.

From the paired phone list, select the phone you want to switch to the highest priority, then press the [Change priority](4) button. The selected device will be changed to the highest priority.

When a device is currently connected, even if you change the priority to a different device, the currently connected phone will always be set as the highest priority.

### Phone Menu Screen



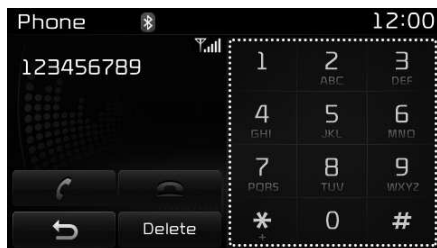
#### Phone Menus

With a *Bluetooth®* Wireless Technology device connected, press the [PHONE] button to display the Phone menu screen.

- Dial Number : Displays the dial screen where numbers can be dialed to make calls.
- Call History : Displays the call history list screen.
- Contacts : Displays the Contacts list screen.
- Setup : Displays Phone related settings.

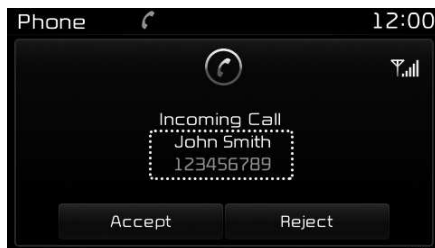
### \* NOTICE

- If you press the [Call History] button but there is no call history data, a prompt is displayed which asks whether to download call history data.
- If you press the [Contacts] button but there is no contacts data stored, a prompt is displayed which asks whether to download contacts data.
- This feature may not be supported in some mobile phones. For more information on download support, refer to your mobile phone user's manual.



### Calling by Dialing a Number

- Dial Pad : Used to enter phone number.
- Call : If a number has been entered, calls the number. If no number has been entered, switches to call history screen.
- End : Deletes the entered phone number.
- Delete : Deletes entered numbers one digit at a time.



### Answering a Call

Answering a call with a *Bluetooth®* Wireless Technology device connected will display the following screen.

- Caller : Displays the other party's name when the incoming caller is saved within your contacts.
- Incoming Number : Displays the incoming number.
- Accept : Accepts the incoming call.
- Reject : Rejects the incoming call.

### \* NOTICE

- When an incoming call pop-up is displayed, most Audio and SETUP mode features are disabled. Only the call volume will operate.
- The telephone number may not be properly displayed in some mobile phones.
- When a call is answered with the mobile phone, the call mode will automatically revert to Private mode.



### During a Handsfree Call

- Caller : Displays the other party's name if the incoming caller is saved within your contacts.
- Incoming Number : Displays the incoming number.
- Call time : Displays the call time.
- End : Ends call.
- Private : Converts to Private mode.
- Out Vol. : Sets call volume as heard by the other party.
- Mute : Turns Mic Mute On/Off.

### \* NOTICE

If the mic is muted, the other party will not be able to hear your voice.

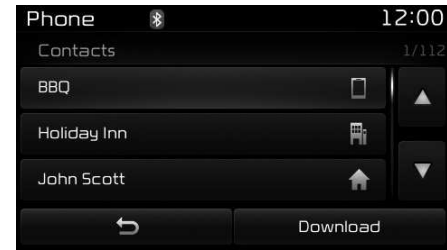


### Call History

A list of incoming, outgoing and missed calls is displayed.

Press the [Download] button to download the call history.

- Call History :
  - Displays recent calls (call history).
  - Connects call upon selection.
- Download : Download Recent Call History.



### Contacts

The list of saved phone book entries is displayed. Press the [Download] button to download the call history.

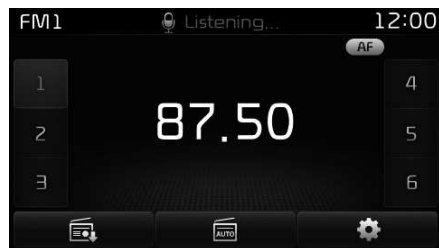
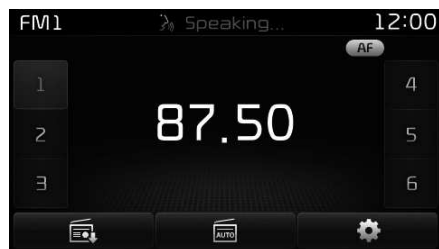
- Contacts List :
  - Displays downloaded contacts entries.
  - Connects call upon selection.
- Download : Download contacts entries.

### **\* NOTICE**

- Up to 1,000 contacts entries can be copied into car contacts.
- Upon downloading contacts data, previously saved contacts data will be deleted.
- Downloading is not possible if the contacts download feature is turned off within the *Bluetooth*® Wireless Technology device. Also, some devices may require device authorization upon attempting to download. If downloading cannot be normally conducted, check the *Bluetooth*® Wireless Technology device setting or the screen state.
- Caller ID information will not be displayed for unsaved callers.
- The download feature may not be supported in some mobile phones. Check to see that the *Bluetooth*® Wireless Technology device supports the download feature.

## Voice Recognition Mode (if equipped)

### Using Voice Recognition



### Starting Voice Recognition

Shortly press the  button on the steering wheel controls. Say a command.

If voice recognition is in [Normal Mode], then the system will say "Please say a command. Ding~"

- If voice recognition is in [Expert Mode], then the system will only say a "Ding~"
- To change the Normal Mode/Expert Mode setting, go to **[SETUP] ► [System] ► [Voice Recognition System]**.

For proper recognition, say the command after the voice instruction and beep tone.

## \* NOTICE

### Phonebook List Best Practice

- 1) Do not store single-name entries (e.g., "Bob", "Mom", "Kim", etc.). Instead, always use full names (including first and last names) for phonebook (e.g., use "Jacob Stevenson" instead of "Dad").
- 2) Do not use abbreviations (i.e., use "Lieutenant" instead of "Lt." or "Sergeant" instead of "Sgt.").
- 3) Do not use acronyms (i.e., use "County Finance Department" instead of "CFD").
- 4) Do not use special characters (e.g., "@", "hyphen -", "asterisk \*", ampersand &").
- 5) If a name is not recognized from the phonebook, change it to a more descriptive name (e.g., use "Grandpa Joseph" instead of "Pa Joe").

### **Skipping Prompt Messages**

While prompt message is being stated ► Shortly press the  button on the steering wheel controls.

The prompt message is immediately ended and the beep tone will sound. After the “Ding”, say the voice command.

### **Re-starting Voice Recognition**

While system waits for a command ► Shortly press the  button on the steering wheel controls.

The command wait state is immediately ended and the beep tone will sound. After the “Ding”, say the voice command.

### **Ending Voice Recognition**

While Voice Recognition is operating ► Press and hold the  button on the steering wheel controls.

- While using voice commands, pressing some steering wheel controls or some different buttons will end voice command.
- When the system is waiting for a voice command, say “cancel” or “end” to end voice command.
- When the system is waiting for a voice command, press and hold the  button on the steering wheel controls to end voice command.

### **\* NOTICE**

#### **Voice Recognition and Phonebook Tips**

The Kia Voice Recognition System may have difficulty understanding some accents or uncommon names.

When using Voice Recognition to place a call, speak in a moderate tone, with clear pronunciation.

To maximize the use of Voice Recognition, consider these guidelines when storing contacts:

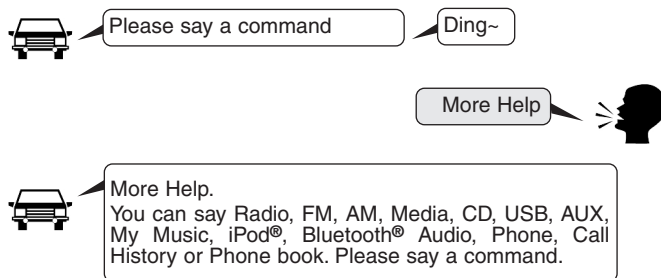
- Do not store single-name entries (e.g., “Bob”, “Mom”, etc.). Instead, always use full names (including first and last names) for these contacts.
- Do not use special characters (e.g., '@', '-', '!', '&', etc.).
- Do not use abbreviations (i.e., use “Lieutenant” instead of “Lt.”) or acronyms (i.e., use “County Finance Department” instead of “C. F. D.”; Be sure to say the name exactly as it is entered in the contacts list



## Illustration on Using Voice Recognition

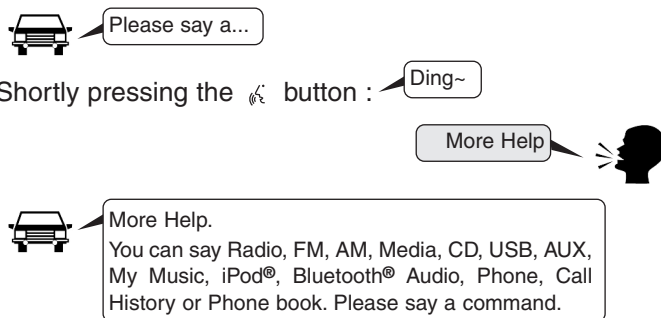
### Starting Voice Recognition

Shortly pressing the  button :



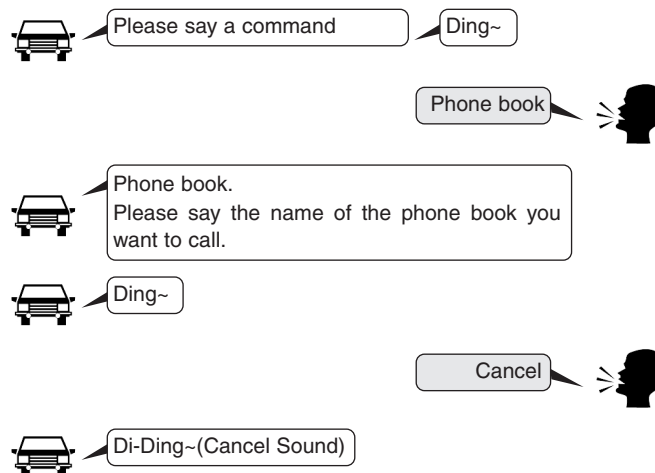
### Skipping Voice Recognition

Shortly pressing the  button :



### Ending Voice Recognition

Shortly pressing the  button :



## Voice Command List

### Common Commands

These commands can be used in most operations.

(However a few commands may not be available during certain operations)

| Command      | Function                                                                                                                                                                                                                         |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| More Help    | Provides guidance on commands that can be used anywhere in the system.                                                                                                                                                           |
| Help         | Provides guidance on commands that can be used within the current mode.                                                                                                                                                          |
| Call<Name>   | Calls <Name> saved in phone book<br>Ex) Call "John Smith"                                                                                                                                                                        |
| Phone        | Provides guidance on Phone related commands. After saying this command, say "Call History", "Phone book", "Dial Number" to execute corresponding functions.                                                                      |
| Call History | Displays the Call History screen.                                                                                                                                                                                                |
| Phone book   | Displays the phone book screen. After saying this command, say the name of a phone book saved in the phone book to automatically connect the call.                                                                               |
| Dial Number  | Displays the Dial number screen. After saying this command, you can say the number that you want to call.                                                                                                                        |
| Redial       | Connects the most recently called number.                                                                                                                                                                                        |
| Radio        | <ul style="list-style-type: none"> <li>When listening to the radio, displays the next radio screen. (FM1→FM2→FMA→AM→AMA)</li> <li>When listening to a different mode, displays the most recently played radio screen.</li> </ul> |

| Command       | Function                                                                                                                                                                                                           |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FM            | <ul style="list-style-type: none"> <li>When currently listening to the FM radio, maintains the current state.</li> <li>When listening to a different mode, displays the most recently played FM screen.</li> </ul> |
| FM1(FM One)   | Displays the FM1 screen.                                                                                                                                                                                           |
| FM2(FM Two)   | Displays the FM2 screen.                                                                                                                                                                                           |
| FMA           | Displays the FMA screen.                                                                                                                                                                                           |
| AM            | Displays the AM screen.                                                                                                                                                                                            |
| AMA           | Displays the AMA screen.                                                                                                                                                                                           |
| FM Preset 1~6 | Plays the most recently played broadcast saved in FM Preset 1~6.                                                                                                                                                   |
| AM Preset 1~6 | Plays the broadcast saved in AM Preset 1~6.                                                                                                                                                                        |
| FM 87.5~107.9 | Plays the FM broadcast of the corresponding frequency.<br>※ Range can be different by application frequency of corresponding country.                                                                              |
| AM 530~1710   | Plays the AM broadcast of the corresponding frequency.<br>※ Range can be different by application frequency of corresponding country.                                                                              |
| TA On         | Enables Traffic Announcement.                                                                                                                                                                                      |
| TA Off        | Disables Traffic Announcement.                                                                                                                                                                                     |

| Command         | Function                                                                                                                                                                                                                                                                                                      |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| News On         | Enables RDS News feature.                                                                                                                                                                                                                                                                                     |
| News Off        | Disables RDS News feature.                                                                                                                                                                                                                                                                                    |
| Media           | Moves to the most recently played media screen.                                                                                                                                                                                                                                                               |
| Play Track 1~30 | If a music CD has been inserted, plays the corresponding track.                                                                                                                                                                                                                                               |
| CD              | Plays music on the CD.                                                                                                                                                                                                                                                                                        |
| Search CD       | Moves to the CD track or file selection screen. <ul style="list-style-type: none"> <li>• For audio CDs, move to the screen and say the track number to play the corresponding track.</li> <li>• Moves to MP3 CD file selection screen. After manually operate the device to select and play music.</li> </ul> |
| USB             | Plays music on the USB device.                                                                                                                                                                                                                                                                                |
| Search USB      | Moves to USB file selection screen. After manually operate the device to select and play music.                                                                                                                                                                                                               |
| iPod®           | Plays music on the iPod®.                                                                                                                                                                                                                                                                                     |
| Search iPod®    | Moves to the iPod® file selection screen. After, manually operate the device to select and play music.                                                                                                                                                                                                        |
| My Music        | Plays music saved in My Music.                                                                                                                                                                                                                                                                                |
| Search My Music | Moves to the My Music file selection screen. After, manually operate the device to select and play music.                                                                                                                                                                                                     |

| Command          | Function                                                                  |
|------------------|---------------------------------------------------------------------------|
| AUX (Auxiliary)  | Plays the connected external device.                                      |
| Bluetooth® Audio | Plays the music saved in connected Bluetooth® Wireless Technology device. |
| Mute             | Mutes the radio or music volume.                                          |
| Pardon?          | Repeats the most recent comment.                                          |
| Cancel (Exit)    | Ends voice command.                                                       |

### FM/AM Radio Commands

Commands available during FM/AM Radio operation.

| Command         | Function                                                                                                                                                          |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Preset 1~6      | Plays the broadcast saved in Preset 1~6.                                                                                                                          |
| Auto Store      | Automatically selects radio broadcast frequencies with superior reception and saves in Presets 1~6.                                                               |
| Preset Save 1~6 | Saves the current broadcast frequency to Preset 1~6.                                                                                                              |
| Seek up         | Plays the next (higher) receivable broadcast.                                                                                                                     |
| Seek down       | Plays the previous (lower) receivable broadcast.                                                                                                                  |
| Next Preset     | Selects the preset number next to the most recently selected preset. (Example: When currently listening to preset no. 3, then preset no. 4 will be selected.)     |
| Previous Preset | Selects the preset number previous to the most recently selected preset. (Example: When currently listening to preset no. 3, then preset no. 2 will be selected.) |
| Scan            | Scans receivable frequencies from the current broadcast and plays for 10 seconds each.                                                                            |
| Preset Scan     | Moves to the next preset from the current present and plays for 10 seconds each.                                                                                  |
| AF on           | Enables Alternative Frequency feature.                                                                                                                            |
| AF off          | Disables Alternative Frequency feature.                                                                                                                           |
| Region          | Enables Region feature.                                                                                                                                           |
| Region off      | Disables Region feature.                                                                                                                                          |

### Audio CD Commands

Commands available during Audio CD operation.

| Command        | Function                                                  |
|----------------|-----------------------------------------------------------|
| Random         | Randomly plays the tracks within the CD.                  |
| Random Off     | Cancels random play to play tracks in sequential order.   |
| Repeat         | Repeats the current track.                                |
| Repeat Off     | Cancels repeat play to play tracks in sequential order.   |
| Next Track     | Plays the next track.                                     |
| Previous Track | Plays the previous track.                                 |
| Scan           | Scans the tracks from the next track for 10 seconds each. |
| Track 1~30     | Plays the desired track number.                           |
| Information    | Displays the information screen of the current track.     |

**MP3 CD/USB Commands**

Commands available during MP3 CD/USB operation.

| <b>Command</b> | <b>Function</b>                                           |
|----------------|-----------------------------------------------------------|
| Random         | Randomly plays the files within the current folder.       |
| All Random     | Randomly plays all saved files.                           |
| Random Off     | Cancels random play to play files in sequential order.    |
| Repeat         | Repeats the current file.                                 |
| Folder Repeat  | Repeats all files in the current folder.                  |
| Repeat Off     | Cancels repeat play to play files in sequential order.    |
| Next File      | Plays the next file.                                      |
| Previous File  | Plays the previous file.                                  |
| Scan           | Scans the tracks from the next files for 10 seconds each. |
| Information    | Displays the information screen of the current file.      |
| Copy           | Copies the current file into My Music.                    |

**iPod® Commands**

Commands available during iPod® operation.

| <b>Command</b> | <b>Function</b>                                        |
|----------------|--------------------------------------------------------|
| All Random     | Randomly plays all saved songs.                        |
| Random         | Randomly plays the songs within the current category.  |
| Random Off     | Cancels random play to play songs in sequential order. |
| Repeat         | Repeats the current song.                              |
| Repeat Off     | Cancels repeat play to play songs in sequential order. |
| Next Song      | Plays the next song.                                   |
| Previous Song  | Plays the previous song.                               |
| Information    | Displays the information screen of the current song.   |

### My Music Commands

Commands available during My Music operation.

| Command       | Function                                                                                 |
|---------------|------------------------------------------------------------------------------------------|
| Random        | Randomly plays all saved files.                                                          |
| Random Off    | Cancels random play to play files in sequential order.                                   |
| Repeat        | Repeats the current file.                                                                |
| Repeat Off    | Cancels repeat play to play files in sequential order.                                   |
| Next File     | Plays the next file.                                                                     |
| Previous File | Plays the previous file.                                                                 |
| Scan          | Scans the files from the next files for 10 seconds each.                                 |
| Information   | Displays the information screen of the current file.                                     |
| Delete        | Deletes the current file. You will bypass an additional confirmation process.            |
| Delete All    | Deletes all files saved in My Music. You will bypass an additional confirmation process. |

### Bluetooth® Wireless Technology Audio Commands

Commands available during *Bluetooth®* Wireless Technology audio streaming from mobile phone operation Command Operation.

| Command | Function                         |
|---------|----------------------------------|
| Play    | Plays the currently paused song. |
| Pause   | Pauses the current song.         |

## Setup Mode (Type-1)



Press the **[SETUP]** button to display the Setup screen.

You can select and control options related to [Display], [Sound], [Clock/Day], [Phone] and [System].

### *With the Display Button*

Press the **[SETUP]** button ► Select [Display]

You can select and control options related to [Brightness], [Pop-up Mode], [Scroll text] and [Song Info].

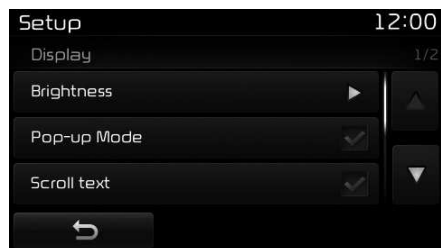


### **Adjusting the Brightness**

Use the [Left/Right] buttons to adjust the screen brightness or set the Brightness on Automatic, Day or Night mode.

Press the [Default] button to reset.

- Automatic : Adjusts the brightness automatically.
- Day : Always maintains the brightness on high.
- Night : Always maintains the brightness on low.



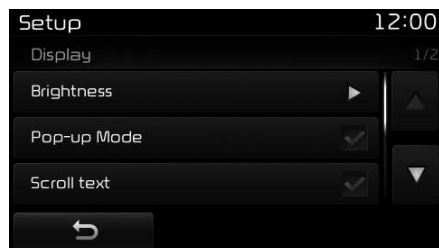
### Pop-up Mode

This feature is used to display the Pop-up Mode screen when entering radio and media modes.

When this feature is turned on, pressing the **[RADIO]** or **[MEDIA]** button will display the Pop-up Mode screen.

### \* NOTICE

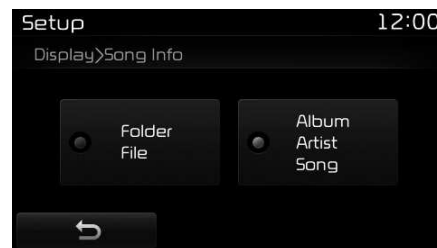
The media Pop-up Mode screen can be displayed only when two or more media modes have been connected.



### Scroll Text

This feature is used to scroll text displayed on the screen when it is too long to be displayed at once.

When turned on, the text is repeatedly scrolled. When turned off, the text is scrolled just once.



### Song Info

This feature is used to change the information displayed within USB and MP3 CD modes.

- Folder File : Displays file name and folder name.
- Album Artist Song : Displays album name/artist name/song.



**With the Sound Button**

Press the **[SETUP]** button ► Select [Sound]

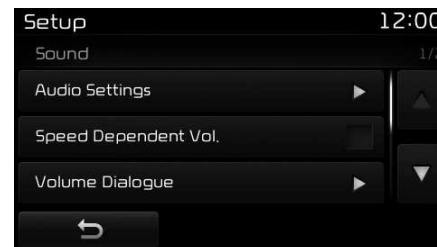
You can select and control options related to [Audio Settings], [Speed Dependent Vol.], [Volume Dialogue] and [Touch Screen Beep].

**Audio Settings**

Use the [Up/Down/Left/Right] buttons to adjust the Fader/Balance settings.

Use the [Left/Right] buttons to adjust the Bass/Middle/Treble settings.

Press the [Default] button to reset.

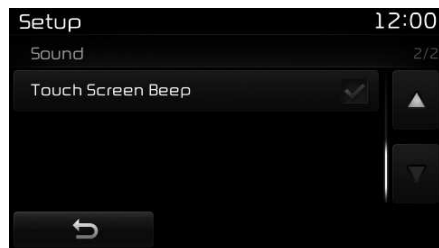
**SDVC (Speed Dependent Volume Control)**

The volume level is controlled automatically according to the vehicle speed. SDVC can be set by selecting from On/Off.



### Volume Dialogue (if equipped)

Use the [-], [+] buttons to adjust the Volume Dialog.



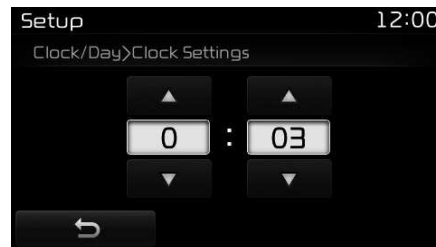
### Touch Screen Beep

This feature is used to turn the touch screen beep on/off.

### *With the Clock/Day Button*

Press the **[SETUP]** button ► Select [Clock/Day]

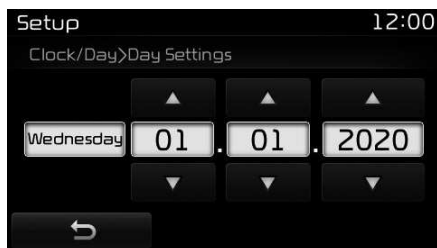
You can select and control options related to [Clock Settings], [Day Settings], [Time Format], [Clock Display(Power off)] and [Automatic RDS Time].



### Clock Settings

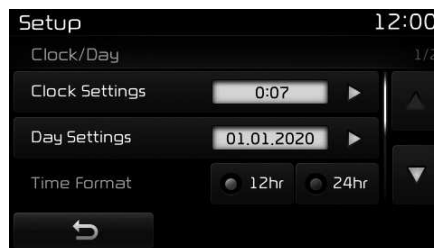
Use the [Up/Down] buttons to set the Hour, Minutes and AM/PM setting.

Press and hold the **[CLOCK]** button to display the Clock/Day screen.



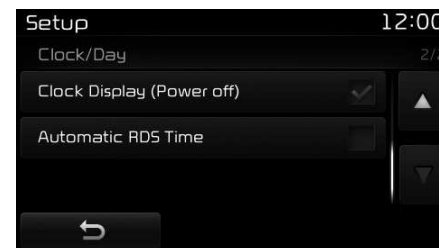
### Day Settings

Use the [Up/Down] buttons to set the Day, Month and Year setting.



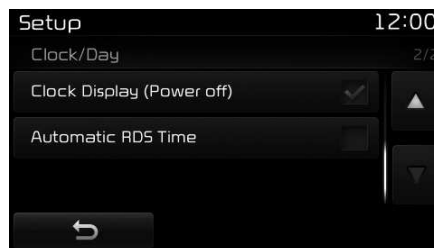
### Time Format

This feature is used to change the clock format between 12hr or 24hr.



### Automatic RDS Time

This feature is used to set time automatically by synchronizing with RDS.



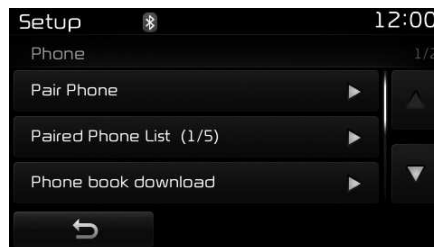
### Clock Display (Power Off)

This feature is used to display a clock on the screen when the audio system is turned off.

### With the Phone Button

Press the **[SETUP]** button ► Select [Phone]

You can select and control options related to [Pair Phone], [Paired Phone List], [Phone book Download], [Auto Download], [Outgoing Volume] and [Bluetooth System Off].



#### Pairing a New Device

*Bluetooth®* Wireless Technology devices can be paired with the audio system.

For more information, refer to the “Pairing through Phone Setup” section within *Bluetooth®* Wireless Technology.



#### Viewing Paired Phone List

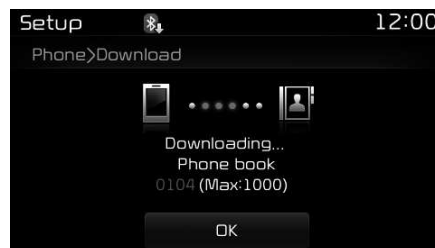
This feature is used to view mobile phones that have been paired with the audio system. Upon selecting a paired phone, the setup menu is displayed.

For more information, refer to the “Setting *Bluetooth®* Wireless Technology Connection” section within *Bluetooth®* Wireless Technology.

- (1) Moves to the previous screen.
- (2) Connect/Disconnects currently selected phone.
- (3) Deletes the currently selected phone.
- (4) Sets currently selected phone to highest connection priority.

### \* NOTICE - Before Downloading Phone Books

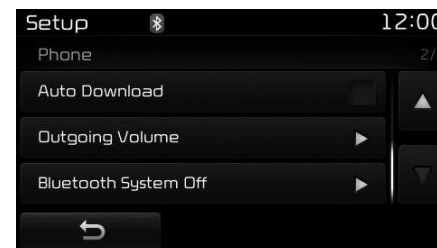
- Only phone books within connected phones can be downloaded. Also check to see that your mobile phone supports the download feature.
- To learn more about whether your mobile phone supports phone book downloads, refer to your mobile phone user's manual.
- The Phone book for only the connected phone can be downloaded. Before downloading, check to see whether your phone supports the download feature.



#### Downloading Phone books

As the Phone book is downloaded from the mobile phone, downloading Phone book number is displayed.

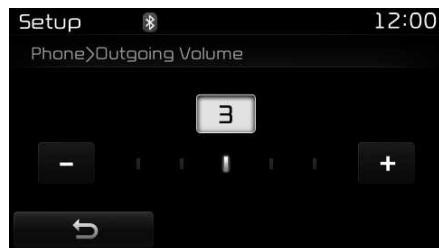
- Up to 1,000 phone book entries can be copied into car phone book.
- Up to 1,000 phone book entries can be saved for each paired device.
- Upon downloading phone book data, previously saved phone book data will be deleted. However, Phone book entries saved to other paired phones are not deleted.



#### Auto Download (Phone Book)

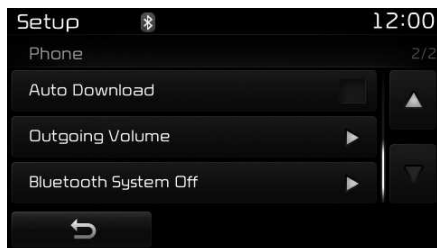
This feature is used to automatically download mobile phone book entries once a *Bluetooth®* Wireless Technology phone is connected.

- The Auto Download feature will download mobile phone book entries every time the phone is connected. The download time may differ depending on the number of saved phone book entries and the communication state.
- When downloading a phone book, first check to see that your mobile phone supports the phone book download feature.



### Outgoing Volume

Use the [-], [+] buttons to adjust the outgoing volume level.



### Turning Bluetooth System Off

Once *Bluetooth®* Wireless Technology is turned off, *Bluetooth®* Wireless Technology related features will not be supported within the audio system.

To turn *Bluetooth®* Wireless Technology back on, go to [SETUP] ► [Phone] and press “Yes”.



### CAUTION

*Bluetooth®* Wireless Technology audio streaming may not be supported in some *Bluetooth®* Wireless Technology phones.

### With the System Button

Press the **[SETUP]** button ► Select [System]

You can select and control options related to [Memory Information], [Voice Recognition System] and [Language].

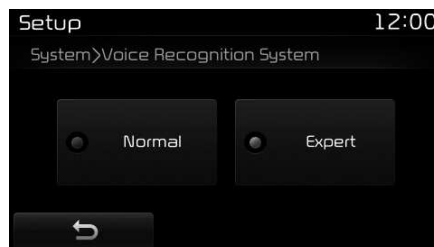


#### Memory Information

This feature displays information related to system memory.

- Using : Displays capacity currently in use
- Capacity : Displays total capacity

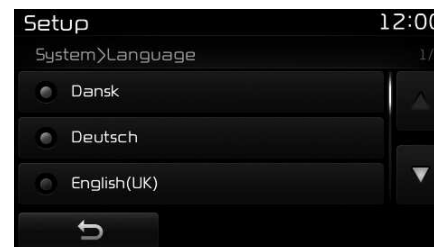
※ May differ depending on the selected audio.



#### Voice Recognition System (if equipped)

This feature is used to select the desired prompt feedback option from Normal and Expert.

- Normal : When using voice recognition, provides detailed guidance prompts
- Expert : When using voice recognition, omits some guidance prompts



#### Language

This feature is used to change the system and voice recognition language.

If the language is changed, the system will restart and apply the selected language.

- Language support by region  
Dansk, Deutsch, English(UK), Español, Français, Italiano, Nederlands, Русский, Polski, Svenska, Türkçe

### Setup Mode (Type-2)



Press the **[SETUP]** button to display the Setup screen.

You can select and control options related to [Display], [Sound], [Clock/Calendar], [Phone] and [System].

#### *With the Display Button*

Press the **[SETUP]** button ► Select [Display]

You can select and control options related to [Brightness], [Mode Pop up], [Text Scroll] and [Media Display].



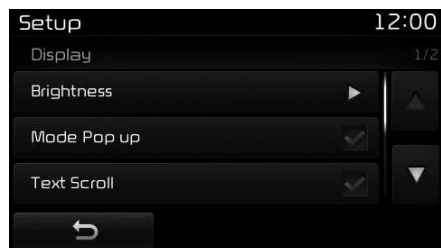
#### **Adjusting the Brightness**

Use the [Left/Right] buttons to adjust the screen brightness or set the Brightness on Automatic, Day or Night mode.

Press the [Default] button to reset.

- Automatic : Adjusts the brightness automatically.
- Day : Always maintains the brightness on high.
- Night : Always maintains the brightness on low.





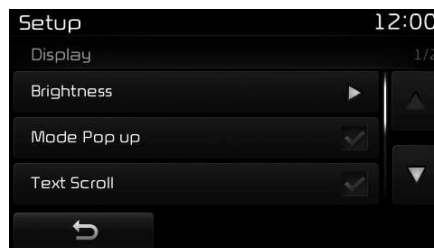
### Mode Pop up

This feature is used to display the Mode Pop up screen when entering radio and media modes.

When this feature is turned on, pressing the **[RADIO]** or **[MEDIA]** button will display the Mode Pop up screen.

### \* NOTICE

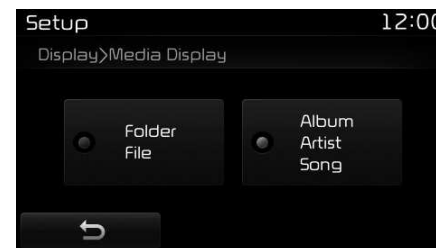
The media Mode Pop up screen can be displayed only when two or more media modes have been connected.



### Text Scroll

This feature is used to scroll text displayed on the screen when it is too long to be displayed at once.

When turned on, the text is repeatedly scrolled. When turned off, the text is scrolled just once.



### Media Display

This feature is used to change the information displayed within USB and MP3 CD modes.

- Folder File : Displays file name and folder name.
- Album Artist Song : Displays album name/artist name/song.

### With the Sound Button

Press the **[SETUP]** button ► Select **[Sound]**

You can select and control options related to **[Sound Setting]**, **[Speed Dependent Vol.]** and **[Touch Screen Beep]**.

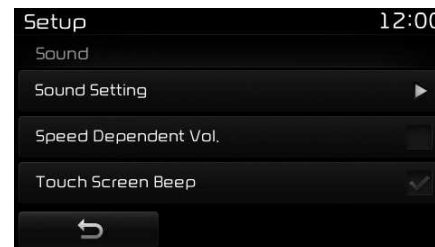


### Sound Setting

Use the **[Up/Down/Left/Right]** buttons to adjust the **Fader/Balance** settings.

Use the **[Left/Right]** buttons to adjust the **Bass/Middle/Treble** settings.

Press the **[Default]** button to reset.



### SDVC (Speed Dependent Volume Control)

The volume level is controlled automatically according to the vehicle speed. SDVC can be set by selecting from **On/Off**.

### Touch Screen Beep

This feature is used to turn the touch screen beep on/off.

**With the Clock/Calendar Button**

Press the **[SETUP]** button ► Select [Clock/Calendar]

You can select and control options related to [Clock Settings], [Calendar Settings] and [Clock Display(Power off)].

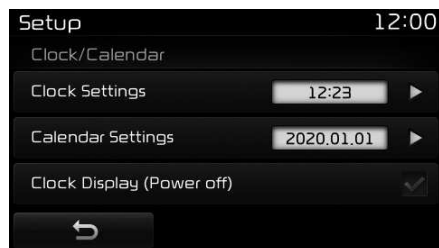
**Clock Settings**

Use the [Up/Down] buttons to set the Hour, Minutes and AM/PM setting.

Press and hold the **[CLOCK]** button to display the Clock/Calendar screen.

**Calendar Settings**

Use the [Up/Down] buttons to set the Year, Month and Day setting.



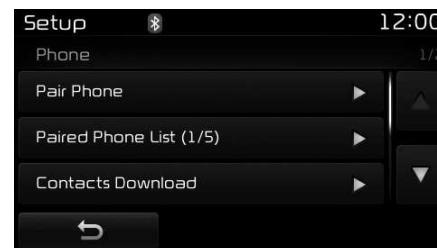
### Clock Display (Power off)

This feature is used to display a clock on the screen when the audio system is turned off.

### With the Phone Button

Press the **[SETUP]** button ► Select [Phone]

You can select and control options related to [Pair Phone], [Paired Phone List], [Contacts Download], [Auto Download], [Outgoing Volume] and [Bluetooth System Off].



### Pairing a New Device

*Bluetooth®* Wireless Technology devices can be paired with the audio system.

For more information, refer to the “Pairing through Phone Setup” section within *Bluetooth®* Wireless Technology.



### Viewing Paired Phone List

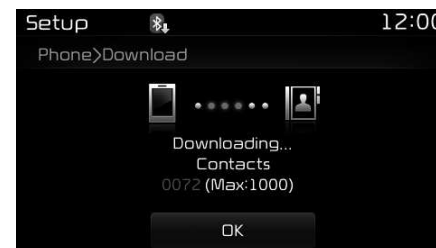
This feature is used to view mobile phones that have been paired with the audio system. Upon selecting a paired phone, the setup menu is displayed.

For more information, refer to the "Setting *Bluetooth®* Wireless Technology Connection" section within *Bluetooth®* Wireless Technology.

- (1) Moves to the previous screen.
- (2) Connect/Disconnects currently selected phone.
- (3) Deletes the currently selected phone.
- (4) Sets currently selected phone to highest connection priority.

### \* NOTICE - Before Downloading Contacts

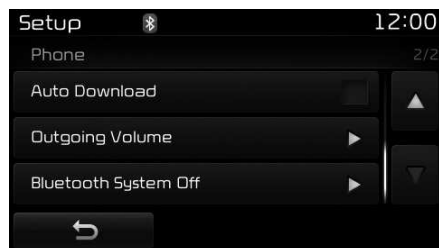
- To learn more about whether your mobile phone supports contacts downloads, refer to your mobile phone user's manual.
- The contacts for only the connected phone can be downloaded.



### Downloading Contacts

As the contacts are downloaded from the mobile phone, downloading contacts number is displayed.

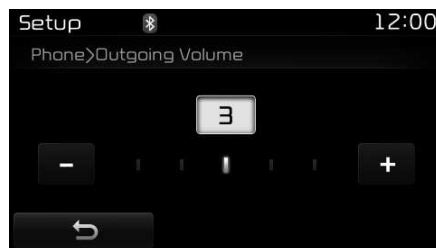
- Up to 1,000 contacts entries can be copied into car contacts.
- Up to 1,000 contacts entries can be saved for each paired device.
- Upon downloading contacts data, previously saved contacts data will be deleted. However, contacts entries saved to other paired phones are not deleted.



### Auto Download (Contacts)

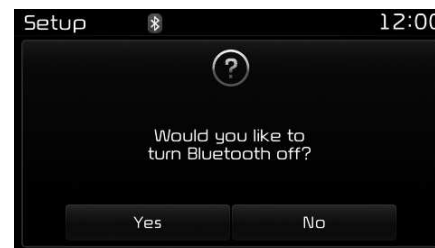
This feature is used to automatically download mobile contacts entries once a *Bluetooth®* Wireless Technology phone is connected.

- The Auto Download feature will download mobile contacts entries every time the phone is connected. The download time may differ depending on the number of saved contacts entries and the communication state.
- When downloading a contacts, first check to see that your mobile phone supports the contacts download feature.



### Outgoing Volume

Use the [-], [+] buttons to adjust the outgoing volume level.



### Turning Bluetooth System Off

Once *Bluetooth®* Wireless Technology is turned off, *Bluetooth®* Wireless Technology related features will not be supported within the audio system.

To turn *Bluetooth®* Wireless Technology back on, go to **[SETUP] ► [Phone]** and press "Yes".

**With the System Button**

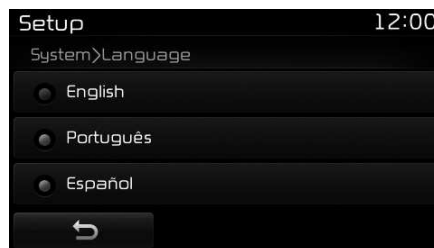
Press the **[SETUP]** button ► Select [System]

You can select and control options related to [Memory Information] and [Language].

**Memory Information**

This feature displays information related to system memory.

- Using : Displays capacity currently in use
- Capacity : Displays total capacity

**Language**

This feature is used to change the system language.

If the language is changed, the system will restart and apply the selected language.

Language Setting is depend on the Audio System.

## **Declaration of Conformity**

### **FCC**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures :

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution : Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.



This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions :

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum 20cm between the and your body. This transmitter must not be collocated or operating in conjunction with any other antenna or transmitter unless authorized to do so by the FCC.

## CE for EU

### Declaration of Conformity

We, manufacturer, hereby declare that the product

|       |                              |
|-------|------------------------------|
| Model | AC110ENEE (Alt. : AC110ENEG) |
| Type  | DIGITAL CAR AUDIO SYSTEM     |

satisfies all the technical regulations applicable to the product within the scope of Council Directives 2006/95/EC, 2004/108/EC and 99/5/EC:

|        |                                                                                                                        |
|--------|------------------------------------------------------------------------------------------------------------------------|
| Radio  | ETSI EN 300 328 V1.8.1                                                                                                 |
| EMC    | ETSI EN 301 489-1 V1.9.2:2011, ETSI EN 301 489-17 V2.2.1:2012<br>EN 55013:2001/A1:2003/A2:2006, EN 55020:2007/A11:2011 |
| Safety | EN 60065:2002/A1:2006/A11:2008/A2:2010/A12:2011                                                                        |

All essential radio test suites have been carried out.

