KIA, THE COMPANY

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

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

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

Enjoy your Vehicle!

Thank you for choosing a Kia vehicle.

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

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

This manual will familiarize you with operational, maintenance and safety information about your new vehicle. It is supplemented by a Warranty and Consumer Information manual that provides important information on all warranties regarding your vehicle. If your vehicle is equipped with an audio system, you will also have a Kia Integrated Audio System manual explaining its operation. We urge you to read these publications carefully and follow the recommendations to help assure enjoyable and safe operation of your new vehicle.

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

Therefore, the equipment described in this manual, along with the various illustrations, may not all be applicable to your particular vehicle.

The information and specifications 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 Kia Dealer.

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

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Printed in Korea

TABLE OF CONTENTS

Introduction	1
Your vehicle at a glance	2
Knowing your vehicle	3
Driving your vehicle	4
Driving tips	5
In case of an emergency	6
Maintenance	7
Specifications	8
Index	9

Introduction

How to use this manual / 1-2
Vehicle break-in process / 1-3

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. Especially, in order to prevent death or injury, at the very least, you must read the WARNING and CAUTION sections spread throughout the manual, which are easily recognized by their special markings listed.

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

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

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

⚠ WARNING

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

CAUTION

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

✻ NOTICE

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

VEHICLE BREAK-IN PROCESS

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

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

Your vehicle at a glance

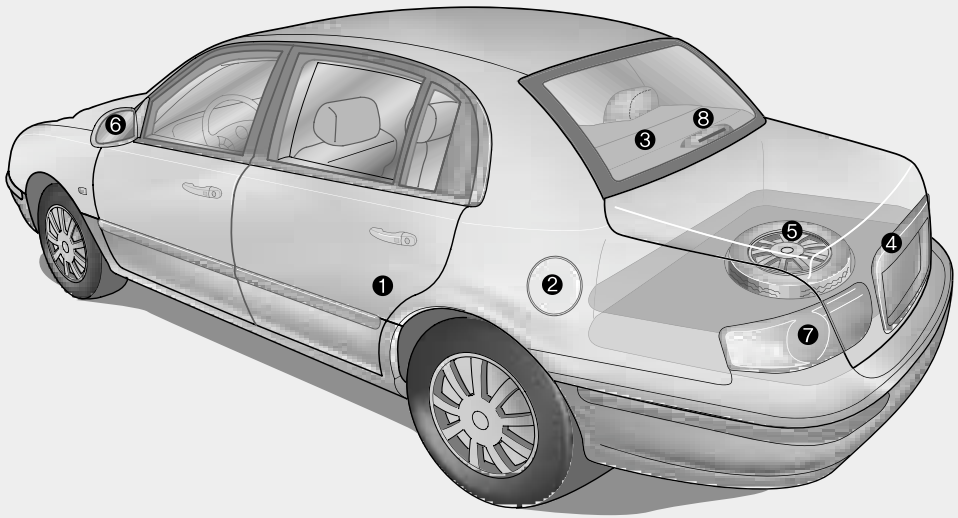
Exterior overview / 2-2
Interior overview / 2-4
Instrument panel overview / 2-5

EXTERIOR OVERVIEW



1. Headlight (high beam)
2. Headlights (low beam)
3. Turn signal light
4. Side repeater light
5. Engine hood
6. Inside rearview mirror
7. Seat
8. Steering wheel
9. Door
10. Outside rearview mirror

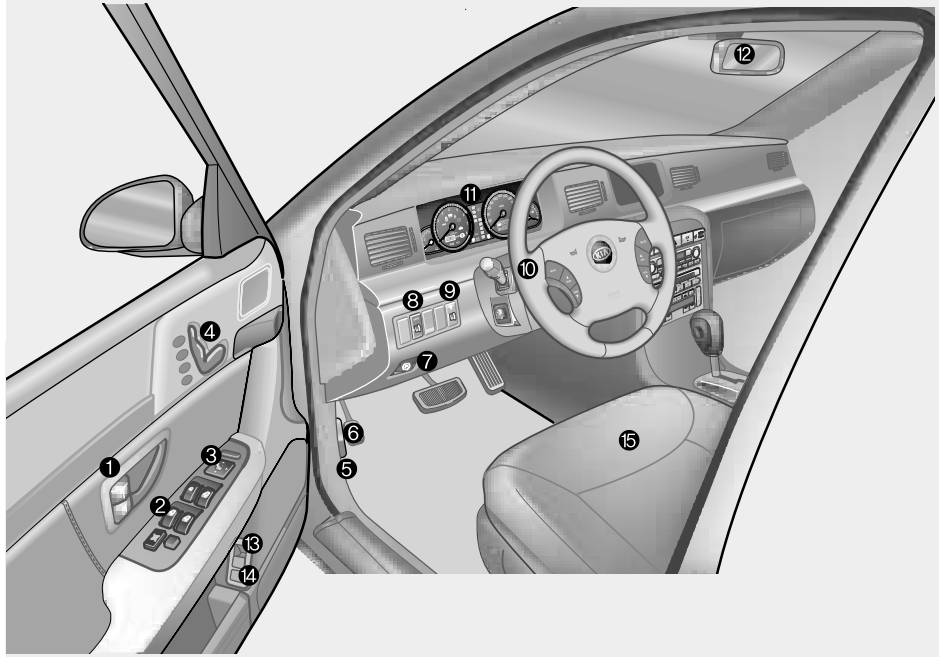
1GHA0001



1. Rear door child safety lock
2. Fuel filler lid
3. Rear window
4. Trunk
5. Spare tire
6. Outside rearview mirror
7. Tail lights
8. High mounted stop light

1GHA0002

INTERIOR OVERVIEW



1. Door lock/unlock button
2. Power window switches
3. Outside rearview mirror control switch
4. Seat adjust knob
5. Hood release lever
6. Parking brake pedal
7. Parking brake release lever
8. Air purifier (if equipped)
9. Instrument panel illumination
10. Steering wheel
11. Instrument cluster
12. Inside rearview mirror
13. Trunk release lever
14. Fuel filler lid release button
15. Seat

1GHA0005

INSTRUMENT PANEL OVERVIEW



1. Driver's Air Bag
2. Light control / Turn signals
3. Instrument cluster
4. Wiper/Washer
5. Ignition switch
6. Seat warmer
7. Traction control system (if equipped) / Electronic stability program (if equipped)
8. Hazard
9. Rear climate control selection button
10. Climate control system
11. Rear window curtain (if equipped)
12. Electronic control suspension (if equipped)
13. Shift lever
14. Passenger's airbag
15. Glove box
16. Trunk lid control button
17. Audio controls (if equipped)
18. Auto cruise controls (if equipped)

2GHA0004

Key / 3-3
Remote keyless entry / 3-6
e-key (Electronic key) / 3-9
Immobilizer system / 3-12

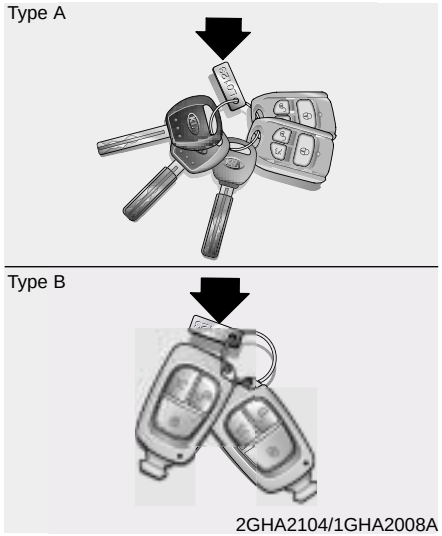
Knowing your vehicle

Door locks / 3-13
Window / 3-18
Seat / 3-23
Driver position memory system / 3-40
Safety belts / 3-42
Airbags-supplemental restraint system / 3-66
Trunk / 3-85
Hood / 3-90
Fuel filler lid / 3-91
Mirrors / 3-94
Interior lights / 3-98
Storage compartment / 3-99
Interior features / 3-102

1
2
3 Knowing your vehicle
4
5
6
7
8
9

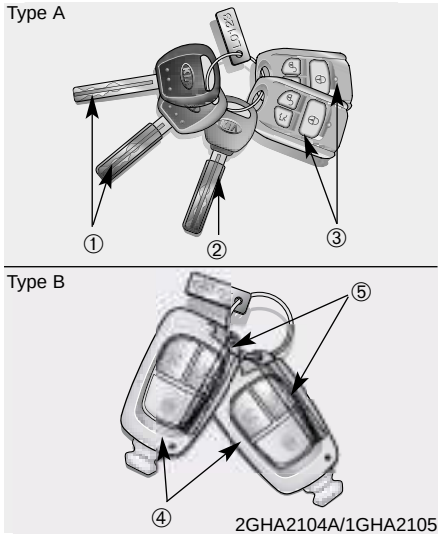
Air purifier / 3-108
Sunroof / 3-109
Antenna / 3-112

KEYS



2GHA2104/1GHA2008A

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



2GHA2104A/1GHA2105

Key operations

① Master key
Used to start the engine, lock and unlock the doors, lock and unlock the glove box, and open the trunk.

② Sub key
Used only to start the engine and lock and unlock the door.

③ Transmitter
Used to lock and unlock the doors and trunk (trunk can only be opened with the transmitter when the trunk lid control button located in the glove compartment is turned on. See page 3-6).

④ e-key (electronic key)
Used to start the engine, lock and unlock the doors and open the trunk (the trunk can only be opened with the e-key when the trunk lid control button located in the glove compartment is turned on. See page 3-9)

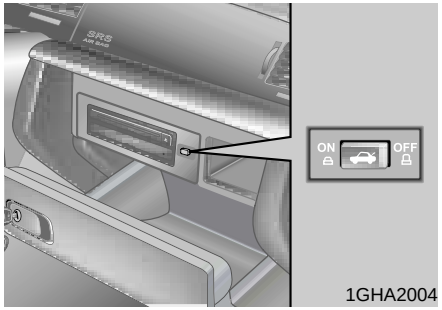
⑤ Mechanical key
Used to lock and unlock the doors and trunk, and lock and unlock the glove box.

⚠ WARNING - Ignition key

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

CAUTION

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

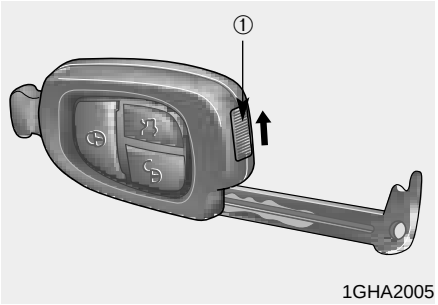


Restrictions in handling keys

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

With master and sub key (type A, if equipped)

1. Unlock the glove box with the master key and open it.
2. Set the trunk lid control button in the glove box compartment to off (not depressed). In the off position, the trunk can not be unlocked with either the trunk release lever inside the car or trunk open button of the transmitter.
3. Close the glove box, and lock the glove box using the master key.
4. Leave the attendant with the sub key. The trunk and glove box are secured because the sub key only allows engine start and door lock and unlock.

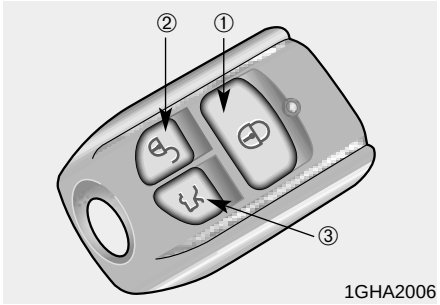


1GHA2005

With e-key (type B, if equipped)

1. Depress and hold the release button (①) and remove the mechanical key.
2. Using the mechanical key, unlock the glove box then open it.
3. Set the trunk lid control button in the glove box compartment to off (not depressed). In the off position, the trunk cannot be unlocked with either the trunk release lever inside the car or an e-key.
4. Close and then lock the glove box using the mechanical key.
5. Leave the e-key with the attendant. The trunk and glove box are secure with the mechanical key.

REMOTE KEYLESS ENTRY (IF EQUIPPED)



① Lock button
② Unlock button
③ Trunk lid open button

① **Lock ( )**
All doors are locked if the lock button is pressed. Also, the trunk is locked and cannot be opened with the outside handle.

② **Unlock ( )**
All doors are unlocked if the unlock button is pressed. Also, the trunk is unlocked and can be opened with the outside handle.

③ **Trunk lid open ( )**
The trunk lid opens if this button is pressed. If this button is pressed while all the doors are locked, the trunk will open, however it will remain locked when closed.

If any door is unlocked, the trunk will remain unlocked when closed.

When the trunk lid control button in the glove box is OFF, the trunk will not open or unlock even when the button on the transmitter is pressed.

✻ NOTICE

The transmitter will not work if any of following occur:

- **The ignition key is in ignition switch.**
- **You exceed the operating distance limit (10 m).**
- **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.**

When the transmitter does not work correctly, open and close the door with the ignition key. If you have a problem with the transmitter, contact an authorized Kia Dealer.

✻ NOTICE

Keep the transmitter 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 vehicle warranty.

Operational distance may vary depending upon the area the transmitter is used in. For example, if the vehicle is parked near police stations, government and public offices, broadcasting stations, military installations, airports, or transmitting towers, etc.

Remember, if you lock the doors with the transmitter, be sure to unlock the doors with the transmitter. If you unlock the doors with the ignition key, the theft-alarm system will be activated and the alarm will sound. The alarm can be disarmed if the ignition key is inserted into the ignition switch and the ignition switch is turned to “ON” for at least 30 seconds.



1GHA2007

Battery replacement

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

1. Insert a slim tool into the slot and gently pry open the transmitter center cover (①).
2. Replace the battery with new one. When replacing the battery, make sure the battery positive “+” symbol faces up as indicated in the illustration.
3. Install the battery in the reverse order of removal.

✻ NOTICE

The keyless entry system transmitter is designed to give you years of troublefree use, however it can malfunction if exposed to moisture or static electricity. If you are unsure how to use your transmitter or replace the battery, contact an authorized Kia dealer.

CAUTION

- ***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.***

e-KEY (ELECTRONIC KEY, IF EQUIPPED)



1GHA2008

With possession of an e-key, you can lock or unlock a door and even start the engine without inserting the key.

Function and instructions of buttons on an e-key are similar to the remote keyless entry. (See page 3-6 for the remote keyless entry)

E-key functions

With possession of an e-key you can lock and unlock the vehicle doors, and unlock the trunk and the e-key enables starting of the engine as well. Detailed information is as follows:

Unlocking

With all doors closed, when you keep this e-key and pull a front outside door handle, all doors are open after 0.5 second.

When the e-key is recognized in the area of 0.7m~1m from the front outside door handle, other people can also open the door without possession of the e-key.

Locking

The lock button (in the front outside door handle), when pressed with all doors closed, locks all the doors. The lock button will only operate when the e-key is within 0.7m~1m from the outside door handle. If, however, a front door handle is pulled again the door will open. If you want to make sure that a door has locked or not, you should check the locking lever inside the vehicle or pull the rear outside door handle.

Trunk lid open

If you are within 0.7m~1m from the outside trunk handle, with your e-key in your possession, the trunk lid will open when you press the trunk handle. If you attempt to close the trunk with the e-key left in the trunk the lid will not close.

✻ NOTICE

The e-key if left in some areas of the trunk near surrounding electronic equipment, the trunk lid re-opening function may not work. Do not place the e-key in the trunk, but keep it in your possession at all times.

Start-up

You can start the engine without inserting the key. For detailed information refer to the chapter 4 of this manual for starting the engine with an e-key.

Deactivating of e-key

When using 2 e-keys, if you lock a door with e-key A from outside of the vehicle, while the following all conditions are met, e-key B will be deactivated.

- the ignition switch is in the LOCK position.
- e-key is removed from the ignition switch.
- e-key B is placed in the vehicle.

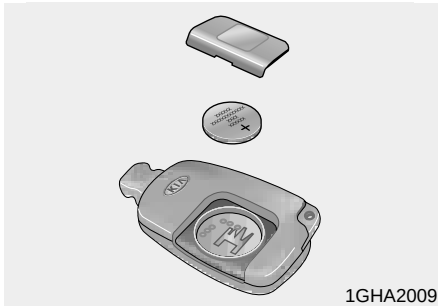
If this occurs, the alarm will sound for approximately 6 seconds. However, the function of start-up possible with inserting e-key B and the unlock button on it can be operated.

When trying to activate e-key B, unlock a door with e-key A or press the unlock button on e-key B.

While using the e-key, take note of the following facts:

1. The e-key door lock/unlock function will work only when all doors are closed.
2. When unlocking a door using the e-key, activation occurs 0.5 second after you initially grip the outside door handle. Therefore, wait 0.5 second before trying to open door.
3. While in possession of an e-key, a door may inadvertently be unlocked if a front outside door handle is touched or when high-pressurized car washing is occurring.
4. When leaving the vehicle, always keep your e-key with you.

- **If, for some reason, you happen to lose your e-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 e-keys can be registered to a single vehicle. If you lose an e-key you should immediately take the vehicle and key to your authorized Kia dealer to protect it from potential theft.**



1GHA2009

Battery replacement

An e-key battery should last for several years, but if the indicator light gets weak or the e-key is not working properly, try replacing the battery with a new one. If you are unsure how to use your e-key or replace the battery, contact an authorized Kia dealer.

✻ NOTICE

The circuit inside the e-key can have a problem if exposed to moisture or static electricity. If you are unsure how to use your e-key or replace the battery, contact an authorized Kia dealer.

1. Pry open the rear cover of the e-key.
2. Replace the battery with new one.
3. Install the battery in the reverse order of removal.

✻ NOTICE

- **Using the wrong battery can cause the e-key to malfunction. Be sure to use the correct battery.**
- **Circuits inside the e-key may develop problems when dropped, exposed to moisture or static electricity.**
- **If you suspect that your e-key might have sustained some damage, or you feel your e-key is not working correctly, contact an authorized Kia dealer.**

IMMOBILIZER SYSTEM (IF EQUIPPED)

Your vehicle is 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 antenna coil in the key cylinder and BCM (Body Control Module) in the instrument panel.

With this system, whenever you insert your ignition key into the ignition switch and turn it to ON, the antenna coil in the ignition switch receives a signal from the transponder in the ignition key and then sends the signal to the BCM (Body control Module).

The BCM checks the signal whether the ignition key is valid.

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 deactivate the immobilizer system:

Insert the ignition key into the key cylinder and turn it to the ON position.

To activate the immobilizer system:

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

✻ 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 not to have any malfunction after you receive your new vehicle.

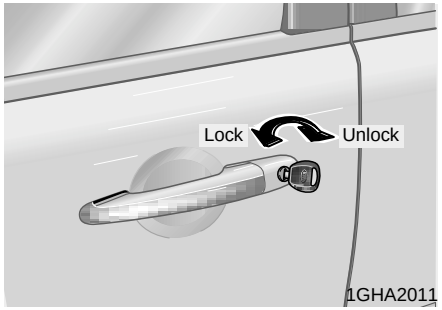
CAUTION

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

CAUTION

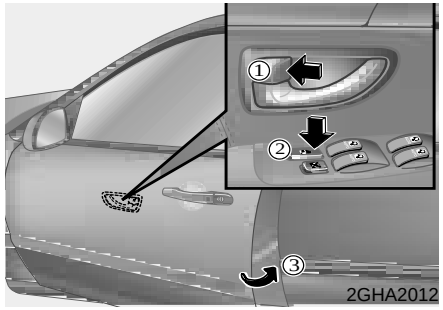
Do not change, alter or adjust the immobilizer system because it could cause the immobilizer system to malfunction and should only be serviced by an authorized Kia dealer.
Malfunctions caused by improper alterations, adjustments or modifications to the immobilizer system are not covered by your vehicle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

DOOR LOCKS



Operating door locks from outside the vehicle

- Driver's door can be locked and unlocked with the key.
- Turn the key to the left to lock and to right to unlock the door.
- When the driver's door is operated with a key, all doors are automatically locked or unlocked.
- Doors can also be locked and unlocked with the transmitter key (if equipped).
- Doors can also be locked and unlocked with the e-key (if equipped, see page 3-9).
- Once the doors are unlocked, it may be opened by pulling the door handle.
- When closing the door, push the door by the hand. Make sure that doors are closed securely.