Testing laboratory: SGS Korea Co., Ltd.

4, LS-ro, 182 beon-gil, Gunpo-si, Gyeonggi-do, 435-040, Korea  
Tel. 82-31-428-5700 / Fax 82-31-427-2371

Authorized representative or manufacturer:

Hyundai MOBIS Co., Ltd.  
203, Teheran-ro, Gangnam-gu, Seoul, 135-977, Korea  
Tel. 82-31-260-2707 / Fax. 82-31-899-1788

This declaration is issued under the sole responsibility of the manufacturer and, if applicable, his authorized Representative, and is marked in accordance with the CE marking directive 93/68/EEC.

Point of contact:

Hyundai MOBIS Co., Ltd. Tel. 82-31-260-2707 / Fax. 82-31-899-1788  
Seoul, Korea / 11 September 2015



  
Seung-Hoon Choe  
Senior Researcher

### Declaration of Conformity

We, manufacturer, hereby declare that the product

|       |                                                                          |
|-------|--------------------------------------------------------------------------|
| Model | AC110ENGG (Alt. : AC110ENGN, AC111ENGG, AC111ENGN, AC110ENGE, AC110ENGI) |
| Type  | DIGITAL CAR AUDIO SYSTEM                                                 |

satisfies all the technical regulations applicable to the product within the scope of Council Directives 2006/95/EC, 2004/108/EC and 99/5/EC:

|        |                                                                                                                        |
|--------|------------------------------------------------------------------------------------------------------------------------|
| Radio  | ETSI EN 300 328 V1.8.1                                                                                                 |
| EMC    | ETSI EN 301 489-1 V1.9.2:2011, ETSI EN 301 489-17 V2.2.1:2012<br>EN 55013:2001/A1:2003/A2:2006, EN 55020:2007/A11:2011 |
| Safety | EN 60065:2002/A1:2006/A11:2008/A2:2010/A12:2011                                                                        |

All essential radio test suites have been carried out.

Testing laboratory: SGS Korea Co., Ltd.

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Seoul, Korea / 11 September 2015



  
Seung-Hoon Choe  
Senior Researcher

# Driving your vehicle

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**⚠ WARNING - ENGINE EXHAUST CAN BE DANGEROUS!**

Engine exhaust fumes can be extremely dangerous. If, at any time, you smell exhaust fumes inside the vehicle, open the windows immediately.

- **Do not inhale exhaust fumes.**

Exhaust fumes contain carbon monoxide, a colorless, odorless gas that can cause unconsciousness and death by asphyxiation.

- **Be sure the exhaust system does not leak.**

The exhaust system should be checked whenever the vehicle is raised to change the oil or for any other purpose. If you hear a change in the sound of the exhaust or if you drive over something that strikes the underneath side of the vehicle, we recommend that the system be checked by an authorized Kia dealer.

- **Do not run the engine in an enclosed area.**

Letting the engine idle in your garage, even with the garage door open, is a hazardous practice. Never run the engine in your garage any longer than it takes to start the engine and back the vehicle out.

- **Avoid idling the engine for prolonged periods with people inside the vehicle.**

If it is necessary to idle the engine for a prolonged period with people inside the vehicle, be sure to do so only in an open area with the air intake set at "Fresh" and fan operating at one of the higher speeds so fresh air is drawn into the interior.

If you must drive with the tailgate/trunk open because you are carrying objects that make this necessary:

1. Close all windows.
2. Open side vents.
3. Set the air intake control at "Fresh", the air flow control at "Floor" or "Face" and the fan at one of the higher speeds.

To assure proper operation of the ventilation system, be sure the ventilation air intakes located just in front of the windshield are kept clear of snow, ice, leaves or other obstructions.

## BEFORE DRIVING

### Before entering vehicle

- Be sure that all windows, outside mirror(s), and outside lights are clean.
- Check the condition of the tires.
- 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 fluid, and washer fluid should be checked on a regular basis, with the exact interval depending on the fluid. Further details are provided in chapter 8, “Maintenance”.

#### **WARNING**

**Driving while distracted can result in a loss of vehicle control, that may lead to an accident, severe personal injury, and death. The driver's primary responsibility is in the safe and legal operation of a vehicle, and use of any handheld devices, other equipment, or vehicle systems which take the driver's eyes, attention and focus away from the safe operation of a vehicle or which are not permissible by law should never be used during operation of the vehicle.**

### 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.

**⚠ WARNING**

All passengers must be properly belted whenever the vehicle is moving. Refer to “Seat belts” in chapter 3 for more information on their proper use.

**⚠ WARNING**

Always check the surrounding areas near your vehicle for people, especially children, before putting a vehicle into “D (Drive)” or “R (Reverse)”.

**⚠ WARNING - Driving under the influence of alcohol or drugs**

Drinking and driving is dangerous. Drunk driving is the number one contributor to the highway death toll each year. Even a small amount of alcohol will affect your reflexes, perceptions and judgement. Driving while under the influence of drugs is as dangerous or more dangerous than driving drunk.

You are much more likely to have a serious accident if you drink or take drugs and drive.

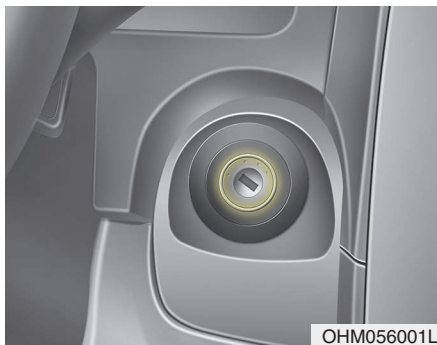
If you are drinking or taking drugs, don't drive. Do not ride with a driver who has been drinking or taking drugs. Choose a designated driver or call a cab.

**⚠ WARNING**

- When you intend to park or stop the vehicle with the engine on, be careful not to depress the accelerator pedal for a long period of time. It may overheat the engine or exhaust system and cause fire.
- When you make a sudden stop or turn the steering wheel rapidly, loose objects may drop on the floor and it could interfere with the operation of the foot pedals, possibly causing an accident. Keep all things in the vehicle safely stored.
- If you do not focus on driving, it may cause an accident. Be careful when operating what may disturb driving such as audio or heater. It is the responsibility of the driver to always drive safely.

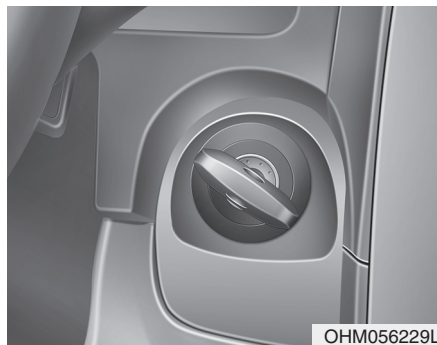
## KEY POSITIONS

### Illuminated ignition switch (if equipped)



Whenever a front 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 immediately when the ignition switch is turned on or go off after about 30 seconds when the door is closed.

### Ignition switch position *LOCK*



The steering wheel locks to protect against theft. The ignition key can be removed only in the LOCK position.

### *ACC (Accessory)*

The steering wheel is unlocked and electrical accessories are operative.

### **\* NOTICE**

If difficulty is experienced turning the ignition switch to the ACC position, turn the key while turning the steering wheel right and left to release the tension.



**ON**

The warning lights can be checked before the engine is started. This is the normal running position after the engine is started.

*Do not leave the ignition switch ON if the engine is not running to prevent battery 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. The brake warning lamp can be checked in this position.

**⚠ WARNING - Ignition key**

- Never turn the ignition switch to LOCK or ACC while the vehicle is moving. This would result in loss of directional control and braking function, which could cause an accident.

(Continued)

**(Continued)**

- The anti-theft steering column lock (if equipped) is not a substitute for the parking brake. Before leaving the driver's seat, always make sure the shift lever is engaged in P (Park), set the parking brake fully and shut the engine off. Unexpected and sudden vehicle movement may occur if these precautions are not taken.
- Never reach for the ignition switch, or any other controls through the steering wheel while the vehicle is in motion. The presence of your hand or arm in this area could cause a loss of vehicle control, an accident and serious bodily injury or death.
- Do not place any movable objects around the driver's seat as they may move while driving, interfere with the driver and lead to an accident.

**Starting the engine****⚠ WARNING**

- Always wear appropriate shoes when operating your vehicle. Unsuitable shoes (high heels, ski boots, etc.) may interfere with your ability to use the brake and accelerator pedal.
- Do not start the vehicle with the accelerator pedal depressed. The vehicle can move and lead to an accident.
- Wait until the engine rpm is normal. The vehicle may suddenly move if the brake pedal is released when the rpm is high.

### **Starting the gasoline engine**

1. Make sure the parking brake is applied.
2. Place the transaxle shift lever in P (Park). Depress the brake pedal fully.

*You can also start the engine when 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.

*It should be started **without depressing the accelerator pedal.***

4. Do not wait for the engine to warm up while the vehicle remains stationary.

Start driving at moderate engine speeds. (Steep accelerating and decelerating should be avoided.)

#### **CAUTION**

***If the engine stalls while you are in motion, do not attempt to move the shift lever to the P (Park) position. If traffic and road conditions permit, you may put the shift lever in the N (Neutral) position while the vehicle is still moving and turn the ignition switch to the START position in an attempt to restart the engine.***

#### **CAUTION**

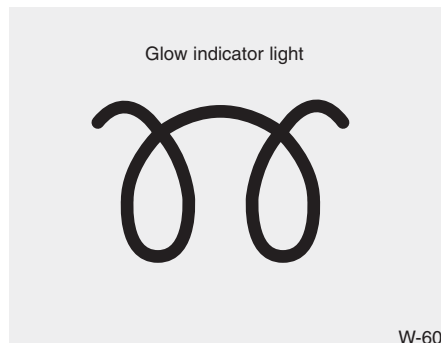
- ***Do not engage the starter for more than 10 seconds. If the engine stalls or fails to start, wait 5 to 10 seconds before re-engaging the starter. Improper use of the starter may damage it.***
- ***Do not turn the ignition switch to the START position with the engine running. It may damage the starter.***

**Starting the diesel engine**

To start the diesel engine when the engine is cold, it has to be pre-heated before starting the engine and then have to be warmed up before starting to drive.

1. Make sure the parking brake is applied.
2. Place the transaxle shift lever in P(park). Depress the brake pedal fully.

*You can also start the engine when the shift lever is in the N(neutral) position.*



3. Turn the ignition switch to the ON position to pre-heat the engine. Then the glow indicator light will illuminate.
4. If the glow indicator light goes out, turn the ignition switch to the START position and hold it there until the engine starts (a maximum of 10 seconds), then release the key.

**\* NOTICE**

If the engine does not start within 10 seconds after the preheating is completed, turn the ignition key once more to the LOCK position for 10 seconds, and then to the ON position, in order to preheat again.

**Starting and stopping the engine for turbocharger intercooler**

1. Do not race or accelerate the engine immediately after starting.  
If the engine is cold, idle for several seconds before sufficient lubrication is ensured in the turbocharger unit.
2. After high speed or extended driving, requiring a heavy engine load, run the engine on idle condition about 1 minute before turning it off.  
This idle time will allow the turbocharger to cool prior to shutting the engine off.

**⚠ CAUTION**

***Do not turn off the engine immediately after it has been subjected to a heavy load. Doing so may cause severe damage to the engine or turbo charger unit.***

## ENGINE START/STOP BUTTON (IF EQUIPPED)

### Illuminated engine start/stop button



Whenever the front door is opened, the engine start/stop button will illuminate for your convenience. The light will go off after about 30 seconds when the door is closed. It will also go off immediately when the engine start/stop button is ON position.

### Engine start/stop button position

**OFF**



Not illuminated

To turn off the engine (START/RUN position) or vehicle power (ON position), press the engine start/stop button with the shift lever in the P (Park) position. When you press the engine start/stop button without the shift lever in the P (Park) position, the engine start/stop button will not change to the OFF position but to the ACC position.

### Vehicles equipped with anti-theft steering column lock

The steering wheel locks when the engine start/stop button is in the OFF position to protect you against theft.

It locks when the door is opened.

If the steering wheel is not locked properly when you open the driver's door, the warning chime will sound. Try locking the steering wheel again. If the problem is not solved, we recommend that the system be checked by an authorized Kia dealer.

In addition, if the engine start/stop button is in the OFF position after the driver's door is opened, the steering wheel will not lock and the warning chime will sound. In such a situation, close the door. Then the steering wheel will lock and the warning chime will stop.

**\* NOTICE**

If the steering wheel doesn't unlock properly, the engine start/stop button will not work. Press the engine start/stop button while turning the steering wheel right and left to release the tension.

**⚠ CAUTION**

*You are able to turn off the engine (START/RUN) or vehicle power (ON), only when the vehicle is not in motion. In an emergency situation while the vehicle is in motion, you are able to turn the engine off and to the ACC position by pressing the engine start/stop button for more than 2 seconds or 3 times successively within 3 seconds. If the vehicle is still moving, you can restart the engine without depressing the brake pedal by pressing the engine start/stop button with the shift lever in the N (Neutral) position.*

**ACC(Accessory)**

Orange indicator

Press the engine start/stop button while it is in the OFF position without depressing the brake pedal.

The steering wheel unlocks and electrical accessories are operational.

If the engine start/stop button is in the ACC position for more than 1 hour, the button is turned off automatically to prevent battery discharge.

**ON**

Green indicator

Press the engine start/stop button while it is in the ACC position without depressing the brake pedal.

The warning lights can be checked before the engine is started. Do not leave the engine start/stop button in the ON position for a long time. The battery may discharge, because the engine is not running.

### START/RUN



To start the engine, depress the brake pedal and press the engine start/stop button with the shift lever in the P (Park) or the N (Neutral) position. For your safety, start the engine with the shift lever in the P (Park) position.

#### \* NOTICE

If you press the engine start/stop button without depressing the brake pedal, the engine will not start and the engine start/stop button changes as follow:

OFF → ACC → ON → OFF or ACC

#### \* NOTICE

If you leave the engine start/stop button in the ACC or ON position for a long time, the battery will discharge.

#### **⚠ WARNING**

- Never press the engine start/stop button while the vehicle is in motion. This would result in loss of directional control and braking function, which could cause an accident.
- The anti-theft steering column lock is not a substitute for the parking brake. Before leaving the driver's seat, always make sure the shift lever is engaged in P (Park), set the parking brake fully and shut the engine off. Unexpected and sudden vehicle movement may occur if these precautions are not taken.

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- Never reach for the engine start/stop button or any other controls through the steering wheel while the vehicle is in motion. The presence of your hand or arm in the area could cause loss of vehicle control, an accident and serious bodily injury or death.
- Do not place any movable objects around the driver's seat as they may move while driving, interfere with the driver and lead to an accident.

## Starting the engine

### **WARNING**

- Always wear appropriate shoes when operating your vehicle. Unsuitable shoes (high heels, ski boots, etc.) may interfere with your ability to use the brake and accelerator pedal.
- Do not start the vehicle with the accelerator pedal depressed. The vehicle can move and lead to an accident.
- Wait until the engine rpm is normal. The vehicle may suddenly move if the brake pedal is released when the rpm is high.

### **Starting the gasoline engine**

1. Carry the smart key or leave it inside the vehicle.
2. Make sure the parking brake is firmly applied.
3. Place the transaxle shift lever in P (Park). Depress the brake pedal fully.

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

4. Press the engine start/stop button. It should be started without depressing the accelerator.
5. Do not wait for the engine to warm up while the vehicle remains stationary.

Start driving at moderate engine speeds. (Steep accelerating and decelerating should be avoided.)

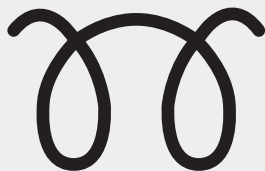
### **Starting the diesel engine**

To start the diesel engine when the engine is cold, it has to be pre-heated before starting the engine and then have to be warmed up before starting to drive.

1. Make sure the parking brake is applied.
2. Place the transaxle shift lever in P (Park). Depress the brake pedal fully.

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

Glow indicator light



W-60

3. Press the engine start/stop button while depressing the brake pedal.
4. Continue depressing the brake pedal until the illuminated glow indicator goes off. (approximately 5 seconds)
5. The engine starts running when the glow indicator goes off.

### \* NOTICE

If the engine start/stop button is pressed once more while the engine is pre-heating, the engine may start.

### Starting and stopping the engine for turbocharger intercooler

1. Do not race or accelerate the engine immediately after starting.  
If the engine is cold, idle for several seconds before sufficient lubrication is ensured in the turbocharger unit.
2. After high speed or extended driving, requiring a heavy engine load, idle the engine about 1 minute before turning it off.  
This idle time will allow the turbocharger to cool prior to shutting the engine off.

### CAUTION

***Do not turn the engine off immediately after it has been subjected to a heavy load. Doing so may cause severe damage to the engine or turbocharger unit.***

- Even if the smart key is in the vehicle, if it is far away from you, the engine may not start.
- When the engine start/stop button is in the ACC position or above, if any door is opened, the system checks for the smart key. If the smart key is not in the vehicle, a message “Key is not in the vehicle” will appear on the LCD display. And if all doors are closed, the chime will sound for 5 seconds. The indicator or warning will turn off while the vehicle is moving. Always have the smart key with you.



**⚠ WARNING**

The engine will start, only when the smart key is in the vehicle.

Never allow children or any person who is unfamiliar with the vehicle touch the engine start/stop button or related parts.

**⚠ CAUTION**

*If the engine stalls while the vehicle is in motion, do not attempt to move the shift lever to the P (Park) position. If the traffic and road conditions permit, you may put the shift lever in the N (Neutral) position while the vehicle is still moving and press the engine start/stop button in an attempt to restart the engine.*



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**\* NOTICE**

- If the battery is weak or the smart key does not work correctly, you can start the engine by pressing the engine start/stop button with the smart key.

The side with the lock button should be contacted directly.

When you press the engine start/stop button directly with the smart key, the smart key should contact the button at a right angle.

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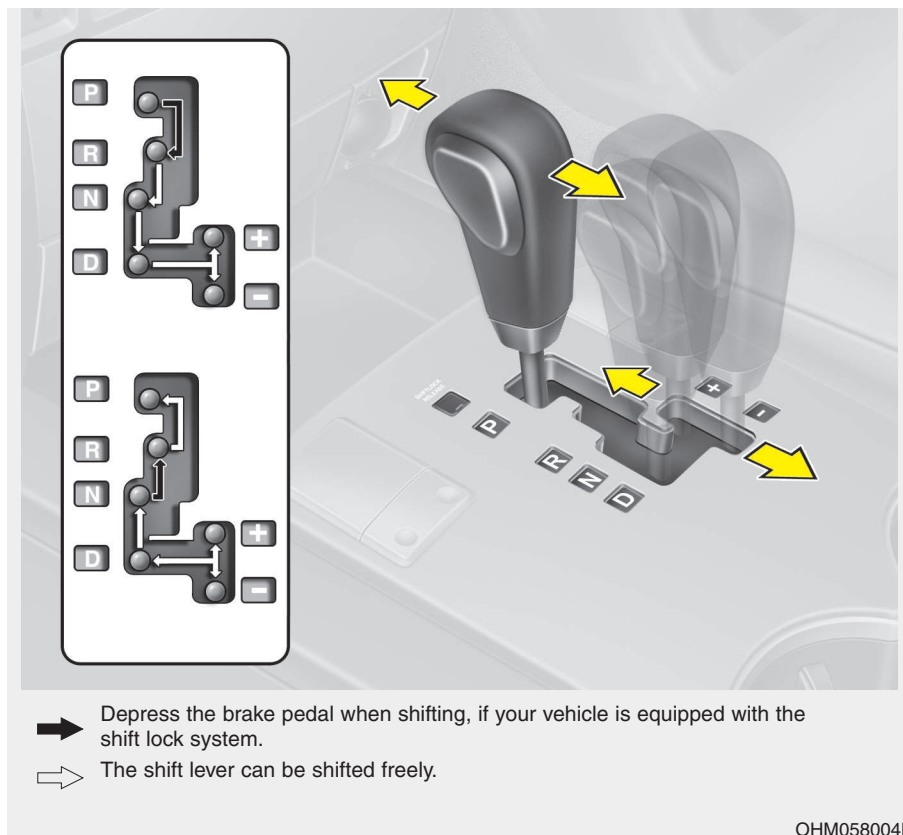
- When the stop lamp fuse is blown, you cannot start the engine normally.

Replace the fuse with a new one. If it is not possible, you can start the engine by pressing the engine start/stop button for 10 seconds while it is in the ACC position. The engine can start without depressing the brake pedal. But for your safety always depress the brake pedal before starting the engine.

**⚠ CAUTION**

*Do not press the engine start/stop button for more than 10 seconds except when the stop lamp fuse is blown.*

## AUTOMATIC TRANSAXLE (IF EQUIPPED)



### Automatic transaxle operation

The automatic transaxle has 5 (or 8) forward speeds and one reverse speed. The individual speeds are selected automatically, depending on the position of the shift lever.

### \* NOTICE

The first few shifts on a new vehicle, if the battery has been disconnected, may be somewhat abrupt. This is a normal condition, and the shifting sequence will adjust after shifts are cycled a few times by the TCM (Transaxle Control Module) or PCM (Powertrain Control Module).

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

### **WARNING - Automatic transaxle**

- Always check the surrounding areas near your vehicle for people, especially children, before shifting a vehicle into D (Drive) or R (Reverse).
- 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.
- Do not use the engine brake (shifting from a high gear to lower gear) rapidly on slippery roads.  
The vehicle may slip causing an accident.

### **CAUTION**

- *To avoid damage to your transaxle, do not accelerate the engine in R (Reverse) or any forward gear position 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 D (Drive), or R (Reverse) when the engine is above idle speed.*

### *Transaxle ranges*

The indicator lights in the instrument cluster displays the shift lever position when the ignition switch is in the ON position.

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

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

### **WARNING**

- Shifting into P (Park) while the vehicle is in motion will cause the drive wheels to lock which will cause you to lose control of the vehicle.
- Do not use the P (Park) position in place of the parking brake. Always make sure the shift lever is latched in the P (Park) position and set the parking brake fully.
- Never leave a child unattended in a vehicle.

### **CAUTION**

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

#### **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 (Reverse) while the vehicle is in motion, except as explained in "Rocking the vehicle", in this manual.***

### N (Neutral)

The wheels and transaxle are not engaged. The vehicle will roll freely even on the slightest incline unless the parking brake or service brakes are applied.

### WARNING

**Do not drive with the shift lever in N (Neutral).  
The engine brake will not work and lead to an accident.**

### - Parking in N (Neutral) gear

Follow below steps when parking and you want the vehicle to move when pushed.

1. After parking your vehicle, step on the brake pedal and move the shift lever to [P] with the ignition button in [ON] or while the engine is running.
2. If the parking brake is applied unlock the parking brake.
3. While pressing the brake pedal, turn the ignition button [OFF].
  - For smart key equipped vehicles, the ignition switch can be moved to [OFF] only when the shift lever is in [P].
4. Change the gear shift lever to [N] (Neutral) while pressing the brake pedal and pushing [SHIFT LOCK RELEASE] button or inserting, pressing down a tool (e.g. flathead screw-driver) into the [SHIFT LOCK RELEASE] access hole at the same time. Then, the vehicle will move when external force is applied.

### CAUTION

- ***With the exception of parking in neutral gear, always park the vehicle in [P] (Park) for safety and engage the parking brake.***
- ***Before parking in [N] (Neutral) gear, first make sure the parking ground is level and flat. Do not park in [N] gear on any slopes or gradients.***  
***If parked and left in [N], the vehicle may move and cause serious damage and injury.***

**D (Drive)**

This is the normal forward driving position. The transaxle will automatically shift through a 5 (or 8)-gear sequence, providing the best fuel economy and power.

For extra power when passing another vehicle or climbing grades, depress the accelerator fully, at which time the transmission will automatically downshift to the next lower gear.

**\* NOTICE**

Always come to a complete stop before shifting into D (Drive).

**Manual mode**

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

In manual mode, moving the shift lever backwards and forwards will allow you to make gearshifts rapidly. In contrast to a manual transmission, the manual 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.

**\* NOTICE**

- In manual mode, the driver must execute upshifts in accordance with road conditions, taking care to keep the engine speed below the red zone.
- In manual mode, only the 5 (or 8) forward gears can be selected. To reverse or park the vehicle, move the shift lever to the R (Reverse) or P (Park) position as required.
- In manual mode, downshifts are made automatically when the vehicle slows down. When the vehicle stops, 1st gear is automatically selected.
- In manual mode, when the engine rpm approaches the red zone shift points are varied to upshift automatically.

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- 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 on a slippery road, push the shift lever forward into the +(up) position. This causes the transaxle to shift into the 2nd (or 3rd) gear which is better for smooth driving on a slippery road. Push the shift lever to the -(down) side to shift back to the 1st gear.

### Shift lock system

For your safety, the automatic transaxle has a shift lock system which prevents shifting the transaxle from P (Park) or N (Neutral) into R (Reverse) unless the brake pedal is depressed.

To shift the transaxle from P (Park) or N (Neutral) into R (Reverse):

1. Depress and hold the brake pedal.
2. Start the engine or turn the ignition switch to the ON position.
3. Move the shift lever.

If the brake pedal is repeatedly depressed and released with the shift lever in the P (Park) position, a chattering noise near the shift lever may be heard. This is a normal condition.

### **⚠ WARNING**

**Always fully depress the brake pedal before and while shifting out of the P (Park) position into another position to avoid inadvertent motion of the vehicle which could injure persons in or around the vehicle.**



### Shift-lock override

If the shift lever cannot be moved from the P (Park) or N (Neutral) position into R (Reverse) position with the brake pedal depressed, continue depressing the brake, then do the following:

1. Carefully remove the cap covering the shift-lock override access hole.
2. Insert a screwdriver into the access hole and press down on the screwdriver.
3. Move the shift lever.
4. We recommend that the system be inspected by an authorized Kia dealer.

***Ignition key interlock system  
(if equipped)***

The ignition key cannot be removed unless the shift lever is in the P (Park) position.

**Good driving practices**

- Never move the shift lever from P (Park) or N (Neutral) to any other position with the accelerator pedal depressed.
  - Never move the shift lever into P (Park) when the vehicle is in motion.
  - Be sure the vehicle is completely stopped before you attempt to shift into R (Reverse) or D (Drive).
  - Never take the vehicle out of gear and coast down a hill. This may be extremely hazardous. Always leave the vehicle in gear when moving.
  - Do not "ride" the brakes. This can cause them to overheat and malfunction. Instead, when you are driving down a long hill, slow down and shift to a lower gear. When you do this, engine braking will help slow down the vehicle.
  - Slow down before shifting to a lower gear. Otherwise, the lower gear may not be engaged.
- Always use the parking brake. Do not depend on placing the transaxle in P (Park) to keep the vehicle from moving.
  - Exercise extreme caution when driving on a slippery surface. Be especially careful when braking, accelerating or shifting gears. On a slippery surface, an abrupt change in vehicle speed can cause the drive wheels to lose traction and the vehicle to go out of control.
  - Optimum vehicle performance and economy is obtained by smoothly depressing and releasing the accelerator pedal.

### **WARNING**

- Always buckle-up! In a collision, an unbelted occupant is significantly more likely to be seriously injured or killed than a properly belted occupant.
- Avoid high speeds when cornering or turning.
- Do not make quick steering wheel movements, such as sharp lane changes or fast, sharp turns.
- The risk of rollover is greatly increased if you lose control of your vehicle at highway speeds.
- Loss of control often occurs if two or more wheels drop off the roadway and the driver oversteers to reenter the roadway.
- In the event your vehicle leaves the roadway, do not steer sharply. Instead, slow down before pulling back into the travel lanes.
- Never exceed posted speed limits.

### **WARNING**

If your vehicle becomes stuck in snow, mud, sand, etc., then you may attempt to rock the vehicle free by moving it forward and backward. Do not attempt this procedure if people or objects are anywhere near the vehicle. During the rocking operation the vehicle may suddenly move forward or backward as it becomes unstuck, causing injury or damage to nearby people or objects.

### ***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). 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.



## FOUR WHEEL DRIVE (4WD) (IF EQUIPPED)

Engine power can be delivered to all front and rear wheels for maximum traction. 4WD is useful when extra traction is required on road, such as, when driving on slippery, muddy, wet, or snow-covered roads. These vehicles are not designed for challenging off-road use. Occasional off-road use such as established unpaved roads and trails are OK. It is always important when traveling off-highway that the driver carefully reduces the speed to a level that does not exceed the safe operating speed for those conditions. In general, off-road conditions provide less traction and braking effectiveness than normal road conditions. The driver must be especially alert to avoid driving on slopes which tilt the vehicle to either side.

These factors must be carefully considered when driving off-road. Keeping the vehicle in contact with the driving surface and under control in these conditions is always the driver's responsibility for the safety of him/herself and his or her passengers.

### CAUTION

- *Do not select four wheel drive on flat and normal roads.*
- *Four-wheel driving on flat roads for a long period causes poor fuel economy and noise and it also causes tires to wear faster.*
- *Four-wheel driving on flat and normal roads can result in a severe binding and chattering condition when turning the steering wheel.*
- *Four-wheel driving on flat roads for a long period can also cause the differential oil temperature to increase, resulting in damage to parts in the power train.*

### WARNING - Off road driving

This vehicle is designed primarily for on road use although it can operate effectively off road. However, it was not designed to drive in challenging off-road conditions. Driving in conditions that exceed the vehicle's intended design or the driver's experience level may result in severe injury or death.

### Tight corner brake effect



#### CAUTION

*When turning sharply on a paved road at low speed while in four-wheel drive (4L mode for full-time 4WD operation or 4L/4H mode for part-time 4WD operation), steering control will be difficult.*

Tight corner brake effect is a unique characteristic of four-wheel drive vehicles caused by the difference in tire rotation at the four wheels and the zero-degree alignment of the front wheels and suspension.

Sharp turns at low speeds should be carried out with caution.

**Part-Time 4WD (if equipped)**

| Transfer mode                           | Selection button                                                                  | Indicator light                                      | Description                                                                                                                                                              |
|-----------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>2H</b><br>(Rear-wheel drive)         |  | <b>4WD 4WD</b><br><b>HI LOW</b><br>(not illuminated) | This mode is used when driving on normal roads and highway.                                                                                                              |
| <b>4H</b><br>(High-speed 4-wheel drive) |  | <b>4WD HI</b><br>(illuminated)                       | This mode is used when driving on slippery roads such as snowy and rainy roads at normal speed.<br>Maximum speed: 80 km/h (50 mph)                                       |
| <b>4L</b><br>(Low-speed 4-wheel drive)  |  | <b>4WD LOW</b><br>(illuminated)                      | This mode is used when increased traction is required, such as climbing or descending hills, driving off-roads, and towing a vehicle.<br>Maximum speed: 40 km/h (25 mph) |

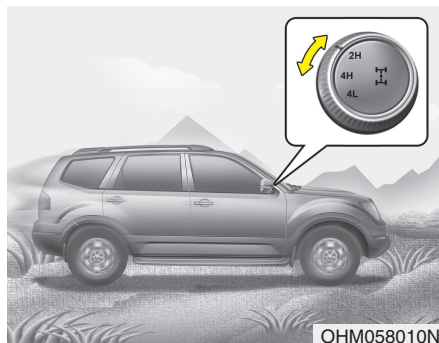
**\* NOTICE**

4WD transfer has a time delay for a few seconds until the actual shift is made after turning the transfer shift knob. When the 4WD transfer mode is shifted, it may cause mechanical noise. It is not a mechanical failure but a normal condition.

**⚠ CAUTION**

*When you stop the vehicle to transfer the shift knob, wait until the corresponding indicator light turns on or off to depart. If the vehicle moves before the transfer is completed, the vehicle may be damaged.*

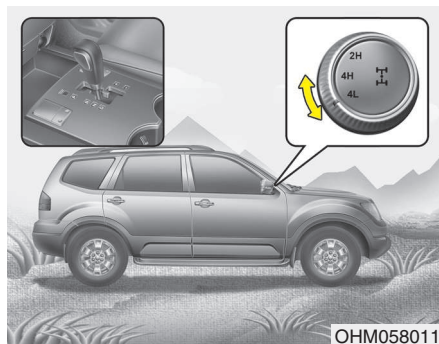
### Part-time 4WD knob operation



#### 2H ↔ 4H

Turn the transfer knob from the 2H mode to 4H mode or 4H mode to 2H mode at the speed below 80 km/h (50 mph). It is not necessary to put the shift lever into the N (Neutral) position. Perform this operation when driving straight. There will be a few seconds of time delay before shifting into the desired mode.

If the weather is extremely cold (-15°C /5°F) and the engine is not heated, transfer from 2H mode to 4H mode when the vehicle is stopped or at low speed.



#### 4H ↔ 4L

1. Stop the vehicle.
2. Put the shift lever into the N (Neutral) position.
3. Turn the transfer knob to the 4H or 4L position.
4. Before shifting to other ranges from the N (Neutral) position, wait for the corresponding indicator light to turn on or off in the cluster.

### \* NOTICE

If the mode is not shifted like the previous instructions, it will not transfer into the selected mode and the corresponding indicator light will continuously blink.



### CAUTION

- **Always check the 4WD shift knob and cluster to see if the system has been activated unintentionally.**
- **Do not speed over 80 km/h (50 mph) in the 4H mode and 40 km/h (25 mph) in the 4L mode.**

**Full-Time 4WD Operation (if equipped)**

| Transfer mode                               | Selection button                                                                  | Indicator light                                                    | Description                                                                                                                                                                                                                      |
|---------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>AUTO</b><br>(Automatic<br>4-wheel drive) |  | <b>4WD</b> <b>4WD</b><br><b>HI</b> <b>LOW</b><br>(not illuminated) | This mode is used when driving on normal roads and highway.<br>The engine power is distributed to all four wheels automatically without the driver's intervention in accordance with the road conditions and driving conditions. |
| <b>4H</b><br>(High-speed<br>4-wheel drive)  |  | <b>4WD</b><br><b>HI</b><br>(illuminated)                           | This mode is used when driving on slippery roads, such as snowy and rainy roads at normal speed.<br>Maximum speed: 80 km/h (50 mph)                                                                                              |
| <b>4L</b><br>(Low-speed<br>4-wheel drive)   |  | <b>4WD</b><br><b>LOW</b><br>(illuminated)                          | This mode is used when increased traction is required, such as climbing or descending hills, driving off-roads, and towing a vehicle.<br>Maximum speed: 40 km/h (25 mph)                                                         |

**\* NOTICE**

4WD transfer has a time delay for a few seconds until the actual shift is made after turning the transfer shift knob. When the 4WD transfer mode is shifted, it may cause mechanical noise. It is not a mechanical failure but a normal condition.

**CAUTION**

*When you stop the vehicle to transfer the shift knob, wait until the corresponding indicator light turns on or off to depart. If the vehicle moves before the transfer is completed, the vehicle may be damaged.*

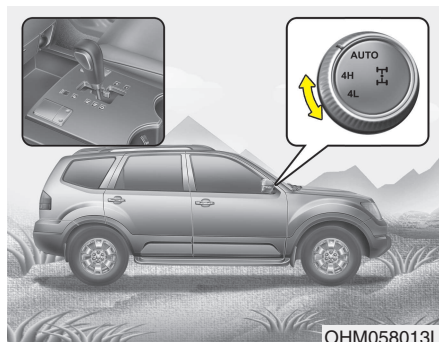
### Full-time 4WD knob operation



#### **AUTO ↔ 4H**

Turn the transfer knob from the AUTO mode to 4H mode or 4H mode to AUTO mode at the speed below 80 km/h (50 mph). It is not necessary to put the shift lever into the N (Neutral) position. Perform this operation when driving straight. There will be a few seconds of time delay before shifting into the desired mode.

If the weather is extremely cold (-15°C/5°F) and the engine is not heated, transfer from AUTO mode to 4H mode when the vehicle is stopped or at low speed.



#### **4H ↔ 4L**

1. Stop the vehicle.
2. Put the shift lever into the N (Neutral) position.
3. Turn the transfer knob to the 4H or 4L position.
4. Before shifting to other ranges from the N (Neutral) position, wait for the corresponding indicator light to turn on or off in the cluster.

### **\* NOTICE**

If the mode is not shifted like the previous instructions, it will not transfer into the selected mode and the corresponding indicator light will continuously blink.



### **CAUTION**

- **Always check the 4WD shift knob and cluster to see if the system has been activated unintentionally.**
- **Do not speed over 80 km/h (50 mph) in the 4H mode and 40 km/h (25 mph) in the 4L mode.**

## For safe four-wheel drive operation

### **⚠ WARNING - Four-wheel driving**

The conditions of on-road or off-road that demand four-wheel drive mean all functions of your vehicle are exposed to extreme stress than under normal road conditions. Slow down and be ready for changes in the composition and traction of the surface under your tires. If you have any doubt about the safety of the conditions you are facing, stop and consider the best way to proceed. Do not exceed the ability of yourself or your vehicle to operate safely.

- Do not try to drive in deep standing water or mud since such conditions can stall your engine and clog your exhaust pipes. Do not drive down steep hills since it requires extreme skill to maintain control of the vehicle.



- When you are driving up or down hills drive as straight as possible. Use extreme caution in going up or down steep hills, since you may flip your vehicle over depending on the grade, terrain and water/mud conditions.



### **⚠ WARNING - Hills**

Driving across the contour of steep hills can be extremely dangerous. This danger can come from slight changes in the wheel angle which can destabilize the vehicle or, even if the vehicle is maintaining stability under power, it can lose that stability if the vehicle stops its forward motion. Your vehicle may roll over without warning and without time for you to correct a mistake that could cause serious injury or death.

- You must consciously take the effort to learn how to corner in a 4WD vehicle. Do not rely on your experience in conventional 2WD vehicles in choosing safe cornering speed in 4WD mode. For starters, you must drive more slowly in 4WD.
- Drive carefully off-road because your vehicle may be damaged by rocks or roots of trees. Become familiar with the off-road conditions where you are going to drive before you begin driving.

### **⚠ WARNING - 4WD**

Reduce speed when you turn corners. The center of gravity of 4WD vehicles is higher than that of conventional 2WD vehicles, making them more likely to roll over when you turn corners too fast.



- Always hold the steering wheel firmly when you are driving off-road.
- Make sure all passengers are wearing seat belts.

### **⚠ WARNING - Steering wheel**

Do not grab the inside of the steering wheel when you are driving off-road. You may hurt your arm by a sudden steering maneuver or from steering wheel rebound due to impact with objects on the ground. You could lose control of the steering wheel.

### **⚠ WARNING - Wind danger**

If you are driving in heavy wind, the vehicle's higher center of gravity decreases your steering control capacity and requires you to drive more slowly.

- If you need to drive in the water, stop your vehicle, set your transfer to the 4L mode and drive at less than 8 km/h (5 mph).

### **⚠ WARNING - Driving through water**

Drive slowly. If you are driving too fast in water, the water can get into the engine compartment and wet the ignition system, causing your vehicle to suddenly stop. If this happens and your vehicle is in a tilted position, your vehicle may roll over.



**\* NOTICE**

- Do not drive in water if the level is higher than the bottom of the vehicle.
- Check your brake condition once you are out of mud or water. Press the brake pedal several times as you move slowly until you feel normal braking forces return.
- Shorten your scheduled maintenance interval if you drive in off-road conditions such as sand, mud or water (see “Maintenance under severe usage conditions” in chapter 8). Always wash your vehicle thoroughly after off road use, especially cleaning the bottom of the vehicle.
- Since the driving torque is always applied to the 4 wheels the performance of the 4WD vehicle is greatly affected by the condition of the tires. Be sure to equip the vehicle with four tires of the same size and type.
- A full time four wheel drive vehicle cannot be towed by an ordinary tow truck. Make sure that the vehicle is placed on a flat bed truck for moving.

**CAUTION - Mud or snow**

*If one of the front or rear wheels begins to spin in mud, snow, etc. the vehicle can sometimes be driven out by depressing the accelerator pedal further; however avoid running the engine continuously at high rpm because doing so could damage the 4WD system.*

**Reducing the risk of a rollover**

This multi-purpose passenger vehicle is defined as a Sports Utility Vehicle (SUV). SUV's have higher ground clearance and a narrower track to make them capable of performing in a wide variety of off-road applications. Specific design characteristics give them a higher center of gravity than ordinary vehicles. An advantage of the higher ground clearance is a better view of the road, which allows you to anticipate problems. They are not designed for cornering at the same speeds as conventional passenger vehicles, any more than low-slung sports vehicles are designed to perform satisfactorily in off-road conditions. Due to this risk, driver and passengers are strongly recommended to buckle their seat belts. In a rollover crash, an unbelted person is more likely to die than a person wearing a seat belt. There are steps that a driver can make to reduce the risk of a rollover. If at all possible, avoid sharp turns or abrupt maneuvers, do not load your roof rack with heavy cargo, and never modify your vehicle in any way.

**⚠ WARNING - Rollover**

As with other Sports Utility Vehicle (SUV), failure to operate this vehicle correctly may result in loss of control, an accident or vehicle rollover.

- Utility vehicles have a significantly higher rollover rate than other types of vehicles.
- Specific design characteristics (higher ground clearance, narrower track, etc.) give this vehicle a higher center of gravity than ordinary vehicles.
- A SUV is not designed for cornering at the same speeds as conventional vehicles.
- Avoid sharp turns or abrupt maneuvers.
- In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. Make sure everyone in the vehicle is properly buckled up.

**⚠ WARNING**

Your vehicle is equipped with tires designed to provide safe ride and handling capability. Do not use a size and type of tire and wheel that is different from the one that is originally installed on your vehicle. It can affect the safety and performance of your vehicle, which could lead to steering failure or rollover and serious injury. When replacing the tires, be sure to equip all four tires with the tire and wheel of the same size, type, tread, brand and load-carrying capacity. If you nevertheless decide to equip your vehicle with any tire/wheel combination not recommended by Kia for off road driving, you should not use these tires for highway driving.

**⚠ WARNING - Jacked vehicle**

While the full-time 4WD vehicle is being raised on a jack, never start the engine or cause the tires to rotate.

There is the danger that rotating tires touching the ground could cause the vehicle to go off the jack and to jump forward.

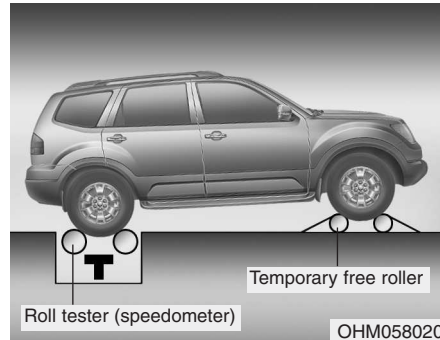
- Full-time 4WD vehicles must be tested on a special four wheel chassis dynamometer.

Part-time 4WD vehicles must be tested on a 2WD roll tester with the transfer shift knob in the 2H position.

### \* NOTICE

**Never engage the parking brake while performing these tests.**

- A full-time 4WD vehicle should not be tested on a 2WD roll tester. If a 2WD roll tester must be used, perform the following:



1. Check the tire pressures recommended for your vehicle.
2. Place the rear wheels on the roll tester for a speedometer test as shown in the illustration.
3. Release the parking brake.
4. Place the front wheels on the temporary free roller as shown in the illustration.

### **⚠ WARNING**

#### **- Dynamometer testing**

**Keep away from the front of the vehicle while the vehicle is in gear on the dynamometer. This is very dangerous as the vehicle can jump forward and cause serious injury or death.**

## BRAKE SYSTEM

### Power brakes

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

In the event that the power-assisted brakes lose power 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 applied. Do not pump the brake pedal when the power assist has been interrupted.

Pump the brake pedal only when necessary to maintain steering control on slippery surfaces.

### **WARNING - Brakes**

- Do not drive with your foot resting on the brake pedal. This will create abnormal 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 impair the vehicle's ability to safely slow down; the vehicle may also pull to one side when the brakes are applied. Applying the brakes lightly will indicate whether they have been affected in this way.

(Continued)

### (Continued)

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.

- Always, confirm the position of the brake and accelerator pedal before driving. If you don't check the position of the accelerator and brake pedal before driving, you may depress the accelerator instead of the brake pedal. It may cause a serious accident.

### *In the event of brake failure*

If service brakes 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**  
Applying 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.

### **⚠ CAUTION**

*Do not operate the parking brake while the vehicle is moving except in an emergency situation. It could damage the vehicle system and make endanger driving safety.*

### *Disc brakes wear indicator*

When your brake pads are worn and new pads are required, you will hear a high-pitched warning sound from your front brakes or rear brakes (if equipped). You may hear this sound come and go or it may occur whenever you depress the brake pedal.

Please remember that 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.

### **⚠ CAUTION**

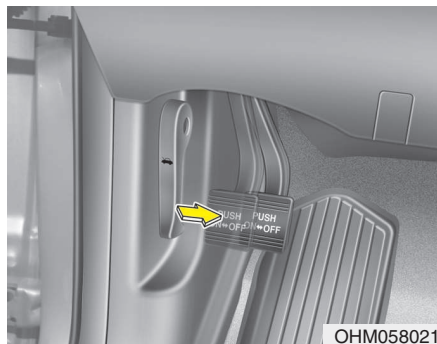
- *To avoid costly brake repairs, do not continue to drive with worn brake pads.*
- *Always replace the front or rear brake pads as pairs.*

### **⚠ WARNING - Brake wear**

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

### Parking brake

#### Applying the parking brake

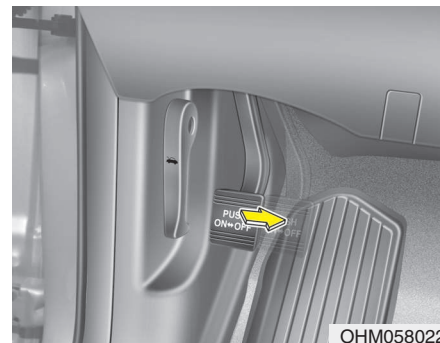


To engage the parking brake, first apply the foot brake and then depress the parking brake pedal down as far as possible. In addition it is recommended that when parking the vehicle on an incline, the shift lever should be in the P (Park) position.

#### CAUTION

- ***Driving with the parking brake applied will cause excessive brake pad and brake rotor wear.***
- ***Do not operate the parking brake while the vehicle is moving except in an emergency situation. It could damage the vehicle system and make endanger driving safety.***

#### Releasing the parking brake



To release the parking brake, depress the parking brake pedal a second time while applying the foot brake. The pedal will automatically extend to the fully released position. If the parking brake pedal does not release or does not release all the way, we recommend that the system be checked by an authorized kia dealer.

**⚠ WARNING**

- To prevent unintentional movement when stopped and leaving the vehicle, do not use the shift lever instead of the parking brake. Set the parking brake AND make sure the shift lever is securely positioned in 1st (First) gear or in P (Park).
- Never allow anyone who is unfamiliar with the vehicle to touch the parking brake. If the parking brake is released unintentionally, serious injury may occur.
- All vehicles should always have the parking brake fully engaged when parking to avoid inadvertent movement of the vehicle which can injure occupants or pedestrians.



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Check the brake warning light by turning the ignition switch ON (do not start the engine). This light will be illuminated when the parking brake is applied with the ignition switch in the START or ON position.

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 while the engine is running, 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 while operating the vehicle and only continue to drive the vehicle until you can reach a safe location or repair shop.

## Anti-lock brake system (ABS)

### **WARNING**

ABS (or ESC) will not prevent accidents due to improper or dangerous driving maneuvers. Even though vehicle control is improved during emergency braking, always maintain a safe distance between you and objects ahead. Vehicle speeds should always be reduced during extreme road conditions.

The braking distance for vehicle equipped with an anti-lock braking system (or Electronic Stability Control) may be longer than for those without it in the following road conditions.

During these conditions the vehicle should be driven at reduced speeds:

- Rough, gravel or snow-covered roads.
- With tire chains installed.

(Continued)

### (Continued)

- On roads where the road surface is pitted or has different surface height.

The safety features of an ABS (or ESC) equipped vehicle should not be tested by high speed driving or cornering. This could endanger the safety of yourself or others.

The ABS continuously senses the speed of the wheels. If the wheels are going to lock, the ABS system repeatedly modulates the hydraulic brake pressure to the wheels.

When you apply your brakes under conditions which may lock the wheels, you may hear a “tik-tik” sound from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your ABS is active.

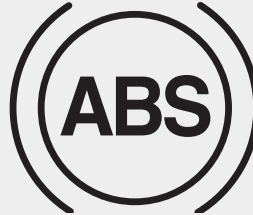
In order to obtain the maximum benefit from your ABS in an emergency situation, do not attempt to modulate your brake pressure and do not try to pump your brakes. Press your brake pedal as hard as possible or as hard as the situation warrants and allow the ABS to control the force being delivered to the brakes.

### **\* NOTICE**

A click sound may be heard in the engine compartment when the vehicle begins to move after the engine is started. These conditions are normal and indicate that the anti-lock brake system is functioning properly.



- Even with the anti-lock brake system, your vehicle still requires 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.



W-78

 **CAUTION**

- *If the ABS warning light is on and stays on, you may have a problem with the ABS. In this case, however, your regular brakes will work normally.*

*(Continued)*

*(Continued)*

- *The ABS warning light will stay on for approximately 3 seconds after the ignition switch is 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. We recommend that you contact an authorized Kia dealer.*

### CAUTION

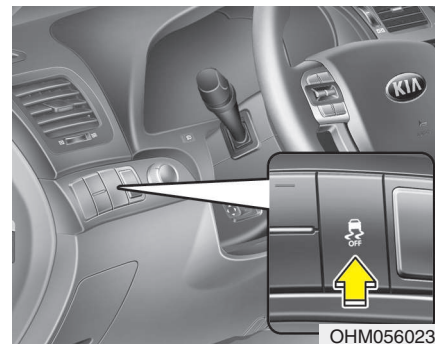
- *When you drive on a road having poor traction, such as an icy road, and operate your brakes continuously, the ABS will be active continuously and the ABS warning light may illuminate. Pull your vehicle over to a safe place and stop the engine.*
- *Restart the engine. If the ABS warning light is off, then your ABS system is normal. Otherwise, you may have a problem with the ABS. We recommend that you contact an authorized Kia dealer.*

### \* NOTICE

When you jump start your vehicle because of a drained battery, the engine may not run as smoothly and the ABS warning light may turn on at the same time. This happens because of the low battery voltage. It does not mean your ABS is malfunctioning.

- Do not pump your brakes!
- Have the battery recharged before driving the vehicle.

### Electronic stability control (ESC) (if equipped)



The Electronic Stability Control (ESC) system is designed to stabilize the vehicle during cornering maneuvers. ESC checks where you are steering and where the vehicle is actually going. ESC applies the brakes at individual wheels and intervenes with engine management system to stabilize the vehicle.

**⚠ WARNING**

**Never drive too fast for the road conditions or too quickly when cornering. Electronic stability control (ESC) will not prevent accidents. Excessive speed in turns, abrupt maneuvers and hydroplaning on wet surfaces can still result in serious accidents. Only a safe and attentive driver can prevent accidents by avoiding maneuvers that cause the vehicle to lose traction. Even with ESC installed, always follow all the normal precautions for driving - including driving at safe speeds for the conditions.**

The Electronic stability control (ESC) system is an electronic system designed to help the driver maintain vehicle control under adverse conditions. It is not a substitute for safe driving practices. Factors including speed, road conditions and driver steering input can all affect whether ESC will be effective in preventing a loss of control. It is still your responsibility to drive and corner at reasonable speeds and to leave a sufficient margin of safety.

When you apply your brakes under conditions which may lock the wheels, you may hear a “tik-tik” sound from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your ESC is active.

**\* NOTICE**

**A click sound may be heard in the engine compartment when the vehicle begins to move after the engine is started. These conditions are normal and indicate that the Electronic stability control (ESC) System is functioning properly.**

### **ESC operation**

#### **ESC ON condition**

-

- When the ignition is turned ON, ESC and ESC OFF indicator lights illuminate for approximately 3 seconds, then ESC is turned on.
- Press the ESC OFF button for at least half a second after turning the ignition ON to turn ESC off. (ESC OFF indicator will illuminate). To turn the ESC on, press the ESC OFF button (ESC OFF indicator light will go off).
- When starting the engine, you may hear a slight ticking sound. This is the ESC performing an automatic system self-check and does not indicate a problem.

### **When operating**



When the ESC is in operation, ESC indicator light blinks.

- When the Electronic Stability 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 moving out of the mud or slippery road, the engine rpm (revolution per minute) may not increase even if you press the accelerator pedal deeply. This is to maintain the stability and traction of the vehicle and does not indicate a problem.

### **ESC operation off**

#### **ESC OFF state**



This car has 2 kinds of ESC off states.

If the engine stops when ESC is off, ESC remains off. Upon restarting the engine, the ESC will automatically turn on again.

## ■ Type A



OHM046515L

## ■ Type B



OHM046514L

• **ESC off state 1**

To cancel ESC operation, press the ESC OFF button (ESC OFF ) shortly (ESC OFF indicator light (ESC OFF ) illuminates). At this state, the engine control function does not operate. It means the traction control function does not operate. Brake control function only operates.

## ■ Type A



OHM046517L

## ■ Type B



OHM046516L

• **ESC off state 2**

To cancel ESC operation, press the ESC OFF button (ESC OFF ) for more than 3 seconds. ESC OFF indicator light (ESC OFF ) illuminates and ESC OFF warning chime will sound. At this state, the engine control function and brake control function do not operate. It means the car stability control function does not operate any more.

**Indicator light**

## ■ ESC indicator light



## ■ ESC OFF indicator light



When ignition switch is turned to ON, the indicator light illuminates, then goes off if the ESC system is operating normally.

The ESC indicator light blinks whenever ESC is operating or illuminates when ESC fails to operate.

ESC OFF indicator light comes on when the ESC is turned off with the button.

 **CAUTION**

*Driving with varying tire or wheel sizes may cause the ESC system to malfunction. When replacing tires, make sure they are the same size as your original tires.*

 **WARNING**

The Electronic Stability Control system is only a driving aid; use precautions for safe driving by slowing down on curved, snowy, or icy roads. Drive slowly and don't attempt to accelerate whenever the ESC indicator light is blinking, or when the road surface is slippery.

**ESC OFF usage**

**When driving**

- ESC should be turned on for daily driving whenever possible.
- To turn ESC off while driving, press the ESC OFF button while driving on a flat road surface.

 **WARNING**

**Never press the ESC OFF button while ESC is operating (ESC indicator light blinks).**

**If ESC is turned off while ESC is operating, the vehicle may slip out of control.**

**\* NOTICE**

- When operating the vehicle on a dynamometer, ensure that the ESC is turned off by pressing the ESC OFF button for more than 3 seconds (ESC OFF light illuminated). If the ESC is left on, it may prevent the vehicle speed from increasing, and result in false diagnosis.
- Turning the ESC off does not affect ABS or brake system operation.

**Hill-start assist control (HAC)  
(if equipped)**

A vehicle has the tendency to slip back on a steep hill when it starts to go after stopping. The Hill-start Assist Control (HAC) prevents the vehicle from slipping back by operating the brakes automatically for about 1~2 seconds. The brakes are released when the accelerator pedal is depressed or after about 1~2 seconds.

** WARNING**

The HAC is activated only for about 1~2 seconds, so when the vehicle is starting off always depress the accelerator pedal.

**\* NOTICE**

- The HAC does not operate when the transaxle shift lever is in the P (Park) or N (Neutral) position.
- The HAC activates even though the ESC is off but it does not activate when the ESC has malfunctioned.

**Good braking practices**** WARNING**

- Whenever you leave or park your vehicle, always set the parking brake as far as possible and fully engage the vehicle's transaxle into the P (Park) position. If the parking brake is not fully engaged, the vehicle may move inadvertently and injure yourself and others.
- All vehicles should always have the parking brake fully engaged when parking to avoid inadvertent movement of the vehicle which can injure occupants or pedestrians.

- Check to be sure the parking brake is not engaged and that the parking brake indicator light is out before driving away.
- Driving through water may get the brakes wet. They can also get wet when the vehicle is washed. Wet brakes can be dangerous! Your vehicle will not stop as quickly if the brakes are wet. Wet brakes may cause the vehicle to pull to one side. To dry the brakes, apply the brakes lightly until the braking action returns to normal, taking care to keep the vehicle under control at all times. If the braking action does not return to normal, stop as soon as it is safe to do so and we recommend that you call an authorized Kia dealer.
- Do not coast down hills with the vehicle out of gear. This is extremely hazardous. Keep the vehicle in gear at all times, use the brakes to slow down, then shift to a lower gear so that engine braking will help you maintain a safe speed.
- Do not "ride" the brake pedal. Resting your foot on the brake pedal while driving can be dangerous because it can result in the brakes overheating and losing their effectiveness. It also increases the wear of the brake components.
- If a tire goes flat while you are driving, apply the brakes gently and keep the vehicle pointed straight ahead while you slow down. When you are moving slowly enough for it to be safe to do so, pull off the road and stop in a safe place.
- If your vehicle is equipped with an automatic transaxle, do not let your vehicle creep forward. To avoid creeping forward, keep your foot firmly on the brake pedal when the vehicle is stopped.
- Be cautious when parking on a hill. Firmly engage the parking brake and place the shift lever in P (Park). If your vehicle is facing downhill, turn the front wheels into the curb to help keep the vehicle from rolling.  
If your vehicle is facing uphill, turn the front wheels away from the curb to help keep the vehicle from rolling. If there is no curb or if it is required by other conditions to keep the vehicle from rolling, block the wheels.



- Under some conditions your parking brake can freeze in the engaged position. This is most likely to happen when there is an accumulation of snow or ice around or near the rear brakes or if the brakes are wet. If there is a risk that the parking brake may freeze, apply it only temporarily while you put the shift lever in P(Park) and block the rear wheels so the vehicle cannot roll. Then release the parking brake.
- Do not hold the vehicle on the upgrade with the accelerator pedal. This can cause the transaxle to overheat. Always use the brake pedal or parking brake.

## LOCKING DIFFERENTIAL (IF EQUIPPED)

A locking differential, if equipped, is for the rear wheel differential only. The features of this locking differential are described below:

Just as with a conventional differential, the wheel on one side is allowed to turn at a different speed from the wheel on the other side when the vehicle is cornering. The difference between the locking differential and a conventional differential is that if the wheel on one side of the vehicle loses traction, a greater amount of torque is applied to the rear wheel on the other side to improve traction.

### \* NOTICE

In a stationary position, the LD (Locking Differential) will operate when the difference of the revolution speed between the rear right wheel and the rear left wheel occurs.

The following procedures can be used to confirm that the locking differential is functioning properly:

1. Position the vehicle so that one wheel is on a dry paved surface and the other on ice, snow, mud, etc. Drive the vehicle, and observe the operation of the locking differential. The vehicle should not become stuck if the differential is functioning properly.
2. Depress the accelerator pedal gradually, and then when traction is good, depress it forcefully. If the vehicle accelerates well, the differential is functioning properly.

### \* NOTICE

Usually a locking differential will operate and release automatically but occasionally it may not release automatically.

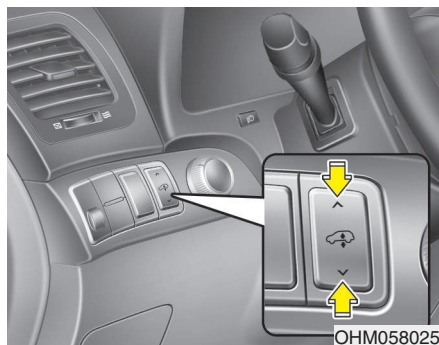
At this time you will feel the tire is dragged when you are driving or cornering. You can release it manually by slightly turning the steering wheel right and left while the vehicle is moving slowly.



### CAUTION

- ***Never start the engine with the gearshift lever placed in the forward or reverse while one of the rear wheels is jacked up and the other in contact with the ground; doing so may cause the vehicle to jump forward.***
- ***If one of the rear wheels begins to spin in mud, snow, etc., the vehicle can sometimes be driven out by depressing the accelerator pedal further; however, avoid running the engine continuously at high rpm because doing so could damage the locking differential.***

## AIR LEVELING SYSTEM (ALS) (IF EQUIPPED)



The Air Leveling System improves driving stability and riding comfort with continuous maintenance of vehicle height regardless of the load and number of passengers. The rear height is controlled automatically and manually into three modes; Ordinary driving mode (N), Off road driving mode (HI) and Loading mode (LO).

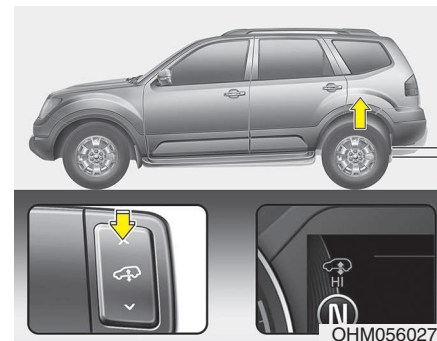
### N (Normal) - Ordinary driving mode



The normal height of the vehicle is maintained.

The indicator will illuminate at N (Normal) on the LCD display.

### HI (High) - Off road driving mode

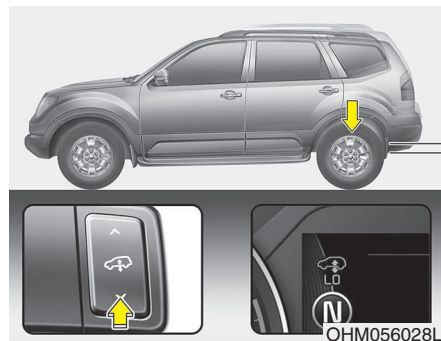


The rear part of the vehicle is lifted to drive on rough roads such as off-roads.

With the engine running press the top part of the switch. The HI (High) mode activates only when the vehicle is not moving or the speed is less than 35 km/h (22mph). The indicator blinks when the system is adjusting itself to the HI (High) mode. When the adjustment is completed (about 40mm (2 in.) raised) the indicator will illuminate at HI (High) on the LCD display.

To go to the N (Normal) mode, press the bottom part of the switch. Also, if the vehicle speed is over 60 km/h (38mph) or drives over 10 seconds at the speed of about 45 km/h (28mph), the vehicle will lower itself to the N (Normal) mode.

### LO (Low) - Loading mode



The rear part of the vehicle is lowered to make it easy to load or unload cargo.

With the engine running press the bottom part of the switch. The LO (Low) mode activates only when the vehicle is not moving. The indicator blinks when the system is adjusting itself to the LO (Low) mode. When the adjustment is completed (about 40mm (2 in.) lowered) the indicator will illuminate at LO (Low) on the LCD display.

To go to the N (Normal) mode, press the top part of the switch. Also, if the vehicle speed is over 2 km/h (1 mph), the vehicle will lift itself to the N (Normal) mode.

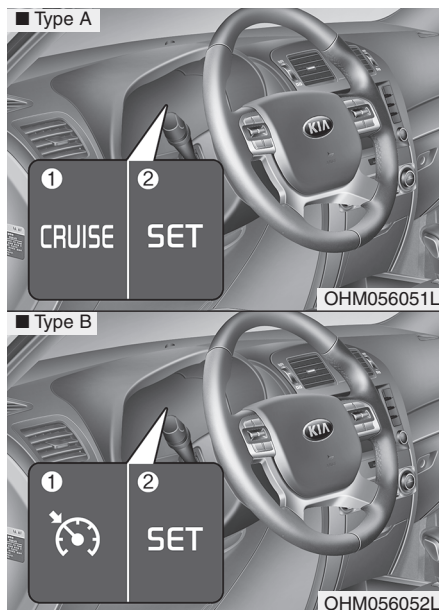
### \* NOTICE

The ALS will adjust the rear height of the vehicle according to the load and number of passengers when the ignition switch is in the ON position or when the engine is on.

 **CAUTION**

- *Always check if there is anything under the rear part of the vehicle before adjusting the ALS.*
- *There may be noise heard while the ALS is adjusting the height to a mode.*
- *Do not turn off the engine or press the switch to another mode while the ALS is adjusting to the mode selected.*
- *Do not activate the ALS when the air filter of the compressor has been submerged.*
- *Inspect or replace the ALS air filter and air spring according to the maintenance schedule.*
- *Do not drive the vehicle when the air spring is damaged or airless. Have the vehicle towed with all the wheels lifted from the ground.*

## CRUISE CONTROL SYSTEM (IF EQUIPPED)



1. Cruise indicator
2. Cruise set indicator

The cruise control system allows you to program the vehicle to maintain a constant speed without pressing the accelerator pedal.

This system is designed to function above approximately 40 km/h (25 mph).

### **⚠ WARNING**

- If the cruise control is left on, (cruise indicator light is illuminated), the cruise control can be switched on accidentally. Keep the cruise control system off when the cruise control is not in use, to avoid inadvertently setting a speed.
- Use the cruise control system only when traveling on open highways in good weather.
- Do not use the cruise control when it may not be safe to keep the vehicle 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.

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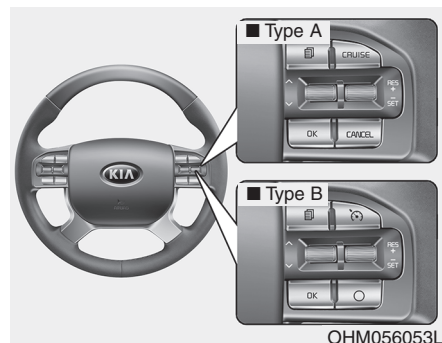
### **(Continued)**

- Pay particular attention to the driving conditions whenever using the cruise control system.
- Be careful when driving downhill using the cruise control system, which may increase the vehicle speed.

## \* NOTICE

- During normal cruise control operation, when the SET switch is activated or reactivated after applying the brakes, the cruise control will energize after approximately 3 seconds. This delay is normal.
- To activate cruise control, depress the brake pedal at least once after turning the ignition switch to the ON position or starting the engine. This is to check if the brake switch which is important part to cancel cruise control is in normal condition.

## Cruise control switch



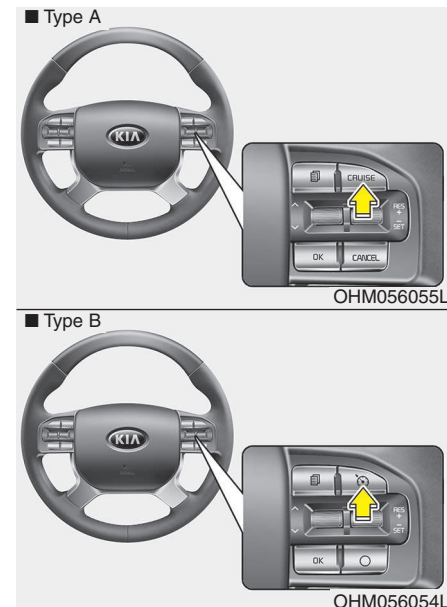
CANCEL/O : Cancels cruise control operation.

CRUISE /  : Turns cruise control system on or off.

RES+ : Resumes or increases cruise control speed.

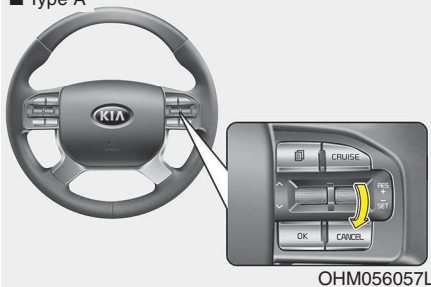
SET- : Sets or decreases cruise control speed.

## To set cruise control speed:

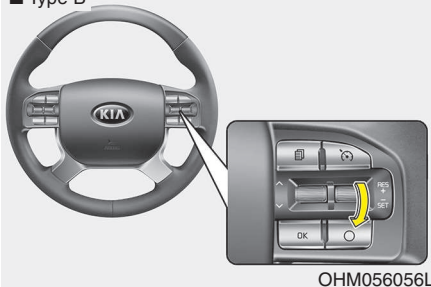


1. Press the CRUISE /  button on the steering wheel, to turn the system on. The cruise indicator light will illuminate.
2. Accelerate to the desired speed, which must be more than approximately 40 km/h (25 mph).

### ■ Type A



### ■ Type B

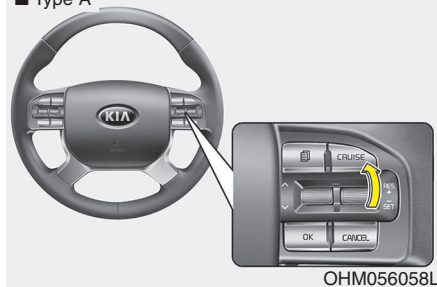


3. Move the lever down (to SET-), and release it at the desired speed. The cruise set indicator light will illuminate. Release the accelerator pedal at the same time. The desired speed will automatically be maintained.

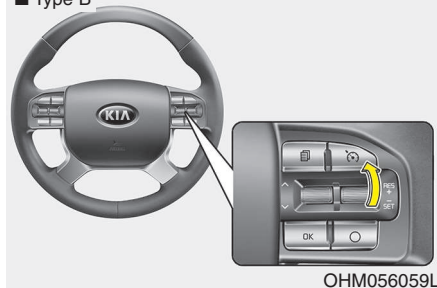
*On a steep grade, the vehicle may slow down or speed up slightly while going downhill.*

## To increase cruise control set speed:

### ■ Type A



### ■ Type B



Follow either of these procedures:

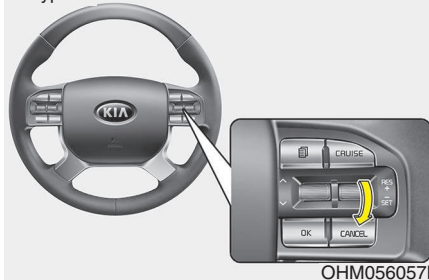
- Move the lever up (to RES+) and hold it. Your vehicle will accelerate. Release the lever at the speed you want.



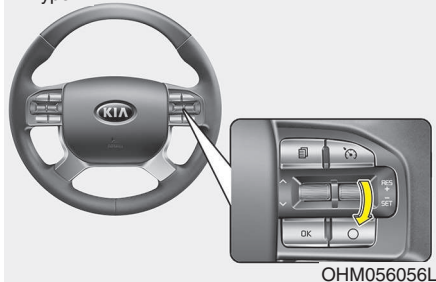
- Move the lever up (to RES+) and release it immediately. The cruising speed will increase by 2 km/h (1 mph) each time you move the lever up (to RES+) in this manner.

## To decrease the cruising speed:

### ■ Type A



### ■ Type B



Follow either of these procedures:

- Move the lever down (to SET-) and hold it. Your vehicle will gradually slow down. Release the lever at the speed you want to maintain.

- Move the lever down (to SET-) and release it immediately. The cruising speed will decrease by 2 km/h (1 mph) each time you move the lever down (to SET-) in this manner.

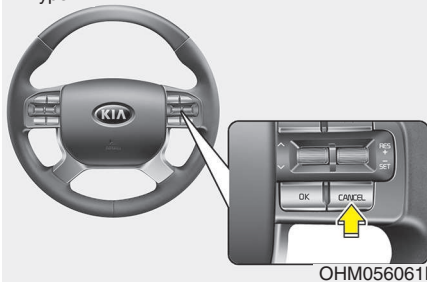
### To temporarily accelerate with the cruise control on:

If you want to speed up temporarily when the cruise control is on, depress the accelerator pedal. Increased speed will not interfere with cruise control operation or change the set speed.

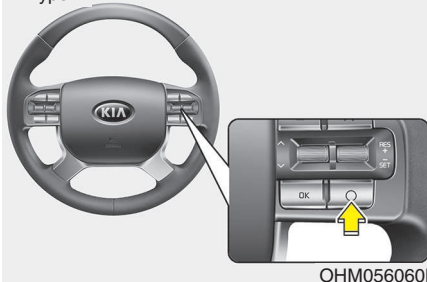
To return to the set speed, take your foot off the accelerator pedal.

### To cancel cruise control, do one of the following:

#### ■ Type A



#### ■ Type B



- Decrease the vehicle speed lower than the memory speed by approximately 15 km/h (9 mph).
- Decrease the vehicle speed to less than approximately 40 km/h (25 mph).

*Each of these actions will cancel cruise control operation (the cruise set indicator light will go off), but it will not turn the system off. If you wish to resume cruise control operation, move up the lever (to RES+) located on your steering wheel. You will return to your previously preset speed.*

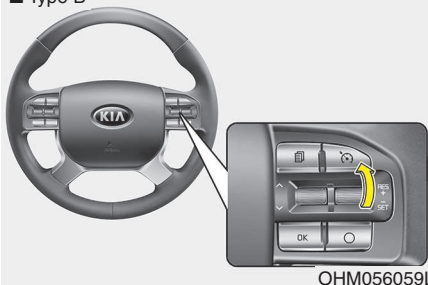
- Depress the brake pedal.
- Shift into N (Neutral) with an automatic transaxle.
- Press the CANCEL/O button located on the steering wheel.

**To resume cruising speed at more than approximately 40 km/h (25 mph).**

■ Type A



■ Type B



If any method other than the CRUISE /  button was used to cancel cruising speed and the system is still activated, the most recent set speed will automatically resume when the RES+ switch is pushed.

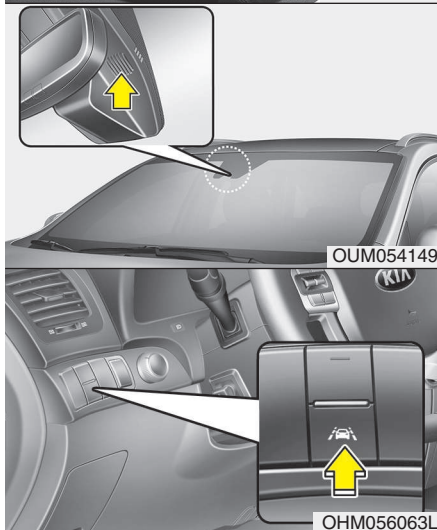
It will not resume, however, if the vehicle speed has dropped below approximately 40 km/h (25 mph).

**To turn cruise control off, do one of the following:**

- Press the CRUISE /  button (the cruise indicator light will be turn off).
- Turn the ignition off.

*Both of these actions cancel cruise control operation. If you want to resume cruise control operation, repeat the steps provided in "To set cruise control speed" on the previous page.*

## LANE DEPARTURE WARNING SYSTEM (LDWS) (IF EQUIPPED)



This system detects the lane with the sensor at the front windshield and warns you when your vehicle leaves the lane.

### **⚠ WARNING**

- The LDWS does not make the vehicle change lanes. It is the driver's responsibility to always check the road conditions.
- Do not turn the steering wheel suddenly, when the LDWS warns you that your vehicle is leaving the lane.
- If the sensor can not detect the lane or if the vehicle speed does not exceed around 60km/h, the LDWS won't warn you even though the vehicle leaves the lane.
- If your vehicle has window tint or other types of coating and accessory on the front windshield, the LDWS may not work properly.

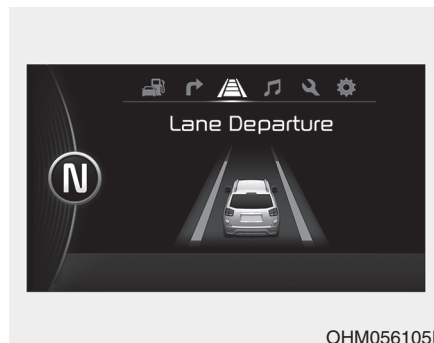
(Continued)

### **(Continued)**

- Do not let water or any kind of liquid come in contact with the LDWS sensor.
- Do not remove the LDWS parts and do not affect the sensor by a strong impact.
- Do not put objects that reflect light on the dash board.
- Always check road conditions because you may not hear the warning chime because of audio and external conditions.

To operate the LDWS, press the switch with the ignition in the ON position. The indicator illuminates white on the cluster.

To cancel the LDWS, press LDWS button again. The indicator on the cluster will go off.



OHM056105L

If you select this symbol, the LDWS mode on the LCD display will appear.

If your vehicle leaves the lane when the LDWS is operating and vehicle speed exceeds around 60km/h, the warning operates as follows:



OHM056107L



OHM056106L

## 1. Visual warning

If you leave a lane, the lane you cross will blink (yellow) and LDWS indicator will blink green on LCD during max 3 seconds.

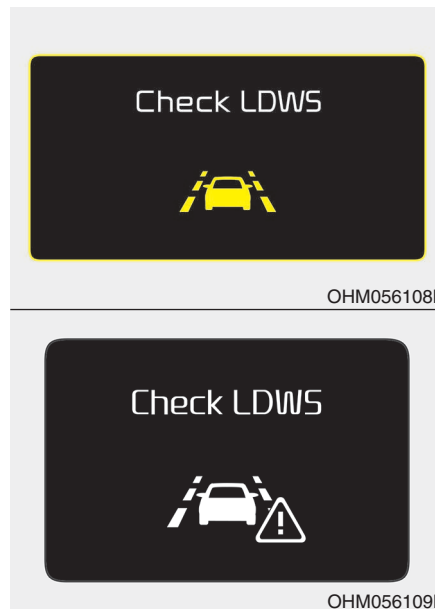
### 2. Auditory warning

If you leave the lane, the warning sound operates for maximum 3 seconds.

The color of symbol will change depend on the condition of LDWS system.

- White color : When you activate the lane departure warning system by pressing the LDWS button, system operating conditions are not satisfied or the sensor does not detect the lane line
- Green color : When you activate the lane departure warning system by pressing the LDWS button, system operating conditions are satisfied and the sensor detect the lane line
- Yellow color : when there is a malfunction with the lane departure warning system.

### Warning indicator



We recommend that the system be checked by an authorized Kia dealer.

When the LDWS is not working properly, the warning light will illuminate and the warning message will come on for a few second. After the message disappears, the master warning light will illuminate.

**The LDWS does not operate when:**

- The driver turns on the turn signal or the hazard warning flasher to change lane.
- Driving on the lane line.

**\* NOTICE**

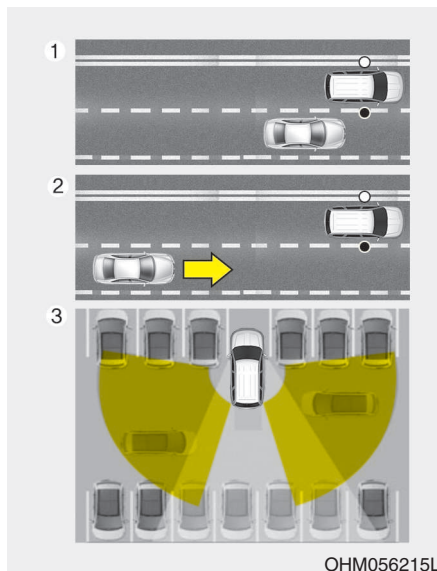
To change lanes, operate the turn signal switch, then change the lane.

**The LDWS may not warn you even if the vehicle leaves the lane, or may warn you even if the vehicle does not leave the lane when:**

- The lane is not visible due to snow, rain, stain, a puddle or many other things.
- The brightness of the outside changes suddenly.
- The headlights are off at night or in a tunnel.
- The color of the lane marking from the road is difficult to distinguish.
- Driving on a steep grade or a curve.
- Light reflects from the water on the road.
- The lens or windshield is stained with foreign matter.
- The sensor can not detect the lane because of fog, heavy rain or heavy snow.
- The surrounding temperature of the inside rear view mirror is high due to a direct ray of light.

- The lane is very wide or narrow.
- The lane line is damaged or indistinct.
- The shadow is on the lane line by a median strip.
- There is a mark similar to a lane line.
- There is a boundary structure.
- The distance from vehicle ahead is very short or the vehicle ahead hides the lane line.
- The vehicle shakes heavily.
- The lane number increases or decreases or the lane lines are crossing complicatedly.
- Putting something on the dashboard.
- Driving with the sun in front of you.
- Driving in areas under construction.
- The lane line is more than two in either side (Left/Right).
- The windshield is fogged by humid air in the vehicle.

## BLIND SPOT DETECTION SYSTEM (BSD) (IF EQUIPPED)



The BSD (Blind spot detection) system uses a radar sensor to alert the driver while driving.

It senses the rear side territory of the vehicle and provides information to the driver.

### ① BSD(Blind spot detection)

Warning range is dependent on your vehicle speed. However, if your vehicle speed is speedy about 10km/h than other vehicle, the warning is not operated.

### ② LCA(Lane change assist)

When the vehicle is approaching to your vehicle at high speed, the warning is operated.

### ③ RCTA(Rear cross traffic alert)

When your vehicle moves backward, the sensor detects the approaching vehicles to the left or right side direction and warning is operated.

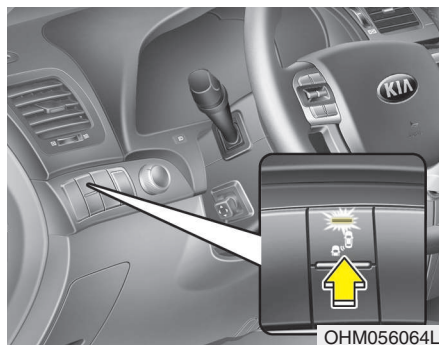
## **⚠ WARNING**

- Always check the road condition while driving for unexpected situations even though the BSD (Blind spot detection) system is operating.
- BSD (Blind spot detection) system is a system made for convenience. Do not solely rely on the system but always pay attention to drive safely.