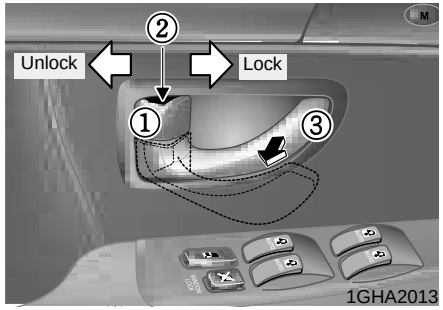
To lock a door without the key, push the inside door lock button (①) or door lock switch (②) to the "LOCK" position and close the door (③).

✻ NOTICE

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

✻ NOTICE

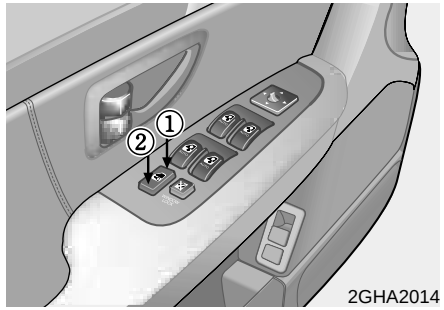
If the door is locked/unlocked multiple times in rapid succession with either the vehicle key or door lock switch, the system may stop operating temporarily in order to protect the circuit and prevent damage to system components.



Operating door locks from inside the vehicle

With the door lock button

- To unlock a door, push the door lock button to the “UNLOCK” position.
- To lock a door, push the door lock button (①) to the “lock” position. If the door is locked, red part (②) of the knob becomes invisible.
- To open a door, pull the door handle (③) outward.
- Front doors cannot be locked if the ignition key is in the ignition switch and door is open.



2GHA2014

With central door lock switch

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

- When pushing down on the front portion (①) of the driver's door lock switch, all vehicle doors will lock.
- When pushing down on the rear portion (②) of the switch, all vehicle doors will unlock.
- However, if the key is in the ignition switch and any front door is open, the doors will not lock when the front portion of central door lock switch is pressed.

CAUTION

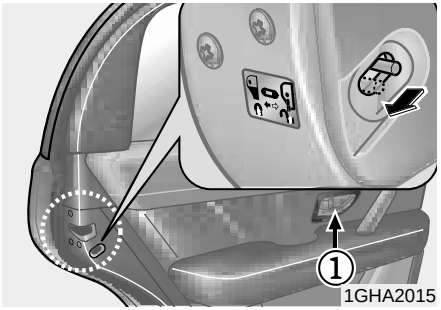
- ***The doors should always be fully closed and locked while the vehicle is in motion to prevent accidental opening of the door. Locked doors will also discourage the potential intruders when the vehicle stops or slows.***
- ***Be careful when opening doors and watch for vehicles, motorcycles, bicycles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

⚠ WARNING

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.



Rear door child safety lock

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

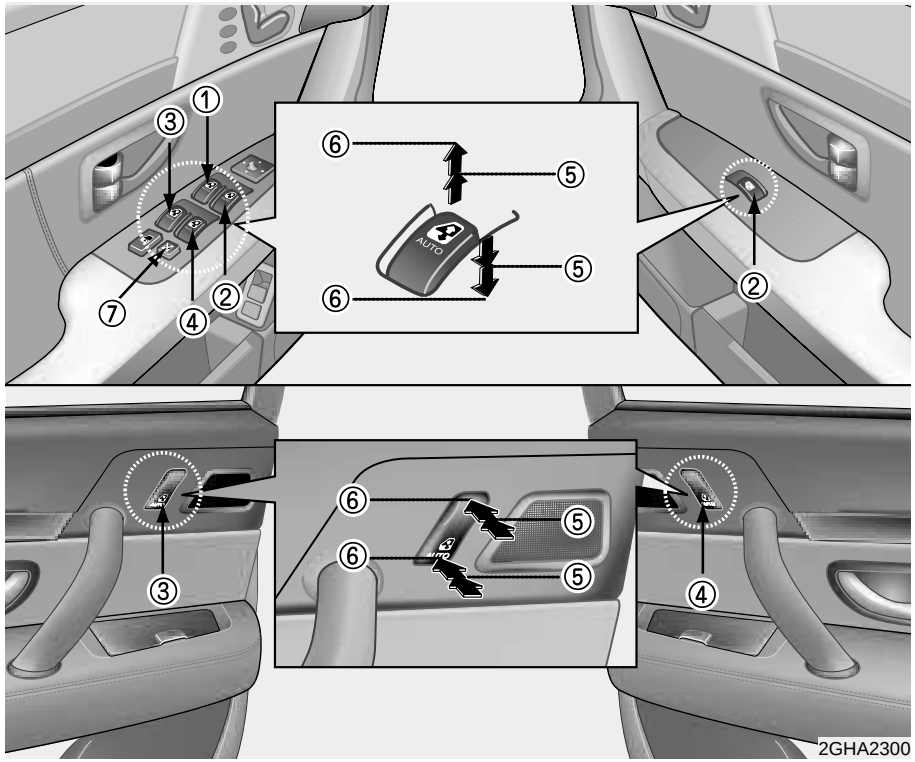
1. Open the rear door.
2. Push the child safety lock located on the rear edge of the door to the “lock” position. When the child safety lock is in the “lock ( )” position, rear door will not open when the inner door handle is pulled inside the vehicle.
3. Close the rear door.
4. To open the rear door, pull the outside door handle.

Even though the doors may be unlocked, the rear door will not open by pulling the inner door handle (①) until 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.

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
(see page 3-20)
⑥ Automatic power window
(see page 3-20)
⑦ Power window lock switch
(see page 3-21)

- Automatic window reversal
(see page 3-20)
- Power window timer
(see page 3-21)

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 that door's window. However, the driver has a power window lock switch which can block the operation of passenger windows.

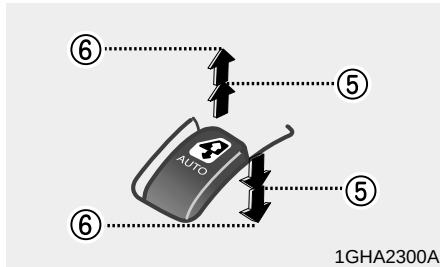
If you notice buffeting and pulsation (wind shock) with either side window open, you should open the opposite window slightly to reduce the condition.

✻ NOTICE

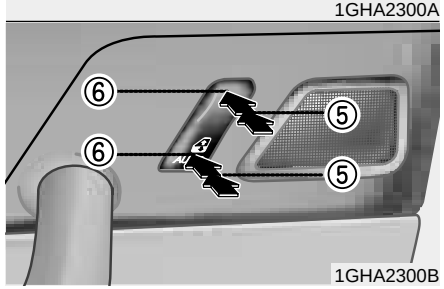
To prevent the power window system from the possibility of damage, do not open or close two windows at the same time. This will also ensure the longevity of the fuse.

CAUTION

- ***Make sure hands and face are safely out of the way before closing a window.***
- ***Do not allow children to play with the power windows. Keep the driver's door power window switch in the LOCK position (depressed). Serious injury can result from unintentional window operation by the child.***
- ***Do not extend face or arms outside through the window opening while driving.***
- ***Always double check to make sure all arms, hands and other obstructions are safely out of the way before closing a window***



1GHA2300A



1GHA2300B

Window opening and closing

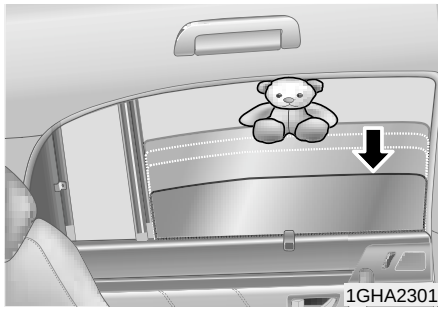
The driver's door has a master power window switch that controls all the windows in the vehicle. To open or close a window, press down or pull up the front portion of the corresponding switch.

Automatic power window

Depressing or pulling up the power window switch momentarily to the second detent position (⑥) completely lowers or lifts 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 depress the switch momentarily to the opposite direction of the window movement.

If the battery has been discharged or disconnected, the automatic power window system must be reset as follows:

1. Turn the ignition key to ON position.
2. Close each window and continue pulling up on each power window switch for at least 0.5 second after the window is completely closed.



1GHA2301

Automatic window reversal (When window is closed by the automatic power window)

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 15cm to allow the object to be cleared.

⚠ WARNING

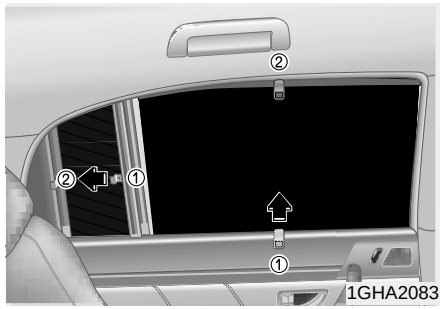
- **The automatic window reversal feature (window lowers 15cm when a resistance is detected) will only operate when the automatic power window operation feature is used. Automatic window reverseal will not operate if the window is raised using the first detent position (⑤) on the power window switch. Always double check to make sure all faces, arms, hands and other obstructions are safely out of the way of before operating the power window.**
- **If an object less than 4 mm in diameter is caught between the window glass and the upper window channel, the automatic reversal may not detect the resistance and will not operate. Therefore, always check for any obstructions before raising any window.**

Power window lock switch

- The driver can disable the power window switches on a passenger door by depressing the power window lock switch located on the driver's door to LOCK (pressed).
- When the power window lock switch is ON, the driver's master control cannot operate the passenger door power windows either.

Power window timer (if equipped)

The power windows can be operated for approximately 30 seconds after the ignition key is removed. However, if the front doors are opened, the power windows cannot be operated even within the 30 seconds after the ignition key removal.



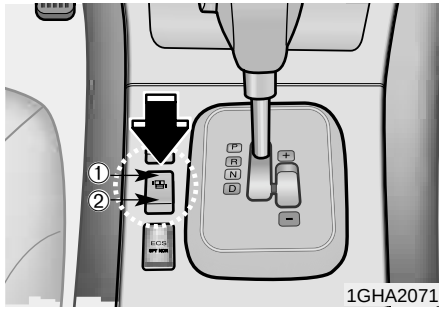
1GHA2083

Curtain (if equipped)

Rear seat side window

Use the side curtains installed in the door panel to shield the rear seat from direct sunlight through the side windows.

Grasp the tab on the end (①) of the curtain and carefully pull it up to hook (②).



1GHA2071

Electric curtain switch (rear window) (if equipped)

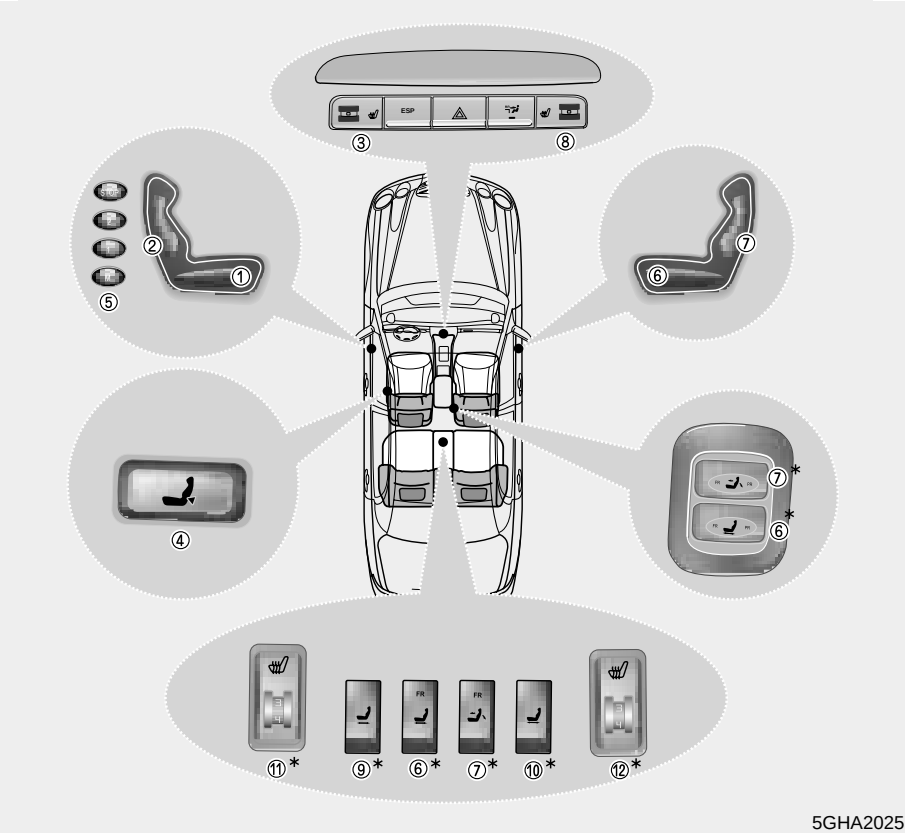
Use the rear curtain installed in the rear package shelf to shield the rear seat from direct sunlight through the rear window.

Press down on the front portion (①) of the electric curtain switch to raise the rear glass curtain. To lower the rear glass curtain, press down on the rear portion (②) of the switch.

✻ NOTICE

Do not attempt to raise or lower the rear curtain manually. Damage to parts or system malfunction could occur.

SEAT



5GHA2025

Driver's seat

① Seat adjustment, forward / backward/height (see page 3- 25)
② Seatback recliner (see page 3- 27)
③ Seat heater switch (see page 3- 27)
④ Lumbar support (see page 3- 28)
⑤ Driver position memory system (see page 3- 29)

■ Headrest adjustment (see page 3- 29)

Front passenger seat

⑥ Seat adjustment, forward / backward (see page 3- 30)
⑦ Seatback recliner (see page 3- 31)
⑧ Seat heater switch (see page 3- 32)

■ Headrest adjustment (see page 3- 33)

Rear seat

⑨ Seat adjustment, forward / backward (left) (see page 3- 35)
⑩ Seat adjustment, forward / backward (right) (see page 3- 35)
⑪ Seat heater switch (left) (see page 3- 37)
⑫ Seat heater switch (right) (see page 3- 37)

■ Headrest adjustment (see page 3- 38)

For a comfortable seating position, adjust the seat forward, backward, up and down.

✻ NOTICE

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

⚠ WARNING

- **Loose objects in the driver's foot area could interfere with the operation of the foot pedals, possibly causing an accident. Loose objects might interfere with the seat slide mechanism. Do not place anything under the front seats.**
- **The power seats are operable with the ignition OFF.**

  Therefore, children should never be left unattended in the car.

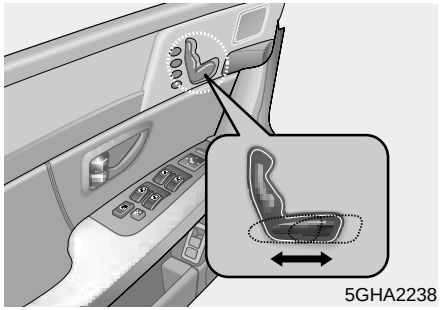
⚠ WARNING - Driver's seat

- **Never attempt to adjust 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.**

(Continued)

(Continued)

- **Always drive and ride with your seatback upright and the lap portion of the safety belt, or lap belt, snug and low across the hips. This position puts your safety belts in the best position to protect you in case of an accident.**
- **In order to avoid unnecessary airbag injuries including the possibility of severe injury or death, always sit as far back as possible from the steering wheel so that your chest is away at least 250 mm (10 inches) away from the steering wheel.**


5GHA2238

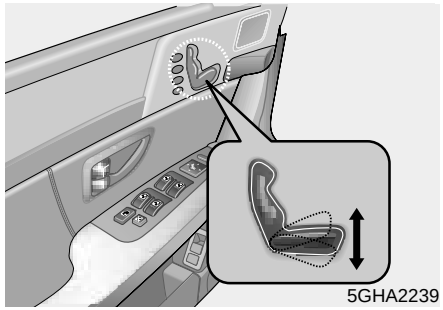
Driver's seat adjustment

Forward/backward position and height adjustment

Adjusting the seat forward and backward

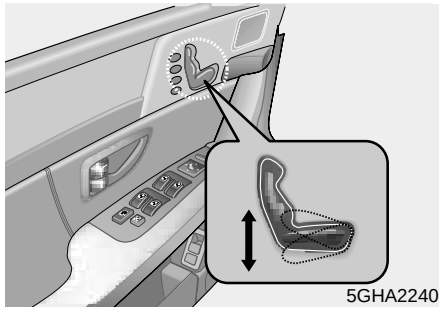
Push the control button forward or backward to move the seat to the desired position. Release the knob and the seat will lock in the selected position.

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


5GHA2239

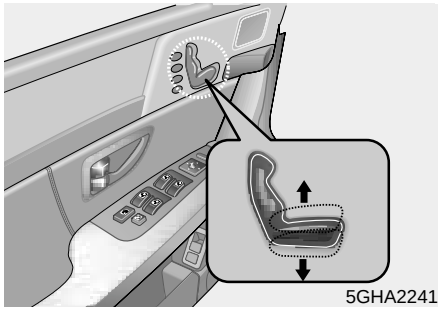
Adjusting front height of seat cushion

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


5GHA2240

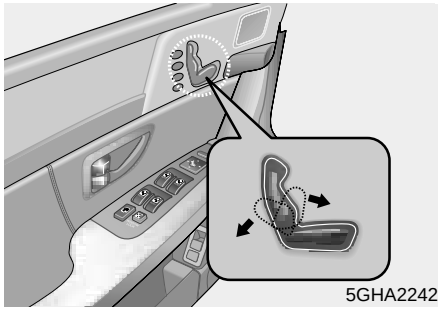
Adjusting rear height of seat cushion

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


5GHA2241

Adjusting the height of seat cushion

To raise or lower the seat cushion, pull up or push down on the center of the corresponding switch. Release the knob once the seat reaches to the desired position.

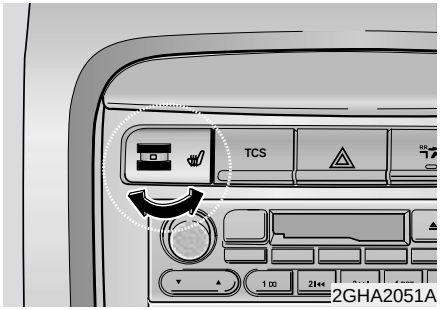

5GHA2242

Adjusting the driver's seatback recliner

Move the lever forward or backward to the desired angle and release the lever. If the lever is released, seatback will lock in place. After adjustment, make sure that the lever has returned to its original locked position.