## BSD (Blind Spot Detection) / LCA (Lane Change Assist)

### Operating conditions



The indicator on the switch will illuminate when the BSD (Blind spot detection) system switch is pressed with the ignition switch ON. If vehicle speed exceeds 30 km/h (18.6 mph), the system will activate.

If you press the switch again, the switch indicator and system will be turned off.

If the ignition switch is turned OFF and ON the system returns to the previous state.

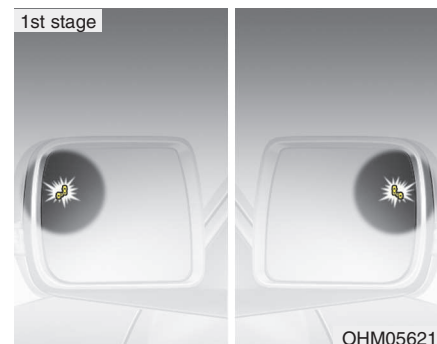
When the system is not used turn the system off by turning off the switch.

When the system is turned on the warning light will illuminate for 3 seconds on the outside rearview mirror.

### Warning type

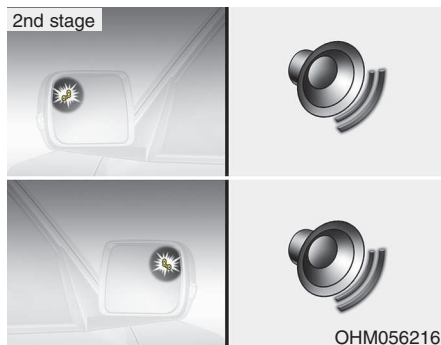
The system will activate when:

1. The system is on
2. Vehicle speed is above 30 km/h (18.6 mph)
3. Other vehicles are detected in the rear side



If a vehicle is detected within the boundary of the system, a warning light will illuminate on the outside rearview mirror.

If the detected vehicle is not in detecting range, the warning will be turned off by driving conditions.



The second stage alarm will activate when:

1. The first stage alert is on
2. The turn signal is on to change a lane

When the second stage alert is activated, a warning light will be blinking on the outside rearview mirror and a alarm will sound.

If you move the turn signal switch to origin position, the second stage alert will be deactivated.

- The second stage alarm may be deactivated.

- To activate the alarm:

Go to the User Settings Mode → Sound and select "BSD" on the LCD display.

- To deactivate the alarm:

Go to the User Settings Mode → Sound and deselect "BSD" on the LCD display.

### CAUTION

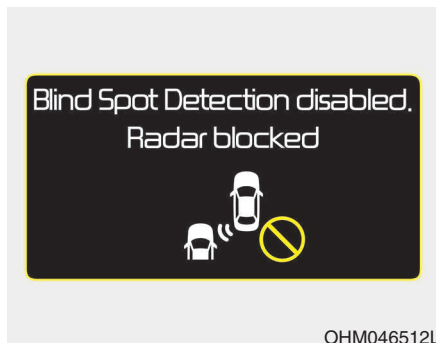
***The alarm function helps alert the driver. Deactivate this function only when it is necessary***

### ***Detecting sensor***



The sensors are located on inside of the rear bumper.

Always keep the rear bumper clean for the system to work properly.

**Warning message**

- This warning message may appear when :
  - There are foreign substances on the rear bumper or inside the rear bumper.
  - The vehicle carries a trailer or carrier on the rear.
  - Driving in rural areas with little traffic or open terrains such as wide expanse of desert.
  - There is heavy snow or rain.

To carry a trailer or carrier on the rear, turn off the BSD. To turn on the BSD, remove a trailer or carrier on the rear.

The light on the switch and the system will turn off automatically.

When the message is displayed due to a foreign substance, remove the foreign substance on the rear bumper. After the foreign substance is removed, if you drive for approximately 10 minutes, the system will work normally.

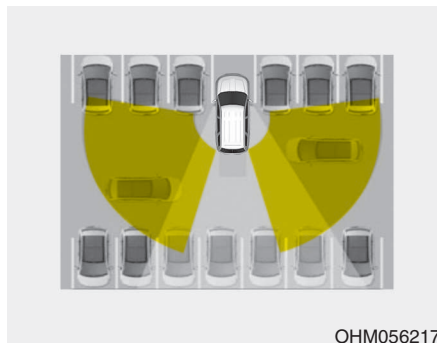
If the system does not operate normally after removing the substance or is not in a situation mentioned above, we recommend that you take your vehicle to an authorized Kia dealer and have the system checked.



If the system does not work properly, a warning message will appear and the light on the switch will turn off. The system will turn off automatically.

We recommend have the system checked by an authorized Kia dealer.

### RCTA (Rear cross traffic alert)

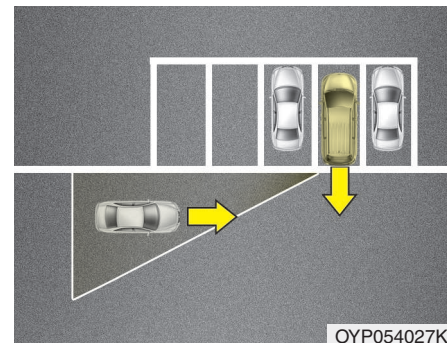


When your vehicle moves backwards from a parking position, the sensor detects approaching vehicles to the left or right side direction and gives information driver.

### Operating conditions

- Select RCTA (Rear Cross Traffic Alert) in "User Settings" under "Driving Assist" on the instrument cluster. The system will turn on and standby to activate.
- Select RCTA again, to turn the system off.
- If the vehicle is turned off and on again, the RCTA system will return to the state right before the vehicle was turned off. Always turn the RCTA system off when not in use.
- The system is operated when the vehicle speed is below 10km/h with the shift lever in R (Reverse).
- The RCTA (Rear Cross Traffic Alert) detecting range is 0.5m~20m based on side direction. If the approaching vehicle speed is 4 km/h~36 km/h in sensing range, it is detected. However, the system sensing range is different base on conditions. Always pay attention to surrounding.

### Warning type



- If the vehicle detected by sensors approaches your vehicle, the warning is chime and the warning light will blink on the outside rearview mirror.
- If the detected vehicle is got out from sensing range, behind your vehicle, moving opposite direction away from your vehicle or moving slow, the warning is cancelled.
- The system operating is not working properly due to other factors or circumstances, always pay attention to your surrounding.

- \* If your vehicle's left or right side bumper is blinded by barrier or vehicles, the system sensing ability may be deteriorated.

### **WARNING**

- The warning light on the outside rearview mirror will illuminate whenever a vehicle is detected at the rear side by the system.

To avoid accidents, do not focus only on the warning light and neglect to see the surrounding of the vehicle.

- Drive safely even though the vehicle is equipped with a BSD (Blind spot detection) system. Do not solely rely on the system but check for yourself before changing lanes.

The system may not alert the driver in some conditions so always check the surroundings while driving.

### **CAUTION**

- *The system may not work properly if the bumper has been replaced or if a repair work has been done near the sensor.*
- *The detection area differs according to the roads width. If the road is narrow the system may detect other vehicles in the next lane.*
- *On the contrary, if the road is very wide the system may not detect other vehicles.*
- *The system may turn off due to strong electromagnetic waves.*

### Non-operating condition

#### *Driver's Attention*

The driver must be cautious in the below situations for the system may not assist the driver and may not work properly.

- Curved roads, tollgates, etc.
- The surrounding of the sensor is polluted with rain, snow, mud, etc
- The rear bumper near the sensor is covered or hidden with a foreign matter such as a sticker, bumper guard, bicycle stand etc.
- The rear bumper is damaged or the sensor is out of place.
- The height of the vehicle shows much change such as when the trunk is loaded with heavy objects, abnormal tire pressure etc.
- Due to bad weather such as heavy rain or snow.
- A fixed object is near such as a guardrail, etc.
- A lot of amount of metal substances are near the vehicles such as a construction area.

- A big vehicle is near such as a bus or truck.
- A motorcycle or bicycle is near.
- A flat trailer like vehicle is near.
- If the vehicle has started at the same time as the vehicle next to it and has accelerated.
- When the other vehicle passes by very fast.
- When changing lanes.
- When going down or up a steep, uneven road.
- When the other vehicle drives at the rear very nearby or drives very close.
- When a trailer or carrier is installed.
- When the temperature of the rear bumper is very high or low.
- When the sensors are covered by the vehicle, wall and pillar of parking lot.
- When exiting rearward from a parking space with pillars or metal structures.

- When your vehicle moves back, if the detected vehicle also moves back.
- If there is small things like shopping cart and baby carriage.
- If there is low height vehicle like sport vehicle.
- When the vehicle is closing to your vehicle.
- When driving through a narrow road with many plants.
- When driving on wet surface.

#### ***Outside rearview mirror may not alert the driver when:***

- The outside rearview mirror housing is severely polluted.
- The window is severely polluted.
- The windows are severely tinted.
- When driving through a narrow road with many trees or bushes.

## ECONOMICAL OPERATION

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

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

- Drive smoothly. Accelerate at a moderate rate. Do not make "jack-rabbit" starts or full-throttle shifts and maintain a steady cruising speed. Do not race between stoplights. Try to adjust your speed to the traffic so you do not have to change speeds unnecessarily. Avoid heavy traffic whenever possible. Always maintain a safe distance from other vehicles so you can avoid unnecessary braking. This also reduces brake wear.
- Drive at a moderate speed. The faster you drive, the more fuel your vehicle uses. Driving at a moderate speed, especially on the highway, is one of the most effective ways to reduce fuel consumption.
- Do not "ride" the brake pedal. This can increase fuel consumption and also increase wear on these components. In addition, driving with your foot resting on the brake pedal may cause the brakes to overheat, which reduces their effectiveness and may lead to more serious consequences.
- Take care of your tires. Keep them inflated to the recommended pressure. Incorrect inflation, either too much or too little, results in unnecessary tire wear. Check the tire pressures at least once a month.
- Be sure that the wheels are aligned correctly. Improper alignment can result from hitting curbs or driving too fast over irregular surfaces. Poor alignment causes faster tire wear and may also result in other problems as well as greater fuel consumption.
- Keep your vehicle in good condition. For better fuel economy and reduced maintenance costs, maintain your vehicle in accordance with the maintenance schedule in chapter 8. If you drive your vehicle in severe conditions, more frequent maintenance is required (see chapter 8 for details).
- Keep your vehicle clean. For maximum service, your vehicle should be kept clean and free of corrosive materials. It is especially important that mud, dirt, ice, etc. not be allowed to accumulate on the underside of the vehicle. This extra weight can result in increased fuel consumption and also contribute to corrosion.
- Travel lightly. Do not carry unnecessary weight in your vehicle. Weight reduces fuel economy.
- Do not let the engine idle longer than necessary. If you are waiting (and not in traffic), turn off your engine and restart only when you're ready to go.

- Remember, your vehicle does not require extended warm-up. After the engine has started, allow the engine to run for 10 to 20 seconds prior to placing the vehicle in gear. In very cold weather, however, give your engine a slightly longer warm-up period.
- Do not "lug" or "over-rev" the engine. Lugging is driving too slowly in too high a gear resulting engine bucking. If this happens, shift to a lower gear. Over-revving is racing the engine beyond its safe limit. This can be avoided by shifting at the recommended speeds.
- Use your air conditioning sparingly. The air conditioning system is operated by engine power so your fuel economy is reduced when you use it.
- Open windows at high speeds can reduce fuel economy.
- Fuel economy is less in crosswinds and headwinds. 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, we recommend that the system be serviced by an authorized Kia dealer.

**⚠ WARNING - Engine off during 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 properly without the engine running. Instead, keep the engine on and downshift to an appropriate gear for engine braking effect. In addition, turning off the ignition while driving could engage the steering wheel lock (if equipped) resulting in loss of vehicle steering which could cause serious injury or death.**



## SPECIAL DRIVING CONDITIONS

### Hazardous driving conditions

When hazardous driving conditions are encountered such as water, snow, ice, mud, sand, or similar hazards, follow these suggestions:

- Drive cautiously and allow extra distance for braking.
- Avoid sudden braking or steering.
- When braking with non-ABS brakes pump the brake pedal with a light up-and-down motion until the vehicle is stopped.

#### **WARNING - ABS**

**Do not pump the brake pedal on a vehicle equipped with ABS.**

- If stalled in snow, mud, or sand, use second gear. Accelerate slowly to avoid spinning the drive wheels.
- Use sand, rock salt, tire chains, or other non-slip material under the drive wheels to provide traction when stalled in ice, snow, or mud.

 **WARNING - Downshifting**  
**Downshifting with an automatic transaxle, while driving on slippery surfaces can cause an accident. The sudden change in tire speed could cause the tires 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, first turn the steering wheel right and left to clear the area around your front wheels. Then, shift back and forth between R (Reverse) and any forward gear in vehicles equipped with an automatic transaxle. Do not race the engine, and spin the wheels as little as possible. If you are still stuck after a few tries, have the vehicle pulled out by a tow vehicle to avoid engine overheating and possible damage to the transaxle.

#### **CAUTION**

***Prolonged rocking may cause engine over-heating, transaxle damage or failure, and tire damage.***

### **⚠ WARNING - Spinning tires**

Do not spin the wheels, especially at speeds more than 56 km/h (35 mph). Spinning the wheels at high speeds when the vehicle is stationary could cause a tire to overheat which could result in tire damage that may injure bystanders.

### **\* NOTICE**

The ESC system should be turned OFF prior to rocking the vehicle.

### **⚠ WARNING**

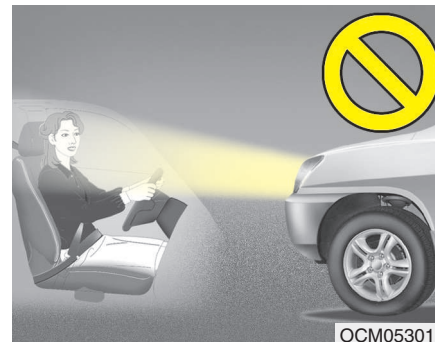
If your vehicle becomes stuck in snow, mud, sand, etc., then you may attempt to rock the vehicle free by moving it forward and backward. Do not attempt this procedure if people or objects are anywhere near the vehicle. During the rocking operation the vehicle may suddenly move forward or backward as it becomes unstuck, causing injury or damage to nearby people or objects.

## Smooth cornering



Avoid braking or gear changing in corners, especially when roads are wet. Ideally, corners should always be taken under gentle acceleration. If you follow these suggestions, tire wear will be held to a minimum.

## Driving at night



Because night driving presents 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 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 on vehicles not equipped with the automatic headlight aiming feature. Dirty or improperly aimed 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:

- A heavy rainfall will make it harder to see and will increase the distance needed to stop your vehicle, so slow down.
- Keep your windshield wiping equipment in good shape. Replace your windshield wiper blades when they show signs of streaking or missing areas on the windshield.
- If your tires are not in good condition, making a quick stop on wet pavement can cause a skid and possibly lead to an accident. Be sure your tires 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 in flooded areas

Avoid driving through flooded areas unless you are sure the water is no higher than the bottom of the wheel hub. Drive through any water slowly. Allow adequate stopping distance because brake performance may be affected.

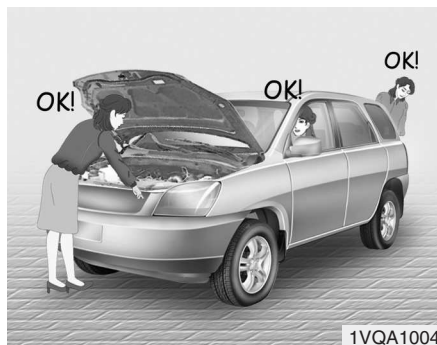
After driving through water, dry the brakes by gently applying them several times while the vehicle is moving slowly.

### Driving off-road

Drive carefully off-road because your vehicle may be damaged by rocks or roots of trees. Become familiar with the off-road conditions where you are going to drive before you begin driving.

### Highway driving

#### Tires



Adjust the tire inflation pressures to specification. Low tire inflation pressures will result in overheating and possible failure of the tires.

Avoid using worn or damaged tires which may result in reduced traction or tire failure.

#### \* NOTICE

Never exceed the maximum tire inflation pressure shown on the tires.

#### **⚠ WARNING**

- Underinflated or overinflated tires can cause poor handling, loss of vehicle control, and sudden tire failure leading to accidents, injuries, and even death. Always check the tires for proper inflation before driving. For proper tire pressures, refer to chapter 9, "Tires and wheels".
- Driving on tires with no or insufficient tread is dangerous. Worn-out tires can result in loss of vehicle control, collisions, injury, and even death. Worn-out tires should be replaced as soon as possible and should never be used for driving. Always check the tire tread before driving your vehicle. For further information and tread limits, refer to chapter 8, "Tires and wheels".

#### ***Fuel, engine coolant and engine oil***

High speed travel consumes more fuel than urban motoring. Do not forget to check both engine coolant and engine oil.

#### ***Drive belt***

A loose or damaged drive belt may result in overheating of the engine.

## WINTER DRIVING

Severe weather conditions in the winter result in greater wear and other problems. To minimize the problems of winter driving, you should follow these suggestions:

### Snowy or icy conditions

To drive your vehicle in deep snow, it may be necessary to use snow tires or to install tire chains on your tires. If snow tires are needed, it is necessary to select tires equivalent in size and type of the original equipment tires. Failure to do so may adversely affect the safety and handling of your vehicle. Furthermore, speeding, rapid acceleration, sudden brake applications, and sharp turns are potentially very hazardous practices.

During deceleration, use engine braking to the fullest extent. Sudden brake applications on snowy or icy roads may cause skids to occur. You need to keep sufficient distance between the vehicle in operation in front and your vehicle. Also, apply the brake gently. It should be noted that installing tire chains on the tire will provide a greater driving force, but will not prevent side skids.

### \* NOTICE

**Tire chains are not legal in all countries. Check the country laws before fitting tire chains.**

### Snow tires

If you mount snow tires on your vehicle, make sure they are radial tires of the same size and load range as the original tires. Mount snow tires on all four wheels to balance your vehicle's handling in all weather conditions. Keep in mind that the traction provided by snow tires on dry roads may not be as high as your vehicle's original equipment tires. You should drive cautiously even when the roads are clear. Check with the tire dealer for maximum speed recommendations.

#### **WARNING - Snow tire size**

**Snow tires should be equivalent in size and type to the vehicle's standard tires. Otherwise, the safety and handling of your vehicle may be adversely affected.**

*Do not install studded tires without first checking local, state and municipal regulations for possible restrictions against their use.*

### Tire chains



Since the sidewalls of radial tires are thinner, they can be damaged by mounting some types of snow chains on them. Therefore, the use of snow tires is recommended instead of snow chains. Do not mount tire chains on vehicles equipped with aluminum wheels; snow chains may cause damage to the wheels. If snow chains must be used, use wire-type chains with a thickness of less than 15 mm (0.59 in). Damage to your vehicle caused by improper snow chain use is not covered by your vehicle manufacturers warranty.

When using tire chains, install them on the rear tires only.

### CAUTION

- ***Make sure the snow chains are the correct size and type for your tires. Incorrect snow chains can cause damage to the vehicle body and suspension and may not be covered by your vehicle manufacturer warranty. Also, the snow chain connecting hooks may be damaged from contacting vehicle components causing the snow chains to come loose from the tire. Make sure the snow chains are SAE class "S" certified.***
- ***Always check chain installation for proper mounting after driving approximately 0.5 to 1 km (0.3 to 0.6 miles) to ensure safe mounting. Retighten or remount the chains if they are loose.***

**Chain installation**

When installing chains, follow the manufacturer's instructions and mount them as tightly as you can. Drive slowly with chains installed. If you hear the chains contacting the body or chassis, stop and tighten them. If they still make contact, slow down until it stops. Remove the chains as soon as you begin driving on cleared roads.

 **WARNING - Mounting chains**

When mounting snow chains, park the vehicle on level ground away from traffic. Turn on the vehicle Hazard Warning flashers and place a triangular emergency warning device behind the vehicle if available. Always place the vehicle in P (Park), apply the parking brake and turn off the engine before installing snow chains.

 **WARNING - Tire chains**

- The use of chains may adversely affect vehicle handling.
- Do not exceed 30 km/h (20 mph) or the chain manufacturer's recommended speed limit, whichever is lower.
- Drive carefully and avoid bumps, holes, sharp turns, and other road hazards, which may cause the vehicle to bounce.
- Avoid sharp turns or locked-wheel braking.

 **CAUTION**

- *Chains that are the wrong size or improperly installed can damage your vehicle's brake lines, suspension, body and wheels.*
- *Stop driving and retighten the chains any time you hear them hitting the vehicle.*

### **Use high quality ethylene glycol coolant**

Your vehicle is delivered with high quality ethylene glycol coolant in the cooling system. It is the only type of coolant that should be used because it helps prevent corrosion in the cooling system, lubricates the water pump and prevents freezing. Be sure to replace or replenish your coolant in accordance with the maintenance schedule in chapter 8. Before winter, have your coolant tested to assure that its freezing point is sufficient for the temperatures anticipated during the winter.

### **Check battery and cables**

Winter puts additional burdens on the battery system. Visually inspect the battery and cables as described in chapter 8. We recommend that the level of charge in your battery be checked by an authorized Kia dealer.

### **Change to "winter weight" oil if necessary**

In some climates it is recommended that a lower viscosity "winter weight" oil be used during cold weather. See chapter 9 for recommendations. If you aren't sure what weight oil you should use, we recommend that you consult an authorized Kia dealer.

### **Check spark plugs and ignition system**

Inspect your spark plugs as described in chapter 8 and replace them if necessary. Also check all ignition wiring and components to be sure they are not cracked, worn or damaged in any way.

### **To keep locks from freezing**

To keep the locks from freezing, squirt an approved de-icer fluid or glycerine into the key opening. If a lock is covered with ice, squirt it with an approved de-icing fluid to remove the ice. If the lock is frozen internally, you may be able to thaw it out by using a heated key. Handle the heated key with care to avoid injury.

### **Use approved window washer anti-freeze in system**

To keep the water in the window washer system from freezing, add an approved window washer anti-freeze solution in accordance with instructions on the container. Window washer anti-freeze is available from an authorized Kia dealer and most auto parts outlets. Do not use engine coolant or other types of anti-freeze as these may damage the paint finish.



### **Don't let your parking brake freeze**

Under some conditions your parking brake can freeze in the engaged position. This is most likely to happen when there is an accumulation of snow or ice around or near the rear brakes or if the brakes are wet. If there is a risk the parking brake may freeze, apply it only temporarily while you put the shift lever in P (Park) and block the rear wheels so the vehicle cannot roll. Then release the parking brake.

### **Don't let ice and snow accumulate underneath**

Under some conditions, snow and ice can build up under the fenders and interfere with the steering. When driving in severe winter conditions where this may happen, you should periodically check underneath the vehicle to be sure the movement of the front wheels and the steering components is not obstructed.

### **Carry emergency equipment**

Depending on the severity of the weather, you should carry appropriate emergency equipment. Some of the items you may want to carry include tire chains, tow straps or chains, flashlight, emergency flares, sand, shovel, jumper cables, window scraper, gloves, ground cloth, coveralls, blanket, etc.

## VEHICLE WEIGHT

This section will guide you in the proper loading of your vehicle and/or trailer, to keep your loaded vehicle weight within its design rating capability, with or without a trailer. Properly loading your vehicle will provide maximum return of the vehicle design performance. Before loading your vehicle, familiarize yourself with the following terms for determining your vehicle's weight ratings, with or without a trailer, from the vehicle's specifications and the certification label:

### Base curb weight

This is the weight of the vehicle including a full tank of fuel and all standard equipment. It does not include passengers, cargo, or optional equipment.

### Vehicle curb weight

This is the weight of your new vehicle when you picked it up from your dealer plus any aftermarket equipment.

### Cargo weight

This figure includes all weight added to the Base Curb Weight, including cargo and optional equipment.

### GAW (Gross axle weight)

This is the total weight placed on each axle (front and rear) - including vehicle curb weight and all payload.

### GAWR

#### (Gross axle weight rating)

This is the maximum allowable weight that can be carried by a single axle (front or rear). These numbers are shown on the certification label.

The total load on each axle must never exceed its GAWR.

### GVW (Gross vehicle weight)

This is the Base Curb Weight plus actual Cargo Weight plus passengers.

### GVWR

#### (Gross vehicle weight rating)

This is the maximum allowable weight of the fully loaded vehicle (including all options, equipment, passengers and cargo). The GVWR is shown on the certification label.

### Overloading

#### **WARNING - Vehicle weight**

**The gross axle weight rating (GAWR) and the gross vehicle weight rating (GVWR) for your vehicle are on the certification label attached to the driver's (or front 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 (and people) before putting them in the vehicle. Be careful not to overload your vehicle.**

# What to do in 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. The flasher switch is located in the center console switch panel. All turn signal lights will flash simultaneously.

- The hazard warning flasher operates whether your vehicle is running or not.
- The turn signals do not work when the hazard flasher is on.
- Care must be taken when using the hazard warning flasher while the vehicle is being towed.

## IN CASE OF AN EMERGENCY WHILE DRIVING

### If the engine stalls at a cross-road or crossing

If the engine stalls at a crossroad or crossing, set the shift lever in the N (Neutral) position and then push the vehicle to a safe place.

### If you have a flat tire while driving

If a tire goes flat while you are driving:

1. Take your foot off the accelerator pedal and let the vehicle slow down while driving straight ahead. Do not apply the brakes immediately or attempt to pull off the road as this may cause a loss of control. When the vehicle has slowed down to such a speed that it is safe to do so, brake carefully and pull off the road. Drive off the road as far as possible and park on a firm level ground. If you are on a divided highway, do not park in the median area between the two traffic lanes.
2. When the vehicle is stopped, turn on your emergency hazard flashers, set the parking brake and put the transaxle in P (Park).
3. Have all passengers get out of the vehicle. Be sure they all get out on the side of the vehicle that is away from traffic.
4. When changing a flat tire, follow the instruction provided later in this section.

### If engine stalls while driving

1. Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place.
2. Turn on your emergency flashers.
3. Try to start the engine again. If your vehicle does not start, we recommend that you consult an authorized Kia dealer.

## IF THE ENGINE WILL NOT START

### If engine doesn't turn over or turns over slowly

1. If your vehicle has an automatic transaxle, be sure the shift lever is in N (Neutral) or P (Park) and the emergency brake is set.
2. Check the battery connections to be sure they are clean and tight.
3. Turn on the interior light. If the light dims or goes out when you operate the starter, the battery is discharged.
4. Check the starter connections to be sure they are securely tightened.
5. Do not push or pull the vehicle to start it. See instructions for "Jump starting".

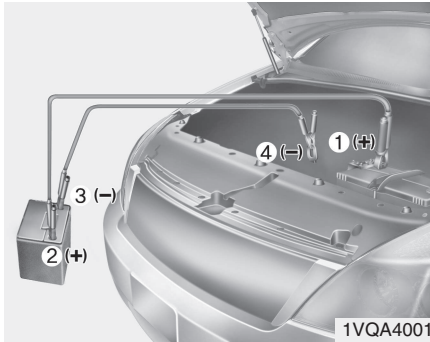
### WARNING

**If the engine will not start, do not push or pull the vehicle to start it. This could result in a collision or cause other damage. In addition, push or pull starting may cause the catalytic converter to be overloaded and create a fire hazard.**

### If engine turns over normally but does not start

1. Check the fuel level.
2. With the ignition switch in the LOCK position, check all connectors at the ignition coils and spark plugs. Reconnect any that may be disconnected or loose.
3. Check the fuel line in the engine compartment.
4. If the engine still does not start, we recommend that you call an authorized Kia dealer.

## EMERGENCY STARTING



Connect cables in numerical order and disconnect in reverse order.

### 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. If in doubt, we strongly recommend that you have a competent technician or towing service jump start your vehicle.



### CAUTION

*Use only a 12-volt jumper system. You can damage a 12-volt starting motor, ignition system, and other electrical parts beyond repair by use of a 24-volt power supply (either two 12-volt batteries in series or a 24-volt motor generator set).*



### WARNING - Battery

**Never attempt to check the electrolyte level of the battery as this may cause the battery to rupture or explode causing serious injury.**

**⚠ 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.

If these instructions are not followed exactly, serious personal injury and damage to the vehicle may occur! If you are not sure how to follow this procedure, seek qualified assistance. Automobile batteries contain sulfuric acid. This is poisonous and highly corrosive. When jump starting, wear protective glasses and be careful not to get acid on yourself, your clothing or on the vehicle.

- Do not attempt to jump start the vehicle if the discharged battery is frozen or if the electrolyte level is low; the battery may rupture or explode.

(Continued)

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- Do not allow the (+) and (-) jumper cables to touch. It may cause sparks.
- The battery may rupture or explode when you jump start with a low or frozen battery.

***Jump starting procedure***

1. Make sure the booster battery is 12-volt and that its negative terminal is grounded.
2. If the booster battery is in another vehicle, do not allow the vehicles come in contact.
3. Turn off all unnecessary electrical loads.
4. Connect the jumper cables in the exact sequence shown in the illustration. First connect one end of a jumper cable to the positive terminal of the discharged battery (1), then connect the other end to the positive terminal on the booster battery (2).

Proceed to 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) away from the battery (4). Do not connect it to or near any part that moves when the engine is cranked.



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.

 **CAUTION - Battery cables**

*Do not connect the jumper cable from the negative terminal of the booster battery to the negative terminal of the discharged battery.*

*This can cause the discharged battery to overheat and crack, releasing battery acid.*

*Make sure to connect one end of the jumper cable to the negative terminal of the booster battery, and the other end to a metallic point, far away from the battery.*

5. Start the engine of the vehicle with the booster battery and let it run 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, we recommend that the system be checked by an authorized Kia dealer.*

## **Push-starting**

Vehicles equipped with automatic transaxle cannot be push-started.

Follow the directions in this section for jump-starting.

 **WARNING**

**Never tow a vehicle to start it because the sudden surge forward when the engine starts could cause a collision with the tow vehicle.**

### IF THE ENGINE OVERHEATS

If your temperature gauge indicates overheating, you will experience a loss of power, or hear loud pinging or knocking, the engine is probably too hot. If this happens, you should:

1. Pull off the road and stop as soon as it is safe to do so.
2. Place the shift lever in P (Park) and set the parking brake. If the air conditioning is on, turn it off.
3. If engine coolant is running out under the vehicle or steam is coming out from the hood, stop the engine. Do not open the hood until the coolant has stopped running or the steaming has stopped. If there is no visible loss of engine coolant and no steam, leave the engine running and check to be sure the engine cooling fan is operating. If the fan is not running, turn the engine off.
4. Check to see if the water pump drive belt is missing. If it is not missing, check to see that it is tight.

If the drive belt seems to be satisfactory, check for coolant leaking from the radiator, hoses or under the vehicle. (If the air conditioning had been in use, it is normal for cold water to be draining from it when you stop).

#### **WARNING**

**While the engine is running, keep hair, hands and clothing away from moving parts such as the fan and drive belts to prevent injury.**

5. If the water pump drive belt is broken or engine coolant is leaking out, stop the engine immediately and we recommend that you call an authorized Kia dealer.

#### **WARNING**

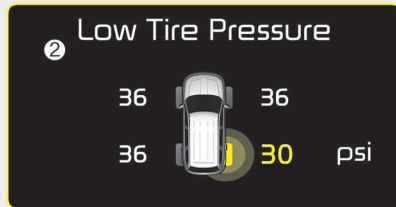
**Do not remove the radiator cap when the engine is hot. This can allow coolant to blow out of the opening and cause serious burns.**

6. If you cannot find the cause of the overheating, wait until the engine temperature has returned to normal. Then, if coolant has been lost, carefully add coolant to the reservoir to bring the fluid level in the reservoir up to the halfway mark.
7. Proceed with caution, keeping alert for further signs of overheating. If overheating happens again, we recommend that you call an authorized Kia dealer.

#### **CAUTION**

- ***Serious loss of coolant indicates there is a leak in the cooling system and we recommend that the system be checked by an authorized Kia dealer.***
- ***When the engine overheats from low engine coolant, suddenly adding engine coolant may cause cracks in the engine. To prevent damage, add engine coolant slowly in small quantities.***

## TIRE PRESSURE MONITORING SYSTEM (TPMS) (IF EQUIPPED)



- (1) Low tire pressure telltale / TPMS malfunction indicator
- (2) Low tire pressure position telltale (Shown on the LCD display)

### Check tire pressure



- You can check the tire pressure in the information mode on the cluster.
  - Refer to “User settings mode” in chapter 4.
- Tire pressure is displayed 1~2 minutes later after driving.
- If tire pressure is not displayed when the vehicle is stopped, “Drive to display” message displays. After driving, check the tire pressure.

- You can change the tire pressure unit in the user settings mode on the cluster.
  - psi, kpa, bar (Refer to “User settings mode” in chapter 4).

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label.

(If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a tire pressure monitoring system (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale.

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale. When the system detects a malfunction, the telltale will flash for approximately 1 minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists. When the TPMS malfunction indicator remains illuminated after blinking for approximately 1 minute, the system may not be able to detect or signal low tire pressure as intended.

TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly. Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.

**\* NOTICE**

If any of the below happens, we recommend that the system be checked by an authorized Kia dealer.

1. The low tire pressure telltale/TPMS malfunction indicator do not illuminate for 3 seconds when the ignition switch is turned to the ON position or engine is running.
2. The TPMS malfunction indicator remains illuminated after blinking for approximately 1 minute.
3. The Low tire pressure position telltale remains illuminated.

**Low tire pressure telltale****Low tire pressure position telltale**

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When the tire pressure monitoring system warning indicators are illuminated and warning message displayed on the cluster LCD display, one or more of your tires is significantly under-inflated. The low tire pressure position telltale light will indicate which tire is significantly under-inflated by illuminating the corresponding position light.

If either telltale illuminates, immediately reduce your speed, avoid hard cornering and anticipate increased stopping distances. You should stop and check your tires as soon as possible. Inflate the tires to the proper pressure as indicated on the vehicle's placard or tire inflation pressure label located on the driver's side center pillar outer panel. If you cannot reach a service station or if the tire cannot hold the newly added air, replace the low pressure tire with a spare tire.

If you drive the vehicle for about 10 minutes at speeds above 25 km/h after replacing the low pressure tire with the spare tire, one of the following will happen:

- The TPMS malfunction indicator may blink for approximately 1 minute and then remain continuously illuminated because the TPMS sensor is not mounted on the spare wheel. (changed tire equipped with a sensor not in the vehicle)

- The TPMS malfunction indicator will remain continuously illuminated while driving because the TPMS sensor is not mounted on the spare wheel. (changed tire equipped with a sensor in the vehicle)

### CAUTION

*In winter or cold weather, the low tire pressure telltale may illuminate if the tire pressure was adjusted to the recommended tire inflation pressure in warm weather. It does not mean your TPMS is malfunctioning because the decreased temperature leads to a lowering of tire pressure.*

*When you drive your vehicle from a warm area to a cold area or from a cold area to a warm area, or the outside temperature is higher or lower, you should check the tire inflation pressure and adjust the tires to the recommended tire inflation pressure.*

### WARNING - Low pressure damage

**Significantly low tire pressure makes the vehicle unstable and can contribute to loss of vehicle control and increased braking distances.**

**Continued driving on low pressure tires can cause the tires to overheat and fail.**



### **TPMS (Tire Pressure Monitoring System) malfunction indicator**

The TPMS malfunction indicator will illuminate after it blinks for approximately one minute when there is a problem with the Tire Pressure Monitoring System.

We recommend that the system be checked by an authorized Kia dealer to determine the cause of the problem.

### **\* NOTICE**

If there is a malfunction with the TPMS, the low tire pressure position telltale will not be displayed even though the vehicle has an under-inflated tire.

 **CAUTION**

- *The TPMS malfunction indicator may blink for approximately 1 minute and then remain continuously illuminated if the vehicle is moving around electric power supply cables or radios transmitter such as at police stations, government and public offices, broadcasting stations, military installations, airports, or transmitting towers, etc. This can interfere with normal operation of the Tire Pressure Monitoring System (TPMS).*
- *The TPMS malfunction indicator may blink for approximately 1 minute and then remain continuously illuminated if snow chains are used or some separate electronic devices such as notebook computer, mobile charger, remote starter or navigation etc., are used in the vehicle.*

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*This can interfere with normal operation of the Tire Pressure Monitoring System (TPMS).*

**Changing a tire with TPMS**

If you have a flat tire, the low Tire Pressure and Position telltales will come on. We recommend that the system be checked by an authorized Kia dealer.

 **CAUTION**

*We recommend that you use the sealant approved by Kia.*

*The sealant on the tire pressure sensor and wheel shall be eliminated when you replace the tire with a new one.*

Each wheel is equipped with a tire pressure sensor mounted inside the tire behind the valve stem. You must use TPMS specific wheels. It is recommended that you have your tires serviced by an authorized Kia dealer.

If you drive the vehicle for about 10 minutes at speeds above 25 km/h after replacing the low pressure tire with the spare tire, one of the following will happen:

- The TPMS malfunction indicator may blink for approximately 1 minute and then remain continuously illuminated because the TPMS sensor is not mounted on the spare wheel. (changed tire equipped with a sensor not in the vehicle)
- The TPMS malfunction indicator will remain continuously illuminated while driving because the TPMS sensor is not mounted on the spare wheel. (changed tire equipped with a sensor in the vehicle)

You may not be able identify a low tire by simply looking at it. Always use a good quality tire pressure gauge to measure the tire's inflation pressure. Please note that a tire that is hot (from being driven) will have a higher pressure measurement than a tire that is cold (from sitting stationary for at least 3 hours and driven less than 1 mile (1.6 km) during that 3 hour period).

Allow the tire to cool before measuring the inflation pressure. Always be sure the tire is cold before inflating to the recommended pressure.

A cold tire means the vehicle has been sitting for 3 hours and driven for less than 1 mile (1.6 km) in that 3 hour period.

### CAUTION

***We recommend that you use the sealant approved by Kia if your vehicle is equipped with a Tire Pressure Monitoring System. The liquid sealant can damage the tire pressure sensors.***

### WARNING - TPMS

- **The TPMS cannot alert you to severe and sudden tire damage caused by external factors such as nails or road debris.**
- **If you feel any vehicle instability, immediately take your foot off the accelerator, apply the brakes gradually and with light force, and slowly move to a safe position off the road.**



**⚠ WARNING - Protecting TPMS**

Tampering with, modifying, or disabling the Tire Pressure Monitoring System (TPMS) components may interfere with the system's ability to warn the driver of low tire pressure conditions and/or TPMS malfunctions. Tampering with, modifying, or disabling the Tire Pressure Monitoring System (TPMS) components may void the warranty for that portion of the vehicle.

**⚠ WARNING - For EUROPE**

- Do not modify the vehicle, it may interfere with the TPMS function.
- The wheels on the market do not have a TPMS sensor.

For your safety, we recommend that you use parts for replacement from an authorized Kia dealer.

- If you use the wheels on the market, use a TPMS sensor approved by a Kia dealer.

If your vehicle is not equipped with a TPMS sensor or TPMS does not work properly, you may fail the periodic vehicle inspection conducted in your country.

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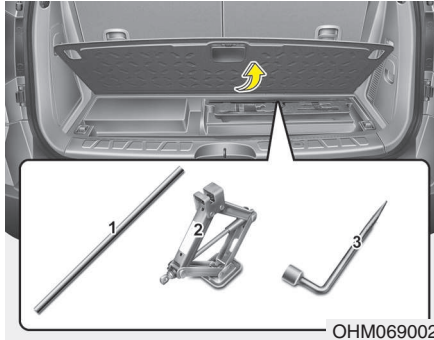
\* All vehicles sold in the EUROPE market during below period must be equipped with TPMS.

- New model vehicle :  
Nov. 1, 2012 ~

- Current model vehicle :  
Nov. 1, 2014~ (Based on vehicle registrations)

## IF YOU HAVE A FLAT TIRE (WITH SPARE TIRE)

### Jack and tools



The jack, jack handle, wheel lug nut wrench are stored in the luggage compartment.

Pull up the luggage box cover to reach this equipment.

- (1) Jack handle
- (2) Jack
- (3) Wheel lug nut wrench

### Jacking instructions

The jack is provided for emergency tire changing only.

To prevent the jack from “rattling” while the vehicle is in motion, store it properly.

Follow jacking instructions to reduce the possibility of personal injury.