⚠ WARNING

Riding in a vehicle with a front seatback reclined could lead to serious or fatal injury in an accident. If a front seat is reclined, the occupant's hip may slide under the lap portion of the safety belt applying great force to the unprotected abdomen or neck. Internal injuries could result. Keep the seatbacks in a comfortably upright position whenever the vehicle is in motion.



2GHA2051A

Warming the driver's seats (if equipped)

The front seats can be electrically heated individually when the ignition switch is ON. When the switch is ON, a number ranging from 1 to 5 is displayed on the switch (5 = warmest setting).

To turn off the seat warmer, set the switch to 0.

The seat warmer turns off automatically when the seat temperature reaches the selected range and will turn on again if the temperature drops below the selected range.

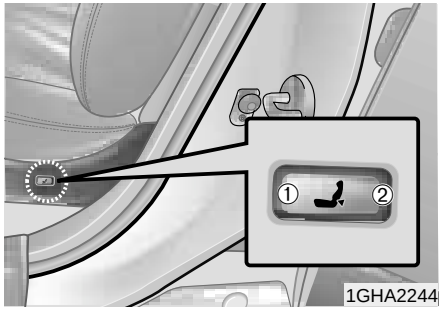
✻ NOTICE

- When cleaning the seats, do not use an organic solvent such as 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 blankets, cushions or seat covers on the seats 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.

⚠ WARNING

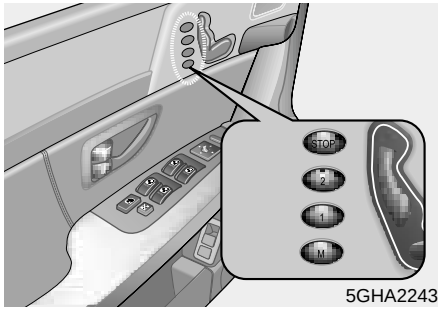
Passengers should use extreme caution when using seat warmers due to the possibility of excess heating or burns. In particular, the following types of passengers should exercise extreme care:

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.)**



Lumbar support

The lumbar support can be adjusted by pressing the lumbar support switch on the side of the drivers seat. Press the front portion of the switch (①) to increase support, or the rear portion of the switch (②), to decrease support.

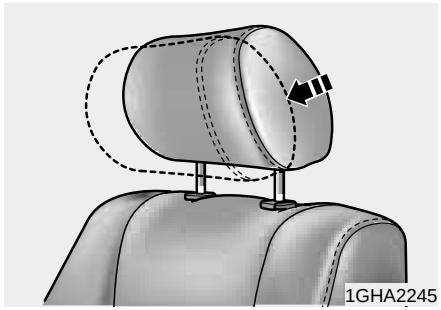


5GHA2243

Driver position memory system (if equipped)

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

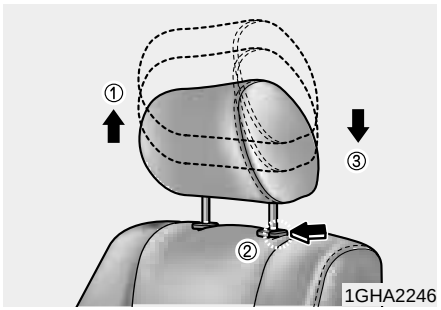
See page 3-40 for detail information.


1GHA2245

Headrest adjustment

Adjusting forward and backward

The headrest may be adjusted forward to three different positions by pulling the headrest forward. To adjust the headrest backward, pull it fully forward to the farthest position and release it. Adjust the headrest so that it properly supports the head and neck.

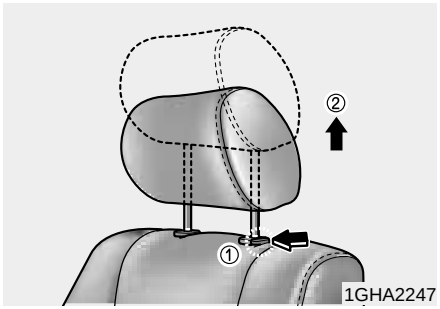


1GHA2246

Adjusting the height up and down

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

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). For best protection, adjust the headrest so its center is as high as your ears. Also adjust the headrest so its distance from the head is as wide as your fist.



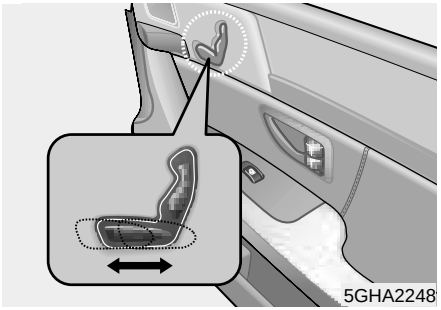
Removal

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

⚠ WARNING

To reduce the risk of head and neck injuries, do not drive the vehicle with the headrest removed or improperly positioned.

Do not adjust the driver's headrest while driving.



Adjusting the front passenger seat

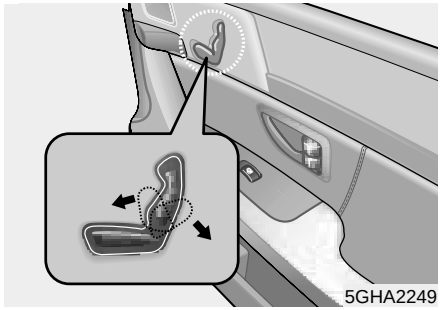
Forward/backward position adjustment

Push the control knob forward or backward to move the seat to the desired position. Release the knob and the seat will lock in the selected position.

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

⚠ WARNING

In order to avoid unnecessary airbag injuries including the possibility of severe injury or death, always sit as far back as possible by moving the seat far back. Serious injury or death may be caused due to the deployment of the passenger's airbag.

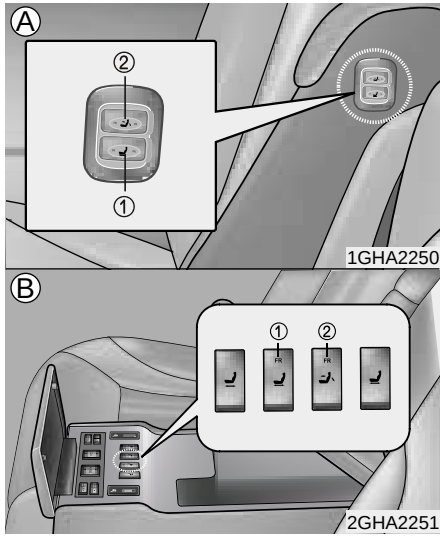


Adjusting seatback recliner

Move the lever forward or backward to the desired angle and release the lever. If the lever is released, seatback will lock in place. After adjustment, make sure that the lever has returned to its original locked position.

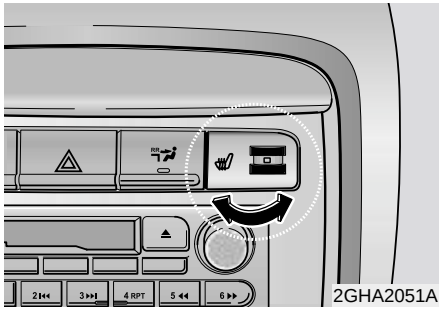
⚠ WARNING

Riding in a vehicle with a front seatback reclined could lead to serious or fatal injury in an accident. If a front seat is reclined, the occupant's hip may slide under the lap portion of the safety belt applying great force to the unprotected abdomen or neck. Internal injuries could result. Keep the seatbacks in a comfortably upright position whenever the vehicle is in motion.



Additional switches for adjusting the front passenger seat (if equipped)

In some vehicles, additional switches are provided to move front passenger seat forward and backward (①), and adjust the recliner (②) from the driver's or rear seats. The switches are located on the left side of the passenger seatback (Ⓐ) and on the rear seat center armrest (Ⓑ). Do not use these switches while the front passenger seat is occupied.



Warming the front passenger seats (if equipped)

The front seats can be electrically heated individually when the ignition switch is ON. When the switch is ON, a number ranging from 1 to 5 is displayed on the switch (5 = warmest setting).

To turn off the seat warmer, set the switch to 0.

The seat warmer turns off automatically when the seat temperature reaches the selected range and will turn on again if the temperature drops below the selected range.

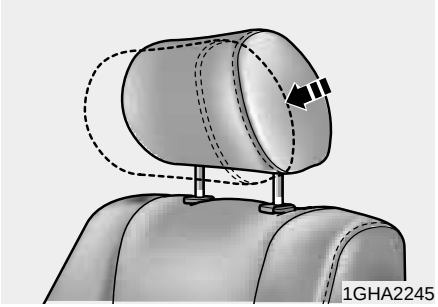
✻ NOTICE

- When cleaning the seats, do not use an organic solvent such as 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 blankets, cushions or seat covers on the seats 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.

⚠ WARNING

Passengers should use extreme caution when using seat warmers due to the possibility of excess heating or burns. In particular, the following types of passengers should exercise extreme care:

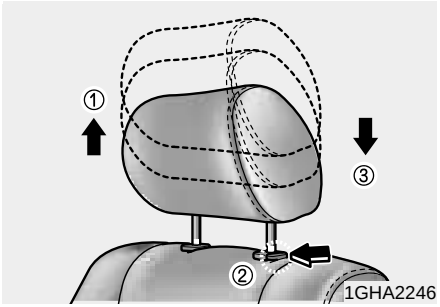
1. **Infants, children, elderly or handicapped persons, or hospital outpatients**
2. **Persons with sensitive skin or those that burn easily**
3. **Fatigued individuals**
4. **Intoxicated individuals**
5. **Individuals taking medication that can cause drowsiness or sleepiness (sleeping pills, cold tablets, etc.)**



Headrest adjustment

Adjusting forward and backward

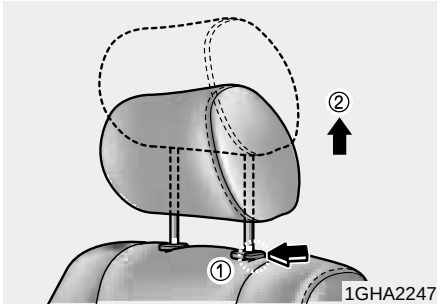
The headrest may be adjusted forward to three different positions by pulling the headrest forward. To adjust the headrest backward, pull it fully forward to the farthest position and release it. Adjust the headrest so that it properly supports the head and neck.



Adjusting the height up and down

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

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). For best protection, adjust the headrest so its center is as high as your ears. Also adjust the headrest so its distance from the head is as wide as your fist.

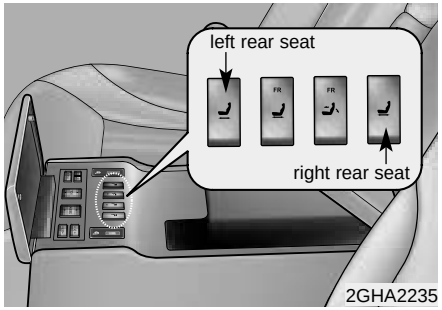


Removal

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

⚠ WARNING

To reduce the risk of head and neck injuries, do not drive the vehicle with the headrest removed or improperly positioned.



Adjusting the rear seat

Forward/backward position adjustment (if equipped)

This control knob operates only when the ignition key is ON.

Push the front portion of the control switch, then seat cushion moves forward and seatback reclines.

Push the rear portion of the control switch, then seat cushion moves backward and seatback returns to upright position.

For easier passenger loading, if the rear seat is in any forward position and the rear door is opened, the seat will automatically move to the rear position. The seat will not move back to the original position when the door is closed and must be repositioned by the passenger if desired.

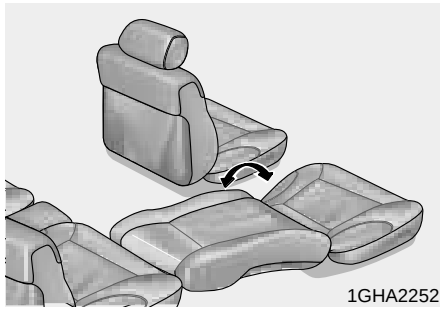
✻ NOTICE

Do not continue to push the control switch once the seat is moved to the farthest forward or rear positions. Doing so may damage the related parts.

⚠ WARNING

Use extreme caution so that hands or other objects are not caught in the seat mechanisms while the seat is moving.

Do not adjust the seat while wearing seat belts. Moving the seat cushion forward may cause strong pressure on the abdomen.


1GHA2252

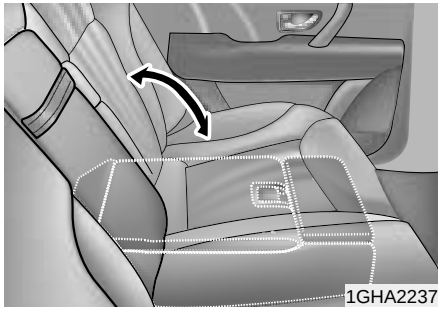
Full flat seat

To allow the rear seat passenger to support their legs in a reclined position, the front passenger seatback can be reclined nearly flat.

1. Remove the headrest (refer to page 3-34).
2. Using the control switch, move the front passenger seat to the farthest forward position.
3. Using the control switch, recline the seatback as far as it can go to allow the rear seat passenger to support their legs in the reclined position.

⚠ WARNING

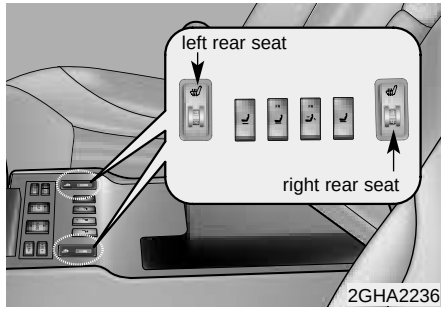
Do not allow a rear seat passenger to use the full flat seat feature and recline while the vehicle is in motion. Severe injury or death could occur.


1GHA2237

Armrest

The armrest is located in the center of the rear seat. Pull the armrest down from the seatback.

You will find a storage cover and cup holders (if equipped).



Warming the rear passenger seats (if equipped)

Rear seats can be electrically heated when the ignition switch is ON.

1. Pull the armrest down using the strap provided on the armrest.
2. When the switch is ON, a number ranging from 1 to 5 is displayed on the switch (5 = warmest setting).

To turn off the seat warmer, set the switch to 0.

The seat warmer turns off automatically when the seat temperature reaches the selected range and will turn on again if the temperature drops below the selected range.

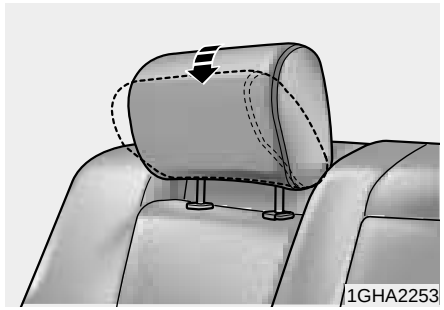
✻ NOTICE

- **When cleaning the seats, do not use an organic solvent such as 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 blankets, cushions or seat covers on the seats 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.**

⚠ WARNING

Passengers should use extreme caution when using seat warmers due to the possibility of excess heating or burns. In particular, the following types of passengers should exercise extreme care:

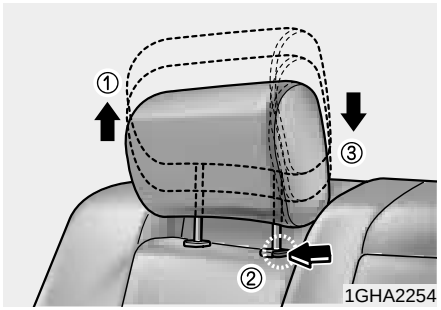
1. **Infants, children, elderly or handicapped persons, or hospital outpatients**
2. **Persons with sensitive skin or those that burn easily**
3. **Fatigued individuals**
4. **Intoxicated individuals**
5. **Individuals taking medication that can cause drowsiness or sleepiness (sleeping pills, cold tablets, etc.)**


1GHA2253

Headrest adjustment

Adjusting forward and backward

The headrest may be adjusted forward to three different positions by pulling the headrest forward. To adjust the headrest backward, pull it fully forward to the farthest position and release it. Adjust the headrest so that it properly supports the head and neck.

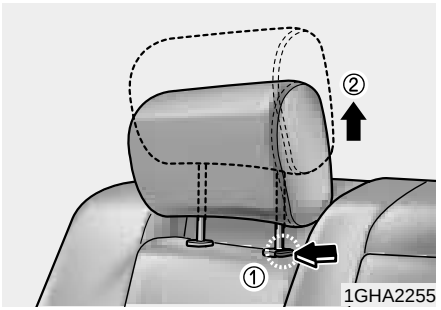


1GHA2254

Adjusting the height up and down

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

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). For best protection, adjust the headrest so its center is as high as your ears. Also adjust the headrest so its distance from the head is as wide as your fist.



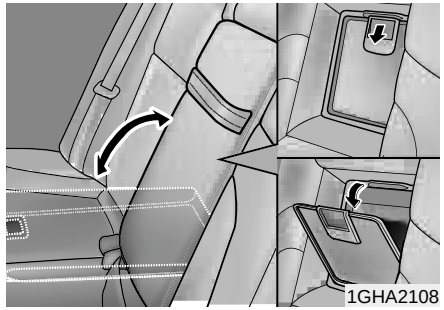
1GHA2255

Removal

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

⚠ WARNING

To reduce the risk of head and neck injuries, do not drive the vehicle with the headrest removed or improperly positioned.



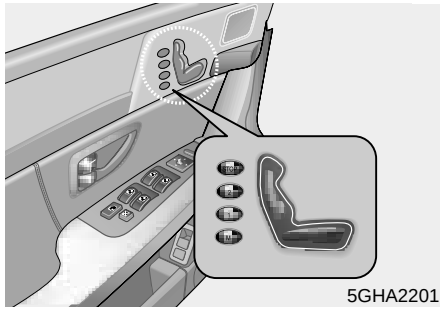
Storing long/narrow cargo with trunk closed (if equipped)

Pull the armrest down using the strap provided on the armrest. Pull the cover down while pushing the release lever down. Additional cargo space is provided to accommodate long/narrow cargo (skis, poles, lumber, etc.) not able to fit properly in the trunk when closed.

CAUTION

- ***Make sure the engine is off, the transaxle is in P and the parking brake is applied whenever loading or unloading cargo. Vehicle may move if shift lever is inadvertently moved to another position.***
- ***Be careful when loading cargo through the rear passenger seats to prevent damage to the vehicle interior.***
- ***When cargo is loaded through the rear passenger seats, ensure the cargo is properly secured to prevent it from moving while driving. Unsecured cargo in the passenger compartment can cause damage to the vehicle or injury to it's occupants.***

DRIVER POSITION MEMORY SYSTEM (IF EQUIPPED)


5GHA2201

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

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

Storing positions into memory using the buttons on the door

Storing driver's seat positions

1. Shift the transaxle lever into P while the ignition switch is ON.
2. Adjust the seat, steering wheel and outside rearview mirror to positions comfortable for the driver.
3. Press M button on the control panel.
4. Press one of the memory buttons (1 or 2) within 5 seconds after pressing the M button. The system will beep twice when memory has been successfully stored.

The particular driver positions are memorized in the button (1 or 2) selected.

Recalling positions from memory

1. Shift the transaxle lever into P while the ignition switch is ON.
2. To recall the position in memory, press the desired memory button (1 or 2) the system will beep once, then seat, steering wheel and outside rearview mirror will automatically adjust to the stored positions.

Adjusting one of the control knobs for the seat, outside rearview mirror or 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 knob is moved. Other components will continue position recalling.

To stop the position recall at any point in the recall process, press the STOP button once. Seat, steering wheel and outside rearview mirror position recalling will stop.

Storing and recalling with transmitter

Storing with the transmitter

Turn the ignition switch to LOCK from ON and lock all the doors using the transmitter. The seat, steering wheel and outside rearview mirror positions will be stored in the system memory.

Driver's position recalling with transmitter

Unlock the door with the transmitter, and the positions stored in the system memory will be recalled automatically.

If using two transmitters, recalling times may vary because stored positions in each transmitter may be different.

Example) If doors are locked with transmitter A and unlocked with transmitter B, the positions memorized when unlocked with transmitter B will be recalled and may take slightly longer than if unlocked with transmitter A.

Storing and recalling with e-key (if equipped)

Storing with the e-key

Turn the ignition switch to LOCK from ON and lock all the doors using the e-key. The positions of seat, steering wheel and outside rearview mirror will automatically be stored in the system memory.

Driver's position recalling with e-key

Unlock the driver's door using the e-key, and all positions stored in the system memory will be recalled automatically.

Unlock the passenger's door with the e-key and the system memory will not operate.

When using two e-keys, position recall times may vary because each e-key's stored positions may be different.

Example) If doors are locked with e-key A and then unlocked with e-key B, the stored e-key B positions will be recalled but will take slightly longer than if unlocked with e-key A which was initially used to lock.

SAFETY BELTS

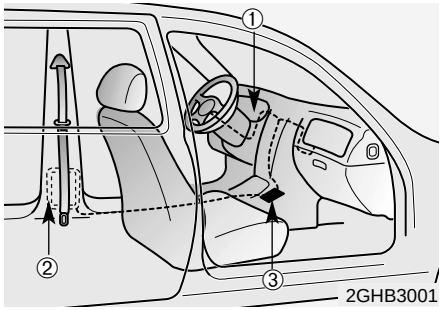

2GHB3002

Pre-tensioner seat belt

Your vehicle is equipped with driver's and front passenger's pre-tensioner seat belts. The purpose of the pre-tensioner is to make sure that the seat belts fit tightly against the occupant's body in certain frontal collision. The pre-tensioner seat belts can be activated alone or, together with the airbags, where the frontal collision is severe enough.

CAUTION

The pre-tensioner seat belt is installed at the front seats, and sensor is equipped inside the buckle, where presence of passenger is sensed by the fastening of the seat belts. Therefore, pre-tensioner will not activate if the passenger is not fastened with seat belts. Likewise, it will activate if buckled even without passenger. Pre-tensioner seat belt may activate regardless of whether a seat belt is in use if the seat belt buckle switch is malfunctioning or no seat belt use is detected within 6 seconds of turning the ignition switch ON.



2GHB3001

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

① SRS airbag warning light

② Seatbelt pre-tensioner assembly

③ SRS airbag control module

⚠ WARNING

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

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

Load limiter (if equipped)

When the pre-tentioner activates, if the system senses excessive seat belt tension on the driver or passenger's seat belt, the load limiter inside the pre-tensioner will release some of the pressure on the affected seat belt.

CAUTION

When the pre-tensioner seat belts are activated, a loud noise may be heard and fine dust, which may appear to be smoke, may be visible in the passenger compartment and are not toxic.

Although, it is harmless, the fine dust may cause skin irritation and should not be breathed for prolonged periods. Wash your hands and face thoroughly after an accident in which the airbags and/or pre-tensioner seat belts were activated.

CAUTION

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

CAUTION

The pre-tensioner seat belt assembly mechanisms become hot during activation. Do not touch the pre-tensioner seat belt assembly for several minutes after they have been activated.

WARNING

- **Pre-tensioners are designed to operate once. 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.**
- **Do not attempt to inspect or replace the pre-tensioner seat belts yourself. This must be done by an authorized Kia dealer.**

⚠ WARNING

- **Do not strike the pre-tensioner seat belt assemblies.**
- **Do not attempt to service or repair the pre-tensioner seat belt system in any manner.**
- **Improper handling of the pre-tensioner seat belt assemblies, and failure to heed the warnings not to strike, modify, inspect, place, service or repair the pre-tensioner seat belt assemblies may lead to improper operation or inadvertent activation causing serious injury.**

  Always wear the seat belts when driving or riding in a motor vehicle.

Safety belt restraint system

⚠ WARNING - Safety belts

To minimize the risk of serious or fatal injury in an accident, the driver and all passengers should use the appropriate safety restraints for their age and size. The presence of airbags does not change the need to be properly restrained by a safety belt or size-appropriate child restraint. In fact, airbags can work properly when passengers are correctly restrained in the vehicle. Be sure you are familiar with the information in this section, including the information on infant and child restraints. Read the safety warnings on the sun visors of your vehicle also.

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

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

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

Whenever possible, use the center rear seat position to install your child restraint.

Lap belt, if equipped, does not have an inertial lock so it is always in a locked condition.

If the center seat is unavailable, a child restraint system may be installed in an outboard rear seat position. Never install a child restraint system in the front passenger position, as an inflating airbag could cause serious or fatal injury to a child in that position.

Safety belts provide the best restraint when:

- The seatback is upright.
- The occupant is sitting upright (not slouched).
- The lap belt is snug across the hips.
- The shoulder belt is snug across the chest.
- The knees are straight forward.

To help you remember to fasten your safety belt, a warning light will come on and a chime will sound. See Safety Belt Warning Light and Chime on page 3-48.

⚠ WARNING - After a collision

- **Lap/shoulder belt assemblies may be stretched or damaged when subjected to the stress and forces of a collision.**
- **The entire restraint system should be inspected following any collision. All belts, retractors, anchors and hardware damaged by a collision should be replaced before the vehicle is operated again.**

⚠ WARNING - Twisted belts

A twisted or jammed safety belt cannot restrain you properly. If you cannot untwist or unjam the safety belt, have an authorized Kia dealer it immediately. Never drive or ride with a twisted or jammed safety belt.

⚠ WARNING - Belt use

Safety belts must be used correctly to work properly in an accident. Each seating position in your vehicle has a specific safety belt assembly that includes a buckle and tongue designed to be used together.

For greatest effectiveness, follow these guidelines in using safety belts:

- **Use the shoulder portion of the safety belt on the outside shoulder only. Never wear the shoulder portion under the arm.**
- **Never swing the safety belt around your neck to fit over the inside shoulder.**
- **Never wear the shoulder portion of the safety belt across the neck or face.**

(Continued)

(Continued)

- **Wear the lap portion as low as possible. Be sure that the lap belt fits snugly around the hips. Never wear a lap belt or lap portion of a lap/shoulder belt over your waist; it should always go over the stronger area of your hips.**
- **Never use a single safety belt for more than one person.**
- **The front seatbacks should always remain in a comfortable, upright position when the vehicle is moving.**

⚠ WARNING - Safety belt care

- **A damaged belt may not give you the protection you need in an accident.**
- **Inspect your safety belts periodically for excessive wear or damage. Pull out each belt fully and look for fraying, cuts, burns or other damage. Pull the safety belt out and let it retract a number of times. Make sure that the lap/shoulder belts return smoothly and easily into the retractor.**
- **Check the latches to make sure they latch and release without interference or delay.**
- **Never close the doors on any part of the lap or shoulder belt.**
- **Any belt not in good condition or in good working order should be promptly replaced.**

CAUTION

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

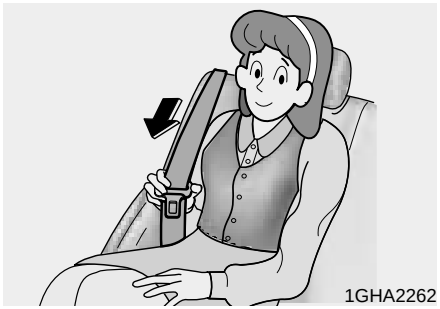


1GQA2083

Safety belt warning light and chime

As a reminder to the driver and passenger, safety belt warning light will blink for approximately 6 seconds each time you turn the ignition switch ON.

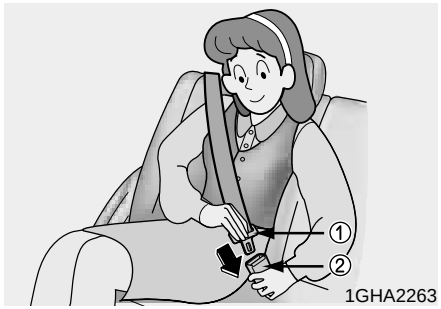
If the driver's lap/shoulder belt is not fastened when the key is turned ON, the safety belt warning chime sounds and the safety belt warning light blinks for approximately 6 seconds.


1GHA2262

Lap/shoulder belt

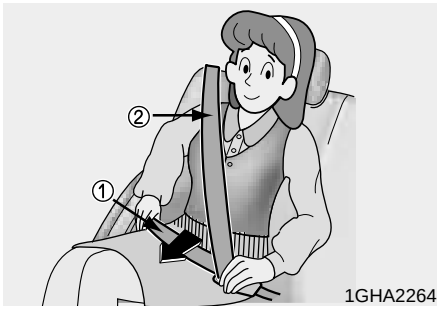
To fasten the front lap/shoulder belt:

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



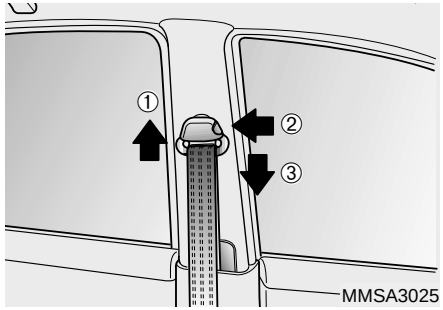
1GHA2263

3. Insert the tongue plate (①) into the open end of the buckle (②) until an audible “click” is heard, indicating the belt is locked in the buckle.



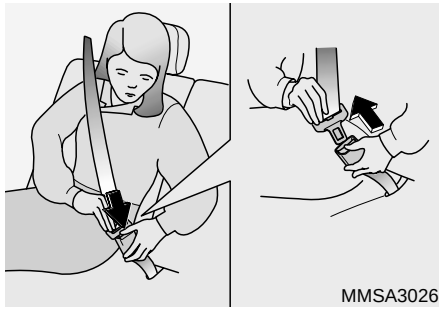
1GHA2264

4. Position the lap portion (①) of the belt across your lap as LOW ON THE HIPS as possible to reduce the risk of sliding under it during an accident. Adjust the belt to a SNUG FIT by pulling up on the shoulder portion (②) of the safety belt. The belt retractor is designed to take up excess webbing automatically and to maintain tension on the belt. For your safety, do not put any excess slack into the safety belt.



MMSA3025

5. Adjust the shoulder anchor position to your size. To raise the anchor position, push the anchor up (①). To lower the anchor position, press the button (②) and slide the anchor down (③). After adjustment, make sure the anchor is locked in position.


MMSA3026

To unfasten the front lap/shoulder belt:

Press the release button on the buckle and allow the belt to slowly retract.

⚠ WARNING

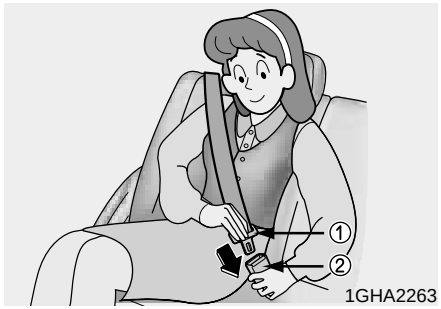
- **The seatbacks should always remain in a comfortable, upright position while the vehicle is in motion. The safety belt system will provide the most protection with the seatbacks in an upright position.**
- **Never wear the shoulder portion of the safety belt under the outside arm or behind the back.**
- **Never wear the shoulder portion of the safety belt across the neck or face.**
- **Wear the lap portion of the safety belt as low on the hips as possible. Be sure the lap belt fits snugly around the hips. Never wear the lap belt over your waist.**

(Continued)

(Continued)

- **Never drive or ride with a twisted or jammed safety belt. If you cannot untwist or unjam the safety belt, see the nearest Kia dealer immediately.**
- **Never use a single belt to restrain more than one person at a time.**

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

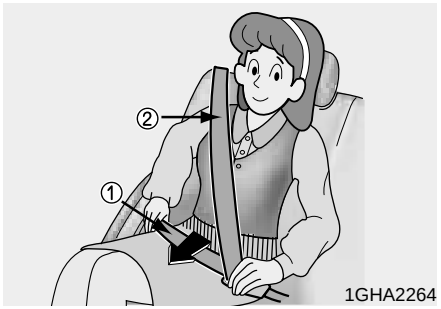


1GHA2263

Rear lap/shoulder belt

To fasten the rear lap/shoulder belt:

1. Grasp the buckle and tongue plate.
2. Slowly pull the lap/shoulder belt out.
3. Insert the tongue plate (①) into the open end of the buckle (②) until an audible “click” is heard, indicating the belt is locked in the buckle.



1GHA2264

4. Position the lap portion (①) of the belt across your lap as LOW ON THE HIPS as possible to reduce the risk of sliding under it during an accident. Adjust the belt to a SNUG FIT by pulling up on the shoulder portion (②) of the safety belt. The belt retractor is designed to take up excess webbing automatically and to maintain tension on the belt. For your safety do not put any excess slack into the safety belt.

To unfasten:

Press the release button on the buckle and allow the belt to slowly retract.

⚠ WARNING

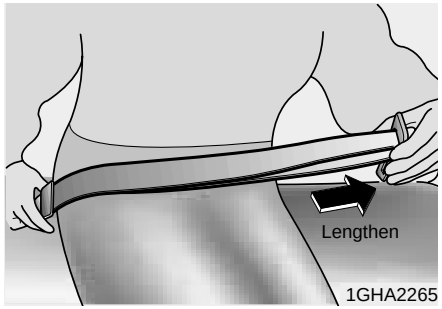
- **Never wear the shoulder portion of the safety belt under the outside arm or behind the back.**
- **Never wear the shoulder portion of the safety belt across the neck or face.**
- **Wear the lap portion of the safety belt as low as possible. Be sure the lap belt fits snugly around the hips. Never wear the lap belt over your waist.**

(Continued)

(Continued)

- **Never drive or ride with a twisted or jammed safety belt. If you cannot untwist or unjam the safety belt, see the nearest Kia dealer immediately.**
- **Never use a single belt to restrain more than one person at a time.**

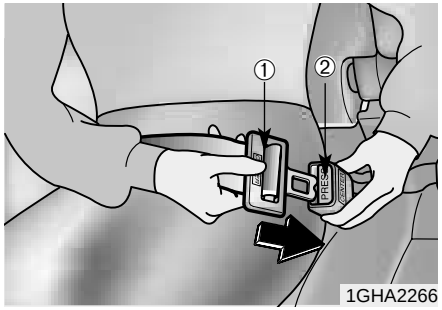
Failure to follow these warnings will increase the risk and severity of injury in an accident.



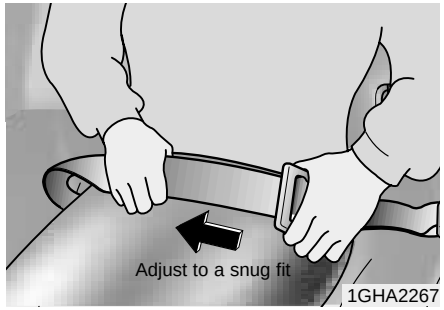
Lap belt (if equipped)

To fasten the lap belt:

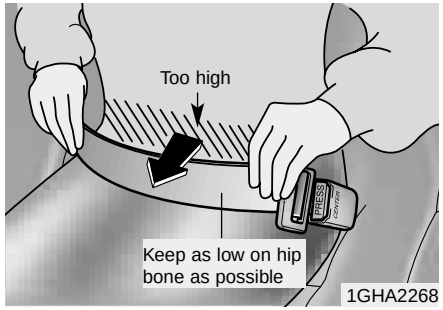
1. Grasp the buckle end and pull it low over the abdomen.



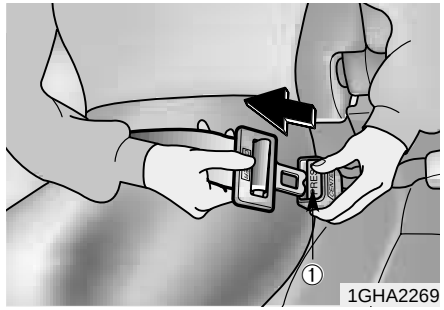
2. Insert the tongue plate (①) into the open end of the buckle (②) until an audible “click” is heard, indicating the latch is locked. Make sure the belt is not twisted.



3. Grasp the free portion of the belt webbing and pull until the belt is snug over the hips and lower abdomen. If it becomes necessary to lengthen or shorten the belt, hold the latch plate tongue at right angles to the webbing and pull.



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

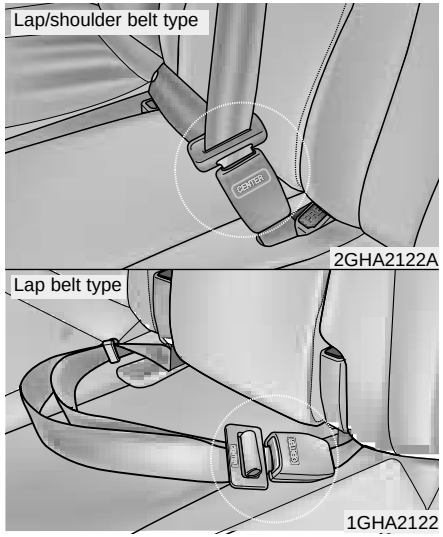


To unfasten the lap belt:

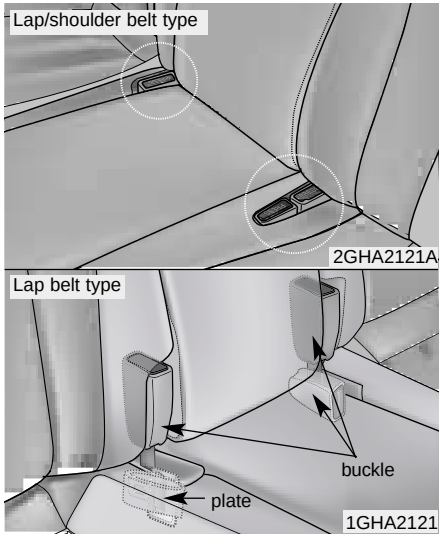
Press the release button (①) on buckle.

⚠ WARNING - Lap belt

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



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



Stowing the rear seat belt (if equipped)

- 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.

Proper use and care of the safety belt system

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

- Use the belts at all times - even on short trips.
- If the safety belt is twisted, straighten it prior to use.
- Keep sharp edges and damaging objects away from the belts.
- Periodically inspect belt webbing, anchors, buckles and all other parts for signs of wear and damage. Replace damaged, excessively worn or questionable parts immediately.
- To clean the belt webbing, use a mild soap solution recommended for cleaning upholstery or carpets. Follow the instructions provided with the soap.

  Do not bleach or dye the webbing because this may weaken the webbing fibers and allow them to fail when loaded in a collision.
- Do not make modifications or additions to the safety belt.
- After wearing a safety belt, make sure it fully retracts to the stowed position. Do not allow the belt to get caught in the door when you close it.