### **⚠ WARNING - Changing tires**

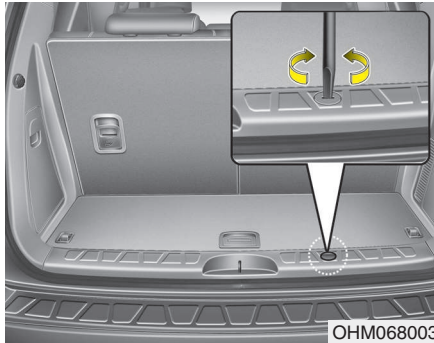
- **Never attempt vehicle repairs in the traffic lanes of a public road or highway.**
- **Always move the vehicle completely off the road and onto the shoulder before trying to change a tire. The jack should be used on firm level ground. If you cannot find a firm level place off the road, call a towing service company for assistance.**

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- **Be sure to use the correct front and rear jacking positions on the vehicle; never use the bumpers or any other part of the vehicle for jacking support.**
- **The vehicle can roll off the jack causing serious injury or death.**
- **Do not get under a vehicle that is supported by a jack.**
- **Do not start or run the engine while the vehicle is on the jack.**
- **Do not allow anyone remain in the vehicle while it is on the jack.**
- **Make sure any children present are in a secure place away from the road and from the vehicle to be raised with the jack.**

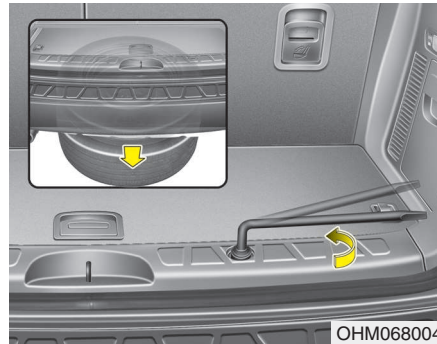
## Removing and storing the spare tire



Your spare tire is stored underneath your vehicle, directly below the cargo area.

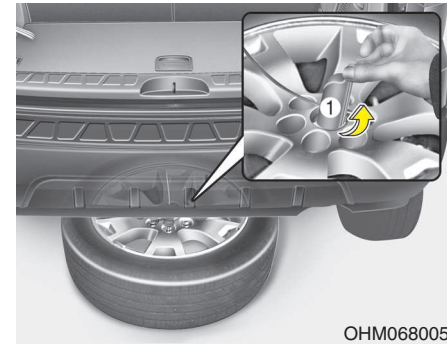
To remove the spare tire:

1. Open the tailgate.
2. Find the plastic hex bolt cover and remove the cover.

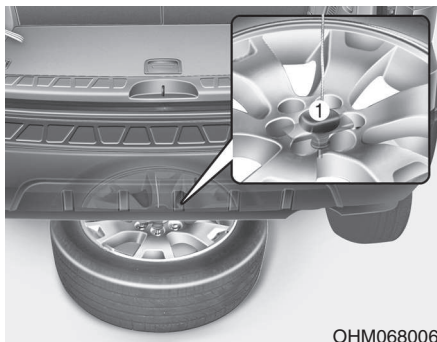


3. Use the wheel lug nut wrench to loosen the bolt enough to lower the spare tire.

Turn the wrench counterclockwise until the spare tire reaches the ground.



4. After the spare tire reaches the ground, continue to turn the wrench counterclockwise, and draw the spare tire outside. Never rotate the wrench excessively, otherwise the spare tire carrier may be damaged.
5. Remove the retainer (1) from the center of the spare tire.



To store the spare tire:

1. Lay the tire on the ground with the valve stem facing up.
2. Place the wheel under the vehicle and install the retainer (1) through the wheel center.
3. Turn the wrench clockwise until it clicks.

### **⚠ WARNING**

Ensure the spare tire retainer is properly aligned with the center of the spare tire to prevent the spare tire from “rattling”.

Otherwise, it may cause the spare tire to fall off the carrier and lead to an accident.

## Changing tires



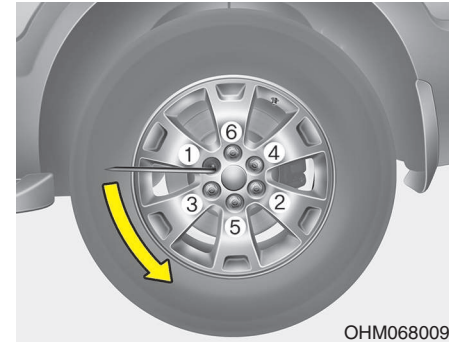
1. Park on a level surface and apply the parking brake firmly.
2. Shift the shift lever into P (Park).
3. Activate the hazard warning flasher.



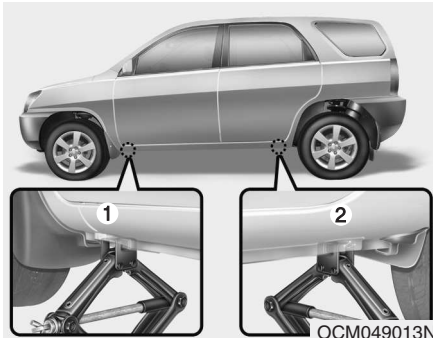
4. Remove the wheel lug nut wrench, jack, jack handle, and spare tire from the vehicle.
5. Block both the front and rear of wheel that is diagonally opposite the jack position.

**⚠ WARNING - Changing a tire**

- To prevent vehicle movement while changing a tire, always set the parking brake fully, and always block the wheel diagonally opposite the wheel being changed.
- We recommend that the wheels of the vehicle be chocked, and that no person remain in a vehicle that is being jacked.



6. Loosen the wheel lug nuts counterclockwise one turn each, but do not remove any nut until the tire has been raised off the ground.



7. Place the jack at the front(1) or rear(2) jacking position closest to the tire you are changing. Place the jack at the designated locations under the frame. The jacking positions are plates welded to the frame with two tabs and a raised dot to index with the jack.

### **⚠ 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.



8. Insert the jack handle into the jack and turn it clockwise, raising the vehicle until the tire just clears the ground. This measurement is approximately 30 mm (1.2 in). Before removing the wheel lug nuts, make sure the vehicle is stable and that there is no chance for movement or slippage.

9. Loosen the wheel nuts and remove them with your fingers. Slide the wheel off the studs and lay it flat so it cannot roll away. To put the wheel on the hub, pick up the spare tire, line up the holes with the studs and slide the wheel onto them.

If this is difficult, tip the wheel slightly and get the top hole in the wheel lined up with the top stud. Then jiggle the wheel back and forth until the wheel can be slid over the other studs.

**⚠ WARNING**

**Wheels may have sharp edges. Handle them carefully to avoid possible severe injury. Before putting the wheel into place, be sure that there is nothing on the hub or wheel (such as mud, tar, gravel, etc.) that interferes with the wheel from fitting solidly against the hub.**

**If there is, remove it. If there is not good contact on the mounting surface between the wheel and hub, the wheel nuts could come loose and cause the loss of a wheel. Loss of a wheel may result in loss of control of the vehicle. This may cause serious injury or death.**

10. To reinstall the wheel, hold it on the studs, put the wheel nuts on the studs and tighten them finger tight. Jiggle the tire to be sure it is completely seated, then tighten the nuts as much as possible with your fingers again.
11. Lower the vehicle to the ground by turning the wheel nut wrench counterclockwise.



Then position the wrench as shown in the drawing and tighten the wheel nuts. Be sure the socket is seated completely over the nut. Do not stand on the wrench handle or use an extension pipe over the wrench handle. Go around the wheel tightening every other nut until they are all tight. Then double-check each nut for tightness. After changing wheels, we recommend that the system be checked by an authorized Kia dealer.

### Wheel nut tightening torque:

Steel wheel & aluminum alloy wheel:  
9~11 kgf·m (65~79 lbf·ft)

If you have a tire gauge, remove the valve cap and check the air pressure. If the pressure is lower than recommended, drive slowly to the nearest service station and inflate to the correct pressure. If it is too high, adjust it until it is correct. Always reinstall the valve cap after checking or adjusting tire pressure. If the cap is not replaced, air may leak from the tire. If you lose a valve cap, buy another and install it as soon as possible.

After you have changed wheels, always secure the flat tire in its place and return the jack and tools to their proper storage locations.

### CAUTION

***Your vehicle has metric threads on the wheel studs and nuts. Make certain during wheel removal that the same nuts that were removed are reinstalled - or, if replaced, that nuts with metric threads and the same chamfer configuration are used. Installation of a non-metric thread nut on a metric stud or vice-versa will not secure the wheel to the hub properly and will damage the stud so that it must be replaced.***

***Note that most lug nuts do not have metric threads. Be sure to use extreme care in checking for thread style before installing aftermarket lug nuts or wheels. If in doubt, consult an authorized Kia dealer.***



**⚠ 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 resulting in serious injuries.

To prevent the jack, jack handle, wheel lug nut wrench and spare tire from rattling while the vehicle is in motion, store them properly.

**⚠ WARNING - Inadequate spare tire pressure**

Check the inflation pressures as soon as possible after installing the spare tire. Adjust it to the specified pressure, if necessary. Refer to "Tires and wheels" in chapter 9.

***Important - use of compact spare tire (if equipped)***

Your vehicle is equipped with a compact spare tire. This compact spare tire takes up less space than a regular-size tire. This tire is smaller than a conventional tire and is designed for temporary use only.

**⚠ CAUTION**

- *You should drive carefully when the compact spare is in use. The compact spare should be replaced by the proper conventional tire and rim at the first opportunity.*
- *The operation of this vehicle is not recommended with more than one compact spare tire in use at the same time.*

**⚠ WARNING**

The compact spare tire is for emergency use only. Do not operate your vehicle on this compact spare at the speed over 80 km/h (50 mph). The original tire should be repaired or replaced as soon as possible to avoid failure of the spare possibly leading to personal injury or death.

The compact spare should be inflated to 420 kPa (60 psi).

**\* NOTICE**

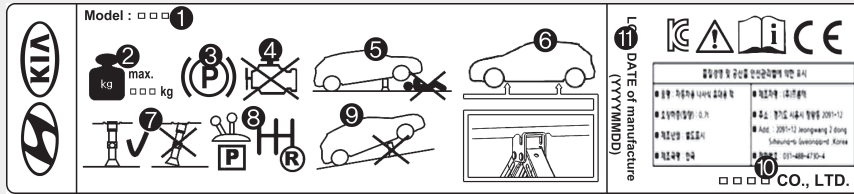
Check the inflation pressure after installing the spare tire. Adjust it to the specified pressure, as necessary.

When using a compact spare tire, observe the following precautions:

- Under no circumstances should you exceed 80 km/h (50 mph); a higher speed could damage the tire.
- Ensure that you drive slowly enough to avoid all hazards. Any road hazard, such as a pothole or debris, could seriously damage the compact spare.
- Any continuous road use of this tire could result in tire failure, loss of vehicle control, and possible personal injury.
- Do not exceed the vehicle's maximum load rating or the load-carrying capacity shown on the sidewall of the compact spare tire.
- Avoid driving over obstacles. The compact spare tire diameter is smaller than the diameter of a conventional tire and reduces the ground clearance approximately 2.5 cm (1 inch), which could result in damage to the vehicle.
- Do not take the vehicle through an automatic car wash while the compact spare tire is installed.
- Do not use tire chains on the temporary compact tire. Because of the smaller size, a tire chain will not fit properly. This could damage the vehicle and result in loss of the chain.
- Temporary compact tire should not be installed on the front axle if the vehicle must be driven in snow or on ice.
- Do not use the temporary compact tire on any other vehicle because this tire has been designed especially for your vehicle.
- The temporary compact tire tread life is shorter than a regular tire. Inspect your temporary compact tire regularly and replace worn compact spare tires with the same size and design, mounted on the same wheel.
- The temporary compact tire should not be used on any other wheels, nor should standard tires, snow tires, wheel covers or trim rings be used with the temporary compact spare wheel. If such use is attempted, damage to these items or other car components may occur.
- Do not use more than one temporary compact tire at a time.
- Do not tow a trailer while the temporary compact tire is installed.

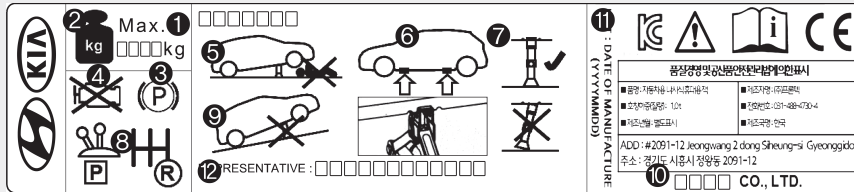
## Jack label

- Example
- Type A



OHYK064001

- Type B



OHYK064005

- Type C



OHYK064002

- \* The actual Jack label in the vehicle may differ from the illustration.
- For more detailed specifications, refer to the label attached to the jack.

1. Model Name
2. Maximum allowable load
3. When using the jack, set your parking brake.
4. When using the jack, stop the engine.
5. Do not get under a vehicle that is supported by a jack.
6. The designated locations under the frame
7. When supporting the vehicle, the base plate of jack must be vertical under the lifting point.
8. Shift into Reverse gear on vehicles with manual transmission or move the shift lever to the P position on vehicles with automatic transmission.
9. The jack should be used on firm level ground.
10. Jack manufacturer
11. Production date
12. Representative company and address

## EC Declaration of Conformity for Jack



### EC Declaration of Conformity according to EC Machinery Directive 2006/42/EC

We, **FRONTEC CO., LTD.**

**2091-12 Jeongwang 2(i)-dong Siheung-si Gyeonggi-d ,Korea**

declare under our sole responsibility that the product

**Product : JACK-ASSY**

**Type Designation(s) : 1200KG, 1000KG, 800KG, 700KG, 500KG**

**Serial No. : N/A (prototype)**

**Year of Manufacture : 2013**

to which this declaration relates is in conformity with the following standard(s) or other normative document(s);

|                       |                                                                                             |
|-----------------------|---------------------------------------------------------------------------------------------|
| EN ISO12100<br>(2010) | Safety of machinery - General principles for design – Risk assessment<br>and risk reduction |
| EN 1494/A1<br>(2008)  | Mobile or movable jacks and associated lifting equipment                                    |

following the provisions of Directive(s);

|            |                                                                                                             |
|------------|-------------------------------------------------------------------------------------------------------------|
| 2006/42/EC | Directive on the approximation of the laws of Member States relating to<br>machinery (OJ L157 Jun, 9, 2006) |
|------------|-------------------------------------------------------------------------------------------------------------|

Siheung-si Gyeonggi-d ,Korea / 15.07.2013 SOO HONG, MIN President 

(Place and date of issue)(Name and signature or equivalent making of authorized person)

\* T.C.F Compiling Location:

- Address: PRIBORSKA 280, 739 42 FRYDEK MISTEK, CHLEBOVICE, CZECH REPUBLIC

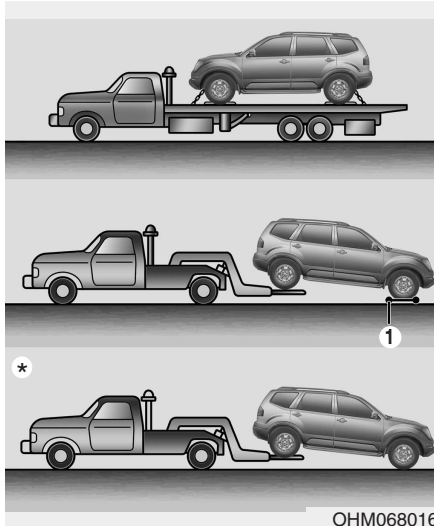
- Team: Purchase team

- Company name: HANWHA L&C CZECH s.r.o

OUM074110L

## TOWING

### Towing service



OHM068016

\* 2WD or part-time 4WD (2H position) vehicles only

If emergency towing is necessary, we recommend having it done by an authorized Kia dealer or a commercial tow-truck service. Proper lifting and towing procedures are necessary to prevent damage to the vehicle. The use of wheel dollies (1) or flatbed is recommended.

On 4WD vehicles, your vehicle must be towed with a wheel lift and dollies or flatbed equipment with all the wheels off the ground.

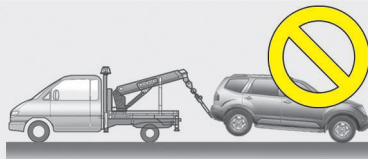
#### CAUTION

***The 4WD vehicle should never be towed with the wheels on the ground. This can cause serious damage to the transaxle or the 4WD system.***

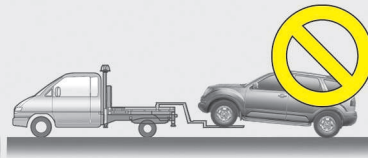
On 2WD or part-time 4WD (2H position) vehicles, it is acceptable to tow the vehicle with the front wheels on the ground (without dollies) and the rear wheels off the ground.

If any of the loaded wheels or suspension components are damaged or the vehicle is being towed with the rear wheels on the ground, use a towing dolly under the rear wheels.

When being towed by a commercial tow truck and wheel dollies are not used, the rear of the vehicle should always be lifted, not the front.



OHM068017



OHM068018

### CAUTION

- **Do not tow the vehicle backwards with the rear wheels on the ground as this may cause damage to the vehicle.**
- **Do not tow with sling-type equipment. Use wheel lift or flatbed equipment.**

When towing your vehicle in an emergency without wheel dollies :

1. Set the ignition switch in the ACC position.
2. Place the transaxle shift lever in N (Neutral).
3. For part-time 4WD vehicle, set the transfer shift knob to 2H.
4. Release the parking brake.

### CAUTION

***Failure to place the transmission shift lever in N (Neutral) and the transfer shift knob for part-time 4WD operation to 2H may cause internal damage to the transmission.***

## Emergency towing



OHM066013L

**If towing is necessary, we recommend you to have it done by an authorized Kia dealer or a commercial tow truck service.**

If towing service is not available in an emergency, your vehicle may be temporarily towed using a cable or chain secured to the emergency towing hook under the front (or rear) of the vehicle. Use extreme caution when towing the vehicle. A driver must be in the vehicle to steer it and operate the brakes.

Towing in this manner may be done only on hard-surfaced roads for a short distance and at low speed. Also, the wheels, axles, power train, steering and brakes must all be in good condition.

- Do not use the tow hooks to pull a vehicle out of mud, sand or other conditions from which the vehicle cannot be driven out under its own power.
- Avoid towing a vehicle heavier than the vehicle doing the towing.
- The drivers of both vehicles should communicate with each other frequently.

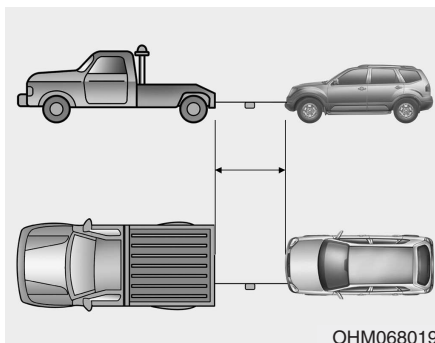
### CAUTION

- ***Attach a towing strap to the tow hook.***
  - ***Using a portion of the vehicle other than the tow hooks for towing may damage the body of your vehicle.***
  - ***Use only a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing hook provided.***
- Before emergency towing, check if the hook is not broken or damaged.
  - Fasten the towing cable or chain securely to the hook.
  - Do not jerk the hook. Apply it steadily and with even force.
  - To avoid damaging the hook, do not pull from the side or at a vertical angle. Always pull straight ahead.

### WARNING

**Use extreme caution when towing the vehicle.**

- **Avoid sudden starts or erratic driving maneuvers which would place excessive stress on the emergency towing hook and towing cable or chain. The hook and towing cable or chain may break and cause serious injury or damage.**
- **If the disabled vehicle is unable to be moved, do not forcibly continue the towing. We recommend that you contact an authorized Kia dealer or a commercial tow truck service for assistance.**
- **Tow the vehicle as straight ahead as possible.**
- **Keep away from the vehicle during towing.**



- Use a towing strap less than 5 m (16 feet) long. Attach a white or red cloth (about 30 cm (12 inches) wide) in the middle of the strap for easy visibility.
- Drive carefully so that the towing strap is not loosened during towing.

### ***Emergency towing precautions***

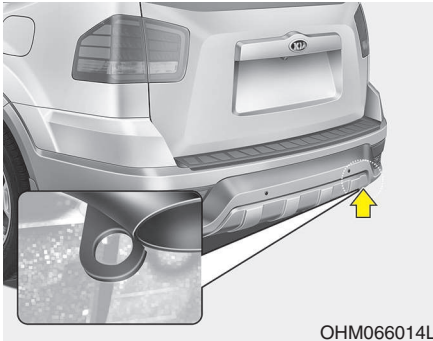
- Turn the ignition switch to ACC so the steering wheel isn't locked.
- Place the transaxle shift lever in N (Neutral).
- Release the parking brake.
- Press the brake pedal with more force than normal since you will have reduced brake performance.
- More steering effort will be required because the power steering system will be disabled.
- If you are driving down a long hill, the brakes may overheat and brake performance will be reduced. Stop often and let the brakes cool off.



### **CAUTION - Automatic transaxle**

- ***If the car is being towed with all four wheels on the ground, it can be towed only from the front. Be sure that the transaxle is in neutral. Be sure the steering is unlocked by placing the ignition switch in the ACC position. A driver must be in the towed vehicle to operate the steering and brakes.***
- ***To avoid serious damage to the automatic transaxle, limit the vehicle speed to 15 km/h (10 mph) and drive less than 1.5 km (1 mile) when towing.***
- ***Before towing, check the automatic transaxle for fluid leaks under your vehicle. If the automatic transaxle fluid is leaking, flatbed equipment or a towing dolly must be used.***





**Tie-down hook  
(for flatbed towing)**

**⚠ WARNING**

Do not use the hooks under the 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 tie-down hooks or rear bumper will be damaged and this could lead to serious injury.

## EMERGENCY COMMODITY (IF EQUIPPED)

There are some emergency commodities in the vehicle to help you respond to the emergency situation.

### Fire extinguisher

If there is small fire and you know how to use the fire extinguisher, take the following steps carefully.

1. Pull the pin at the top of the extinguisher that keeps the handle from being accidentally pressed.
2. Aim the nozzle toward the base of the fire.
3. Stand approximately 2.5 m (8 ft) away from the fire and squeeze the handle to discharge the extinguisher. If you release the handle, the discharge will stop.
4. Sweep the nozzle back and forth at the base of the fire. After the fire appears to be out, watch it carefully since it may re-ignite.

### First aid kit

There are some items such as scissors, bandage and adhesive tape and etc. in the kit to give first aid to an injured person.

### Triangle reflector

Place the triangle reflector on the road to warn oncoming vehicles during emergencies, such as when the vehicle is parked by the roadside due to any problems.

### Tire pressure gauge (If equipped)

Tires normally lose some air in day-to-day use, and you may have to add a few pounds of air periodically and it is not usually a sign of a leaking tire, but of normal wear. Always check tire pressure when the tires are cold because tire pressure increases with temperature.

To check the tire pressure, take the following steps;

1. Unscrew the inflation valve cap that is located on the rim of the tire.
2. Press and hold the gauge against the tire valve. Some air will escape as you begin and more will escape if you don't press the gauge in firmly.
3. A firm non-leaking push will activate the gauge.
4. Read the tire pressure on the gauge to know whether the tire pressure is low or high.
5. Adjust the tire pressures to the specified pressure. Refer to "Tires and wheels" in chapter 9.
6. Reinstall the inflation valve cap.

# Maintenance

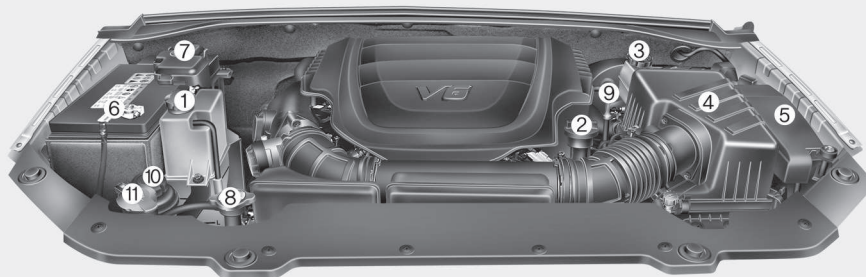
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## ENGINE COMPARTMENT

### ■ Gasoline Engine (Lambda 3.8L) - MPI

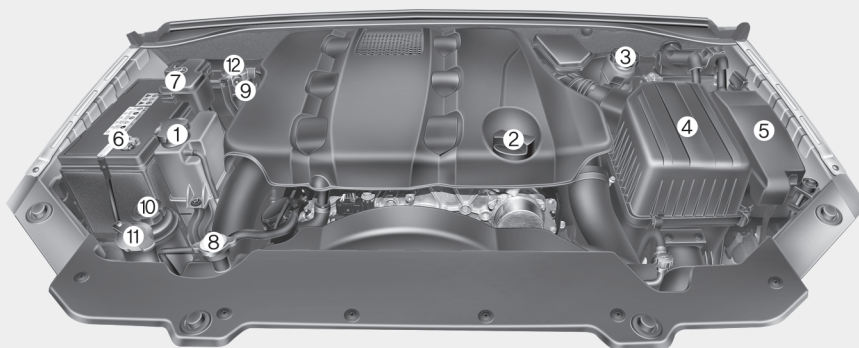


- 1. Engine coolant reservoir
- 2. Engine oil filler cap
- 3. Brake fluid reservoir
- 4. Air cleaner
- 5. Fuse box
- 6. Negative battery terminal
- 7. Positive battery terminal
- 8. Radiator cap
- 9. Engine oil dipstick
- 10. Power steering fluid reservoir
- 11. Windshield washer fluid reservoir

\* The actual engine compartment in the vehicle may differ from the illustration.

OHM076070L

### ■ Diesel Engine (3.0L)



1. Engine coolant reservoir
2. Engine oil filler cap
3. Brake fluid reservoir
4. Air cleaner
5. Fuse box
6. Negative battery terminal
7. Positive battery terminal
8. Radiator cap
9. Engine oil dipstick
10. Power steering fluid reservoir
11. Windshield washer fluid reservoir
12. Fuel filter

\* The actual engine compartment in the vehicle may differ from the illustration.

OHM076071L

## MAINTENANCE SERVICES

You should exercise the utmost care to prevent damage to your vehicle and injury to yourself whenever performing any maintenance or inspection procedures.

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

#### \* NOTICE

**Maintenance Service and Record Retention are the owner's responsibility.**

We recommend in general that you have your vehicle serviced by an authorized Kia dealer.

You should retain documents that show 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 establish your compliance with the servicing and maintenance requirements of your vehicle warranties.

Detailed warranty information is provided in your Warranty & Maintenance book.

Repairs and adjustments required as a result of improper maintenance or a lack of required maintenance are not covered when your vehicle is covered by warranty.

### Owner maintenance precautions

Improper or incomplete service may result in problems. This section gives instructions only for the maintenance items that are easy to perform.

#### \* NOTICE

**Improper owner maintenance during the warranty period may affect warranty coverage. For details, read the separate Warranty & Maintenance book provided with the vehicle. If you're unsure about any servicing or maintenance procedure, we recommend that the system be serviced by an authorized Kia dealer.**

### **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, we recommend that the system be serviced by an authorized Kia dealer.**
- **Working under the hood with the engine running is dangerous. It becomes even more dangerous when you wear jewelry 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 jewelry (especially rings, bracelets, watches, and necklaces) and all neckties, scarves, and similar loose clothing before getting near the engine or cooling fans.**

### **Engine compartment precautions (Diesel engine)**

- The piezo injector operates at high voltage (maximum 200v). Therefore, the following accidents may occur.
  - Direct contact with the injector or injector wiring may cause electric shock or damage your muscle or nerve system.
  - The electromagnetic wave from the operating injector may cause the artificial heart pacemaker to malfunction.
- Follow the safety tips provided below, when you are checking the engine room while the engine is running.
  - Do not touch the injector, injector wirings, and the engine computer while the engine is running.
  - Do not remove the injector connector while the engine is running.
  - People using pacemakers must not go near the engine while the engine is starting or running.

### **WARNING - Diesel Engine**

**Never work on the injection system with the engine running or within 30 seconds after shutting off the engine. High-pressure pump, rail, injectors and high-pressure pipes are subject to high pressure even after the engine stopped. The fuel jet produced by fuel leaks may cause serious injury, if it touches the body. People using pacemakers should not move more than 30cm closer to the ECU or wiring harness within the engine room while the engine is running, since the high currents in the electronic engine control system produce considerable magnetic fields.**



 **CAUTION**

- *Do not put heavy objects or apply excessive force on top of the engine cover (if equipped) or fuel related parts.*
- *When you inspect the fuel system (fuel lines and fuel injection devices), we recommend that you contact an authorized kia dealer.*
- *Do not drive long time with the engine cover (if equipped) removed.*
- *When checking the engine room, do not go near fire.*  
*Fuel, washer fluid, etc. are flammable oils that may cause fire.*
- *Before touching the battery, ignition cables and electrical wiring, you should disconnect the battery "-" terminal. You may get an electric shock from the electric current.*

*(Continued)*

**(Continued)**

- *When you remove the interior trim cover with a flat bed (-) driver, be careful not to damage the cover.*
- *Be careful when you replace and clean bulbs to avoid burns or electrical shock.*

### OWNER MAINTENANCE

The following lists are vehicle checks and inspections that should be performed at the frequencies indicated to help ensure safe, dependable operation of your vehicle.

If you have any question, we recommend that you consult an authorized Kia dealer.

These Owner Maintenance Checks are generally not covered by warranties and you may be charged for labor, parts and lubricants used.

#### Owner maintenance schedule

##### *When you stop for fuel:*

- Check the engine oil level.
- Check the coolant level in the coolant reservoir.
- Check the windshield washer fluid level.
- Look for low or under-inflated tires.

#### **WARNING**

**Be careful when checking your engine coolant level when the engine is hot. Scalding hot coolant and steam may blow out under pressure. This could cause burns or other serious injury.**

##### *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 constantly turns slightly or “pulls” to one side when traveling on smooth, level road.
- When stopping, listen and check for unusual 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 the automatic transaxle P (Park) function.
- Check the parking brake.
- Check for fluid leaks under your vehicle (water dripping from the air conditioning system during or after use is normal).

***At least monthly:***

- Check the coolant level in the engine coolant reservoir.
- Check the operation of all exterior lights, including the stoplights, turn signals and hazard warning flashers.
- Check the inflation pressures of all tires including the spare.

***At least twice a year  
(i.e., every Spring and Fall):***

- Check the radiator, heater and air conditioning hoses for leaks or damage.
- Check the windshield washer spray and wiper operation. Clean the wiper blades with clean cloth dampened with washer fluid.
- Check the headlight alignment.
- Check the muffler, exhaust pipes, shields and clamps.
- Check the lap/shoulder belts for wear and function.
- Check for worn tires and loose wheel lug nuts.

***At least once a year:***

- Clean the body and door drain holes.
- Lubricate the door hinges and checks, and hood hinges.
- Lubricate the door and hood locks and latches.
- Lubricate the door rubber weatherstrips.
- Check the air conditioning system.
- Check the power steering fluid level.
- Inspect and lubricate the automatic transaxle linkage and controls.
- Clean the battery and terminals.
- Check the brake fluid level.

### SCHEDULED MAINTENANCE SERVICE

Follow the Normal Maintenance Schedule if the vehicle is usually operated where none of the following conditions apply. If any of the following conditions apply, follow the Maintenance Under Severe Usage Conditions.

- Repeated driving short distance of less than 8 km (5 miles) in normal temperature or less than 16 km (10 miles) in freezing temperature
- Extensive engine idling or low speed driving for long distances
- Driving on rough, dusty, muddy, unpaved, graveled or salt-spread roads
- Driving in areas using salt or other corrosive materials or in very cold weather
- Driving in heavy dust condition
- Driving in heavy traffic area
- Driving on uphill, downhill, or mountain road repeatedly
- Towing a trailer or using a camper, or roof rack

- Driving as a patrol car, taxi, other commercial use of vehicle towing
- Driving over 170 km/h (106 mile/h)
- Frequently driving in stop-and-go condition

*If your vehicle is operated under the above conditions, you should inspect, replace or refill more frequently than the following Normal Maintenance Schedule. After the periods or distance shown in the chart, continue to follow the prescribed maintenance intervals.*

## NORMAL MAINTENANCE SCHEDULE

| MAINTENANCE INTERVALS<br><br>MAINTENANCE ITEM   |          | Number of months or driving distance, whichever comes first |                                                                                                                                                  |    |    |    |    |    |     |     |  |
|-------------------------------------------------|----------|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|----|----|-----|-----|--|
|                                                 |          | Months                                                      | 12                                                                                                                                               | 24 | 36 | 48 | 60 | 72 | 84  | 96  |  |
|                                                 |          | Miles×1,000                                                 | 10                                                                                                                                               | 20 | 30 | 40 | 50 | 60 | 70  | 80  |  |
|                                                 |          | Km×1,000                                                    | 15                                                                                                                                               | 30 | 45 | 60 | 75 | 90 | 105 | 120 |  |
| Engine oil and engine oil filter * <sup>1</sup> | Gasoline | Except Middle East* <sup>2</sup>                            | R                                                                                                                                                | R  | R  | R  | R  | R  | R   | R   |  |
|                                                 |          | For Middle East* <sup>2</sup>                               | Replace every 10,000 km (6,500 miles) or 12 months                                                                                               |    |    |    |    |    |     |     |  |
|                                                 | Diesel   | For Europe                                                  | Replace every 20,000 km (12,500 miles) or 12 months                                                                                              |    |    |    |    |    |     |     |  |
|                                                 |          | Except Europe                                               | Replace every 10,000 km (6,500 miles) or 12 months                                                                                               |    |    |    |    |    |     |     |  |
| Coolant (Engine) * <sup>3</sup>                 |          |                                                             | At first, replace at 210,000 km (140,000 miles) or 120 months:<br>after that, replace every 30,000 km (20,000 miles) or 24 months * <sup>4</sup> |    |    |    |    |    |     |     |  |
| Drive belts                                     | Gasoline | For Europe                                                  |                                                                                                                                                  |    |    |    |    | I  |     | I   |  |
|                                                 |          | Except Europe                                               |                                                                                                                                                  | I  |    | I  |    | I  |     | I   |  |
|                                                 | Diesel   |                                                             | At first, inspect at 80,000 km (50,000 miles) or 48 months<br>after that, every inspect 20,000 km (12,500 miles) or 12 months                    |    |    |    |    |    |     |     |  |

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

\*<sup>1</sup> : Check the engine oil level and leak every 500 km (350 miles) or before starting a long trip.

\*<sup>2</sup> : Middle East includes India, Libya, Algeria, Morocco, Tunisia, Sudan, Egypt and Iran.

\*<sup>3</sup> : When adding coolant, use only deionized water or soft water for your vehicle and never mix hard water in the coolant filled at the factory. An improper coolant mixture can result in serious malfunction or engine damage.

\*<sup>4</sup> : For your convenience, it can be replaced prior to it's interval when you do maintenance of other items.

**NORMAL MAINTENANCE SCHEDULE (CONT.)**

| <div>MAINTENANCE INTERVALS</div> <div>MAINTENANCE ITEM</div> |          | Number of months or driving distance, whichever comes first                                      |    |    |    |    |    |    |     |     |
|--------------------------------------------------------------|----------|--------------------------------------------------------------------------------------------------|----|----|----|----|----|----|-----|-----|
|                                                              |          | Months                                                                                           | 12 | 24 | 36 | 48 | 60 | 72 | 84  | 96  |
|                                                              |          | Miles×1,000                                                                                      | 10 | 20 | 30 | 40 | 50 | 60 | 70  | 80  |
|                                                              |          | Km×1,000                                                                                         | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 |
| Valve clearance (3.8L)* <sup>5</sup>                         | Gasoline | Inspect every 96,000 km (60,000 miles) or 48 months* <sup>6</sup>                                |    |    |    |    |    |    |     |     |
| Vacuum and crankcase ventilation hoses                       |          |                                                                                                  |    | I  |    |    | I  |    |     |     |
| Spark plugs                                                  | Gasoline | Replace every 165,000 km (110,000 miles) or 120 months* <sup>6</sup>                             |    |    |    |    |    |    |     |     |
| Automatic transmission fluid                                 | Gasoline |                                                                                                  |    |    | I  |    |    |    | I   |     |
|                                                              | Diesel   | No service, No check                                                                             |    |    |    |    |    |    |     |     |
| Driveshaft and boots                                         |          |                                                                                                  | I  |    | I  |    | I  |    | I   |     |
| Transfer case oil (4WD) * <sup>7</sup>                       |          |                                                                                                  |    |    | I  |    |    |    | I   |     |
| Front and rear differential oil * <sup>7</sup>               |          | Inspect every 20,000 km (12,500 miles) and replace every 40,000 km (25,000 miles) * <sup>6</sup> |    |    |    |    |    |    |     |     |
| Propeller shaft                                              |          |                                                                                                  | I  |    | I  |    | I  |    | I   |     |

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

\*<sup>5</sup> : Inspect for excessive valve noise and/or engine vibration and adjust if necessary. An authorized Kia dealer should perform the operation.

\*<sup>6</sup> : For your convenience, it can be replaced prior to it's interval when you do maintenance of other items.

\*<sup>7</sup> : Transfer case oil and differential oil should be changed anytime they have been submerged in water.

## NORMAL MAINTENANCE SCHEDULE (CONT.)

| MAINTENANCE<br>ITEM               |          | MAINTENANCE<br>INTERVALS            | Number of months or driving distance, whichever comes first |    |    |    |    |    |    |     |     |
|-----------------------------------|----------|-------------------------------------|-------------------------------------------------------------|----|----|----|----|----|----|-----|-----|
|                                   |          |                                     | Months                                                      | 12 | 24 | 36 | 48 | 60 | 72 | 84  | 96  |
|                                   |          |                                     | Miles×1,000                                                 | 10 | 20 | 30 | 40 | 50 | 60 | 70  | 80  |
|                                   |          |                                     | Km×1,000                                                    | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 |
| Fuel additives *8                 | Gasoline | For Europe                          | Add every 15,000 km (10,000 miles) or 12 months             |    |    |    |    |    |    |     |     |
|                                   |          | Except Europe                       | Add every 10,000 km (6,500miles) or 6 months                |    |    |    |    |    |    |     |     |
| Fuel filter                       | Gasoline | For China, Brazil                   |                                                             | I  |    | R  |    | I  |    | R   |     |
| Fuel filter cartridge*9           | Diesel   |                                     |                                                             | R  |    | R  |    | R  |    | R   |     |
| Fuel lines, hoses and connections |          |                                     | I                                                           | I  | I  | I  | I  | I  | I  | I   |     |
| Fuel tank air filter              | Gasoline |                                     | I                                                           | I  | R  | I  | I  | R  | I  | I   |     |
| Vapor hose and fuel filler cap    |          |                                     |                                                             | I  |    | I  |    | I  |    | I   |     |
| Air cleaner filter                |          | For China, India, Middle East*10    | R                                                           | R  | R  | R  | R  | R  | R  | R   |     |
|                                   |          | Except China, India, Middle East*10 | I                                                           | I  | R  | I  | I  | R  | I  | I   |     |

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

<sup>\*8</sup> : If good quality gasolines meet Europe Fuel standards (EN228) or equivalents including fuel additives is not available, one bottle of additive is recommended. Additives are available from your authorized Kia dealer along with information on how to use them. Do not mix other additives.

<sup>\*9</sup> : If the diesel fuel specifications don't meet the European standards EN590, replace it more frequently.  
Consult an authorized Kia dealer for details.

<sup>\*10</sup> : Middle East includes India, Libya, Algeria, Morocco, Tunisia, Sudan, Egypt and Iran.

**NORMAL MAINTENANCE SCHEDULE (CONT.)**

| <div>MAINTENANCE INTERVALS</div> <div>MAINTENANCE ITEM</div> |  | Number of months or driving distance, whichever comes first                                                     |    |    |    |    |    |    |     |     |
|--------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------|----|----|----|----|----|----|-----|-----|
|                                                              |  | Months                                                                                                          | 12 | 24 | 36 | 48 | 60 | 72 | 84  | 96  |
|                                                              |  | Miles×1,000                                                                                                     | 10 | 20 | 30 | 40 | 50 | 60 | 70  | 80  |
|                                                              |  | Km×1,000                                                                                                        | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 |
| Cooling system                                               |  | Inspect “Coolant level and leak” every day<br>Inspect “Water pump” when replacing the drive belt or timing belt |    |    |    |    |    |    |     |     |
| Air conditioner refrigerant (if equipped)                    |  | I                                                                                                               | I  | I  | I  | I  | I  | I  | I   |     |
| Air conditioner compressor (if equipped)                     |  | I                                                                                                               | I  | I  | I  | I  | I  | I  | I   |     |
| Climate control air filter (if equipped)                     |  | R                                                                                                               | R  | R  | R  | R  | R  | R  | R   |     |
| Brake discs and pads                                         |  | I                                                                                                               | I  | I  | I  | I  | I  | I  | I   |     |
| Brake lines, hoses and connections                           |  | I                                                                                                               | I  | I  | I  | I  | I  | I  | I   |     |
| Brake pedal                                                  |  |                                                                                                                 | I  |    | I  |    | I  |    | I   |     |
| Brake fluid                                                  |  | I                                                                                                               | I  | I  | I  | I  | I  | I  | I   |     |
| Parking brake                                                |  |                                                                                                                 | I  |    | I  |    | I  |    | I   |     |
| Steering gear rack, linkage and boots                        |  | I                                                                                                               | I  | I  | I  | I  | I  | I  | I   |     |
| Power steering fluid and hoses                               |  | I                                                                                                               | I  | I  | I  | I  | I  | I  | I   |     |

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.