Restraint of pregnant women

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

⚠ WARNING - Pregnant women

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

Restraint of infants and small children

To increase their safety, infants and young children should always be restrained by a restraint system approved for their age and size.

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

It is best for children to be seated in the rear seats.

⚠ WARNING - Children on laps

Never hold a child on your lap or in your arms in a moving vehicle.

Even a very strong person cannot hold onto a child in the event of even a minor collision.

CAUTION - Hot metal parts

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

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

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

Restraint of larger children

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

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

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

⚠ WARNING - Shoulder belts on small children

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

Child restraint system (if equipped)

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

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

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

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



E1BLA204

⚠ WARNING

- **A child restraint system must be placed in the rear seat. Never install a child or infant seat on the front passenger's seat.**

  Should an accident occur and cause the passenger airbag to deploy, it could severely injure or kill an infant or child seated in an infant or child seat. Thus, only use a child restraint in the rear seat of your vehicle.

(Continued)

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- **Since a safety belt or child restraint system can become very hot if it is left in a closed vehicle, be sure to check the seat cover and buckles before placing a child there.**
- **When the child restraint system is not in use, store it in the trunk or fasten it with a safety belt so that it will not be thrown forward in the case of a sudden stop or an accident.**
- **Children who are too large to be in a child restraint should sit in the rear seat and be restrained with the available lap/shoulder belts. Never allow children to ride in the front passenger seat.**

(Continued)

(Continued)

- **Always make sure that the shoulder belt portion of the outboard lap/shoulder belt is positioned midway over the shoulder, never across the neck or behind the back. Moving the child closer to the center of the vehicle may help provide a good shoulder belt fit. The lap belt portion of the lap/shoulder belt or the center seat lap belt must always be positioned as low as possible on the child's hips and as snug as possible.**
- **If the seat belt will not properly fit the child, we recommend the use of an approved booster seat in the rear seat in order to raise the child's seating height so that the seat belt will properly fit the child.**

(Continued)

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- **Never allow a child to stand up or kneel on the seat.**
- **Never use an infant carrier or child safety seat that "hooks" over a seatback; it may not provide adequate security in an accident.**
- **Never allow a child to be held in a person's arms while they are in a moving vehicle, as this could result in serious injury to the child in the event of an accident or a sudden stop. Holding a child in a moving vehicle does not provide the child with any means of protection during an accident, even if the person holding the child is wearing a seat belt.**

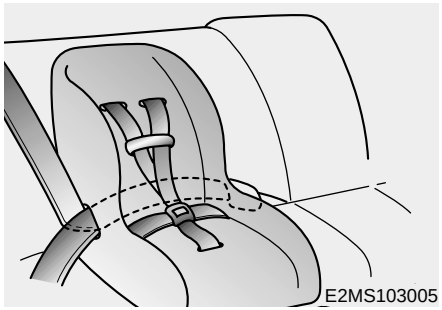
Installation on the rear seats

⚠ WARNING

- **Before installing the child restraint system, read the instructions supplied by the child restraint system manufacturer.**
- **Failure to observe this manual instructions regarding child restraint system and the instructions provided with the child restraint system could increase the chance and/or severity of injury in an accident.**

⚠ WARNING

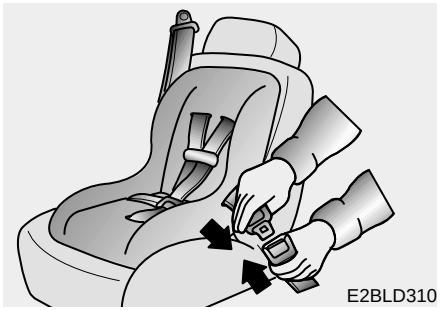
- **Do not install any child restraint system in the front passenger seat. Should an accident occur and cause the passenger airbag to deploy, it could severely injure or kill an infant or child seated in an infant or child seat. Therefore, only use a child restraint system in the rear seat of your vehicle.**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



Installing a child restraint system by lap/shoulder belt (on the outboard or center rear seat) - Except Europe

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

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


E2BLD310

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


E2BLD303

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

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

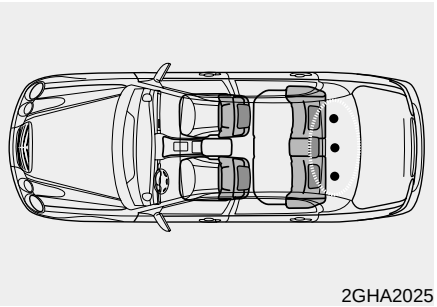

E2BLD347

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


2GHA2025

Securing a child restraint seat with "Tether Anchor" system (If equipped)

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

1. Open the tether anchor cover on the shelf behind the rear seats.


2GHA3300

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

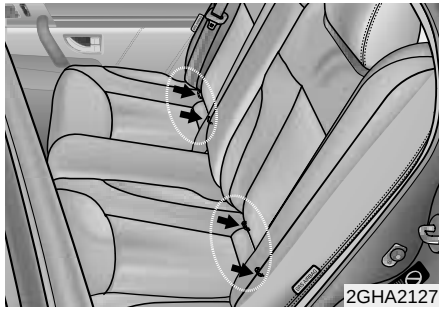
   For vehicles with adjustable headrest, route the tether strap under the headrest and between the headrest posts, otherwise route the tether strap over the top of the seatback.
3. Connect the tether strap hook to the belonging child restraint hook holder and tighten to secure the seat.

Securing a child restraint system with "ISOFIX" system and "Tether Anchorage" system (If equipped)

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

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

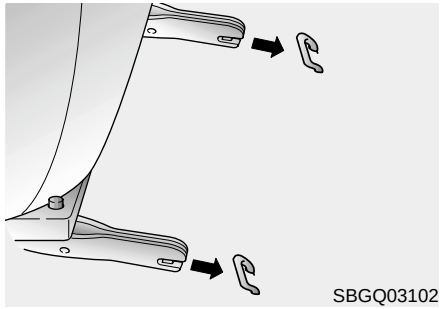
At present, this seat is the only one complying with that provision. In case that other manufacturers will furnish proof of a respective certification, Kia is going to evaluate this seat carefully and will give a recommendation provided that seat complies to the law. Please ask your Kia dealer in this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



On each side of the rear seat, between the cushion and backrest, are located a pair of ISOFIX anchorage points together with a top tether mounting on the shelf behind the rear seats. During the installation, the seat has to be engaged at the anchorage-points in a way you can hear it clicking (check by pulling!) and has to be fixed with the Top Tether-belt on the belonging point on the shelf behind rear seats. The installing and the use of a child-seat has to be done according to the installing-manual, which is added to the ISOFIX-seat.

✻ NOTICE

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


SBGQ03102

To secure the child restraint seat

1. To engage the child restraint seat to the ISOFIX anchor, insert the child restraint seat latch into the ISOFIX anchor. Listen for the audible “click” sound.
2. Connect the tether strap hook to the child restraint hook holder and tighten to secure the seat. Refer to “Securing a child restraint seat with the “Tether Anchorage” system” on page 3-62.

⚠ 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 seat position - 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	Rear outboard	Rear center
0 : Up to 10 kg (0 - 9 months)	X	L2, L3	X
0+ : Up to 13 kg (0 - 2 years)	X	L2, L3	X
I : 9 kg to 18 kg (9 months - 4 years)	X	L1, L4, L5	X
II & III : 15 kg to 36 kg (4 - 12 years)	X	L5, L6	X

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

L1 : Suitable for “Römer Duo ISOFIX / Britax Duo ISOFIX” approved for use in this mass group

L2 : Suitable for “Bebe Comfort (E2 037014)” approved for use in this mass group

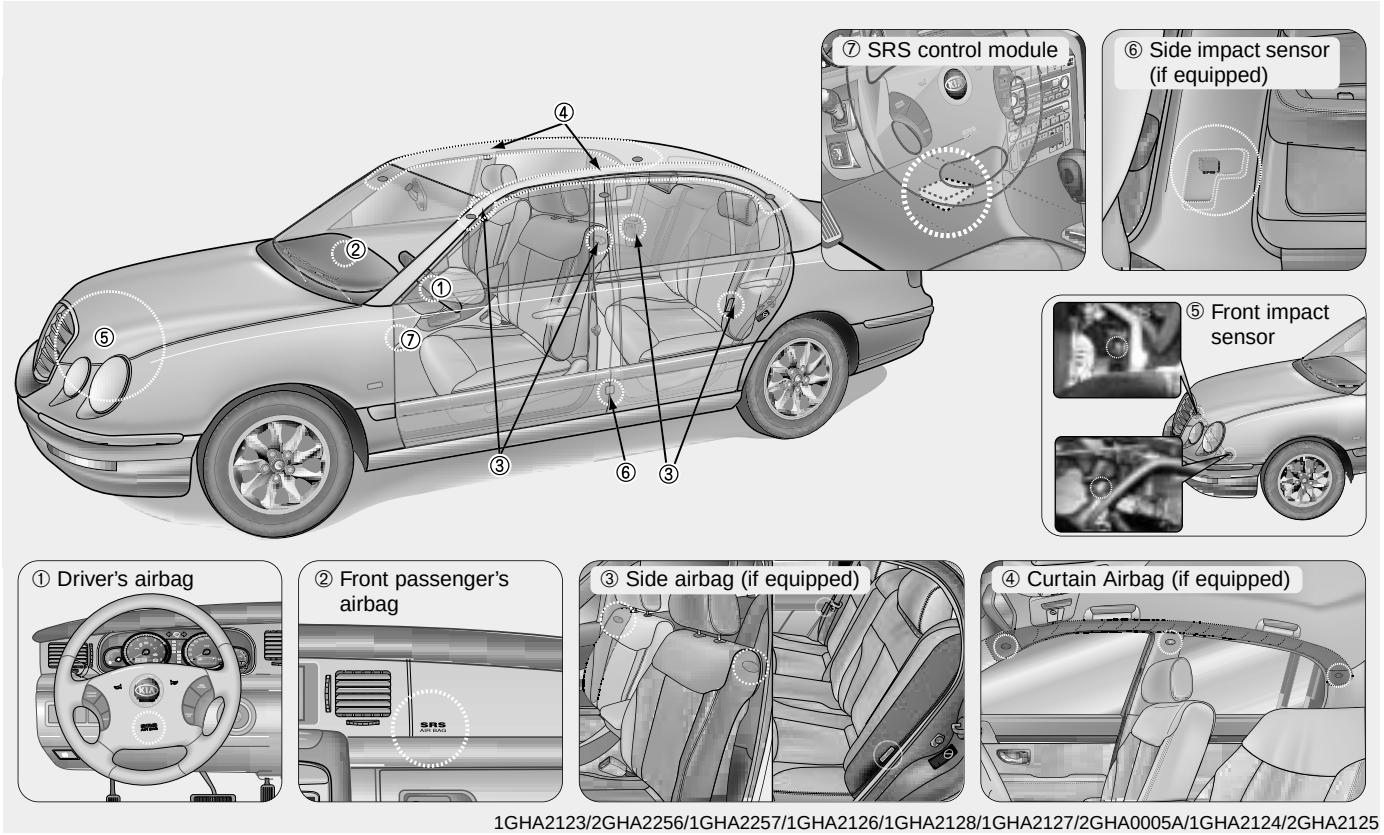
L3 : Suitable for “Römer Baby Safe (E1 03301146)” approved for use in this mass group

L4 : Suitable for “Römer Lord Plus (E1 03301136)” approved for use in this mass group

L5 : Suitable for “Kiddy Life Plus (E1 03301135)” approved for use in this mass group

L6 : Suitable for “Römer Kid (E1 03301148)” approved for use in this mass group

AIRBAG - SUPPLEMENTAL RESTRAINT SYSTEM



1GHA2123/2GHA2256/1GHA2257/1GHA2126/1GHA2128/1GHA2127/2GHA0005A/1GHA2124/2GHA2125

① Driver's airbag
(see page 3- 69)
② Front passenger's airbag
(see page 3- 70)
③ Side airbag
(see page 3- 72)
④ Curtain Airbag
(see page 3- 72)
⑤ Front impact sensor
(see page 3- 74)
⑥ Side impact sensor
(see page 3- 74)
⑦ SRS control module
(see page 3- 74)

- Airbag inflation condition
(see page 3- 75)
- Airbag non-inflation condition
(see page 3- 77)
- Airbag warning light
(see page 3- 82)
- Airbag service
(see page 3- 82)
- Airbag warning label
(see page 3- 84)

What your airbag system does

Driver's airbag and front passenger's airbag are designed to supplement the protection offered by the safety belt in certain frontal collision. Likewise, Side airbag and curtain airbag are designed to supplement the protection offered by the safety belt in side collision. Safety belts are designed to reduce the injury of the driver or passengers in case of light impact or collision. However, if the impact of driver or passengers cannot be reduced only by the seat belts in a serious collision, airbags are installed to reduce the injury on the face and chest.

What your airbag system does not do

The air bag system is designed to supplement the protection offered by the safety belt system. IT IS NOT A SUBSTITUTE FOR THE SAFETY BELT.

The importance of using safety belts

There are four very important reasons to use safety belts even with an airbag supplemental restraint system. They:

- help keep you in the proper position (away from the airbag) when it inflates.
- reduce the risk of harm in rollover, side impact (vehicles not equipped with side and curtain airbags) or rear impact collisions, because an airbag is not designed to inflate in such situations and even a side curtain airbag is designed to inflate only in certain side impact collisions.
- reduce the risk of harm in frontal or side collisions which are not severe enough to actuate the airbag supplemental restraint system.
- reduce the risk of being thrown from your vehicle.

⚠ WARNING - Airbags & safety belts

- **Even in vehicles with air bags, you and your passengers must always wear the safety belts provided in order to minimize the risk and severity of injury in the event of a collision or rollover.**
- **Always wear your safety belt. It can help keep you away from the air bags during heavy braking just before a collision.**
- **If occupants are not fastened or correctly seated, they cannot be protected, and thus face serious injury or death.**

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- **Driver's and front passenger's airbag are designed to inflate only in certain frontal collision, and side and curtain airbags (if equipped) are designed to inflate in certain side impacts. They will generally not provide protection in side impacts (vehicles not equipped with side and curtain airbags) or rear impacts, rollovers, less severe frontal collisions. They will not provide protection from later impacts in a multi-impact collision.**

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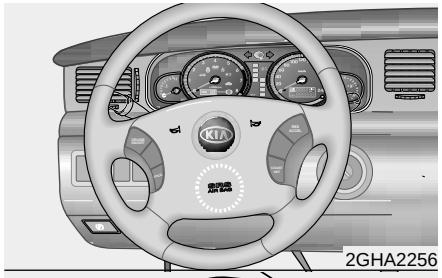
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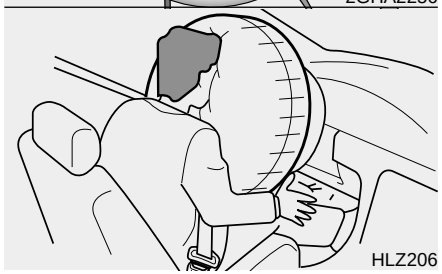
- **If your vehicle has been subjected to flood conditions (e.g. soaked carpeting/standing water on the floor of the vehicle, etc.) or if your vehicle has become flood damaged in any way, do not attempt to start the vehicle or put the key in the ignition before disconnecting the battery. This may cause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

Airbag system components

The main components of your SRS are:

- To indicate that your vehicle is equipped with airbags, the corresponding airbag covers are marked with “SRS AIRBAG”.
  - Driver’s airbag (see page 3- 69)
  - Passenger’s airbag (see page 3- 70)
  - Side airbag (if equipped, see page 3- 72)
  - Curtain airbag (if equipped, see page 3- 72)
- A diagnostic system that continually monitors the system operation.
- An indicator light to warn you of a possible problem with the system.
- Emergency power backup in case your car’s electrical system is disconnected in a crash.





Driver’s airbag

The driver’s airbag is stored in the center of the steering wheel.

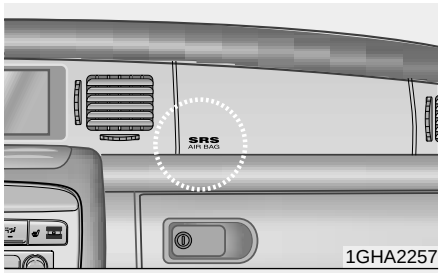
⚠ WARNING

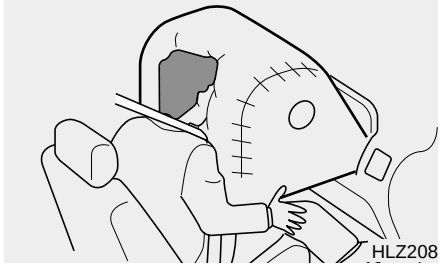
- **You must always sit as far back from the steering wheel airbag as possible (chest at least 250 mm (10 inches) away from the steering wheel), while still maintaining a comfortable seating position for good vehicle control, in order to reduce the risk of injury or death in a collision.**
- **Never place objects over the airbag storage compartments or between the airbags and yourself. Due to the speed and force of the airbag inflation, such objects could hit your body at high speed and cause severe bodily injury and even death.**

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- **Do not put stickers or ornaments on the steering wheel cover. These may interfere with the deployment of the airbag.**





Front passenger's airbag

Front passenger's airbag is stored in the instrument panel on the glove box.

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

⚠ WARNING

- **The front seat passenger's airbag is much larger than the steering wheel airbag and inflates with considerably more force. It can seriously hurt or kill a passenger who is not in the proper position and wearing the safety belt properly. The front passengers should always move their seat as far back as practical and sit back in their seat.**
- **It is essential that the front passengers always wear their safety belts, even when the vehicle is moving in a parking lot or up a driveway into garage.**

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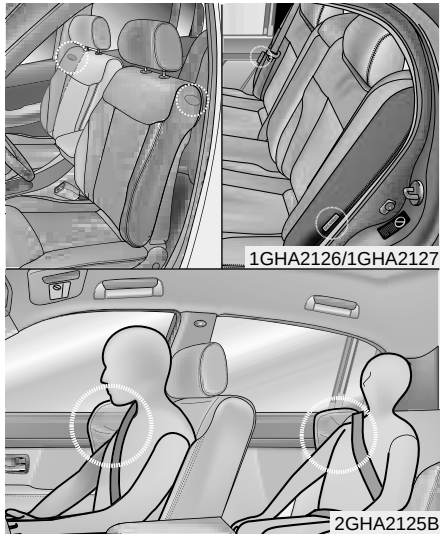
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- **If driver brakes the vehicle heavily in an urgent situations, occupants will be thrown forward. If front passengers are not wearing the safety belts, they will be directly in front of the storage compartment when inflation occurs. In that situation, serious injury or death is possible.**
- **Never allow front passenger to put their hands or feet on the instrument panel or put their face close to the instrument panel. The airbag will impact the front passenger when it inflates.**

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- **Never allow children/old and feeble persons/pregnant women sit on the front passenger's seat. Do not put child restraint system on the front passenger's seat either. They may be seriously injured by the airbag inflation when airbag deploys.**
- **Do not put objects or stickers on the instrument panel. Do not apply any accessory on the front windshield glass or do not install aftermarket mirrors or accessories on the factory installed rearview mirror. These may interfere with the deployment of airbag inflation or could hit your body at high speed and cause severe bodily injury and even death.**



Side airbag (if equipped)

Side airbags are stored in the left side of the driver's seat, right side of the front passenger's seat and left and right sides of the rear seats.

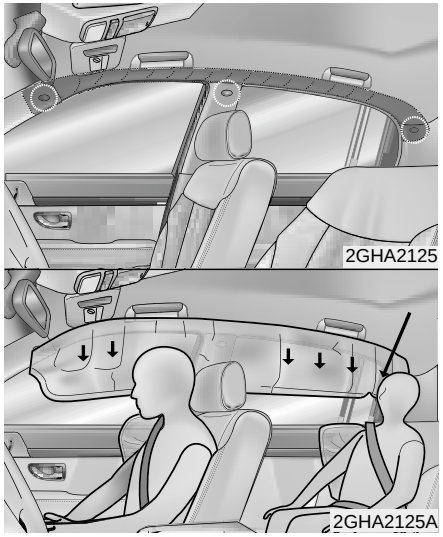
If airbag inflation conditions are met (side collision), they will inflate.

⚠ WARNING

- **Do not use any accessory seat covers for the vehicle equipped with side airbags.**

  Use of seat covers could interfere with side airbag deployment.

  If seat or seat cover is damaged, have the vehicle checked and repaired by an authorized Kia dealer. Inform them that your vehicle is equipped with side airbags.
- **Do not make modifications or additions to the seats. If seats not allowed by Kia Motors are used, unexpected injury may result in due to the malfunction of the airbag system.**



Curtain airbag (if equipped)

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

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

- If the curtain airbag deploys, it remains inflated for approximately 3 seconds. The curtain airbag deployment occurs only on the side of the vehicle affected by the impact.
- The side airbags (side and/or curtain airbags) are not designed to deploy during collisions from the front or rear of the vehicle or in most rollover situations.
- The curtain airbags are designed to deploy only during certain side-impact collisions, depending on the crash severity, angle, speed and impact. The curtain airbags are not designed to deploy in all side impact situations.

⚠ WARNING

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

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- **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 the seats where side airbags are equipped.**
- **Never try to open or repair any components of the side curtain airbag system. This should be done only by an authorized Kia dealer.**

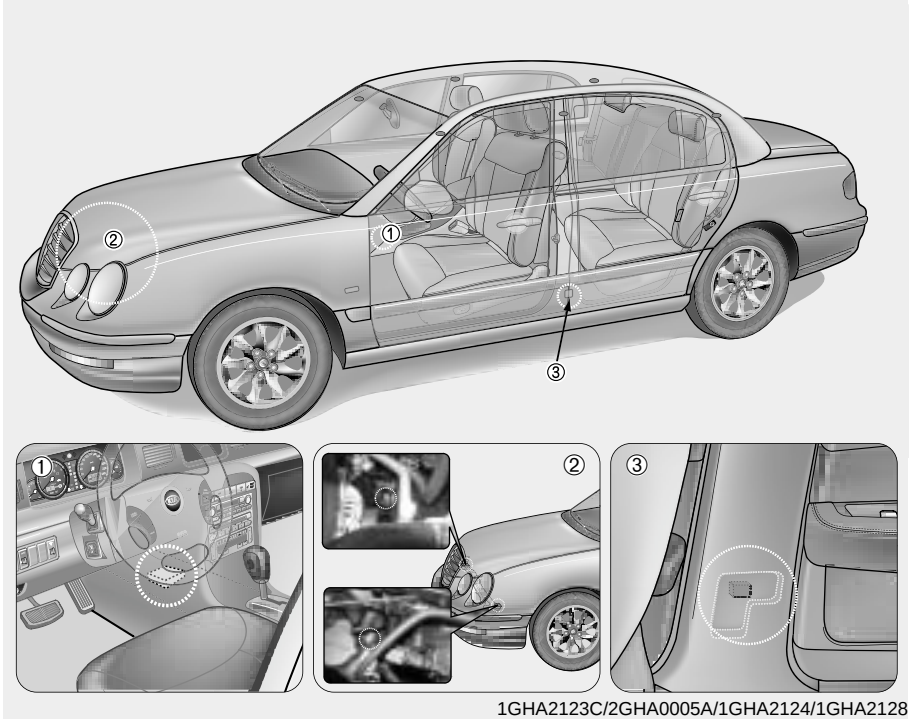
Failure to follow the above mentioned instructions can result in injury or death to the vehicle occupants in an accident.

Why didn’t my airbag go off in a collision?

(Inflation and non-inflation conditions of the airbag)

There are many types of accidents in which the airbag 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. In other words, just because your vehicle is damaged and even if it is totally unusable, don’t be surprised that the airbags did not inflate.



1GHA2123C/2GHA0005A/1GHA2124/1GHA2128

Airbag collision sensors

① SRS control module
② Front impact sensor
③ Side impact sensor (if equipped)

⚠ WARNING

- **Do not hit or allow any objects to impact the locations where airbag or sensors are installed.**

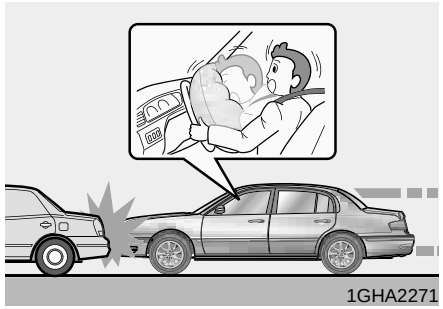
  This may cause unexpected airbag deployment, which could result in serious personal injury or death.
- **If the installation location or angle of the sensors is altered in any way, the airbags may deploy when they should not or they may not deploy when they should, causing severe injury or death.**

  Therefore, do not try to perform maintenance on or around the airbag sensors. Have the vehicle checked and repaired by the authorized Kia dealer.

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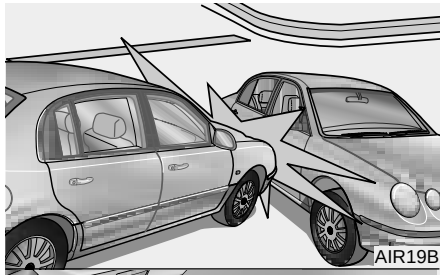
- **Problems may arise if the sensor installation angles are changed due to the deformation of front bumper, body or B pillar where side collision sensors are installed. Have the vehicle checked and repaired by the authorized Kia dealer.**
- **Your vehicle has been designed to absorb impact and deploy the airbag(s) in certain collisions. Installing aftermarket bumper guards or replacing a bumper with non-genuine parts may adversely affect your vehicles collision and airbag deployment performance.**



Airbag inflation condition

Front airbag

Front airbags (driver's and front passenger's airbags) are designed to inflate when the impact is delivered to front collision sensors depending on the intensity, speed or angles of impact of the front collision - generally from an area a little to the left to a little to the right of straight ahead.



Side airbag (if equipped)

Side airbags (side and/or curtain airbags) are designed to inflate when the impact is delivered to side collision sensors depending on the strength, speed or angles of impact of side impact collision or rollover by the side impact.

Although the front airbags (driver's and front passenger's airbags) are designed to inflate only in frontal collision, it may inflate in any collision if front impact sensors are delivered with certain impact.

Side airbags (side and/or curtain airbags) are designed to inflate only in side impact collision, it may inflate in any collision if side impact sensors are delivered with certain impact.

In other words, they may inflate in accidents such as slant collision or impact, collision or impact where the front portion of the vehicle goes under a vehicle with a higher ground clearance (bus or truck), collision with a utility pole or rollover. Therefore, drive safely at all times.

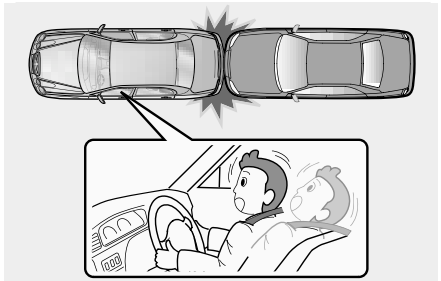
If the vehicle chassis is impacted by bumps or objects on unimproved roads or sidewalks, airbags may deploy. Drive carefully on unimproved roads or on surfaces not designed for vehicle traffic.

To protect occupants, front airbags or pre-tensioner seat belts may deploy in certain side impact collisions.

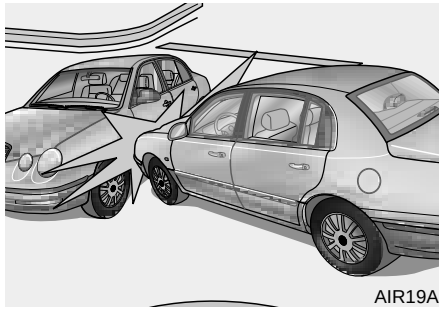

1GHA2272

Airbag non-inflation conditions

- In collisions, the vehicle safety belts are sufficient to protect the vehicle occupants and the airbags may not deploy. In some cases, deploying airbags in low-speed collisions can cause a secondary impact to the occupants (light abrasions, cuts, burns, etc.), or loss of vehicle control.

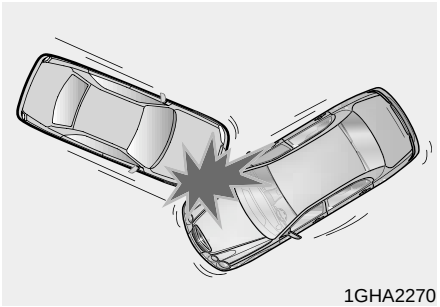

1GHA2273

- Airbags may not inflate in rear collisions, because occupants are moved backward by the force of the impact. In this case, the airbags do not provide proper protection.


AIR19A

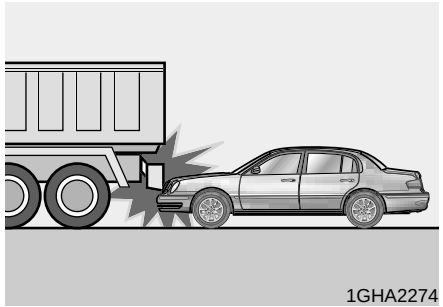
- Front airbags may not inflate in side impact collision, because occupants move to the direction of the collision, and thus front airbag deployment does not provide proper protection.

  However, side or curtain airbags (if equipped) may inflate depending on the intensity, vehicle speed and angles of impact.



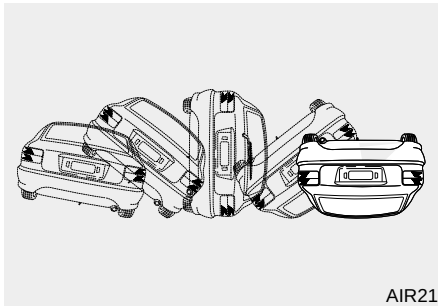
1GHA2270

- In a slant impact or collision, impact delivered will be relatively weaker than that of frontal collision. So, airbags may not inflate.



1GHA2274

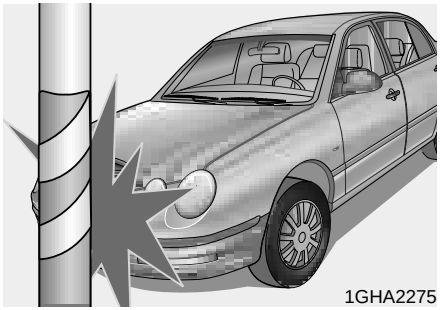
- At the moment of accident, drivers brake heavily with reflex. In such heavy braking, the front portion of the vehicle is lowered by the force of the braking and the vehicle can get under a vehicle with a higher ground clearance. Airbags may not inflate in this situation because impacts may not be delivered or may be delivered with less intensity.



AIR21

- Airbags may not inflate in rollover accidents because airbag deployment cannot provide proper protection to the occupants.

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


1GHA2275

- Airbags 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.

How does the airbag system operate

- Airbag only operates when the ignition switch is turned to ON or START position.
- Airbags inflate instantly in the event of serious frontal or side collision (if equipped with side airbag or curtain airbag) in order to help protect the occupants from serious physical injury.
- There is no single speed at which the airbags will inflate.

  Generally, airbags are designed to inflate by the severity of a collision and its direction. These two factors determine whether the sensors send out an electronic deployment/inflation signal.
- Airbag 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. Though, factors are not limited to those mentioned above.
- The front airbags will completely inflate and deflate in an instant.

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

- In order to help provide protection in a severe collision, the airbags must inflate rapidly. The speed of airbag inflation reduces the likelihood of serious or life-threatening injuries and is thus a mandatory part of the airbag design.

  However, airbag inflation can also cause injuries which normally can include facial abrasions, bruises and broken bones, because that speed also causes the airbags to expand with a great deal force.
- There are even circumstances under which contact with the steering wheel airbag can cause fatal injuries, especially if the occupant is positioned excessively close to the steering wheel.

⚠ WARNING

- **Driver should sit as far back (at least 250 mm away) from the steering wheel airbag as possible to reduce the risk of injury or death in collision. The front passenger should always move their seat as far back as possible and sit back in their seat.**
- **Airbag inflates instantly in an event of collision, passengers may be injured by the airbag expansion force if they are not in proper position.**
- **Airbag inflation may cause injuries which normally include facial or bodily abrasions, injuries by the broken glasses or burns by the explosives.**

Noise and smoke

When the airbags 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 airbag inflator. After the airbag inflates, you may feel substantial discomfort in breathing due to the contact of your chest to both the safety belt and the airbag, as well as from breathing the smoke and powder. We strongly urge you to open your doors and/or windows as soon as possible after impact in order to reduce discomfort and prevent prolonged exposure to the smoke and powder.

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

⚠ WARNING

When the airbags deploy, the airbag related parts in steering wheel and instrument panel are very hot. To prevent injury, do not touch the airbag storage areas internal components immediately after an airbag has inflated.



E1BLA204

Installing a child restraint on a front passenger seat is forbidden.

Never place a rear-facing child restraint in the front passenger seat. If the airbag deploys, it would impact the rear-facing child restraint, causing serious or fatal injury.

In addition, do not place front-facing child restraint in the front passenger seat either. If the front passenger airbag inflates, it would cause serious or fatal injuries to the improperly positioned or improperly restrained child.

⚠ WARNING

- **Never put child restraint in the front passenger seat. If the front passenger airbag inflates, it would cause serious or fatal injuries.**
- **When children are seated in the rear outboard seats in which side airbags are equipped, be sure to put the child restraint system as far away from the door side as possible, and secure the child restraint system to be locked in position.**

  Inflation of side or curtain airbag (If equipped) could cause serious injury or death due to the expansion impact.

AIR BAG

Airbag warning light

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

When the ignition switch is turned ON, the indicator light should blink 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 the engine starts.
- The light comes on while the vehicle is in motion.

Airbag (supplemental restraint system) service

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

You must have the system serviced under the following circumstances:

- If an airbag ever inflates, the airbag must be replaced. Do not try to remove or discard the airbag by yourself. This must be done by an authorized Kia dealer or service representative
- If the airbag warning indicator light alerts you to a problem, have the airbag system checked as soon as possible. Otherwise, your airbag system may be ineffective.

The entire SRS system must be inspected by an authorized Kia dealer in 10 years after the vehicle manufacture date.

CAUTION

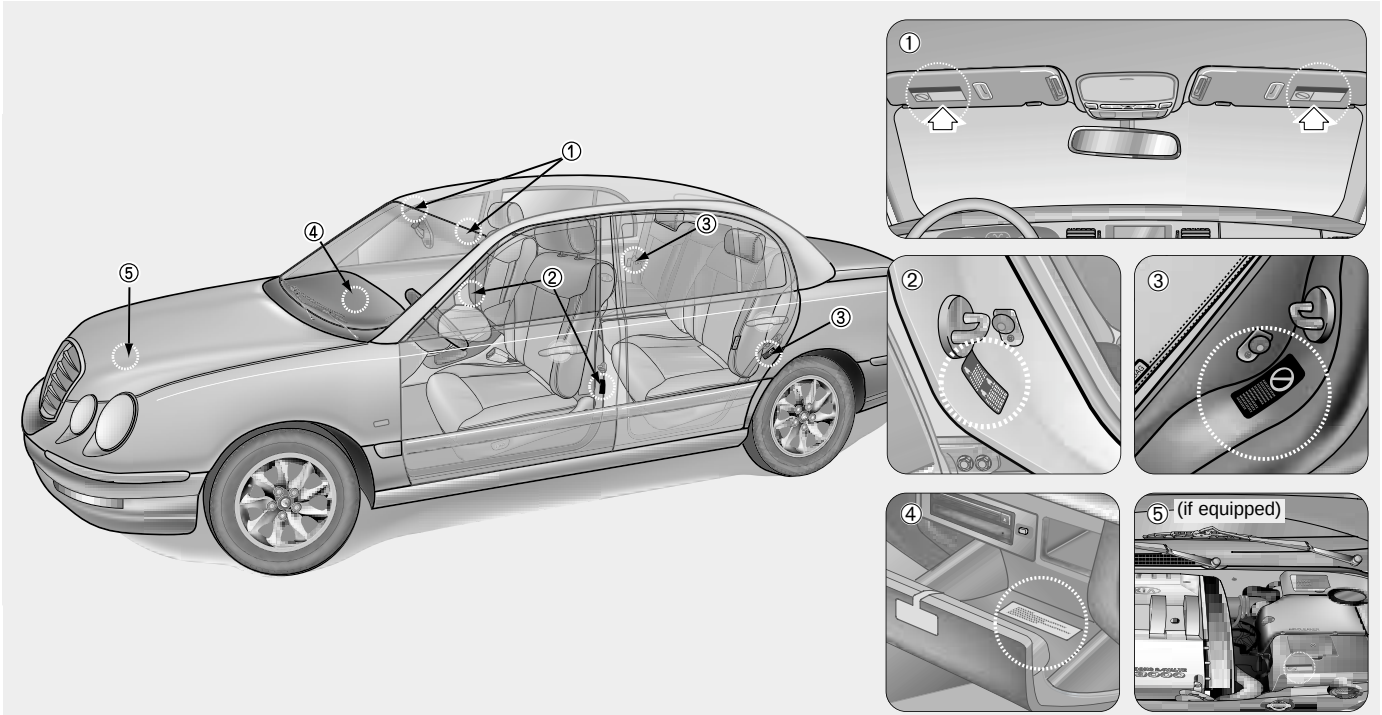
Do not modify any part of the Supplemental Restraint System. Excessive modification could make the airbag system ineffective.

WARNING

- **Do not modify your steering wheel, seat or any other part of the Supplemental Restraint System. Modification could make the system inoperable.**
- **Do not work on the system's components or wiring. This could cause the airbags to inflate inadvertently, possibly seriously injuring someone. Working on the system could also disable the system so that the airbags would not deploy in a collision.**
- **Any work on the SRS system, such as removing, installing, repairing, or any work on the steering wheel must be performed by a qualified Kia technician. Improper handling of the airbag system may result in serious personal injury.**

When repairing or scrapping the vehicles

- Repairing steering wheel, instrument panel, center console or roofs, or installing car audio around center console or painting front metal sheet could disable the airbag system. Have them checked by an authorized Kia dealer.
- When leaving the vehicle at an authorized Kia dealer, inform that the vehicle is equipped with airbag system, and leave the owner's manual in the vehicle.
- Since airbag system contains explosive chemical substances, contact an authorized Kia dealer when scrapping the vehicle.