**NORMAL MAINTENANCE SCHEDULE (CONT.)**

| MAINTENANCE<br>ITEM                          | MAINTENANCE<br>INTERVALS | Number of months or driving distance, whichever comes first |    |    |    |    |    |    |     |     |
|----------------------------------------------|--------------------------|-------------------------------------------------------------|----|----|----|----|----|----|-----|-----|
|                                              |                          | Months                                                      | 12 | 24 | 36 | 48 | 60 | 72 | 84  | 96  |
|                                              |                          | Miles×1,000                                                 | 10 | 20 | 30 | 40 | 50 | 60 | 70  | 80  |
|                                              |                          | Km×1,000                                                    | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 |
| Tire (pressure & tread wear)                 |                          |                                                             | I  | I  | I  | I  | I  | I  | I   | I   |
| Suspension ball joints                       |                          |                                                             | I  | I  | I  | I  | I  | I  | I   | I   |
| Bolt and nuts on chassis and body            |                          |                                                             | I  | I  | I  | I  | I  | I  | I   | I   |
| Air leveling system air filter (if equipped) |                          | Replace every 60,000 km (40,000 miles) or 36 months         |    |    |    |    |    |    |     |     |
| Air leveling system air spring (if equipped) |                          | Inspect every 20,000 km (15,000 miles) or 12 months         |    |    |    |    |    |    |     |     |
| All electrical systems                       |                          |                                                             |    | I  |    | I  |    | I  |     | I   |
| Battery condition                            |                          |                                                             | I  | I  | I  | I  | I  | I  | I   | I   |
| ERS-GLONASS system battery (for Russia)      |                          | Replace every 3 years                                       |    |    |    |    |    |    |     |     |

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

## Maintenance under severe usage conditions

The following items must be serviced more frequently on cars mainly used under severe driving conditions.

Refer to the chart below for the appropriate maintenance intervals.

R : Replace I : Inspect and if necessary, adjust, correct, clean or replace

| Maintenance item                      |          |                                  | Maintenance operation | Maintenance intervals                              | Driving condition            |
|---------------------------------------|----------|----------------------------------|-----------------------|----------------------------------------------------|------------------------------|
| Engine oil and engine oil filter      | Gasoline | Except Middle East* <sup>1</sup> | R                     | Every 7,500 km (5,000 miles) or 6 months           | A, B, C, D, E, F, G, H, I, J |
|                                       |          | For Middle East* <sup>1</sup>    |                       | Every 5,000 km (3,000 miles) or 6 months           |                              |
|                                       | Diesel   | For Europe                       | R                     | Every 10,000 km (6,500 miles) or 6 months          | A, B, C, E, F, G, H, I, J, K |
|                                       |          | Except Europe                    |                       | Every 5,000 km (3,000 miles) or 6 months           |                              |
| Air cleaner filter                    |          |                                  | R                     | Replace more frequently depending on the condition | C, E                         |
| Spark plugs                           | Gasoline |                                  | R                     | Replace more frequently depending on the condition | B, H                         |
| Front and rear differential oil       |          |                                  | R                     | Every 20,000 km (12,500 miles)                     | C, E, G, I                   |
| Steering gear rack, linkage and boots |          |                                  | I                     | Inspect more frequently depending on the condition | C, D, E, F, G                |
| Propeller shaft                       |          |                                  | I                     | Every 15,000 km (10,000 miles) or 12 months        | C, E                         |
| Front suspension ball joints          |          |                                  | I                     | Inspect more frequently depending on the condition | C, D, E, F, G                |

<sup>\*1</sup> : Middle East includes India, Libya, Algeria, Morocco, Tunisia, Sudan, Egypt and Iran.

| Maintenance item                          |               | Maintenance operation | Maintenance intervals                              | Driving condition |
|-------------------------------------------|---------------|-----------------------|----------------------------------------------------|-------------------|
| Disc brakes and pads, calipers and rotors |               | I                     | Inspect more frequently depending on the condition | C, D, E, G, H     |
| Parking brake                             |               | I                     | Inspect more frequently depending on the condition | C, D, G, H        |
| Driveshaft and boots                      |               | I                     | Inspect more frequently depending on the condition | C, D, E, F, H     |
| Climate control air filter (if equipped)  |               | R                     | Replace more frequently depending on the condition | C, E              |
| Automatic transmission fluid              | For Europe    | R                     | Every 90,000 km (56,250 miles)                     | A, C, E, F, G, I  |
|                                           | Except Europe |                       | Every 100,000 km (60,000 miles)                    |                   |

### Severe driving conditions

A : Repeatedly driving short distance of less than 8 km (5 miles) in normal temperature or less than 16 km (10 miles) in freezing temperature.

B : Extensive engine idling or low speed driving for long distances.

C : Driving on rough, dusty, muddy, unpaved, graveled or salt-spread roads.

D : Driving in areas using salt or other corrosive materials or in very cold weather

E : Driving in heavy dust condition.

F : Driving in heavy traffic area.

G : Driving on uphill, downhill, or mountain roads.

H : Towing a trailer or using a camper on roof rack.

I : Driving for patrol car, taxi, commercial car or vehicle towing

J : Driving over 170 km/h (106 mile/h)

K : Frequently driving in stop and go condition

## EXPLANATION OF SCHEDULED MAINTENANCE ITEMS

### Engine oil and filter

The engine oil and filter should be changed at the intervals specified in the maintenance schedule. If the vehicle is being driven in severe conditions, more frequent oil and filter changes are required.

### Drive belts

Inspect all drive belts for evidence of cuts, cracks, excessive wear or oil saturation and replace if necessary. Drive belts should be checked periodically for proper tension and adjusted as necessary.



### CAUTION

***When you are inspecting the belt, place the ignition switch in the LOCK/OFF or ACC position.***

### Fuel filter cartridge (for diesel)

A clogged filter can limit the speed at which the vehicle may be driven, damage the emission system and cause multiple issues such as hard starting. If an excessive amount of foreign matter accumulates in the fuel tank, the filter may require replacement more frequently.

After installing a new filter, run the engine for several minutes, and check for leaks at the connections.

We recommend that the fuel filter be replaced by an authorized Kia dealer.

### Fuel filter (for gasoline)

Kia gasoline vehicle is equipped a lifetime fuel filter that integrated with the fuel tank. Regular maintenance or replacement is not needed but depends on fuel quality. If there are some important safety matters like fuel flow restriction, surging, loss of power, hard starting problem etc, fuel filter inspection or replace is needed.

We recommend that the fuel filter be Inspected or replaced by an authorized Kia dealer.

### Fuel lines, fuel hoses and connections

Check the fuel lines, fuel hoses and connections for leakage and damage. We recommend that the fuel lines, fuel hoses and connections be replaced by an authorized Kia dealer.



### WARNING - Diesel only

**Never work on the injection system with the engine running or within 30 seconds after shutting off the engine. High pressure pump, rail, injectors and high pressure pipes are subject to high pressure even after the engine stops. The fuel jet produced by fuel leaks may cause serious injury, if it touches the body. People using pacemakers should not move more than 30 cm closer to the ECU or wiring harness within the engine room while the engine is running, since the high currents in the Common Rail system produce considerable magnetic fields.**

### Vapor hose and fuel filler cap

The vapor hose and fuel filler cap should be inspected at those intervals specified in the maintenance schedule. Make sure that a new vapor hose or fuel filler cap is correctly replaced.

### Vacuum crankcase ventilation hoses (if equipped)

Inspect the surface of hoses for evidence of heat and/or mechanical damage. Hard and brittle rubber, cracking, tears, cuts, abrasions, and excessive swelling indicate deterioration. Particular attention should be paid to examine those hose surfaces nearest to high heat sources, such as the exhaust manifold.

Inspect the hose routing to assure that the hoses do not come in contact with any heat source, sharp edges or moving component which might cause heat damage or mechanical wear. Inspect all hose connections, such as clamps and couplings, to make sure they are secure, and that no leaks are present. Hoses should be replaced immediately if there is any evidence of deterioration or damage.

### Air cleaner filter

We recommend that the air cleaner filter be replaced by an authorized Kia dealer.

### Spark plugs (for gasoline engine)

Make sure to install new spark plugs of the correct heat range.



#### **WARNING**

**Do not disconnect and inspect spark plugs when the engine is hot. You may burn yourself.**

### Valve clearance (for gasoline engine)

Inspect for excessive valve noise and/or engine vibration and adjust if necessary. We recommend that the system be serviced by an authorized Kia dealer.

### Cooling system

Check the cooling system components, such as the radiator, coolant reservoir, hoses and connections for leakage and damage. Replace any damaged parts.

### Coolant

The coolant should be changed at the intervals specified in the maintenance schedule.

### Automatic transaxle fluid (if equipped)

Automatic transaxle fluid should not be checked under normal usage conditions.

We recommend that the automatic transmission fluid changed by an authorized Kia dealer according to the maintenance schedule.

#### \* NOTICE

**Automatic transaxle fluid color is basically red.**

**As the vehicle is driven, the automatic transaxle fluid will begin to look darker. It is normal condition and you should not judge the need to replace the fluid based upon the changed color.**

#### CAUTION

***The use of a non-specified fluid could result in transaxle malfunction and failure.***

***Use only specified automatic transaxle fluid. (Refer to "Recommended lubricants and capacities" in chapter 9.)***

### Brake hoses and lines

Visually check for proper installation, chafing, cracks, deterioration and any leakage. Replace any deteriorated or damaged parts immediately.

### Brake fluid (if equipped)

Check the brake fluid level in the brake fluid reservoir. The level should be between "MIN" and "MAX" marks on the side of the reservoir. Use only hydraulic brake fluid conforming to DOT 3 or DOT 4 specification.

### Parking brake

Inspect the parking brake system including the parking brake pedal and cables.

**Brake discs, pads, calipers and rotors**

Check the pads for excessive wear, discs for run out and wear, and calipers for fluid leakage.

For more information on checking the pads or lining wear limit, we recommend to refer to the Kia web site. (<https://www.kia-hotline.com>)

**Suspension mounting bolts**

Check the suspension connections for looseness or damage. Retighten to the specified torque.

**Steering gear box, linkage & boots/lower arm ball joint**

With the vehicle stopped and engine off, check for excessive free-play in the steering wheel.

Check the linkage for bends or damage. Check the dust boots and ball joints for deterioration, cracks, or damage. Replace any damaged parts.

**Power steering pump, belt and hoses**

Check the power steering pump and hoses for leakage and damage. Replace any damaged or leaking parts immediately. Inspect the power steering belt (or drive belt) for evidence of cuts, cracks, excessive wear, oiliness and proper tension. Replace or adjust it if necessary.

**Drive shafts and boots**

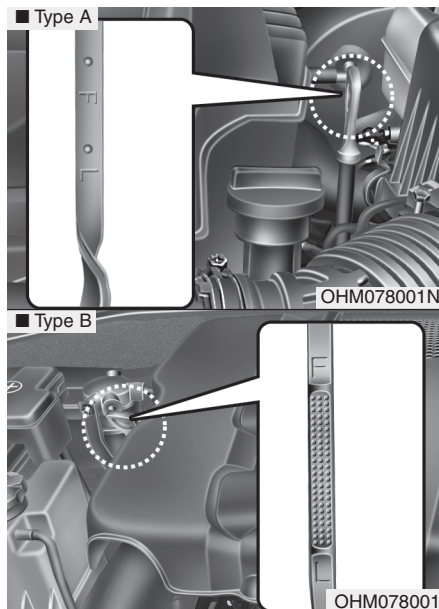
Check the drive shafts, boots and clamps for cracks, deterioration, or damage. Replace any damaged parts and, if necessary, repack the grease.

**Air conditioning refrigerant (if equipped)**

Check the air conditioning lines and connections for leakage and damage.

## ENGINE OIL

### 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 for a few minutes (about 5 minutes) for the oil to return to the oil pan.
4. Pull the dipstick out, wipe it clean, and re-insert it fully.

#### **⚠ WARNING - Radiator hose**

**Be very careful not to touch the radiator hose when checking or adding the engine oil as it may be hot enough to burn you.**

5. Pull the dipstick out again and check the level. The level should be between F and L.

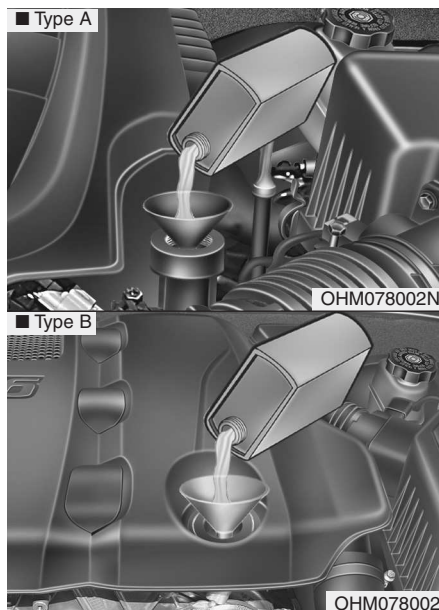
#### **⚠ CAUTION**

- **Do not overfill the engine oil. It may damage the engine.**
- **Do not spill engine oil, when adding or changing engine oil. If you drop the engine oil on the engine room, wipe it off immediately.**
- **When you wipe the oil level gauge, you should wipe it with a clean cloth. When mixed with debris, it can cause engine damage.**

#### **⚠ CAUTION - Diesel engine**

**Overfilling the engine oil may cause severe dieseling due to churning effect. It may lead to engine damage accompanied with abrupt engine speed increment, combustion noise and white smoke emission.**





*Use only the specified engine oil.  
(Refer to “Recommended lubricants  
and capacities” in chapter 9.)*

## Changing the engine oil and filter

We recommend that the engine oil and filter be replaced by an authorized Kia dealer.

### **⚠ WARNING**

Used engine oil may cause skin irritation or cancer if left in contact with the skin for prolonged periods of time. Used engine oil contains chemicals that have caused cancer in laboratory animals. Always protect your skin by washing your hands thoroughly with soap and warm water as soon as possible after handling used oil.

If it is near or at L, add enough oil to bring the level to F. **Do not overfill.**

**Use a funnel to help prevent oil from being spilled on engine components.**

## ENGINE COOLANT

The high-pressure cooling system has a reservoir filled with year round antifreeze coolant. The reservoir is filled 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.



### CAUTION

- *When the engine overheats from low engine coolant, suddenly adding engine coolant may cause cracks in the engine. To prevent damage, add engine coolant slowly in small quantities.*
- *Do not drive with no engine coolant. It may cause water pump failure and engine seizure, etc.*

## Checking the coolant level



### WARNING



### Removing radiator cap

- Never attempt to remove the radiator cap while the engine is operating or hot. Doing so might lead to cooling system and engine damage. Also, hot coolant or steam could cause serious personal injury.
- Turn the engine off and wait until it cools down. 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.

(Continued)

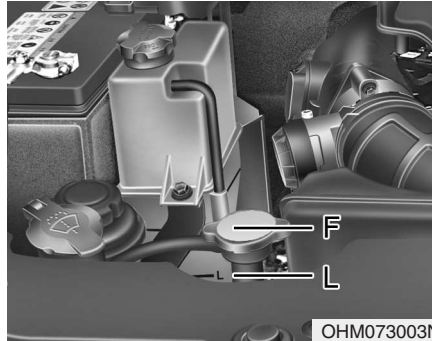
### (Continued)

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.

**⚠ WARNING**

The electric motor (cooling fan) is controlled by engine coolant temperature, refrigerant pressure and vehicle speed. It may sometimes operate even when the engine is not running. Use extreme caution when working near the blades of the cooling fan so that you are not injured by a rotating fan blades. As the engine coolant temperature decreases, the electric motor will automatically shut off. This is a normal condition.



OHM073003N

Check the condition and connections of all cooling system hoses and heater hoses. Replace any swollen or deteriorated hoses.

The coolant level should be filled between F and L marks on the side of the coolant reservoir when the engine is cool.

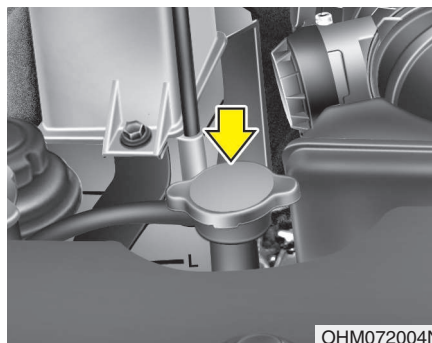
If the coolant level is low, add enough specified coolant to provide protection against freezing and corrosion. Bring the level to F, but do not overfill. If frequent additions are required, we recommend that the system be inspected by an authorized Kia dealer.

***Recommended engine coolant***

- When adding coolant, use only deionized water or soft water for your vehicle and never mix hard water in the coolant filled at the factory. An improper coolant mixture can result in serious malfunction or engine damage.
- The engine in your vehicle has aluminum engine parts and must be protected by an ethylene-glycol with phosphate based coolant to prevent corrosion and freezing.
- DO NOT USE alcohol or methanol coolant or mix them with the specified coolant.
- Do not use a solution that contains more than 60% antifreeze or less than 35% antifreeze, which would reduce the effectiveness of the solution.

For mixture percentage, refer to the following table.

| Ambient Temperature | Mixture Percentage (volume) |       |
|---------------------|-----------------------------|-------|
|                     | Antifreeze                  | 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    |



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### WARNING



#### 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 causing serious injury.

## Changing the coolant

We recommend that the coolant be replaced by an authorized Kia dealer.

### CAUTION

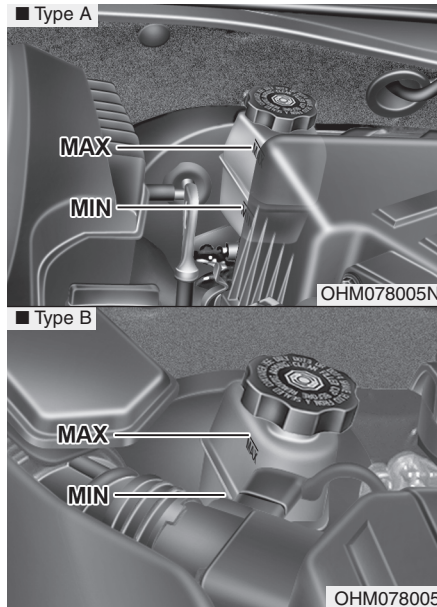
*Put a thick cloth around the radiator cap before refilling the coolant in order to prevent the coolant from overflowing into engine parts such as the alternator.*

### WARNING - Coolant

- 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 the paint and body trim.

## BRAKE FLUID

### Checking the brake fluid level



Check the fluid level in the reservoir periodically. The fluid level should be between MAX (1) and MIN (2) marks on the side of the reservoir.

Before removing the reservoir cap and adding brake fluid, clean the area around the reservoir cap thoroughly to prevent brake fluid contamination.

If the level is low, add fluid to the MAX level. The level will fall with accumulated mileage. This is a normal condition associated with the wear of the brake linings.

If the fluid level is excessively low, we recommend that the system be checked by an authorized Kia dealer.

*Use only the specified brake fluid. (Refer to "Recommended lubricants or capacities" in chapter 9.)*

*Never mix different types of fluid.*

#### **⚠ WARNING - Loss of brake fluid**

**In the event the brake system requires frequent additions of fluid, we recommend that the system be inspected by an authorized Kia dealer.**

#### **⚠ WARNING - Brake fluid**

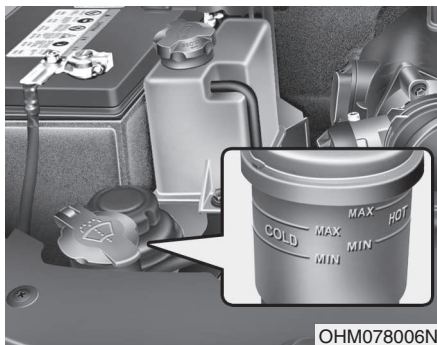
**When changing and adding brake fluid, handle it carefully. Do not let it come in contact with your eyes. If brake fluid should come in contact with your eyes, immediately flush them with a large quantity of fresh tap water. Have your eyes examined by a doctor as soon as possible.**

#### **⚠ CAUTION**

**Do not allow brake fluid to contact the vehicle's body paint, as paint damage will result. Brake fluid, which has been exposed to open air for an extended time should never be used as its quality cannot be guaranteed. It should be properly disposed. Don't put in the wrong kind of fluid. A few drops of mineral-based oil, such as engine oil, in your brake system can damage brake system parts.**

## POWER STEERING FLUID

### Checking the power steering fluid level



With the vehicle on level ground, check the fluid level in the power steering reservoir periodically. The fluid should be between MAX and MIN marks on the side of the reservoir at the normal temperature.

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.

### \* NOTICE

Check that the fluid level is in the "HOT" range on the reservoir. If the fluid is cold, check that it is in the "COLD" range.

In the event the power steering system requires frequent addition of fluid we recommend that the vehicle should be inspected by an authorized Kia dealer.

### ⚠ CAUTION

- **To avoid damage to the power steering pump, do not operate the vehicle for prolonged periods with a low power steering fluid level.**
- **Never start the engine when the reservoir tank is empty.**
- **When adding fluid, be careful that dirt does not get into the tank.**

*(Continued)*

*(Continued)*

- **Too little fluid can result in increased steering effort and/or noise from the power steering system.**
- **The use of the non-specified fluid could reduce the effectiveness of the power steering system and cause damage to it.**

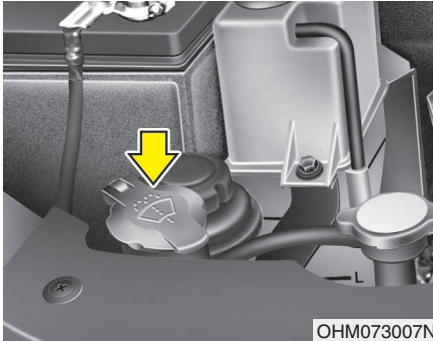
*Use only the specified power steering fluid. (Refer to "Recommended lubricants or capacities" in chapter 9.)*

### Checking the power steering hose

Check the connections for oil leaks, damage and twists in the power steering hose before driving.

## WASHER FLUID

### Checking the washer fluid level



The reservoir is translucent so that you can check the level with a quick visual inspection.

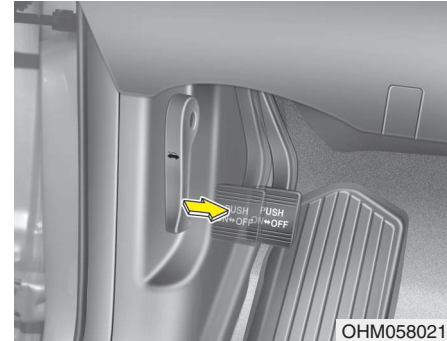
Check the fluid level in the washer fluid reservoir and add fluid if necessary. Plain water may be used if washer fluid is not available. However, use washer solvent with antifreeze characteristics in cold climates to prevent freezing.

### **⚠ WARNING - Coolant**

- 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.
- Windshield Washer fluid agents contain some amounts of alcohol and can be flammable under certain circumstances. Do not allow sparks or flame to contact the washer fluid or the washer fluid reservoir. Damage to the vehicle or occupants could occur.
- Windshield washer fluid is poisonous to humans and animals. Do not drink and avoid contacting windshield washer fluid. Serious injury or death could occur.

## PARKING BRAKE

### Checking the parking brake



Check whether the stroke is within specification when the parking brake pedal is depressed with 20 kg (44 lb, 196N) of force. Also, the parking brake alone should securely hold the vehicle on a fairly steep grade. If the stroke is more or less than specified, we recommend that the system be serviced by an authorized Kia dealer.

**Stroke : 3~4 notch**



### FUEL FILTER (FOR DIESEL)

#### Draining water from the fuel filter

The fuel filter for diesel engine plays an important role of separating water from fuel and accumulating the water in its bottom.

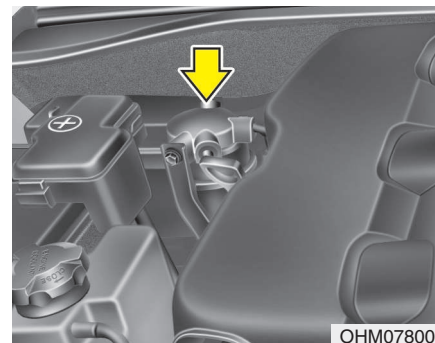
If water accumulates in the fuel filter, the warning light comes on when the ignition switch is in the ON position.

#### CAUTION

*If the water accumulated in the fuel filter is not drained at proper times, damages to the major parts such as the fuel system can be caused by water permeation in the fuel filter.*

- Place a water trap under the fuel filter.
- Loosen the drain plug and drain water.
- After water is drained, securely tighten the drain plug.
- After starting the engine, check to make certain the fuel filter warning light is off.

#### Fuel filter cartridge replacement



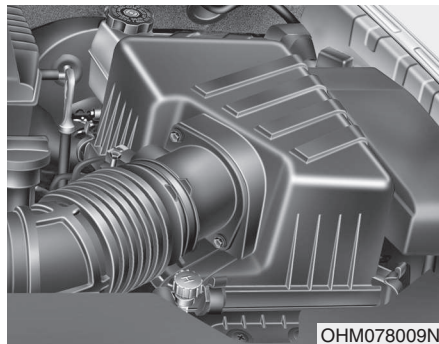
#### \* NOTICE

When replacing the fuel filter cartridge, we recommend that you use parts for replacement from an authorized Kia dealer.



## AIR CLEANER

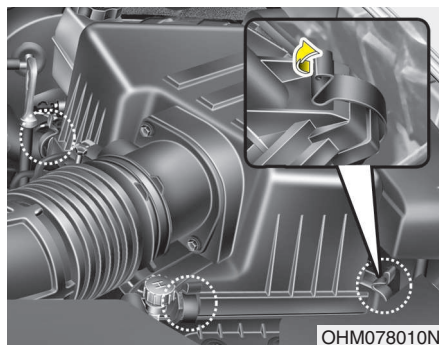
### Filter replacement



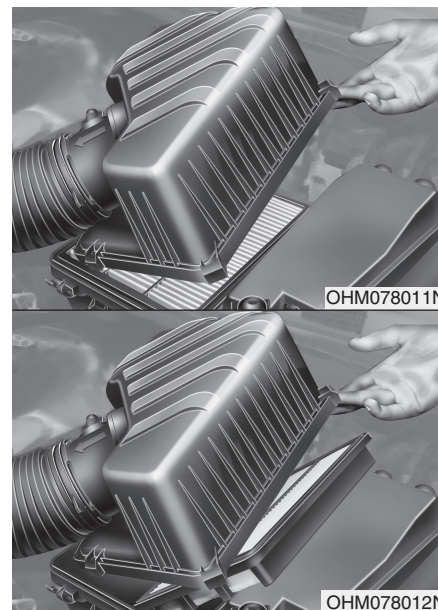
It must be replaced when necessary, and should not be washed.

You can clean the filter when inspecting the air cleaner element.

Clean the filter by using compressed air.



1. Loosen the air cleaner cover attaching clips and open the cover.



2. Wipe the inside of the air cleaner.
3. Replace the air cleaner filter.
4. Lock the cover with the cover attaching clips.

Replace the filter according to the Maintenance Schedule.

*If the vehicle is operated in extremely dusty or sandy areas, replace the element more often than the usual recommended intervals. (Refer to "Maintenance under severe usage conditions" in this section.)*



### CAUTION

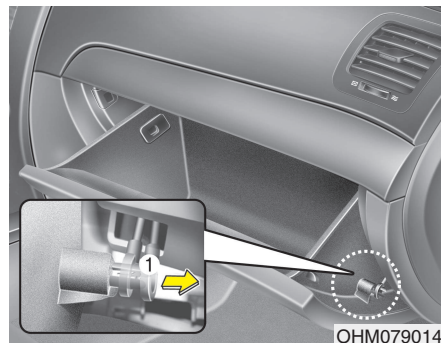
- ***Do not drive with the air cleaner removed; this will result in excessive engine wear.***
- ***When removing the air cleaner filter, be careful that dust or dirt does not enter the air intake, or damage may result.***
- ***We recommend that you use parts for replacement from an authorized Kia dealer.***

## CLIMATE CONTROL AIR FILTER

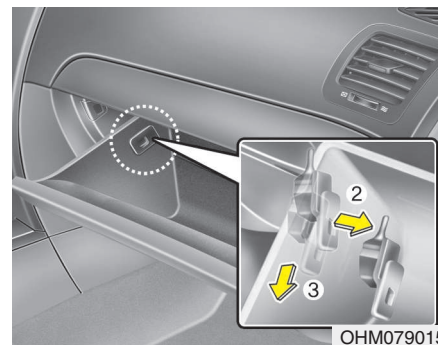
### Filter inspection

The climate control air filter should be replaced according to the maintenance schedule. If the vehicle is operated in severely air-polluted cities or on dusty rough roads for a long period, it should be inspected more frequently and replaced earlier. When you replace the climate control air filter, replace it performing the following procedure, and be careful to avoid damaging other components.

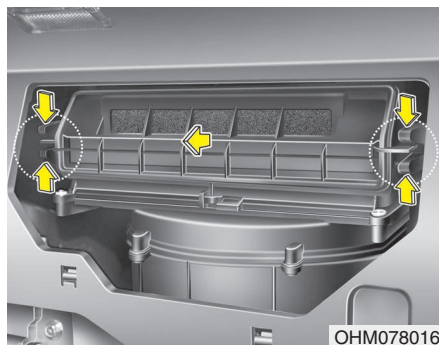
### Filter replacement



1. Open the glove box and remove the support rod (1).



2. With the glove box open, remove the stoppers on both sides to allow the glove box to hang freely on the hinges.



3. Remove the climate control air filter case by pulling out both sides of the cover.



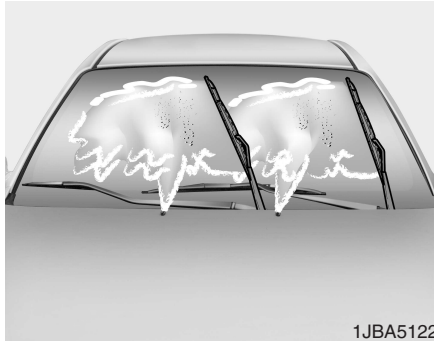
4. Replace the climate control air filter.  
5. Reassemble in the reverse order of disassembly.

### \* NOTICE

When replacing the climate control air filter install it properly. Otherwise, the system may produce noise and the effectiveness of the filter may be reduced.

## WIPER BLADES

### Blade inspection



#### \* 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 rinse thoroughly with clean water.

#### CAUTION

*To prevent damage to the wiper blades, do not use gasoline, kerosene, paint thinner, or other solvents on or near them.*

### Blade replacement

When the wipers no longer clean adequately, the blades may be worn or cracked, and require replacement.

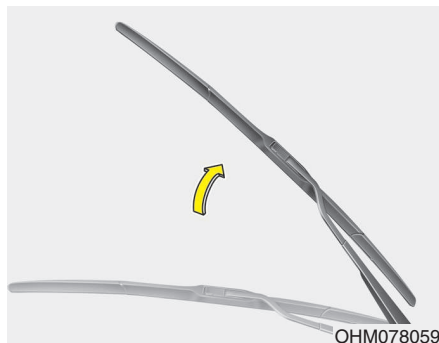
#### CAUTION

*To prevent damage to the wiper arms or other components, do not attempt to move the wipers manually.*

#### CAUTION

*The use of a non-specified wiper blade could result in wiper malfunction and failure.*

### Front windshield wiper blade

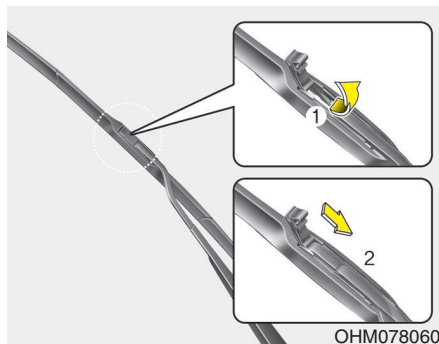


1. Raise the wiper arm.

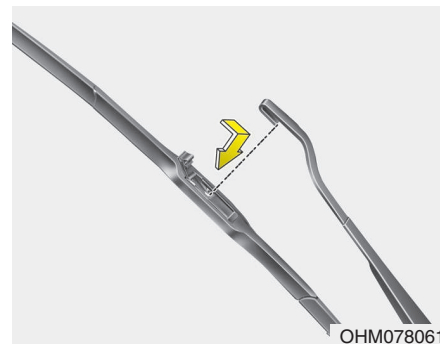


#### CAUTION

*Do not allow the wiper arm to fall against the windshield, since it may chip or crack the windshield.*

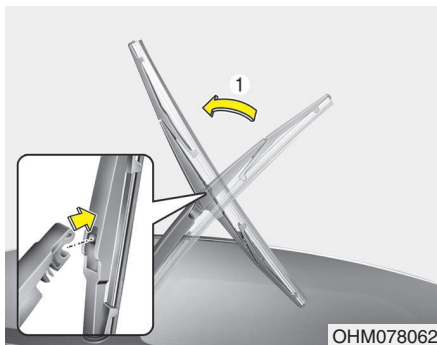


2. Lift up the wiper blade clip. Then pull down the blade assembly and remove it.

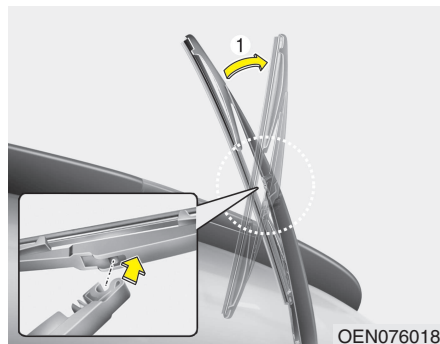


3. Install the new blade assembly in the reverse order of removal.

### Rear window wiper blade



1. Raise the wiper arm and pull out the wiper blade assembly.

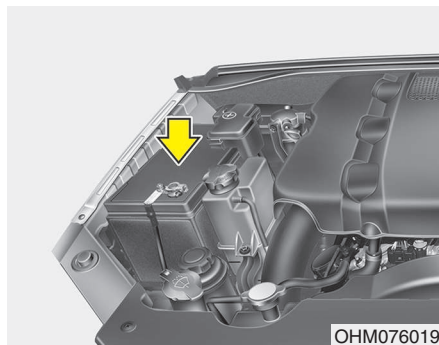


2. Install the new blade assembly by inserting the center part into the slot in the wiper arm until it clicks into place.
3. Make sure the blade assembly is installed firmly by trying to pull it slightly.

To prevent damage to the wiper arms or other components, we recommend that the wiper blade be replaced by an authorized kia dealer.

## BATTERY

### 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.
- Rinse any spilled electrolyte from the battery immediately with a solution of water and baking soda.
- If the vehicle is not going to be used for an extended time, disconnect the battery cables.

### \* NOTICE

Basically equipped battery is maintenance free type. If your vehicle is equipped with the battery marked with LOWER and UPPER on the side, you can check the electrolyte level. The electrolyte level should be between LOWER and UPPER. If the electrolyte level is low, it needs to add distilled (demineralized) water (Never add sulfuric acid or other electrolyte). When refill, be careful not to splash the battery and adjacent components. And do not overfill the battery cells. It can cause corrosion on other parts. After then ensure that tighten the cell caps. We recommend that you contact an authorized Kia dealer.

### **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, a highly combustible gas, is always present in battery cells and may explode if ignited.



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.

(Continued)



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If any electrolyte gets into your eyes, flush your eyes with clean water for at least 15 minutes and get immediate medical attention.

If electrolyte gets on your skin, thoroughly wash the contacted area. If you feel pain or burning sensation, get medical attention immediately.



Wear eye protection when charging or working near a battery. Always provide ventilation when working in an enclosed space.

(Continued)

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An inappropriately disposed battery can be harmful to the environment and human health. Dispose the battery according to your local law(s) or regulation.

- 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 recharge 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.

Failure to follow the above warnings can result in serious bodily injury or death.

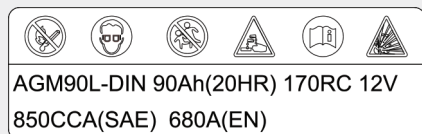


## CAUTION

*If you connect unauthorized electronic devices to the battery, the battery may be discharged. Never use unauthorized devices.*

### Battery capacity label

■ Example



OUM074113L

\* The actual battery label in the vehicle may differ from the illustration.

1. AGM90L-DIN : The Kia model name of battery
2. 90Ah(20HR) : The nominal capacity (in Ampere hours)
3. 170RC : The nominal reserve capacity (in min.)
4. 12V : The nominal voltage
5. 850CCA (SAE) : The cold-test current in amperes by SAE
6. 680A : The cold-test current in amperes by EN

### Battery recharging

Your vehicle has a maintenance-free, calcium-based battery.

- If the battery becomes discharged in a short time (because, for example, the headlights or interior lights were left on while the vehicle was not in use), recharge it by slow charging (trickle) 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 49°C (120°F).**
- **Wear eye protection when checking the battery during charging.**

**(Continued)**

**(Continued)**

- **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.

** WARNING**

- **Before performing maintenance or recharging the battery, turn off all accessories and stop the engine.**
- **The negative battery cable must be removed first and installed last when the battery is disconnected.**

**Reset items**

Items should be reset after the battery has been discharged or the battery has been disconnected.

- Driver position memory system (See chapter 3)
- Auto up/down window (See chapter 4)
- Sunroof (See chapter 4)
- Trip computer (See chapter 4)
- Climate control system (See chapter 4)
- Audio (See chapter 5)

## TIRES AND WHEELS

### Tire care

For proper maintenance, safety, and maximum fuel economy, you must always maintain recommended tire inflation pressures and stay within the load limits and weight distribution recommended for your vehicle.

### Recommended cold tire inflation pressures

All tire pressures (including the spare) should be checked when the tires are cold. "Cold Tires" means the vehicle has not been driven for at least three hours or driven less than 1.6 km (one mile).

Recommended pressures must be maintained for the best ride, top vehicle handling, and minimum tire wear.

For recommended inflation pressure, refer to "Tire and wheels" in chapter 9.



All specifications (sizes and pressures) can be found on a label attached to the vehicle.

### **⚠ WARNING - Tire underinflation**

**Severe underinflation (70 kPa (10 psi) or more) can lead to severe heat build-up, causing blowouts, tread separation and other tire failures that can result in the loss of vehicle control leading to severe injury or death. This risk is much higher on hot days and when driving for long periods at high speeds.**

### **⚠ CAUTION**

- ***Underinflation also results in excessive wear, poor handling and reduced fuel economy. Wheel deformation also is possible. Keep your tire pressures at the proper levels. If a tire frequently needs refilling, we recommend that the system be checked by an authorized Kia dealer.***
- ***Overinflation produces a harsh ride, excessive wear at the center of the tire tread, and a greater possibility of damage from road hazards.***

 **CAUTION**

- *Warm tires normally exceed recommended cold tire pressures by 28 to 41 kPa (4 to 6 psi). Do not release air from warm tires to adjust the pressure or the tires will be under-inflated.*
- *Be sure to reinstall the tire inflation valve caps. Without the valve cap, dirt or moisture could get into the valve core and cause air leakage. If a valve cap is missing, install a new one as soon as possible.*

 **WARNING - Tire Inflation**

Overinflation or underinflation can reduce tire life, adversely affect vehicle handling, and lead to sudden tire failure. This could result in loss of vehicle control and potential injury.

 **CAUTION - Tire pressure**

*Always observe the following:*

- *Check tire pressure when the tires are cold. (After vehicle has been parked for at least three hours or hasn't been driven more than 1.6 km (one mile) since startup.)*
- *Check the pressure of your spare tire each time you check the pressure of other tires.*
- *Never overload your vehicle. Be careful not to overload a vehicle luggage rack if your vehicle is equipped with one.*
- *Worn, old tires can cause accidents. If your tread is badly worn, or if your tires have been damaged, replace them.*

**Checking tire inflation pressure**

Check your tires once a month or more.

Also, check the tire pressure of the spare tire.

***How to check***

Use a good quality gauge to check tire pressure. You can not tell if your tires are properly inflated simply by looking at them. Radial tires may look properly inflated even when they're underinflated.