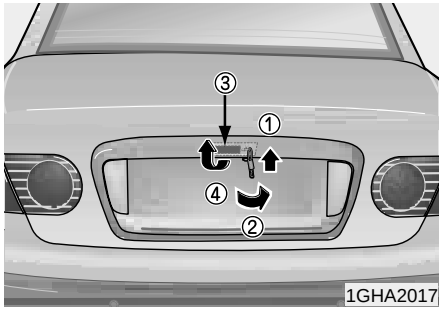


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Airbag warning label

Airbag warning label is attached to alert driver and passengers of potential risk of airbag system.

TRUNK

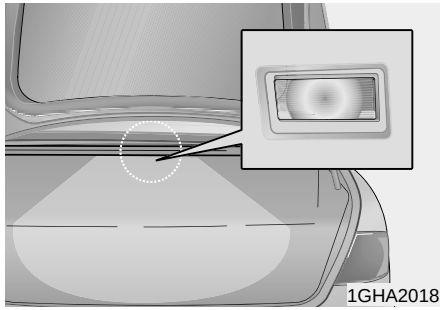


Outside the vehicle

- To open the trunk, insert the key into the lock (①) and turn it clockwise (②). If the trunk is opened with the key while all the doors are locked, trunk will be locked if closed.
- To open the trunk, pull up (④) the trunk lid by pressing the trunk handle (③) when the trunk is unlocked. Trunk can be opened by pressing the button (③) of the handle and pulling up the lid while any door is unlocked.
- To close the trunk, use both hands to push the trunk lid down. Check to see if the trunk is completely shut. If all the doors are locked then trunk will be locked too.
- If the trunk lid control button in the glove box is in the ON position (depressed), trunk can be opened with transmitter.
- If the trunk is opened with the transmitter while all the doors are locked, trunk will be locked when closed.
- Trunk can not be opened with the sub key.
- For e-key operation of the trunk, see page 3-10.

✻ NOTICE

Do not try to open trunk with the sub key. It may damage the key set.

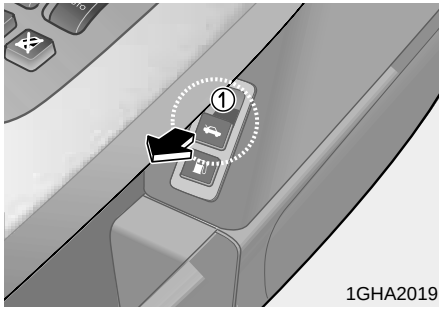


Trunk room lamp

Trunk room lamp turns on when the trunk is opened. It remains on until the trunk is securely closed.

CAUTION

Make sure to close the trunk securely. If it remains open while engine is not running, it may cause battery discharge because trunk room lamp remains on.



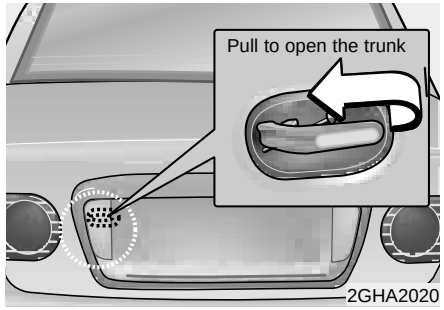
Inside the vehicle

To open the trunk from inside the vehicle, make sure the trunk lid control button in the glove box is ON, then pull trunk lid release lever (①) on the drivers door panel.

If the trunk lid control button in the glove box is OFF, the trunk can only be opened with the vehicle master key.

⚠ WARNING

If you drive with the trunk lid open, you will draw dangerous exhaust fumes into your vehicle causing serious injury or death to vehicle occupants. Open trunk lids can also dangerously obscure rear view vision.

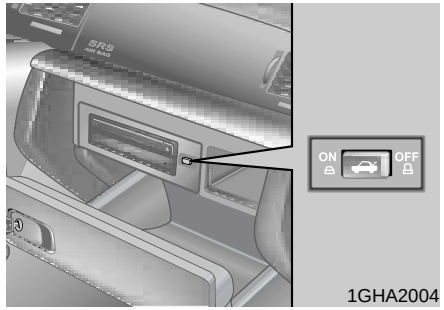


Emergency trunk safety release

Your vehicle is equipped with an emergency trunk release cable located inside the trunk. If someone is inadvertently locked in the trunk, when pulled, this cable will release the trunk latch mechanism and open the trunk.

⚠ WARNING

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



Trunk lock system

The trunk lid control button located in the vehicle glove box is used to prevent unauthorized access to the trunk.

With master and sub key (if equipped)

Trunk locking

To activate the trunk lock system so that the trunk can only be opened with the master key, perform the following:

1. Open the glove box.
2. Set the trunk lid control button to OFF position (not depressed).
3. Close the glove box and lock the glove box with the master key.

When leaving the key with a parking lot attendant or valet, perform steps 1 to 3 above and leave the sub key with the attendent. Sub key can start the engine and operate door locks only.

Lock release

To release the trunk lock feature, open the glove box with master key and set the trunk lid control button to ON position (depressed). In this position the trunk will open with trunk lid release lever or transmitter. The trunk can never be opened with the sub key.

With e-key (if equipped)

Trunk locking

To activate the trunk lock system so that the trunk can only be opened with the mechanical key, perform the following:

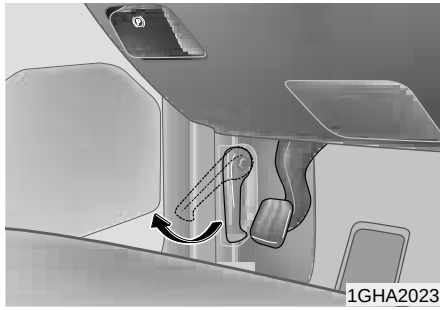
1. Open the glove box.
2. Set the trunk lid control button to OFF position (not depressed).
3. Close and lock the glove box using the mechanical key.

When leaving your keys with a parking lot attendant or valet, perform steps 1 to 3 above, remove the mechanical key from the e-key and leave the e-key with the attendant. In this manner the e-key can only be used to start the engine and operate door locks.

Lock release

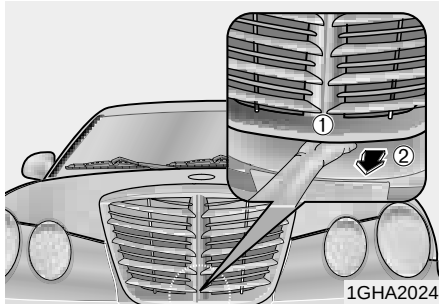
To release the trunk lock feature, open the glove box with mechanical key and set the trunk lid control button to ON position (depressed). In this position the trunk will open with trunk lid release lever or e-key.

HOOD



Opening the hood:

1. Pull the release lever on the lower left side of the instrument panel to unlatch the hood. The hood should pop open slightly.

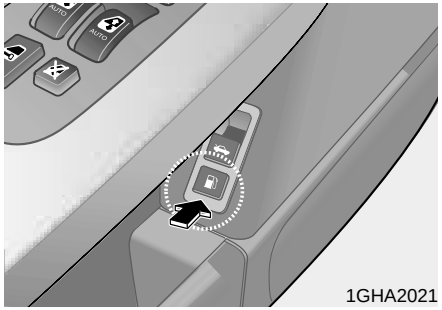


2. Go to the front of the vehicle, slightly raise the hood, pull out (②) the secondary latch (①) inside of the hood center and lift the hood.
3. Raise the hood. It will raise completely by itself after it has been raised about halfway.

Closing the hood

1. Before closing the hood, check the following:
   - All filler caps in 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. Make sure the hood is properly locked before driving.

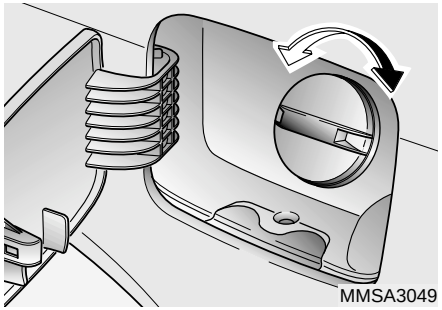
FUEL FILLER LID



1. Stop the engine.
2. To open the fuel filler lid, push the release button located on the driver's lower door.
3. Pull the fuel filler lid out to open.

⚠ WARNING

To avoid injury from sharp objects, it is recommended that protective gloves be worn when opening the fuel filler door manually.



4. To remove the cap, turn the fuel tank cap counter-clockwise.
5. Refuel as needed.
6. To install the cap, turn it clockwise until it "clicks". This indicates that the cap is securely tightened.
7. 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 cause serious injuries. 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.

⚠ WARNING

Automotive fuels are flammable/explosive 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.

- **Before refueling always note the location of the Emergency Gasoline Shut-Off, if available, at the gas station facility.**
- **Before touching the fuel nozzle or fuel filler cap, you should eliminate potentially dangerous static electricity discharge by touching another metal part of the front 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. Do not touch, rub or slide against any item or fabric (polyester, satin, nylon, etc.) capable of producing static electricity. Static electricity discharge can ignite fuel vapors resulting in explosion. 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 a 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. Once refueling has begun, contact with the vehicle should be maintained until the filling is complete.**

(Continued)

(Continued)

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

- **Do not use cellular phones around a gas station or while refueling any vehicle. Electric current and/or electronic interference from cellular phones can potentially ignite fuel vapors causing a fire. If you must use your cellular phone use it in a place away from the gas station.**
- **When refueling always shut the engine off. Sparks produced by electrical components related to the engine can ignite fuel vapors causing a fire. Always insure that the engine is OFF before and during refueling. Once refueling is complete, check to make sure the fuel filler cap and door are securely closed, before starting the engine.**

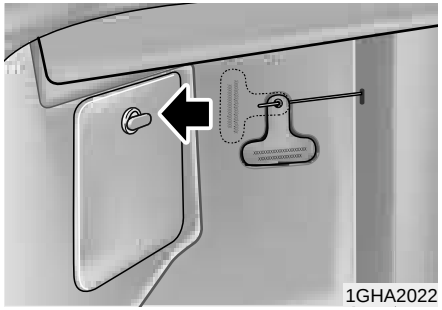
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- **Do not light any fire around a gas station. DO NOT use matches or a lighter and DO NOT SMOKE or leave a lit cigarette in your vehicle while at a gas station especially during refueling. Automotive fuel is highly flammable and can, when ignited,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

✻ NOTICE

- **Make sure to refuel with gasoline (unleaded fuel) only for the gasoline engine vehicles.**
- **Check to make sure the fuel filler cap is securely closed after refueling.**
- **If the fuel filler cap requires replacement, use only a genuine Kia cap or the equivalent specified for your vehicle. An incorrect fuel filler cap can result in a serious malfunction of the fuel system or emission control system. Correct replacement caps are available at authorized Kia dealers.**
- **Do not spill fuel on the exterior surfaces of the vehicle. Any type of fuel spilled on painted surfaces may damage the paint.**
- **If the fuel filler lid will not open in cold weather because the area around it is frozen, push or lightly tap the lid.**



When fuel filler lid does not open with the release button

1. Open the trunk.
2. Pull the emergency hook for fuel filler lid inside the trunk.

MIRRORS

Outside rearview mirror

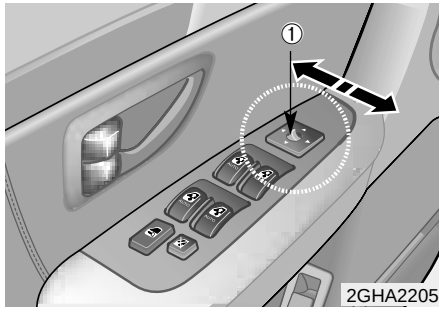
Be sure to adjust mirror angles before driving.

CAUTION

- ***The right outside rearview mirror is convex. In some countries, the left outside rearview mirror is also 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.***

✻ NOTICE

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

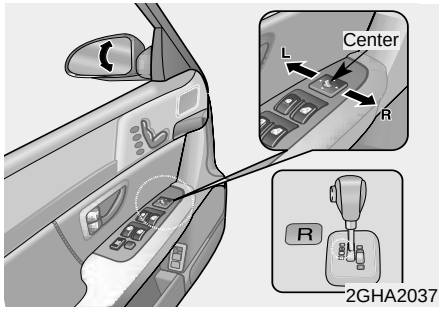


The electric remote control mirror switch allows you to adjust the position of the left and right outside rearview mirrors. To adjust the position of either mirror, move the lever (①) to R or L to select the right side mirror or the left side mirror, then press a corresponding point (▲) on the mirror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

After adjustment, put the lever into neutral position to prevent the inadvertent adjustment.

✻ NOTICE

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



Automatic mirror adjustment in reverse maneuvers (if equipped)

When the transaxle gear is shifted into reverse (R), the outside rearview mirror(s) will automatically be turned downward about 5 degrees to improve driver visibility. It will stay in that position until the transaxle shift lever is shifted out of reverse (R).

L : Both the left and right outside rearview mirrors will be turned downward about 5 degrees.

R : Only the right outside rearview mirror will be turned downward for about 5 degrees.

Center : Automatic mirror adjustment function is disabled, no mirror will be turned downward.

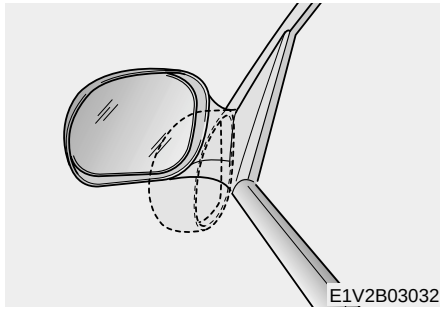
The outside rearview mirror(s) will return to its previous position automatically if outside rearview mirror selection switch is changed to another position, or transaxle shift lever is shifted out of reverse (R).

(Examples)

If the shift lever is shifted into reverse (R) when the outside rearview mirror selection switch is in L, both the right and left outside rearview mirrors will automatically be turned down 5 degrees

If the outside rearview mirror selection switch is set to R while shift lever is in reverse (R), the left outside rearview mirror will return to its previous position. The right outside rearview mirror will not return to it's previous position.

If the shift lever is shifted into any other range OR the outside rearview mirror selection switch is set to center, the right outside rearview mirror will automatically return to its original position.



Folding the outside rearview mirror

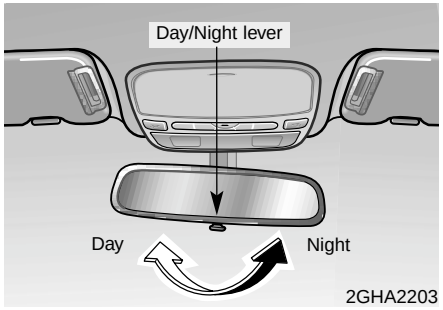
Manual type

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

Outside rearview mirror heater (if equipped)

The outside rearview mirror heater is actuated in connection with the rear window defroster. To heat the outside rearview mirror glass, push the button for the rear window defroster.

The outside rearview mirror glass will be heated for defrosting or defogging and will give you improved rear vision in inclement weather conditions. Push the button again to turn the heater off. The outside rearview mirror heater automatically turns off after 20 minutes.



Day/night rearview mirror

Manual type

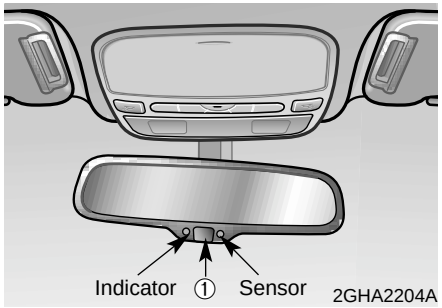
Adjust the rearview mirror to center on the view through the rear window. Make this adjustment before you start driving and while the day/night lever is in the day position.

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

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

CAUTION

Do not place objects in the rear seat or cargo area which would interfere with your vision out the rear window.



Electric type (if equipped)

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

To operate the electric rearview mirror

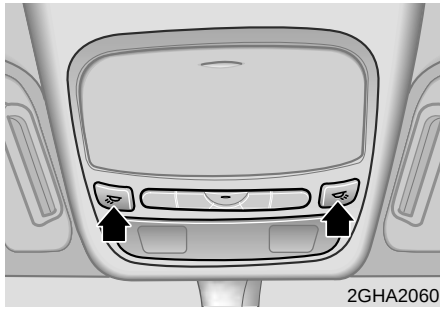
Push the ON/OFF button (①) to activate the electric rearview mirror.

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.

Push the ON/OFF button (①) once again to deactivate the electric rearview mirror.

INTERIOR LIGHTS

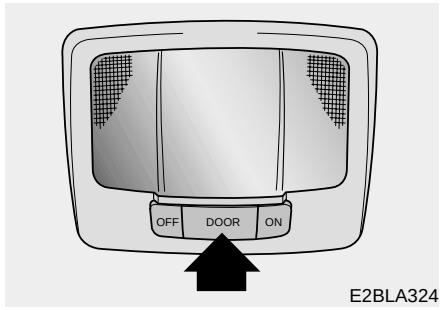


2GHA2060

Map light

Front (if equipped)

The lights are turned ON or OFF by pressing the corresponding switch.



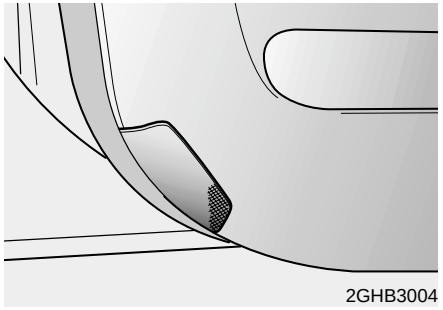
E2BLA324

Dome light (if equipped)

① OFF - The light stays off even when a door is open.

② DOOR - The light turns on or off when a door is opened or closed. When a door is unlocked by the transmitter, interior light stays on for 30 seconds. Though, the light fades out if the door is opened.

③ ON - The light turns on and stays on even when the doors are all closed.



2GHB3004

Door courtesy lamp

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.

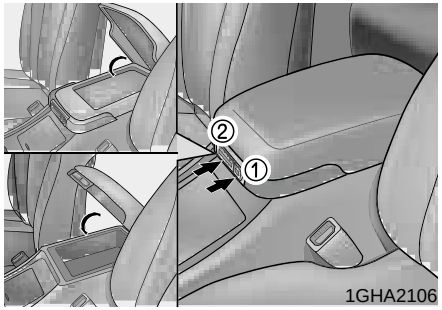
STORAGE COMPARTMENT

✻ NOTICE

- **To avoid possible theft, do not leave valuables in the storage compartment.**
- **Since stored items may move while driving, be sure to position them in the storage compartment so that they do not make noise or cause a potential safety hazard when the vehicle is moving.**
- **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 can not close securely.**

⚠ WARNING

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.

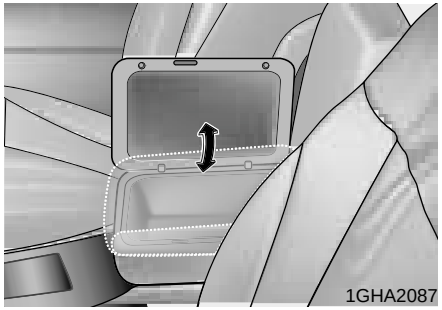


Center console storage

Type A

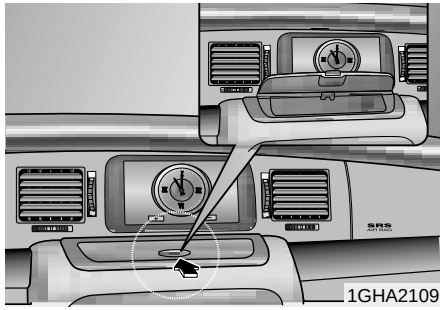
To open either of the console storage compartments, press button ① or ②.