Check the tire's inflation pressure when the tires are cold. - "Cold" means your vehicle has been sitting for at least three hours or driven no more than 1.6 km (1 mile).

Remove the valve cap from the tire valve stem. Press the tire gauge firmly onto the valve to get a pressure measurement. If the cold tire inflation pressure matches the recommended pressure on the tire and loading information label, no further adjustment is necessary. If the pressure is low, add air until you reach the recommended amount.

If you overfill the tire, release air by pushing on the metal stem in the center of the tire valve. Recheck the tire pressure with the tire gauge. Be sure to put the valve caps back on the valve stems. They help prevent leaks by keeping out dirt and moisture.

### **WARNING**

- **Inspect your tires frequently for proper inflation as well as wear and damage. Always use a tire pressure gauge.**
- **Tires with too much or too little pressure wear unevenly causing poor handling, loss of vehicle control, and sudden tire failure leading to accidents, injuries, and even death. The recommended cold tire pressure for your vehicle can be found in this manual and on the tire label located on the driver's side center pillar.**
- **Worn tires can cause accidents. Replace tires that are worn, show uneven wear, or are damaged.**
- **Remember to check the pressure of your spare tire. Kia recommends that you check the spare every time you check the pressure of the other tires on your vehicle.**

### **Tire rotation**

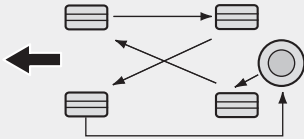
To equalize tread wear, it is recommended that the tires be rotated every 12,000 km (7,500 miles) or sooner if irregular wear develops.

During rotation, check the tires for correct balance.

When rotating tires, check for uneven wear and damage. Abnormal wear is usually caused by incorrect tire pressure, improper wheel alignment, out-of-balance wheels, severe braking or severe cornering. Look for bumps or bulges in the tread or side of tire. Replace the tire if you find either of these conditions. Replace the tire if fabric or cord is visible. After rotation, be sure to bring the front and rear tire pressures to specification and check lug nut tightness.

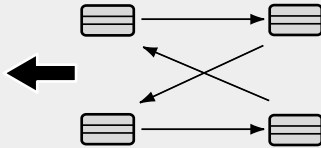
Refer to "Tire and wheels" in chapter 9.

With a full-size spare tire  
(Only the vehicle without TPMS system)



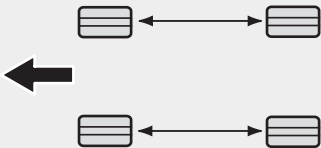
CBGQ0706

Without a spare tire



S2BLA790A

Directional tires (if equipped)



CBGQ0707A

*Disc brake pads should be inspected for wear whenever tires are rotated.*

## \* NOTICE

Rotate radial tires that have an asymmetric tread pattern only from front to rear and not from right to left.

## ⚠ WARNING

**Do not mix bias ply and radial ply tires under any circumstances. This may cause unusual handling characteristics that could result in death, severe injury, or property damage.**

## Wheel alignment and tire balance

The wheels on your vehicle were aligned and balanced carefully at the factory to give you the longest tire life and best overall performance.

In most cases, you will not need to have your wheels aligned again. However, if you notice unusual tire wear or your vehicle pulling one way or the other, the alignment may need to be reset.

If you notice your vehicle vibrating when driving on a smooth road, your wheels may need to be rebalanced.

## ⚠ CAUTION

***Improper wheel weights can damage your vehicle's aluminum wheels. Use only approved wheel weights.***

### Tire replacement



If the tire is worn evenly, a tread wear indicator (A) will appear as a solid band across the tread. This shows there is less than 1.6 mm (1/16 in.) of tread left on the tire. Replace the tire when this happens.

Do not wait for the band to appear across the entire tread before replacing the tire.

### \* NOTICE

We recommend that when replacing tires, use the same originally supplied with the vehicles. If not, that affects driving performance.

### ⚠ CAUTION

*When replacing the tires, recheck and tighten the wheel nuts after driving about 50km (31miles) and recheck after driving about 1,000km (620miles). If the steering wheel shakes or the vehicle vibrates while driving, the tire is out of balance. Align the tire balance. If the problem is not solved, we recommend that you contact an authorized kia dealer.*

### ⚠ WARNING - Replacing tires

To reduce the chance of serious or fatal injuries from an accident caused by tire failure or loss of vehicle control:

- Replace tires that are worn, show uneven wear, or are damaged. Worn tires can cause loss of braking effectiveness, steering control, and traction.
- Do not drive your vehicle with too little or too much pressure in your tires. This can lead to uneven wear and tire failure.
- When replacing tires, never mix radial and bias-ply tires on the same car. You must replace all tires (including the spare) if moving from radial to bias-ply tires.

(Continued)



**(Continued)**

- **Using tires and wheels other than the recommended sizes could cause unusual handling characteristics and poor vehicle control, resulting in a serious accident.**
- **Wheels that do not meet Kia's specifications may fit poorly and result in damage to the vehicle or unusual handling and poor vehicle control.**
- **The ABS works by comparing the speed of the wheels. The tire size affects wheel speed. When replacing tires, all 4 tires must use the same size originally supplied with the vehicle. Using tires of a different size can cause the ABS (Anti-lock Brake System) and ESC (Electronic Stability Control) to work irregularly.**

**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.

 **WARNING**

**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-tire clearance, snow chain clearance, speedometer and odometer calibration, headlight aim and bumper height.**

**Tire traction**

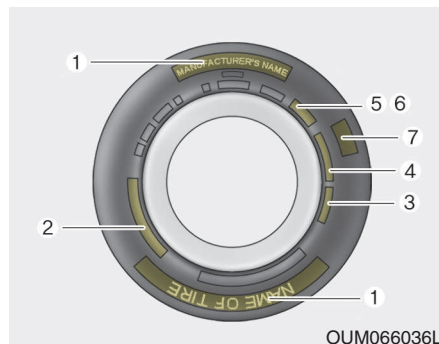
Tire traction can be reduced if you drive on worn tires, tires that are improperly inflated or on slippery road surfaces. Tires should be replaced when tread wear indicators appear. Slow down whenever there is rain, snow or ice on the road to reduce the possibility of losing control of the vehicle.

**Tire maintenance**

In addition to proper inflation, correct wheel alignment helps to decrease tire wear. If you find a tire is worn unevenly, have your dealer check the wheel alignment.

When you have new tires installed, make sure they are balanced. This will increase vehicle ride comfort and tire life. Additionally, a tire should always be rebalanced if it is removed from the wheel.

## Tire sidewall labeling



This information identifies and describes the fundamental characteristics of the tire and also provides the tire identification number (TIN) for safety standard certification. The TIN can be used to identify the tire in case of a recall.

### 1. Manufacturer or brand name

Manufacturer or Brand name is shown.

### 2. Tire size designation

A tire's sidewall is marked with a tire size designation. You will need this information when selecting replacement tires for your vehicle. The following explains what the letters and numbers in the tire size designation mean.

Example tire size designation:

(These numbers are provided as an example only; your tire size designator could vary depending on your vehicle.)

### P235/55R19 108T

P - Applicable vehicle type (tires marked with the prefix "P" are intended for use on passenger vehicles or light trucks; however, not all tires have this marking).

235 - Tire width in millimeters.

55 - Aspect ratio. The tire's section height as a percentage of its width.

R - Tire construction code (Radial).

19 - Rim diameter in inches.

108 - Load Index, a numerical code associated with the maximum load the tire can carry.

T - Speed Rating Symbol. See the speed rating chart in this section for additional information.

### Wheel size designation

Wheels are also marked with important information that you need if you ever have to replace one. The following explains what the letters and numbers in the wheel size designation mean.

Example wheel size designation:

**7.5JX19**

7.5 - Rim width in inches.

J - Rim contour designation.

19 - Rim diameter in inches.

### Tire speed ratings

The chart below lists many of the different speed ratings currently being used for passenger car tires. The speed rating is part of the tire size designation on the sidewall of the tire. This symbol corresponds to that tire's designed maximum safe operating speed.

| Speed Rating Symbol | Maximum Speed            |
|---------------------|--------------------------|
| S                   | 180 km/h (112 mph)       |
| T                   | 190 km/h (118 mph)       |
| H                   | 210 km/h (130 mph)       |
| V                   | 240 km/h (149 mph)       |
| Z                   | Above 240 km/h (149 mph) |

### 3. Checking tire life (TIN : Tire Identification Number)

Any tires that are over 6 years old, based on the manufacturing date, (including the spare tire) should be replaced by new ones. You can find the manufacturing date on the tire sidewall (possibly on the inside of the wheel), displaying the DOT Code. The DOT Code is a series of numbers on a tire consisting of numbers and English letters. The manufacturing date is designated by the last four digits (characters) of the DOT code.

#### DOT : XXXX XXXX 0000

The front part of the DOT means a plant code number, tire size and tread pattern and the last four numbers indicate week and year manufactured.

For example:

DOT XXXX XXXX 1617 represents that the tire was produced in the 16th week of 2017.

**⚠ WARNING - Tire age**

**Tires degrade over time, even when they are not being used.**

**Regardless of the remaining tread, we recommend that tires be replaced after approximately six (6) years of normal service. Heat caused by hot climates or frequent high loading conditions can accelerate the aging process. Failure to follow this warning can result in sudden tire failure, which could lead to a loss of control and an accident involving serious injury or death.**

***4. Tire ply composition and material***

The number of layers or plies of rubber-coated fabric in the tire. Tire manufacturers also must indicate the materials in the tire, which include steel, nylon, polyester, and others. The letter "R" means radial ply construction; the letter "D" means diagonal or bias ply construction; and the letter "B" means belted-bias ply construction.

***5. Maximum permissible inflation pressure***

This number is the greatest amount of air pressure that should be put in the tire. Do not exceed the maximum permissible inflation pressure. Refer to the Tire and Loading Information label for recommended inflation pressure.

***6. Maximum load rating***

This number indicates the maximum load in kilograms and pounds that can be carried by the tire. When replacing the tires on the vehicle, always use a tire that has the same load rating as the factory installed tire.

***7. Uniform tire quality grading***

Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width.

For example:

TREADWEAR 200

TRACTION AA

TEMPERATURE A

**Tread wear**

The tread wear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one-and-a-half times ( $1\frac{1}{2}$ ) as well on the government course as a tire graded 100.

The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

These grades are molded on the side-walls of passenger vehicle tires. The tires available as standard or optional equipment on your vehicle may vary with respect to grade.

**Traction - AA, A, B & C**

The traction grades, from highest to lowest, are AA, A, B and C. Those grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

**Temperature -A, B & C**

The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

 **WARNING**

**The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning, or peak traction characteristics.**

 **WARNING - Tire temperature**

**The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat build-up and possible sudden tire failure. This can cause loss of vehicle control and serious injury or death.**

### Low aspect ratio tire (if equipped)

Low aspect ratio tires, whose aspect ratio is lower than 50, are provided for sporty looks.

Because the low aspect ratio tires are optimized for handling and braking, it may be more uncomfortable to ride in and there is more noise compare with normal tires.

#### CAUTION

***Because the sidewall of the low aspect ratio tire is shorter than the normal, the wheel and tire of the low aspect ratio tire is easier to be damaged. So, follow the instructions below.***

- ***When driving on a rough road or off road, drive cautiously because tires and wheels may be damaged. And after driving, inspect tires and wheels.***
- ***When passing over a pothole, speed bump, manhole, or curb stone, drive slowly so that the tires and wheels are not damaged.***
- ***If the tire is impacted, we recommend that you inspect the tire condition or contact an authorized Kia dealer.***
- ***To prevent damage to the tire, inspect the tire condition and pressure every 3,000km.***

#### CAUTION

- ***It is not easy to recognize the tire damage with your own eyes. But if there is the slightest hint of tire damage, even though you cannot see the tire damage with your own eyes, have the tire checked or replaced because the tire damage may cause air leakage from the tire.***
- ***If the tire is damaged by driving on a rough road, off road, pothole, manhole, or curb stone, it will not be covered by the warranty.***
- ***You can find out the tire information on the tire sidewall.***

## FUSES

Blade type



Normal



Blown

Cartridge type



Normal

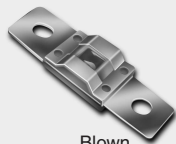


Blown

Fusible link



Normal



Blown

1VQA4037

\* Left side : Normal  
Right side : blown

A vehicle's electrical system is protected from electrical overload damage by fuses.

This vehicle has 5 fuse panels, one located in the driver's side panel bolster, the others in the engine compartment near the battery.

If any of your vehicle's lights, accessories, or controls do not work, check the appropriate circuit fuse. If the fuse becomes disconnected, the electrical system it protected will not function properly. Therefore, replace the fuse.

If the electrical system does not work, first check the driver's side fuse panel.

In order to replace the fuse, turn off the engine and switch of all electrical system first. Then, disconnect the negative battery cable of the fuse and replace at a level and safe location.

Always replace a blown fuse with one of the same rating. If the replacement fuse blows, this indicates an electrical problem. Avoid using the system involved and we recommend that you consult an authorized Kia dealer.

*Three kinds of fuses are used: blade type for lower amperage rating, cartridge type, and fusible link for higher amperage ratings.*

### **⚠ WARNING - Fuse replacement**

- **Never replace a fuse with anything but another fuse of the same rating.**
- **A higher capacity fuse could cause damage and possibly a fire.**
- **Never install a wire or aluminum foil instead of the proper fuse even as a temporary repair. It may cause extensive wiring damage and a possible fire.**
- **Do not arbitrarily modify or add-on electric wiring of the vehicle.**

 **CAUTION**

*Do not use a screwdriver or any other metal object to remove fuses because it may cause a short circuit and damage the system.*

**\* NOTICE**

The actual fuse/relay panel label may differ from equipped items.

 **CAUTION**

- *When replacing a blown fuse or relay with a new one, make sure the new fuse or relay fits tightly into the clips. The incomplete fastening fuse or relay may cause the vehicle wiring and electric systems damage and a possible fire.*
- *Do not remove fuses, relays and terminals fastened with bolts or nuts. The fuses, relays and terminals may be fastened incompletely, and it may cause a possible fire. If fuses, relays and terminals fastened with bolts or nuts are blown, we recommend that you consult an authorized Kia dealer.*
- *Do not input any other objects except fuses or relays into fuse/relay terminals such as a driver or wiring. It may cause contact failure and system malfunction.*

*(Continued)*

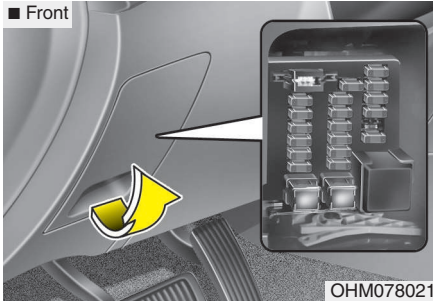
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- *Do not plug in screwdrivers or aftermarket wiring into the terminal originally designed for fuse and relays only. The electrical system and wiring of the vehicle interior may be damaged or burned due to contact failure.*

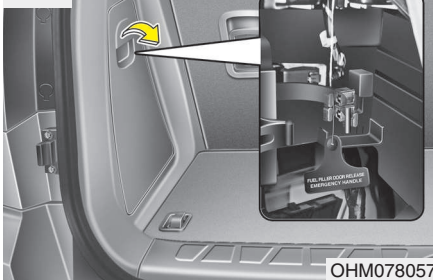


## Inner panel fuse replacement

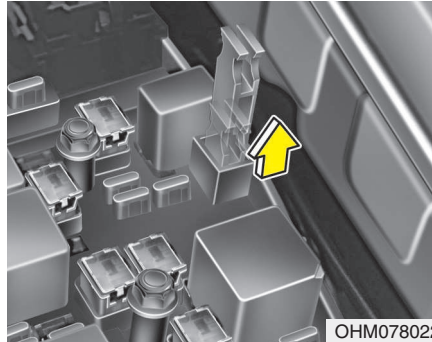
■ Front



■ Rear



1. Turn the ignition switch and all other switches off.
2. Open the fuse panel cover.



3. Pull the suspected fuse straight out. Use the removal tool provided in the main fuse box in the engine compartment.

4. Check the removed fuse; replace it if it is blown.

*Spare fuses are provided in the instrument panel fuse panel (or in the engine compartment fuse panel).*

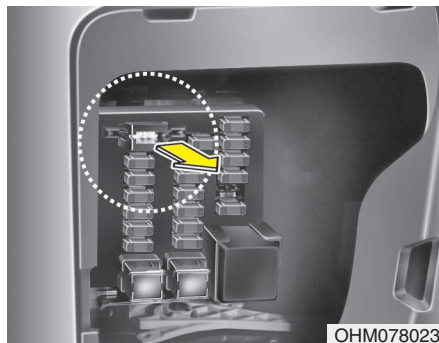
5. Push in a new fuse of the same rating, and make sure it fits tightly in the clips.

If it fits loosely, we recommend that you 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 cigarette lighter fuse.*

If the headlights or taillights, stoplights, courtesy lamp, day time running lights (D.R.L) do not work and the fuses are OK, check the fuse panel in the engine compartment. If a fuse is blown, it must be replaced.

### Memory fuse (SHUNT connector)



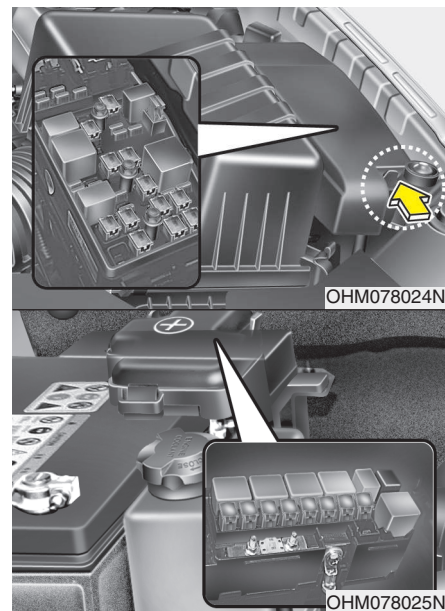
Your vehicle is equipped with a memory fuse (SHUNT connector) to prevent battery discharge if your vehicle is parked without being operated for prolonged periods. Use the following procedures before parking the vehicle for prolonged periods.

1. Turn off the engine.
2. Turn off the headlights and tail lights.
3. Open the driver's side panel cover and pull out the memory fuse (SHUNT connector).

### \* NOTICE

- If the memory fuse is pulled out from the fuse panel, the warning chime, audio, clock and interior lamps, etc., will not operate. Some items must be reset after replacement. Refer to “Battery” in this section.
- Even though the memory fuse is pulled out, the battery can still be discharged by operation of the headlights or other electrical devices.

### Engine compartment fuse replacement



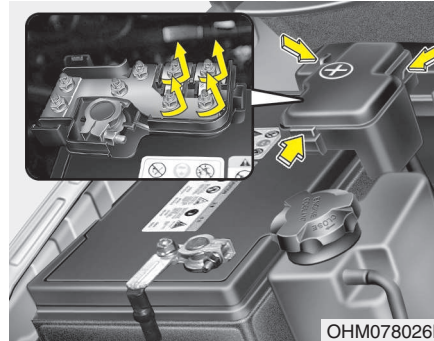
1. Turn the ignition switch and all other switches off.

2. Remove the fuse panel cover by pressing the tab and pulling the cover up. When the blade type fuse is disconnected, remove it by using the clip designed for changing fuses located in the engine room fuse box. Upon removal, securely insert reserve fuse of equal quantity.
3. Check the removed fuse; replace it if it is blown. To remove or insert the fuse, use the fuse puller in the engine compartment fuse panel.
4. Push in a new fuse of the same rating, and make sure it fits tightly in the clips. If it fits loosely, we recommend that you consult an authorized Kia dealer.

### CAUTION

***After checking the fuse panel in the engine compartment, securely install the fuse panel. If not, cover through the audible clicking sound. Electrical failures may occur from water contact.***

### Main fuse



If the main fuse is blown, it must be removed as follows:

1. Turn off the engine.
2. Disconnect the negative battery cable.
3. Remove the nuts shown in the picture above.
4. Replace the fuse with a new one of the same rating.
5. Reinstall in the reverse order of removal

### \* NOTICE

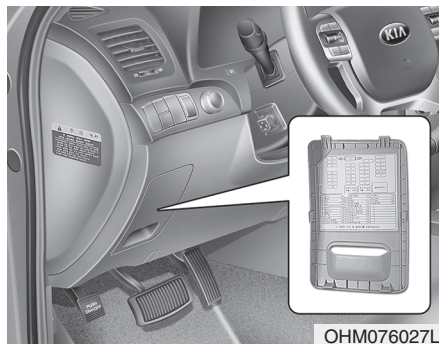
**If the main fuse is blown, consult an authorized Kia dealer.**

### CAUTION

***Visually inspect the battery cap for secure closing. If the battery cap is not securely latched, the electrical system may be damaged to due influx of moisture into the system.***

## Fuse/relay panel description

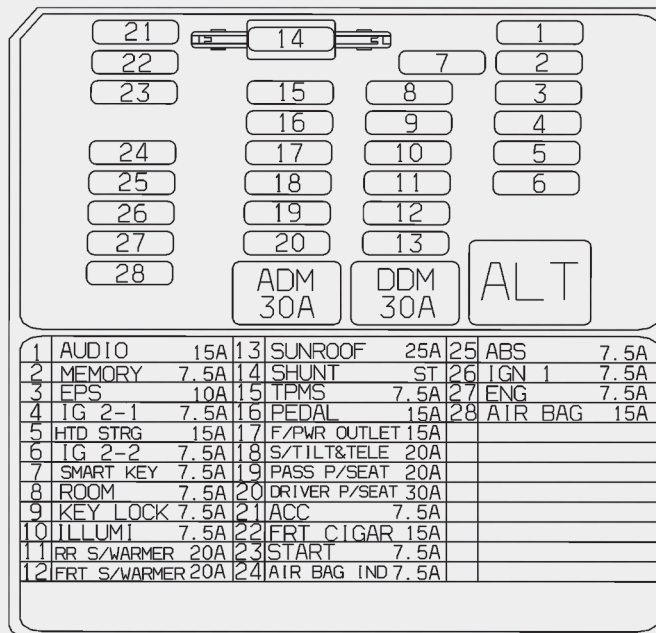
### Inner fuse panel (Instrument panel)



Inside the fuse/relay panel covers, you can find the fuse/relay label describing fuse/relay name and capacity.

### \* NOTICE

Not all fuse panel descriptions in this manual may be applicable to your vehicle. It is accurate at the time of printing. When you inspect the fuse panel in your vehicle, refer to the fuse panel label.



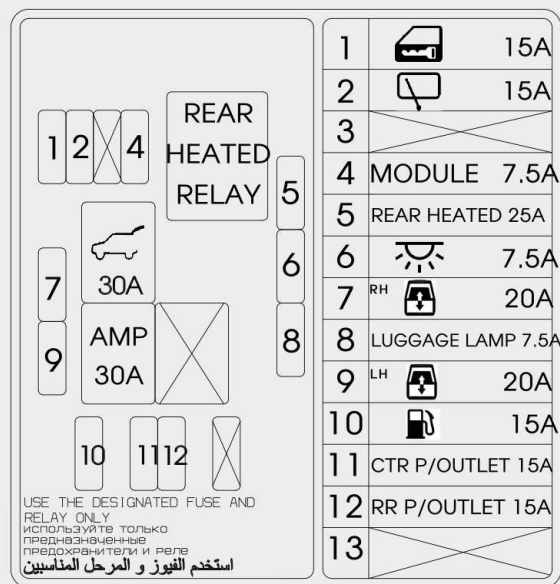
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**Inner fuse panel (Instrument panel)**

| <b>Description</b> | <b>Fuse rating</b> | <b>Protected component</b>                                                                                                                                                                                                                                                        |
|--------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AUDIO              | 15A                | Audio, A/V & Navigation Head Unit, MTS E-Call Module                                                                                                                                                                                                                              |
| MEMORY             | 7.5A               | Front/Rear A/C Control Module, Instrument Cluster(IND.), FAM, RAM, Driver/Passenger Door Module, IMS Control Module, Tilt & Telescopic Module, RF Receiver                                                                                                                        |
| IG2-1              | 7.5A               | Front A/C Control Module, Multifunction Switch, Driver/Passenger Seat Warmer Module, Rain Sensor, Around View Monitor, Smart Key Control Module, Relay Block(Front/Rear Blower Relay), E/R Sub Block (COOLING FAN2 Relay, Fuel Heater Relay), Driver/Passenger CCS Control Module |
| HEATED S/WHEEL     | 15A                | Steering Wheel Heated                                                                                                                                                                                                                                                             |
| IG2-2              | 7.5A               | Rear A/C Control Module, Driver/Passenger Door Module, FAM                                                                                                                                                                                                                        |
| OBD-II             | 7.5A               | Start Stop Button Switch                                                                                                                                                                                                                                                          |
| ROOM               | 7.5A               | Hazard Switch, Map Lamp, Vanity Lamp Switch LH/RH, Front/Rear A/C Control Module, Center Room Lamp, Rear Room Lamp                                                                                                                                                                |
| K/LOCK             | 7.5A               | Sport Mode Switch, Driver/Passenger Door Module, Ignition Key Interlock                                                                                                                                                                                                           |
| ILLUMI             | 7.5A               | IPM                                                                                                                                                                                                                                                                               |
| RR S/WARMER        | 20A                | Rear Seat Warmer Relay                                                                                                                                                                                                                                                            |
| SEAT WARMER        | 20A                | Driver Seat Warmer Module, Passenger Seat Warmer Module, Driver / Passenger CCS Control Module                                                                                                                                                                                    |
| SUNROOF            | 25A                | Sunroof Module                                                                                                                                                                                                                                                                    |
| TPMS               | 7.5A               | Tire Pressure Monitoring Module                                                                                                                                                                                                                                                   |
| S/TILT             | 20A                | Tilt & Telescopic Module                                                                                                                                                                                                                                                          |

| Description   | Fuse rating | Protected component                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PASS P/SEAT   | 20A         | Passenger Power Seat Switch                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| DRIVER P/SEAT | 30A         | Driver Power Seat Switch, Driver Lumbar Support Switch, IMS Control Module                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| ACC           | 7.5A        | Audio, A/V & Navigation Head Unit, MTS E-Call Module, Smart Key Control Module, Around View Monitor, JBL AMP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| FRT CIGAR     | 15A         | Cigarette Lighter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| START         | 7.5A        | Burglar Alarm Relay, Start Relay                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| AIR BAG IND.  | 7.5A        | Instrument Cluster(Air Bag IND.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| ABS           | 7.5A        | ABS Control Module, ESC Control Module, DBC Relay, Steering Angle Sensor, Crash Pad Switch                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| IGN 1         | 7.5A        | Rheostat, Air Suspension Control Module, Electro Chromic Mirror, Front Wiper Motor, Smart Key Control Module, Multipurpose Check Connector, MTS E-Call Module, Rear Parking Assist Buzzer, Rear Parking Assist Switch, Sport Mode Switch, Audio, A/V & Navigation Head Unit, Stop Lamp Switch, Auto Head Lamp Leveling Device Sensor, Alternator, Multifunction Switch, Tire Pressure Monitoring Module, Blind Spot Detection Radar LH/RH, Tilt & Telescopic Module, Front A/C Control Module, Instrument Cluster, Fuel Filter Warning Switch, Lane Departure Warning Control Module, Front/Rear Parking Assist Sensor LH/RH, Front/Rear Parking Assist Sensor Center LH/RH |
| ENG           | 7.5A        | ECM, TCM, 4WD ECM, Air Flow Sensor, Smart Key Control Module, Inhibitor Switch, Multipurpose Check Connector                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| AIR BAG       | 15A         | SRS Control Module                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| DDM           | 30A         | Driver Door Module, Driver Safety Power Window Motor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| ADM           | 30A         | Passenger Door Sensor, Passenger Safety Power Window Motor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

### Inner fuse panel (Luggage compartment)



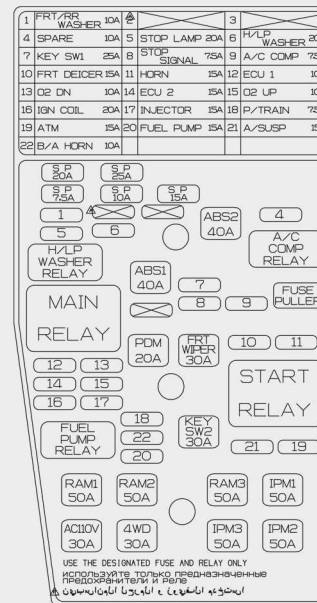
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## Inner fuse panel (Luggage compartment)

| Fuse Name       | Fuse rating | Circuit Protected                 |
|-----------------|-------------|-----------------------------------|
| D/LOCK          | 15A         | Rear Door Lock/Unlock Relay       |
| RR WIPER        | 15A         | Rear Wiper Motor Relay            |
| MODULE 1        | 7.5A        | Console Switch LH/RH              |
| RR DEFOG        | 25A         | RR Defog Relay                    |
| RR P/WIN-RH     | 20A         | Rear Power Window Relay RH(UP/DN) |
| LUGGAGE         | 7.5A        | Luggage Lamp                      |
| RR P/WIN-LH     | 20A         | Rear Power Window Relay LH(UP/DN) |
| FUEL DR         | 15A         | Fuel Door Relay                   |
| CONSOL P/OUT    | 15A         | Console Power Outlet              |
| RR P/OUT        | 15A         | Rear Power Outlet                 |
| T/G POWER LATCH | 30A         | Tail Gate Control Module          |
| AMP             | 30A         | JBL AMP                           |



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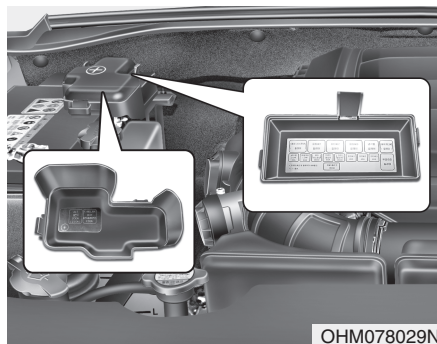


**Engine compartment main fuse panel**

| <b>Fuse Name</b> | <b>Fuse rating</b> | <b>Circuit Protected</b>                                                                                                                                                                               |
|------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FRT/RR WASHER    | 10A                | Front/Rear Washer Motor Relay                                                                                                                                                                          |
| STOP LAMP        | 20A                | FAM(STOP SIGNAL 7.5A), DBC Relay, Stop Signal Relay                                                                                                                                                    |
| KEY SW 1         | 25A                | Ignition Switch, PDM Relay Box(IG1 Relay , ACC Relay )                                                                                                                                                 |
| STOP SIGNAL      | 7.5A               | Stop Lamp Switch, Smart Key Control Module                                                                                                                                                             |
| A/C COMP         | 7.5A               | A/C Comp Relay                                                                                                                                                                                         |
| FRT DEICER       | 15A                | Front Deicer Relay                                                                                                                                                                                     |
| HORN             | 15A                | Horn Relay                                                                                                                                                                                             |
| ECU 1            | 10A                | DIESEL - Immobilizer Module, A/C Comp Relay, Stop Lamp Switch,<br>E/R Sub Block (Glow Relay, PTC 1~3 Relay), Lambda Sensor<br>GASOLINE - ECM, Mass Air Flow Sensor, Immobilizer Module, A/C Comp Relay |
| O2 DN            | 10A                | GASOLINE - Oxygen Sensor #3/ #4                                                                                                                                                                        |
| ECU 2            | 15A                | DIESEL - EGR Cooling Valve, Electric VGT Actuator /<br>GASOLINE - Oil Control Valve, ECM, Variable Intake Manifold Valve,<br>Purge Control Solenoid Valve                                              |
| O2 UP            | 10A                | DIESEL - Rail Pressure Regulator Valve, Fuel Meter Unit /<br>GASOLINE : Oxygen Sensor #1/ #2                                                                                                           |
| IGN COIL         | 20A                | GASOLINE - Ignition Coil #1~#6, Condenser #1,#2                                                                                                                                                        |
| INJECTOR         | 15A                | ECM, Injector #1~#6(GASOLINE)                                                                                                                                                                          |
| P/TRAIN          | 7.5A               | ECM, Main Relay                                                                                                                                                                                        |
| FUEL PUMP        | 15A                | Fuel Pump Relay                                                                                                                                                                                        |

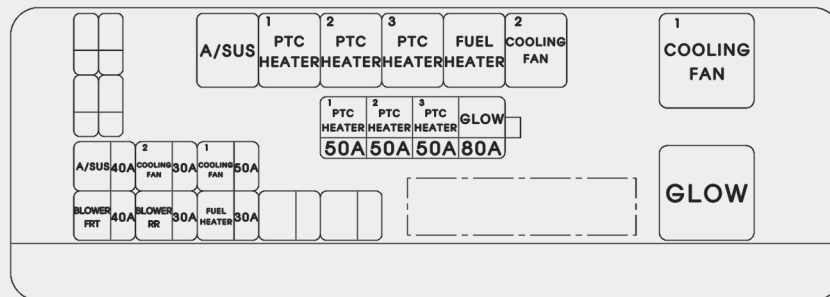
| Fuse Name   | Fuse rating | Circuit Protected                                                                                |
|-------------|-------------|--------------------------------------------------------------------------------------------------|
| ATM         | 15A         | TCM                                                                                              |
| A/SUSP      | 15A         | Air Suspension Control Module                                                                    |
| H/LP WASHER | 20A         | Head Lamp Washer Motor & Washer Level Sensor                                                     |
| B/A HORN    | 10A         | Relay Block (B/A Horn Relay)                                                                     |
| ABS 2       | 40A         | ABS Control Module, ESC Control Module, Multipurpose Check Connector                             |
| ABS 1       | 40A         | ABS Control Module, ESC Control Module                                                           |
| PDM         | 20A         | Smart Key Control Module                                                                         |
| FRT WIPER   | 30A         | Front Wiper ON Relay                                                                             |
| KEY SW 2    | 30A         | Start 1 Relay, Ignition Switch, PDM Relay Box(IG2 Relay)                                         |
| RAM 1       | 50A         | RAM(CONSOL P/OUT 15A, RR P/OUT 15A, FUEL DR 15A, RR P/WIN-LH 20A, RR P/WIN-RH 20A, LUGGAGE 7.5A) |
| RAM 2       | 50A         | RAM (RR DEFOG 25A, T/G POWER LATCH 30A, DOOR LOCK 15A, RR WIPER 15A, MODULE 1 7.5A)              |
| RAM 3       | 50A         | RAM(AMP 30A)                                                                                     |
| IPM 1       | 50A         | IPM (ILLUMI 7.5A, DDM 30A, SEAT WARMER 20A, OBD-II 7.5A, SUNROOF 25A, K/LOCK 7.5A, TPMS 7.5A)    |
| IPM 2       | 50A         | IPM (ADM 30A, S/TILT 20A)                                                                        |
| IPM 3       | 50A         | IPM (MEMORY 7.5A, DRIVER P/SEAT 30A, PASS P/SEAT 20A, RR S/WARM 20A, ROOM 7.5A, AUDIO 15A)       |
| 4WD         | 30A         | 4WD ECM                                                                                          |

## Engine compartment sub fuse panel

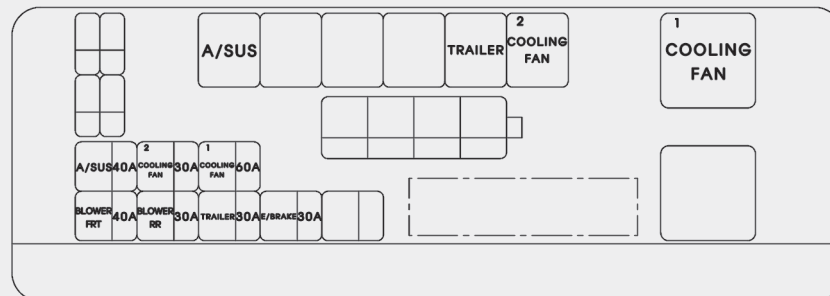


OHM078029N

### ■ Type A



### ■ Type B



OHM076073L

**Engine compartment sub fuse panel**

| <b>Fuse Name</b> | <b>Fuse rating</b> | <b>Circuit Protected</b>        |
|------------------|--------------------|---------------------------------|
| COOLING FAN 2    | 30A                | COOLING FAN 2 RELAY             |
| FUEL HEATER      | 30A                | FUEL HEATER RELAY               |
| A/SUS            | 40A                | AIR SUSPENSION RELAY            |
| BLOWER FRT       | 40A                | RELAY BLOCK(FRONT BLOWER RELAY) |
| BLOWER RR        | 30A                | RELAY BLOCK(REAR BLOWER RELAY)  |
| PTC HEATER 1     | 50A                | PTC 1 RELAY                     |
| PTC HEATER 2     | 50A                | PTC 2 RELAY                     |
| PTC HEATER 3     | 50A                | PTC 3 RELAY                     |
| COOLING FAN 1    | 50A                | COOLING FAN 1 RELAY             |
| GLOW             | 80A                | GLOW RELAY                      |

## LIGHT BULBS

Please prepare bulbs with appropriate standards in case of emergencies. (Refer to chapter 9 for further information)

When changing bulbs and sorts, first turn off the engine at a safe place, firmly apply the side brake and take out the battery's negative (-) terminal.

### **WARNING - Working on the lights**

Prior to working on the light, firmly apply the parking brake, ensure that the ignition switch is turned to the LOCK position and turn off the lights to avoid sudden movement of the vehicle and burning your fingers or receiving an electric shock.

*Use only the bulbs of the specified wattage.*

### **WARNING**

**Be sure to replace the burned-out bulb with one of the same wattage rating. Otherwise, it may cause extensive wiring damage and possible fire.**

### **CAUTION**

*If you don't have necessary tools, the correct bulbs and the expertise, consult an authorized Kia dealer. In many cases, it is difficult to replace vehicle light bulbs because other parts of the vehicle must be removed before you can get to the bulb. This is especially true if you have to remove the headlight assembly to get to the bulb(s). Removing/installing the headlight assembly can result in damage to the vehicle.*

### **CAUTION**

- *If unauthentic parts or sub-standard lights are used when changing lights, it may lead to fuse disconnection and malfunction, and other wiring damages.*
- *Do not install extra lamps or LED to the vehicle. If supplementary lights are installed, it may lead to lamp malfunction and flickering of the lights. In addition, the fuse box and other wiring may be damaged.*

### ■ Lamp part malfunction due to net-work failure

The headlamp, taillight, and fog light may lit up when the head lamp switch is turned ON, and not light up when the taillight or fog light switch is turned ON. This may be caused by network failure or vehicle electrical control system malfunction. If there is a problem, we recommend the system be serviced by an authorized Kia dealer.

### ■ Lamp part malfunction due to electrical control system stabilization

A normally functioning lamp may flicker momentarily. This momentary occurrence is due to stabilization function of the vehicle's electrical control system. If the lamp soon returns to normal, the vehicle does not require service.

However, if the lamp goes out after the momentary flickering, or the flickering continues, we recommend the system be serviced by an authorized Kia dealer.

### \* NOTICE

- If the light bulb or lamp connector is removed from an operating lamp activated by electricity, the fuse box's electronic device may scan it as a malfunction. Therefore, a lamp malfunction history may be recorded in Diagnostic Trouble Code (DTC) in the fuse box.
- It is normal for an operating lamp may blink temporarily. Since this occurrence is due to stabilization function of the vehicle's electronic control device, if the lamp lights up normally after temporary blinking, there is no problem in the vehicle. However, if the lamp continues to blink several times or turn off completely, there may be an error in the vehicle's electronic control device. So we recommend that you have the vehicle checked by an authorized Kia dealer immediately.

### \* NOTICE

After driving in heavy rain or washing, headlamp and taillamp lenses could appear frosty. This condition is caused by the temperature difference between the lamp inside and outside. This is similar to the condensation on your windows inside your vehicle during the rain and doesn't indicate a problem with your vehicle. If the water leaks into the lamp bulb circuitry, have the vehicle checked by an authorized Kia dealer.

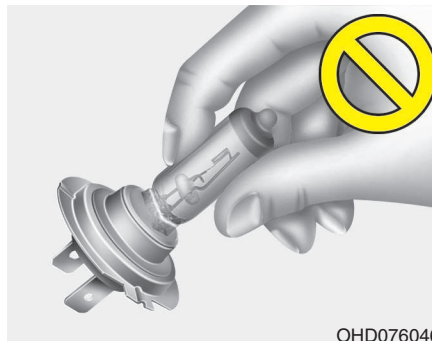
## Headlamp, Front position lamp, Front turn signal lamp, Front fog lamp bulb replacement



- (1) Headlamp (High)
- (2) Headlamp (Low)
- (3) Front turn signal lamp
- (4) Front position lamp /  
Daytime running lamp (LED)\*
- (5) Front fog lamp (Bulb)

\* : if equipped

## Headlamp bulb



### **⚠ WARNING - Halogen bulbs**

- Halogen bulbs contain pressurized gas that will produce flying pieces of glass if broken.
- Always handle them carefully, and avoid scratches and abrasions. 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.

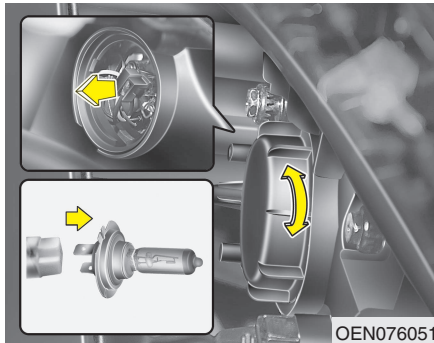
(Continued)

### (Continued)

A bulb should be operated only when installed in a headlight.

- If a bulb becomes damaged or cracked, replace it immediately and carefully dispose of it.
- Wear eye protection when changing a bulb. Allow the bulb to cool down before handling it.





1. Open the hood.
2. Remove the headlight bulb cover by turning it counterclockwise.
3. Disconnect the headlight bulb socket-connector.
4. Unsnap the headlight bulb retaining wire by depressing the end and pushing it upward.
5. Remove the bulb from the headlight assembly.
6. Install a new headlight bulb and snap the headlight bulb retaining wire into position by aligning the wire with the groove on the bulb.

7. Connect the headlight bulb socket-connector.
8. Install the headlight bulb cover by turning it clockwise.

### \* NOTICE

If the headlight aiming adjustment is necessary after the headlight assembly is reinstalled, we recommend that you consult an authorized Kia dealer.

### ***Headlight (HID type), position, turn signal, and front fog light bulb replacement***

If the light bulb does not operate, we recommend that you have the vehicle checked by an authorized Kia dealer.

### **⚠ WARNING**

**- HID Headlight low beam (if equipped)**

**Do not attempt to replace or inspect the low beam (XENON bulb) due to electric shock danger. If the low beam (XENON bulb) is not working, we recommend that you have your vehicle checked by an authorized Kia dealer.**

## \* NOTICE

HID lamps have superior performance vs. halogen bulbs. HID lamps are estimated by the manufacturer to last twice as long or longer than halogen bulbs depending on their frequency of use. They will probably require replacement at some point in the life of the vehicle. Cycling the headlamps on and off more than typical use will shorten HID lamps life. HID lamps do not fail in the same manner as halogen incandescent lamps. If a headlamp goes out after a period of operation but will immediately relight when the headlamp switch is cycled it is likely the HID lamp needs to be replaced. HID lighting components are more complex than conventional halogen bulbs thus have higher replacement cost.

## Side repeater lamp replacement



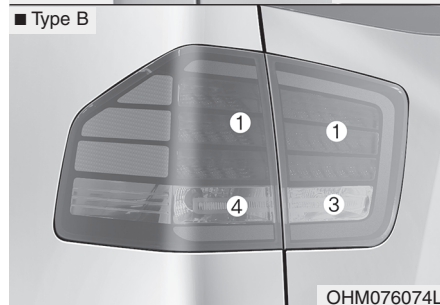
If the light bulb does not operate, we recommend that you checked an authorized Kia dealer.

## Rear combination light bulb replacement

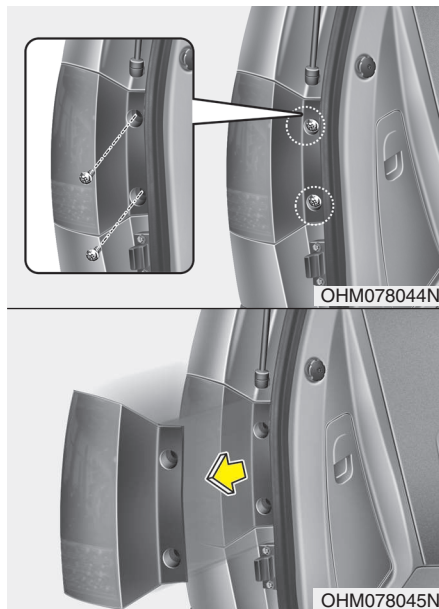
■ Type A



■ Type B

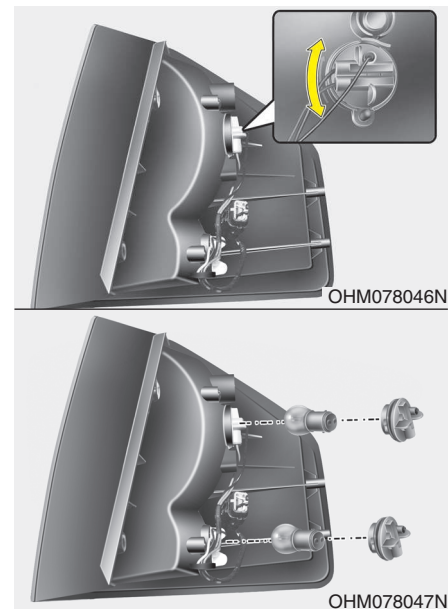


- (1) Stop and tail light
- (2) Tail light
- (3) Back-up light
- (4) Rear turn signal light

**Outside light****Type A**

1. Open the tailgate.
2. Loosen the light assembly retaining screws with a philips head screwdriver.

3. Remove the rear combination light assembly from the body of the vehicle.



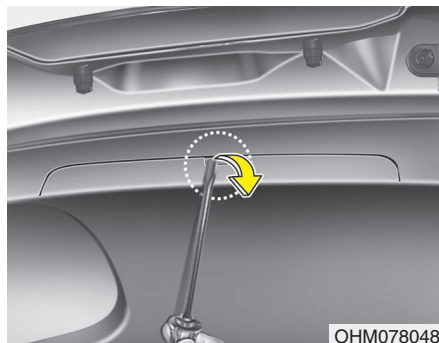
4. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.

5. Remove the bulb from the socket by pressing it in and rotating it counterclockwise until the tabs on the bulb align with the slots in the socket. Pull the bulb out of the socket.
6. Insert a new bulb by inserting it into the socket and rotating it until it locks into place.
7. Install the socket in the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.
8. Reinstall the light assembly to the body of the vehicle.

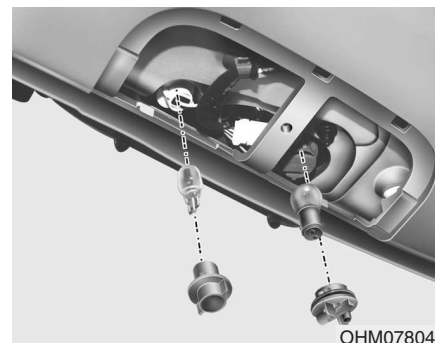
### Type B

If the light bulb does not operate, we recommend that you have the vehicle checked by an authorized Kia dealer.

### Inside light

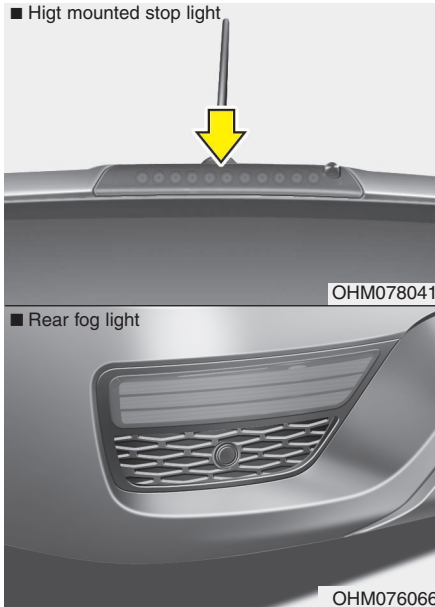


1. Open the tailgate.
2. Remove the service cover using a flat-blade screwdriver.
3. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
4. Remove the bulb from the socket by pressing it in and rotating it counterclockwise until the tabs on the bulb align with the slots in the socket. Pull the bulb out of the socket.



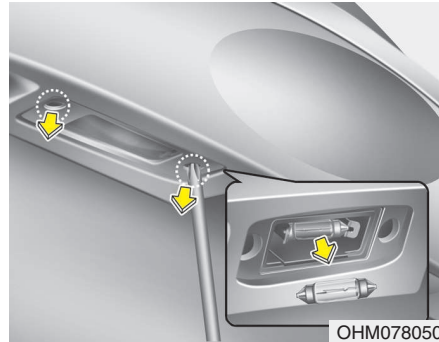
5. Insert a new bulb by inserting it into the socket and rotating it until it locks into place.
6. Install the socket in the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.
7. Install the service cover by putting it into the service hole.

## High mounted stop light and rear fog light bulb replacement



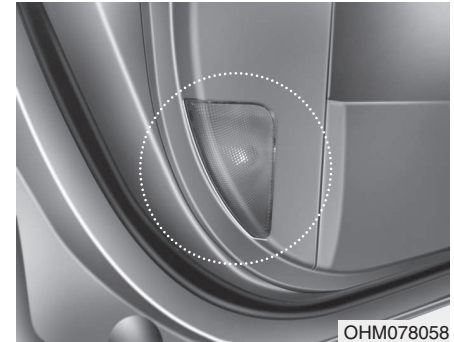
If the light does not operate, we recommend that you have the vehicle checked by an authorized Kia dealer.

## License plate light bulb replacement

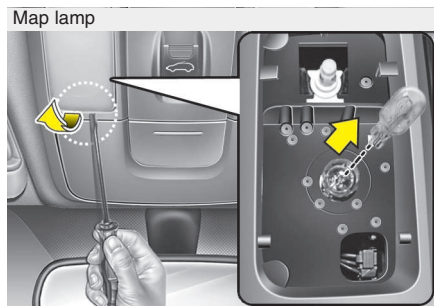


1. Loosen the lens retaining screws with a philips head screwdriver.
2. Remove the lens.
3. Remove the bulb by pulling it straight out.
4. Install a new bulb.
5. Reinstall the lens securely with the lens retaining screws.

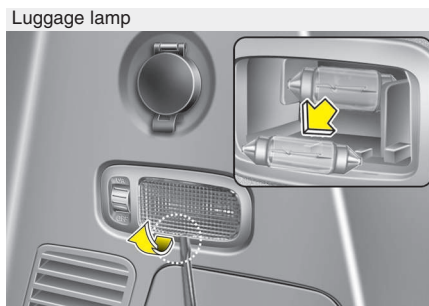
## Door courtesy lamp bulb replacement



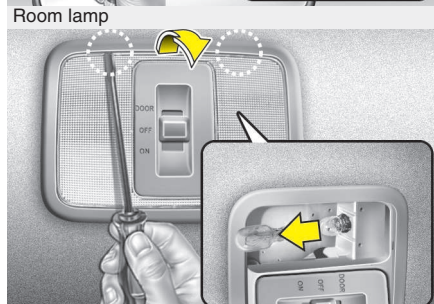
If the light does not operate, we recommend that you have the vehicle checked by an authorized Kia dealer.



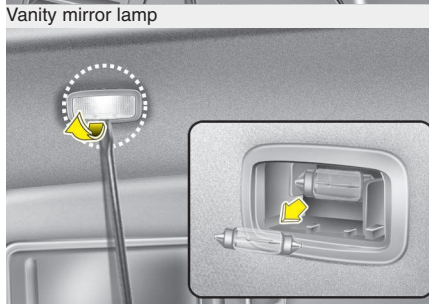
Map lamp



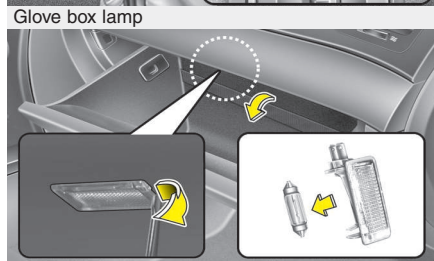
Luggage lamp



Room lamp



Vanity mirror lamp



Glove box lamp

OHM076051/OHM076052/OHM079055  
OHM078054/OHM078053

## Interior light bulb replacement

1. Using a flat-blade screwdriver, gently pry the lens from the interior light housing.

### **⚠ WARNING**

Prior to working on the Interior Lights, ensure that the "OFF" button is depressed to avoid burning your fingers or receiving an electric shock.

2. Remove the bulb by pulling it straight out.
3. Install a new bulb in the socket.
4. Align the lens tabs with the interior light housing notches and snap the lens into place.

### **⚠ CAUTION**

*Be careful not to dirty or damage the lens, lens tab, and plastic housings.*

## APPEARANCE CARE

### Exterior care

#### *Exterior general caution*

It is very important to follow the label 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.

If you use your vehicle for off-road driving, you should wash it after each off-road trip. Pay special attention to the removal of any accumulation of salt, dirt, mud, and 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 pollution 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, may be used.

After washing, rinse the vehicle thoroughly with lukewarm or cold water. Do not allow soap to dry on the finish.



### **CAUTION**

- ***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.***
- ***Be careful when washing the side windows of your vehicle. Especially, with high-pressure water, water may leak through the windows and wet the interior.***
- ***To prevent damage to the plastic parts and lamps, do not clean with chemical solvents or strong detergents.***



### **WARNING - Wet brakes**

**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.**

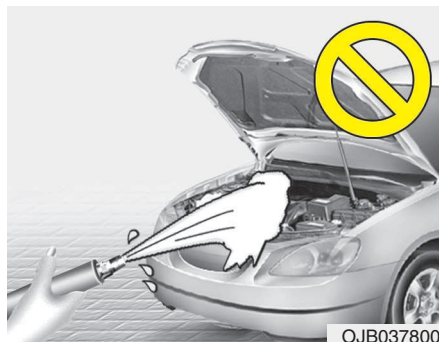


### High-pressure washing

- When using high-pressure washers, make sure to maintain sufficient distance from the vehicle.

Insufficient clearance or excessive pressure can lead to component damage or water penetration.

- Do not spray the camera, sensors or its surrounding area directly with a high pressure washer. Shock applied from high pressure water may cause the device to not operate normally.
- Do not bring the nozzle tip close to boots (rubber or plastic covers) or connectors as they may be damaged if they come into contact with high pressure water.



### CAUTION

- ***Water washing in the engine compartment including high pressure water washing may cause the failure of electrical circuits located in the engine compartment.***
- ***Never allow water or other liquids to come in contact with electrical/electronic components inside the vehicle as this may damage them.***

### 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 to protect it and to maintain its luster.

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. Do not apply wax on embossed unpainted unit, as it may tarnish the unit.



**CAUTION**

- *Wiping dust or dirt off the body with a dry cloth will scratch the finish.*
- *Do not use steel wool, abrasive cleaners, acid detergents or strong detergents containing high 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.

***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 luster.
- 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 and 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, after off-road driving and at the end of each winter. Pay special attention to these areas because it is difficult to see all the mud and dirt. It will do more harm than good to wet down the road grime without removing it. The lower edges of the doors, rocker panels, and frame members have drain holes that should not clog with dirt; trapped water in these areas can cause rusting.

### **WARNING**

**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.**

### *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.
- Clean the wheel when it has cooled.
- 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.
- Do not use any alkaline or acid detergent. It may damage and corrode the aluminum wheels coated with a clear protective finish.

### ***Corrosion protection***

#### **Protecting your vehicle from corrosion**

By using the most advanced design and construction practices to combat corrosion, we produce vehicles of the highest quality. However, this is only part of the job. To achieve the long-term corrosion resistance your vehicle can deliver, the owner's cooperation and assistance is also required.

#### **Common causes of corrosion**

The most common causes of corrosion on your vehicle are:

- Road salt, dirt and moisture that is allowed to accumulate underneath the vehicle.
- Removal of paint or protective coatings by stones, gravel, abrasion or minor scrapes and dents which leave unprotected metal exposed to corrosion.

#### **High-corrosion areas**

If you live in an area where your vehicle is regularly exposed to corrosive materials, corrosion protection is particularly important. Some of the common causes of accelerated corrosion are road salts, dust control chemicals, ocean air and industrial pollution.

#### **Moisture breeds corrosion**

Moisture creates the conditions in which corrosion is most likely to occur. For example, corrosion is accelerated by high humidity, particularly when temperatures are just above freezing. In such conditions, the corrosive material is kept in contact with the vehicle's surface by moisture that evaporate slowly.

Mud is particularly corrosive because it dries slowly and holds moisture in contact with the vehicle. Although the mud appears to be dry, it can still retain moisture and promote corrosion.

High temperatures can also accelerate corrosion of parts that are not properly ventilated so the moisture can be dispersed.

For all these reasons, it is particularly important to keep your vehicle clean and free of mud or accumulations of other materials. This applies not only to the visible surfaces but particularly to the underside of the vehicle.

#### **To help prevent corrosion**

You can help prevent corrosion from getting started by observing the following:

### Keep your vehicle clean

The best way to prevent corrosion is to keep your vehicle clean and free of corrosive materials. Attention to the underside of the vehicle is particularly important.

- If you live in a high-corrosion area — where road salts are used, near the ocean, areas with industrial pollution, acid rain, etc.—, you should take extra care to prevent corrosion. In winter, hose off the underside of your vehicle at least once a month and be sure to clean the underside thoroughly when winter is over.
- When cleaning underneath the vehicle, give particular attention to the components under the fenders and other areas that are hidden from view. Do a thorough job; just dampening the accumulated mud rather than washing it away will accelerate corrosion rather than prevent it. Water under high pressure and steam are particularly effective in removing accumulated mud and corrosive materials.

- When cleaning lower door panels, rocker panels and frame members, be sure that drain holes are kept open so that moisture can escape and not be trapped inside to accelerate corrosion.

### Keep your garage dry

Don't park your vehicle in a damp, poorly ventilated garage. This creates a favorable environment for corrosion. This is particularly true if you wash your vehicle in the garage or drive it into the garage when it is still wet or covered with snow, ice or mud. Even a heated garage can contribute to corrosion unless it is well ventilated so moisture is dispersed.

### Keep paint and trim in good condition

Scratches or chips in the finish should be covered with "touch-up" paint as soon as possible to reduce the possibility of corrosion. If bare metal is showing through, the attention of a qualified body and paint shop is recommended.

**Bird droppings :** Bird droppings are highly corrosive and may damage painted surfaces in just a few hours. Always remove bird droppings as soon as possible.

### Don't neglect the interior

Moisture can collect under the floor mats and carpeting and cause corrosion. Check under the mats periodically to be sure the carpeting is dry. Use particular care if you carry fertilizers, cleaning materials or chemicals in the vehicle.

These should be carried only in proper containers and any spills or leaks should be cleaned up, flushed with clean water and thoroughly dried.

## Interior care

### *Interior general precautions*

Prevent chemicals such as perfume, cosmetic oil, sun cream, hand cleaner, and air freshener from contacting the interior parts because they may cause damage or discoloration. If they do contact the interior parts, wipe them off immediately. If necessary, use a vinyl cleaner, see instructions for correct usage.

#### **CAUTION**

*Never allow water or other liquids to come in contact with electrical/electronic components inside the vehicle as this may damage them.*

#### **CAUTION**

*When cleaning leather products (steering wheel, seats etc.), use neutral detergents or low alcohol content solutions. If you use high alcohol content solutions or acid/alkaline detergents, the color of the leather may fade or the surface may get stripped off.*

#### **CAUTION - Nappa leather seat cover (If equipped)**

*Nappa leather retains the hide's own soft texture with visible pores, scars or blood vessels, etc. Pressure marks or wrinkles may be made when used. Prolonged exposure to sunlight or heat may cause discoloration. These things occur due to the natural characteristics of cowhides. If the leather is exposed to rain or gets wet, remove water with a dry cloth and dry the leather in the shade to minimize damage. Make sure to keep sharp objects away from the leather as these can create scratches on the surface. For light-colored leather, be careful of spots or color transfer, such as from jeans.*

### *Cleaning the upholstery and interior trim*

#### **Vinyl**

Remove dust and loose dirt from vinyl with a whisk broom or vacuum cleaner. Clean vinyl surfaces with a vinyl cleaner.

#### **Fabric**

Remove dust and loose dirt from fabric with a whisk broom or vacuum cleaner. 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 can be stained and its color can be affected. Also, its fire-resistant properties can 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.*

### ***Cleaning the lap/shoulder belt webbing***

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.

### ***Cleaning the interior window glass***

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 a glass cleaner. Follow the directions on the glass cleaner container.



### **CAUTION**

***Do not scrape or scratch the inside of the rear window. This may result in damage of the rear window defroster grid.***

### ***Leather seat cover using precautions (If equipped)***

Natural leather has visible pores, scars or blood vessels, etc. Pressure marks or wrinkles may be made when used. Prolonged exposure to sunlight or heat may cause discoloration. These things occur due to the natural characteristics of cowhides. If the leather is exposed to rain or gets wet, remove water with a dry cloth and dry the leather in the shade to minimize damage. Make sure to keep sharp objects away from the leather as these can create scratches on the surface. For light-colored leather, be careful of spots or color transfer, such as from jeans.

### ***Fabric seat cover using precautions (if equipped)***

Please clean the fabric seats regularly with a vacuum cleaner in consideration of fabric material characteristics. If they are heavily soiled with beverage stains, etc., use a suitable interior cleaner. To prevent damage to seat covers, wipe off the seat covers down to the seams with a large wiping motion and moderate pressure using a soft sponge or microfiber cloth.

Velcro closures on clothing or sharp objects may cause snagging or scratches on the surface of the seats. Make sure not to rub such objects against the surface.

## EMISSION CONTROL SYSTEM (IF EQUIPPED)

The emission control system of your vehicle is covered by a written limited warranty. Please see the warranty information contained in the Warranty & Maintenance book in your vehicle.

Your vehicle is equipped with an emission control system to meet all applicable emission regulations.

There are three emission control systems, as follows.

- (1) Crankcase emission control system
- (2) Evaporative emission control system
- (3) Exhaust emission control system

In order to assure the proper function of the emission control systems, it is recommended that you have your vehicle inspected and maintained by an authorized Kia dealer in accordance with the maintenance schedule in this manual.

### Caution for the Inspection and Maintenance Test (With Electronic Stability Control (ESC) system)

- **To prevent the vehicle from misfiring during dynamometer testing, turn the Electronic Stability Control (ESC) system off by pressing the ESC switch.**
- **After dynamometer testing is completed, turn the ESC system back on by pressing the ESC switch again.**

### 1. Crankcase emission control system

The positive crankcase ventilation system is employed to prevent air pollution caused by blow-by gases being emitted from the crankcase. This system supplies fresh filtered air to the crankcase through the air intake hose. Inside the crankcase, the fresh air mixes with blow-by gases, which then pass through the PCV valve into the induction system.

### 2. Evaporative emission control system

The Evaporative Emission Control System is designed to prevent fuel vapors from escaping into the atmosphere.

### **Canister**

Fuel vapors generated inside the fuel tank are absorbed and stored in the onboard canister. When the engine is running, the fuel vapors absorbed in the canister are drawn into the surge tank through the purge control solenoid valve.

### **Purge Control Solenoid Valve (PCSV)**

The purge control solenoid valve is controlled by the Engine Control Module (ECM); when the engine coolant temperature is low during idling, the PCSV closes so that evaporated fuel is not taken into the engine. After the engine warms up during ordinary driving, the PCSV opens to introduce evaporated fuel to the engine.

### **3. Exhaust emission control system**

The Exhaust Emission Control System is a highly effective system which controls exhaust emissions while maintaining good vehicle performance.

#### **Vehicle modifications**

This vehicle should not be modified. Modification of your vehicle 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.

- If you use unauthorized electronic devices, it may cause the vehicle to operate abnormally, wire damage, battery discharge and fire. For your safety, do not use unauthorized electronic devices.

### **Engine exhaust gas precautions (carbon monoxide)**

- 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. If you ever suspect exhaust fumes are coming into your vehicle, drive it only with all the windows fully open. Have your vehicle checked and repaired immediately.

#### **⚠ WARNING - Exhaust**

**Engine exhaust gases contain carbon monoxide (CO). Though colorless and odorless, it is dangerous and could be lethal if inhaled. Follow the instructions on this page to avoid CO poisoning.**



- 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 (as needed) to draw outside air into the vehicle.
- Never sit in a parked or stopped vehicle for any extended time with the engine running.
- When the engine stalls or fails to start, excessive attempts to restart the engine may cause damage to the emission control system.

***Operating precautions for catalytic converters (if equipped)***

**⚠ WARNING - Fire**

- **A hot exhaust system can ignite flammable items under your vehicle. Do not park the vehicle over or near flammable objects, such as grass, vegetation, paper, leaves, etc.**
  - **The exhaust system and catalytic system are very hot while the engine is running or immediately after the engine is turned off. Keep away from the exhaust system and catalytic, you may get burned.**
- Also, do not remove the heat sink around the exhaust system, do not seal the bottom of the vehicle or do not coat the vehicle for corrosion control. It may present a fire risk under certain conditions.**

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

Therefore, the following precautions must be observed:

- Use only UNLEADED FUEL for gasoline engines.
- 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.
- 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 an authorized Kia dealer.
- Avoid driving with an extremely low fuel level. Running out of fuel could cause the engine to misfire, damaging the catalytic converter.

Failure to observe these precautions could result in damage to the catalytic converter and to your vehicle.

Additionally, such actions could void your warranties.

### ***Diesel Particulate Filter (if equipped)***

The Diesel Particulate Filter (DPF) system removes the soot in the exhaust gas.

Unlike a disposable air filter, the DPF system automatically burns (oxidizes) and removes the accumulated soot according to the driving condition. In other words, the active burning by engine control system and high exhaust gas temperature caused by normal/high driving condition burns and removes the accumulated soot.

However, if the vehicle continues to be driven at repeated short distance or driven at low speed for a long time, the accumulated soot may not be automatically removed because of low exhaust gas temperature. More than a certain amount of soot deposited, the malfunction indicator light (MIL) illuminates.

When the malfunction indicator light blinks, it may stop blinking by driving the vehicle at more than 60 km/h (37 mph) or at more than second gear with 1500 ~ 2500 engine rpm for a certain time (for about 25 minutes).

If the malfunction indicator light (MIL) continues to be blinked or the warning message "Check exhaust system" illuminates in spite of the procedure, please visit an authorized Kia dealer and check the DPF system.

If you continue to drive with the malfunction indicator light blinking for a long time, the DPF system can be damaged and fuel consumption can be worsen.



### **CAUTION - Diesel Fuel (if equipped with DPF)**

***It is recommended to use the regulated automotive diesel fuel for diesel vehicle equipped with the DPF system.***

***If you use diesel fuel including high sulfur (more than 50 ppm sulfur) and unspecified additives, it can cause the DPF system to be damaged and white smoke can be emitted.***

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## DIMENSIONS

| ITEM           |                   |            | mm (in)            |
|----------------|-------------------|------------|--------------------|
| Overall length |                   |            | 4,930 mm (194.1in) |
| Overall width  |                   |            | 1,915 mm (75.4 in) |
| Overall height | Without Roof rack |            | 1,765 mm (69.5 in) |
|                | With Roof rack    |            | 1,810 mm (71.3 in) |
| Tread          | Front             | 245/70 R17 | 1,630 mm (64.2 in) |
|                |                   | 265/60 R18 | 1,615 mm (63.6 in) |
|                | Rear              | 245/70 R17 | 1,640 mm (64.6 in) |
|                |                   | 265/60 R18 | 1,625 mm (64.0 in) |
| Wheelbase      |                   |            | 2,895 mm (114 in)  |

## ENGINE

| Item                        | Gasoline<br>Lambda 3.8 | Diesel 3.0         |
|-----------------------------|------------------------|--------------------|
| Displacement<br>cc (cu. in) | 3,778 (230.56)         | 2,959 (180.57)     |
| Bore x Stroke<br>mm (in.)   | 96x87<br>(3.78X4.25)   | 84x89<br>(3.3X3.5) |
| Firing order                | 1-2-3-4-5-6            | 1-2-3-4-5-6        |
| No. of cylinders            | V6-type                | V6-type            |

## GROSS VEHICLE WEIGHT

For except Europe

| Item      | Gasoline Engine |       | Diesel Engine |
|-----------|-----------------|-------|---------------|
|           | 3.8 MPI         |       | 3.0           |
|           | 2WD             | 4WD   | 4WD           |
| GVW<br>kg | 2,720           | 2,720 | 2,810         |

For Europe

| Item      | Diesel Engine |
|-----------|---------------|
|           | 3.0           |
|           | 4WD           |
| GVW<br>kg | 2,820         |

## LUGGAGE VOLUME

| ITEM | Minimum Volume |
|------|----------------|
| VDA  | 580 l          |

## AIR CONDITIONING SYSTEM

| ITEM                 |     |                    | Weight of volume | Classification  |
|----------------------|-----|--------------------|------------------|-----------------|
| Refrigerant          | GSL | Front A/CON        | 600±25g          | R134a           |
|                      |     | Front + Rear A/CON | 750±25g          |                 |
|                      | DSL | Front A/CON        | 750±25g          |                 |
|                      |     | Front + Rear A/CON | 950±25g          |                 |
| Compressor lubricant |     |                    | 200g±10g         | PAG OIL (PAG30) |

We recommend that you contact an authorized Kia dealer for more details.

## BULB WATTAGE

| Light Bulb               |                    | Wattage        |
|--------------------------|--------------------|----------------|
| Headlights (Low)         |                    | 55 or 35 (HID) |
| Daytime running lights*  |                    | LED            |
| Headlights (High)        |                    | 55             |
| Front turn signal light  |                    | 21             |
| Position lights          | With DRL           | LED            |
|                          | Without DRL        | 5W             |
| Side repeater lights*    |                    | LED            |
| Front fog lights*        |                    | 35W            |
| Rear fog light*          |                    | 21             |
| Stop and tail lights     | Except Middle East | 21/5 or LED    |
|                          | For Middle East    | 27/8 or LED    |
| Tail light*              |                    | 5 or LED       |
| Rear turn signal lights  |                    | 21 or 27       |
| Back-up lights           |                    | 16             |
| High mounted stop light* |                    | LED            |
| License plate lights     |                    | 5              |
| Map lamps                |                    | 6              |
| Room lamps               |                    | 10             |
| Luggage lamp*            |                    | 5              |
| Glove box lamp*          |                    | 5              |
| Vanity mirror lamps*     |                    | 5              |
| Door courtesy lamps*     |                    | 5              |

\* : If equipped

## TIRES AND WHEELS

| Item                             | Tire size  | Wheel size | Supplier | Load Capacity |      | Speed capacity |      | Inflation pressure [bar(psi, kPa)] |                  |                  |                  | Wheel lug nut torque [Kgf·m (lbf·ft, N·m)] |
|----------------------------------|------------|------------|----------|---------------|------|----------------|------|------------------------------------|------------------|------------------|------------------|--------------------------------------------|
|                                  |            |            |          | LI *1         | Kg   | SS *2          | Km/h | Normal load                        |                  | Maximum load     |                  |                                            |
|                                  |            |            |          |               |      |                |      | Front                              | Rear             | Front            | Rear             |                                            |
| Full size tire                   | 245/70R17  | 7.0JX17    | Nexen    | 110           | 1060 | H              | 210  | 2.2<br>(32, 220)                   | 2.2<br>(32, 220) | 2.2<br>(32, 220) | 2.2<br>(32, 220) | 9~11<br>(65~79, 88~107)                    |
|                                  | 265/60R18  | 7.5JX18    | Nexen    | 110           | 1060 | H              | 210  | 2.2<br>(32, 220)                   | 2.2<br>(32, 220) | 2.2<br>(32, 220) | 2.2<br>(32, 220) |                                            |
| Compact spare tire (if equipped) | T175/90R17 | 4TX17      | Hankook  | 119           | 1360 | M              | 130  | 4.2<br>(60, 420)                   | 4.2<br>(60, 420) | 4.2<br>(60, 420) | 4.2<br>(60, 420) |                                            |

\*1 : Load Index

\*2 : Speed Symbol



### CAUTION

***When replacing tires, use the same size originally supplied with the vehicle.  
Using tires of a different size can damage the related parts or make it work irregularly.***

### \* NOTICE

- We recommend that when replacing tires, use the same originally supplied with the vehicles.  
If not, that affects driving performance.
- When driving in high altitude grades, it is natural for the atmospheric pressure to decrease.  
Therefore, please check the tire pressure and add more air when necessary.  
Additionally required tire air pressure per km above sea level: 1.5psi/km

## RECOMMENDED LUBRICANTS AND CAPACITIES

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 that results in improved fuel economy.

These lubricants and fluids are recommended for use in your vehicle.

| Lubricant                                                                                                                                  |                 |                | Volume                | Classification                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------|-----------------------|------------------------------------------------------------------------------------------------|
| Engine oil *1 *2<br>(drain and refill)<br>Recommended<br> | Gasoline Engine | 3.8L           | 5.7 l (5.49 US qt.)   | API Service SM*3,<br>ILSAC GF-4 or above,<br>ACEA A5 or above                                  |
|                                                                                                                                            | Diesel Engine   | With DPF *4    | 7.4 l (7.81 US qt.)   | ACEA C2                                                                                        |
|                                                                                                                                            |                 | Without DPF *4 | 7.4 l (7.81 US qt.)   | ACEA B4                                                                                        |
| Automatic transmission fluid                                                                                                               | Gasoline Engine | 3.8L           | 10 l (10.56 US qt.)   | APOLLOIL ATF RED-1K                                                                            |
|                                                                                                                                            | Diesel Engine   |                | 9.7 l (10.2 US qt.)   | ATF SP-IV-RR                                                                                   |
| Power steering                                                                                                                             |                 |                | 0.9 l (0.95 US qt.)   | PSF-3 or PSF-4                                                                                 |
| Coolant                                                                                                                                    | Gasoline Engine | 3.8L           | 10.7 l (11.3 US qt.)  | Mixture of antifreeze and distilled water (Ethylene glycol base coolant for aluminum radiator) |
|                                                                                                                                            | Diesel Engine   |                | 14.7 l (15.53 US qt.) |                                                                                                |



| Lubricant               |           | Volume                     | Classification                            |
|-------------------------|-----------|----------------------------|-------------------------------------------|
| Brake fluid             |           | 0.7~0.8 l (0.7~0.8 US qt.) | FMVSS116 DOT-3 or DOT-4                   |
| Differential oil        | Front     | 1.3~1.4 l (1.4~1.5 US qt.) | HYPOID GEAR OIL<br>SAE 90, API GL-5       |
|                         | Rear      | 1.7~1.9 l (1.9~2.0 US qt.) |                                           |
| Transfer case oil (4WD) | Part-time | 1.5~1.7 l (1.6~1.8 US qt.) | ATF DEXRON III or equivalent              |
|                         | Full-time |                            | ATF MOBILFLUID LT or equivalent           |
| Fuel                    |           | 80 l (21.13 US gal.)       | Refer to "Fuel requirements" in chapter 1 |

\*1 Refer to the recommended SAE viscosity numbers on the next page.

\*2 Engine oils labeled 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.

\*3 If the API service SM or ACEA A5 engine oil is not available in your country, you are able to use API service SL or ACEA A3.

\*4 DPF : Diesel Particulate Filter

## Recommended SAE viscosity number

### CAUTION

*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 operating (engine start and engine oil flowability). 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. Proceed to 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) | -10 | 0   | 20  | 40 | 60 | 80 | 100 | 120 |    |
| Gasoline Engine Oil<br>(Except Middle East*) |      |     |     |     |    |    |    |     |     |    |
|                                              |      |     |     |     |    |    |    |     |     |    |
|                                              |      |     |     |     |    |    |    |     |     |    |
|                                              |      |     |     |     |    |    |    |     |     |    |
| Gasoline Engine Oil<br>(For Middle East*)    |      |     |     |     |    |    |    |     |     |    |
|                                              |      |     |     |     |    |    |    |     |     |    |
|                                              |      |     |     |     |    |    |    |     |     |    |
|                                              |      |     |     |     |    |    |    |     |     |    |
| Diesel Engine Oil                            |      |     |     |     |    |    |    |     |     |    |
|                                              |      |     |     |     |    |    |    |     |     |    |
|                                              |      |     |     |     |    |    |    |     |     |    |
|                                              |      |     |     |     |    |    |    |     |     |    |

<sup>\*1</sup> : Middle East includes India, Libya, Algeria, Morocco, Tunisia, Sudan, Egypt and Iran.

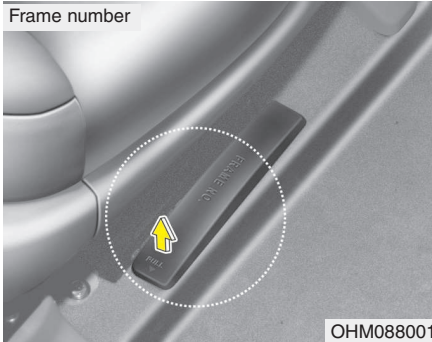
<sup>\*2</sup> : For better fuel economy, it is recommended to use the engine oil of a viscosity grade SAE 5W-20(API SM / ILSAC GF-4). However, if the engine oil is not available in your country, select the proper engine oil using the engine oil viscosity chart.

<sup>\*3</sup> : For better fuel economy, it is recommended to use the engine oil of a viscosity grade SAE 5W-30(ACEA A5). However, if the engine oil is not available in your country, select the proper engine oil using the engine oil viscosity chart.

<sup>\*4</sup> : It is only for extreme cold area and to be restricted by driving condition and area. (Especially, not recommended for sustained high loaded and high speed operation.)

## VEHICLE IDENTIFICATION NUMBER (VIN)

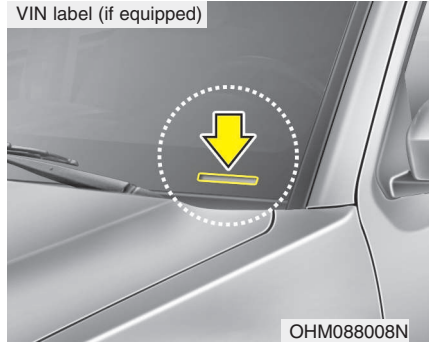
Frame number



OHM088001

The vehicle identification number (VIN) is the number used in registering your vehicle and in all legal matters pertaining to its ownership, etc.

VIN label (if equipped)



OHM088008N

The VIN is also on a plate attached to the top of the dashboard. The number on the plate can easily be seen through the windshield from outside.

## VEHICLE CERTIFICATION LABEL



OHM088002N

The vehicle certification label attached on the driver's (or front passenger's) side center pillar gives the vehicle identification number (VIN).

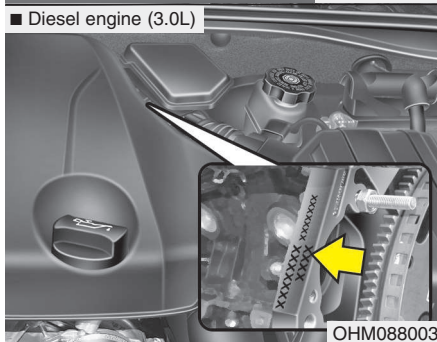
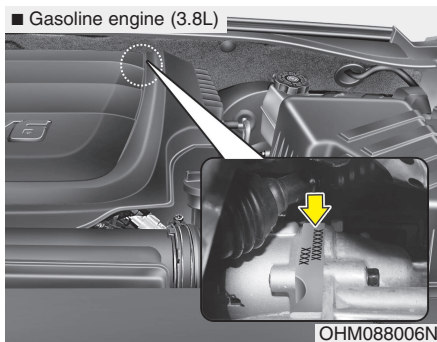
## TIRE SPECIFICATION AND PRESSURE LABEL



The tires supplied on your new vehicle are chosen to provide the best performance for normal driving.

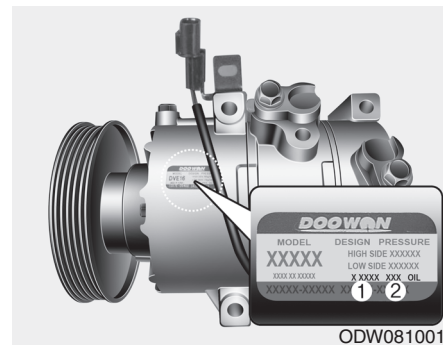
The tire label located on the driver's side center pillar gives the tire pressures recommended for your vehicle.

## ENGINE NUMBER



The engine number is stamped on the engine block as shown in the drawing.

## AIR CONDITIONER COMPRESSOR LABEL



A compressor label informs you the type of compressor your vehicle is equipped with such as model, supplier part number, production number, refrigerant (1) and refrigerant oil (2).

## DECLARATION OF CONFORMITY (IF EQUIPPED)

■ Example

The image shows a large, bold CE mark followed by the text CE0678, representing a declaration of conformity.

CE0678

The radio frequency components of the vehicle comply with requirements and other relevant provisions of Directive 1995/5/EC.

Further information including the manufacturer's declaration of conformity is available on Kia web site as follows;

<http://www.kia-hotline.com>

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