These compartments can be used to store small items required by the driver or front passenger.



Type B

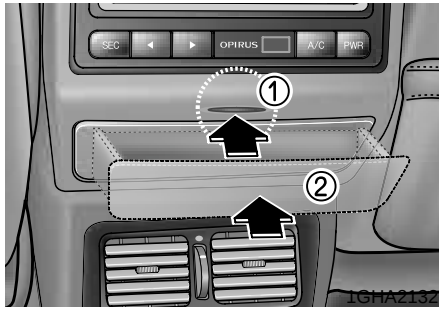
To open the console storage compartment, lift the cover. This compartment can be used to store small items required by the driver or front passenger. If equipped with an air outlet connected to the rear climate control system, you can use this compartment to keep items cool/warm (see page 4-82).



Multi box

Front (if equipped)

To open the cover, push the button and lift the cover up to open. It can be used for storing small items required by the driver or front passenger.



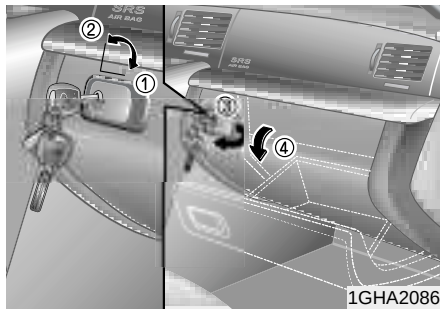
Center (if equipped)

To open the storage compartment, press the button (①), the compartment will automatically open. To close, push the storage compartment (②) fully forward. It can be used for storing small items required by the rear passengers.



Rear (if equipped)

To open the storage compartment, pull the armrest down and pull up on the locking tab (①). It can be used for storing small items.



Glove box

The glove box can be locked (①) and unlocked (②) with a master key (if equipped).

It can be locked/unlocked with the mechanical key in the e-key (if equipped).

It cannot be locked/unlocked with the sub key (if equipped).

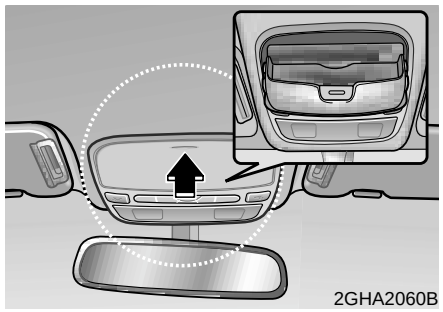
To open the glove box, make sure it is unlocked, then pull the handle (③) and the glove box will automatically open (④). Close the glove box after use.

✻ NOTICE

Since key is not fully inserted into the glove box key set, do not apply excessive force. Doing so may damage the parts.

⚠ WARNING

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



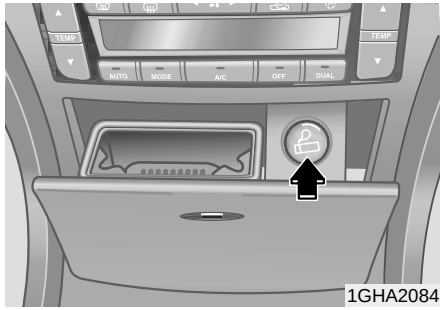
Sunglass holder

A sunglass storage compartment is provided on the overhead console. To open the sunglass holder, press the cover and the holder will slowly open. Place your sunglasses in the compartment door with the lenses facing out. Push to close.

✻ NOTICE

Make sure the sunglass holder is closed while driving.

INTERIOR FEATURES



1GHA2084

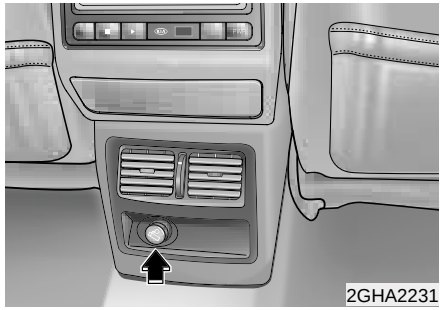
Cigarette lighter

Front

To use the cigarette lighter, press the front face then release it to allow the cigarette lighter and ashtray to slowly extend from center panel.

To operate the cigarette lighter, press it in and release it. When it is heated, it automatically pops out ready for use.

If the engine is not running, the ignition switch must be in the ACC position for the lighter to operate.


2GHA2231

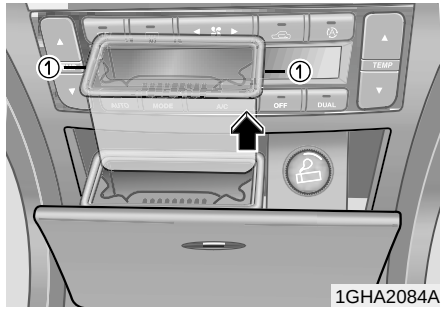
Rear

To operate the cigarette lighter, press it in and release it. When it is heated, it automatically pops out ready for use.

If the engine is not running, the ignition switch must be in the ACC position for the lighter to operate.

✻ NOTICE

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



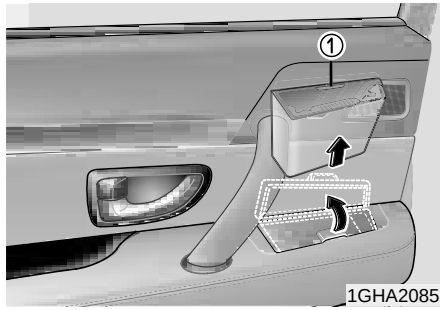
1GHA2084A

Ashtrays

Front

To use the ashtray, press the front face and release it to allow the cigarette lighter and ashtray to slowly extend from center panel.

To remove the ashtray, grasp the ashtray bucket (①) and carefully pull it out.



1GHA2085

Rear

To use the ashtray open the cover.

To remove the ashtray to empty or clean, grasp the ashtray bucket (①) and carefully pull it out.

⚠ WARNING - Ashtray use

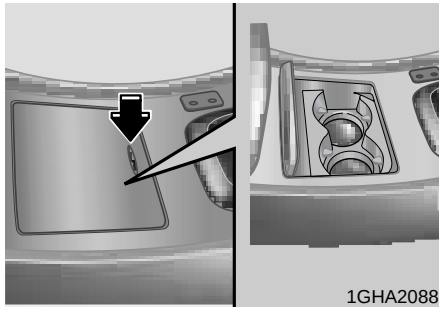
- **Do not use the vehicle's ashtrays as waste receptacles.**
- **Putting lit cigarettes or matches in an ashtray with other combustible materials may cause a fire.**

Cup holder

Cups or small beverage cans may be placed in the cup holders.

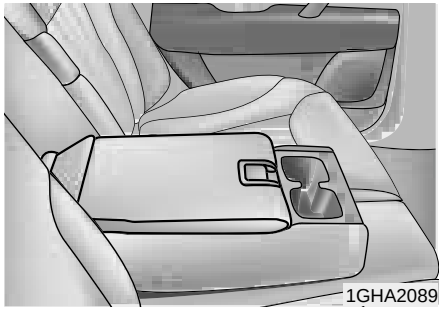
⚠ WARNING - Hot liquids

- **Do not place uncovered cups of hot liquid in the cup holder while the vehicle is in motion. If the hot liquid spills, you could be burned. Such a burn to the driver could cause a loss of control of the vehicle.**
- **To reduce the risk of personal injury in the event of sudden stop or collision, do not place uncovered or insecure bottles, glasses, cans, etc., in the cup holder while the vehicle is in motion.**



Front

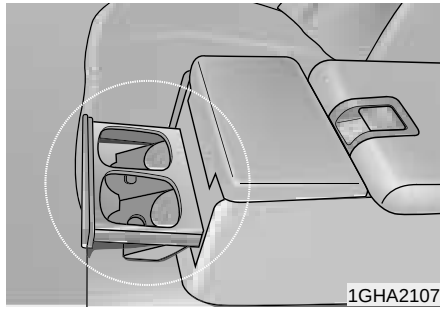
To open the cup holder cover, press the cover and it will automatically open. Push the cover to close after use.



Rear

Type A

To use cup holders in rear seat, pull down the rear seat armrest.



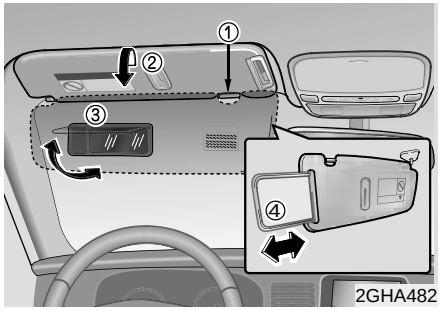
Type B

Pull down the armrest, and push cup holder cover, the cup holder will extend slowly.

To stow the cup holder, push it back into the armrest until an audible “click” is heard.

✻ NOTICE

Do not place heavy cups or cans in cup holders. Cup holders could be damaged.



Sunvisor

Use the sunvisor to shield direct light through the front or side windows.

To use a sunvisor, pull it downward.

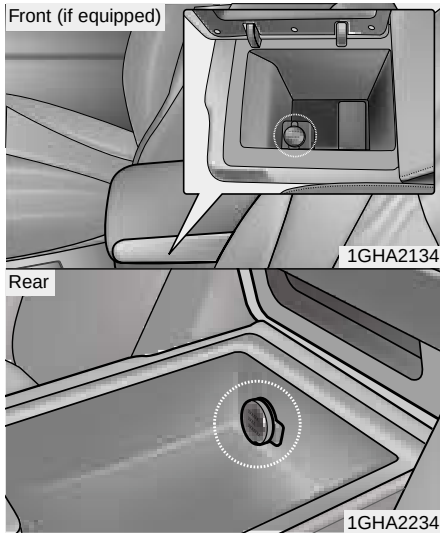
To use a sunvisor for a side window, pull it downward, unsnap it from the bracket (①) and swing it to the side.

There is a pocket (②) on the driver’s visor for items such as tickets or notes. To use the vanity mirror, pull down the visor and pull up the mirror cover (③).

Pull the extension panel (④) of the sunvisor to lengthen the sunvisor.

✻ NOTICE

Close the vanity mirror cover securely and return the sunvisor to its original position after use. If the vanity mirror is not closed securely, the lamp will stay on and could result in battery discharge and possible sunvisor damage.

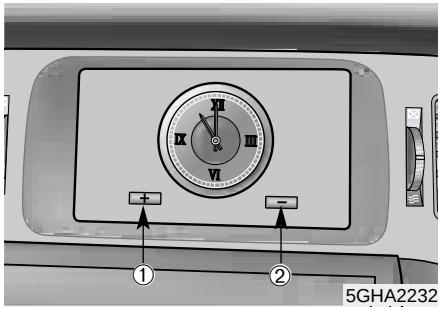


Power socket (if equipped)

The power outlets are 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.

✻ NOTICE

- **Use when the engine is running and remove a plug from the power outlet after using the electric appliance. Using when the engine stops or remaining the electric appliance with plugged in for many hours may cause the battery to be discharged.**
- **Only use the electric appliances which are less than 12V and 10A in electric capacity.**
- **Adjust the air-conditioner or heater to the lowest operation level when you have to use the power socket while using air-conditioner or heater.**
- **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.**



Clock

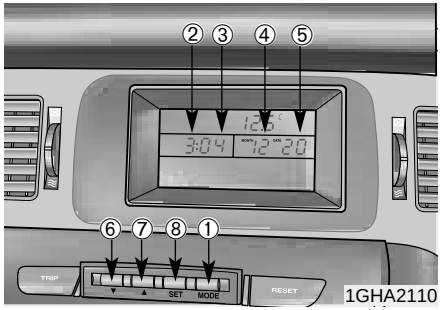
Analog (if equipped)

Whenever the battery terminals, A/V CLOCK fuse, or Power Connect are disconnected, you must reset the time.

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

① (+) : time increases one minute each time the button is pressed. It increases continuously if pressed longer than 3 seconds.

② (-) : time decreases one minute each time the button is pressed. It decreases continuously if pressed longer than 3 seconds.



1GHA2110

Digital (if equipped)

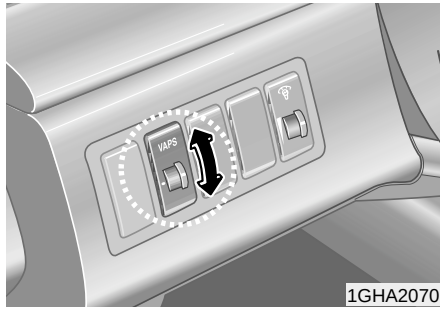
Whenever the battery terminals, A/V CLOCK fuse, or Power Connect are disconnected, you must reset the time.

Press the PUSH button in front of the monitor to access the mode set buttons. Use these buttons to adjust the time/date displayed on the monitor.

1. Press the MODE button (①).
2. Select the mode to be reset hour (②), minute (③), month (④) and date (⑤).
3. Reset the data using button ▼ (⑥) or button ▲ (⑦) while the selected mode blinks.

   If the ▼ (⑥) or ▲ (⑦) button(s) are pressed for more than 3 seconds, the display will begin to change rapidly. When the ▼ (⑥) or ▲ (⑦) button(s) are pressed then released, the display will change in single increments.
4. Press the SET (⑧) button.

AIR PURIFIER (IF EQUIPPED)



With the ignition switch ON, use the air purifier switch on the instrument panel to operate the air purifier system.

To provide fresher air in the vehicle, interior dust, unpleasant odors, and harmful fumes are filtered through an ionized air filtration system via an air outlet located on the upper shelf behind the rear seat.

Operation mode

Choose one of the following modes.

- OFF - No air blows
- AUTO - Sensors operate to control the air flow automatically and filtered, ionized air is generated.
- LOW - Air flow is low and filtered, ionized air is generated.
- HIGH - Air flow increases and filtered, ionized air is generated.

The air purifier system filter must be periodically replaced in accordance with manufacturer recommended replacement intervals.

(See periodic maintenance and replacement of the air purifier filter in Chapter 7.)

If the air purifier system has been used for extended periods in dusty conditions or high-pollution conditions (heavy traffic), be sure to check and replace the filter more frequently than the recommended intervals.

If the air purifier system is used when the filter is dirty, the system will not function well.

SUNROOF (IF EQUIPPED)



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

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

✻ NOTICE

- **Do not continue to press the sunroof control button(s) after the sunroof is in the fully open, closed, or tilt position(s). Damage to the motor or system components could occur.**
- **The sunroof cannot slide when it is in the tilt position nor can it be tilted while in an open or slide position.**

Sliding the sunroof

Autoslide open

To use the autoslide feature, momentarily (more than 1 second) press the SLIDE OPEN button on the overhead console. The sunroof will slide all the way open. To stop the sunroof sliding at any point, press any sunroof control button.

Manual slide open

Press the SLIDE OPEN button on the overhead console for less than 0.5 second.

Close

To close the sunroof, press the CLOSE button on the overhead console and hold it until the sunroof is closed.

Tilting the sunroof

Autotilt open

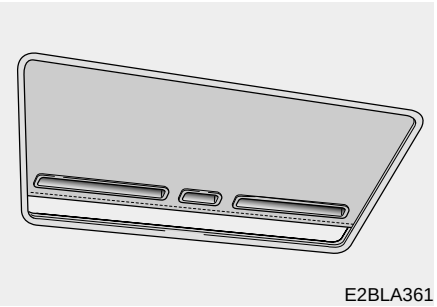
To use the autotilt feature, momentarily (more than 1 second) press the TILT UP button on the overhead console. The sunroof will tilt all the way open. To stop the sunroof tilting at any point, press any sunroof control button.

Manual tilt open

Press the TILT UP button on the overhead console for less than 0.5 second.

Close

To close the sunroof, press the CLOSE button on the overhead console and hold it until the sunroof is closed.



E2BLA361

Sunshade

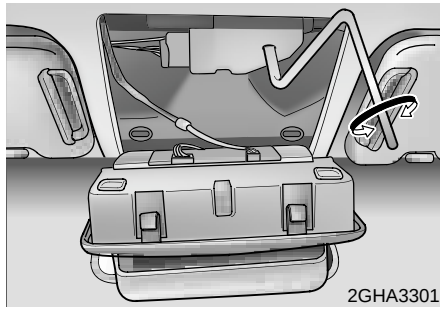
The sunshade will be opened with the glass panel automatically when the glass panel is slid. You will have to close it manually if you want it closed.

✻ NOTICE

- **Do not press any sunroof control button longer than necessary. Damage to the motor or system components could occur.**
- **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.**

⚠ WARNING

- **Do not extend face or arms outside through the sunroof opening while driving.**
- **Make sure hand and face are safely out of the way before closing a sunroof.**


2GHA3301

In case of an emergency

If the sunroof does not open electrically:

1. Remove the lens.
2. Remove the two (2) screws, and then remove the overhead console.
3. Insert the emergency handle (provided with the vehicle) and turn the handle clockwise to open or counterclockwise to close.

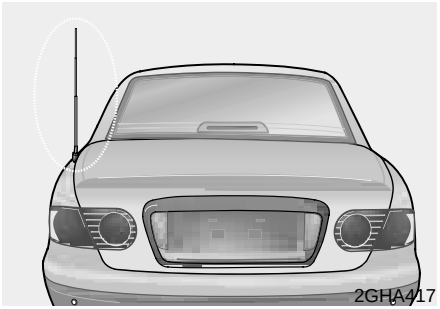
Resetting the sunroof

Whenever the vehicle battery is disconnected or discharged, or you use the emergency handle to operate the sunroof, you have to reset your sunroof system as follows:

1. Turn the ignition key to the ON position.
2. According to the position of the sunroof, do as follows.
   1) in case that the sunroof has closed completely or been tilted
      : Press the TILT UP button for 1 second.
   2) in case that the sunroof has slide-opened
      : Press and hold the CLOSE button for more than 5 seconds until the sunroof has closed completely. And then press the TILT UP button for 1 second
3. Then, release it.
4. Press and hold the TILT UP button once again until the sunroof has returned to the original position of TILT UP after it is raised a little higher than the maximum TILT UP position.

When this is complete, the sunroof system is reset.

ANTENNA



Power antenna (if equipped)

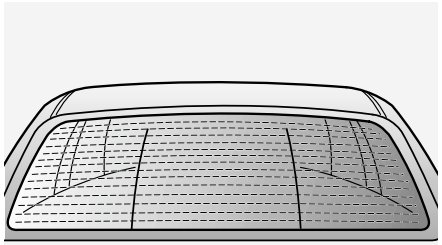
The antenna will automatically be extended when the radio power switch is turned “ON” while the ignition key is either in the “ON” or “ACC” position. The antenna will automatically be retracted and stored when either the radio power switch is turned “OFF” or the ignition key is set to the “LOCK” position.

CAUTION

Before turning on the radio while stopped, make sure that no one is near the antenna.

✻ NOTICE

- **Before entering an automatic car wash, be sure that the antenna is retracted and stored.**
- **If the antenna is dirty, be sure to clean it before turning off the radio or the vehicle engine in order to prevent jamming the antenna.**



MMSA3076

Glass antenna (if equipped)

When the radio power switch is turned on while the ignition key is in either the “ON” or “ACC” position, your car will receive both AM and FM broadcast signals through the antenna in the rear window glass.

✻ NOTICE

- **Do not clean the inside of the rear window glass with a cleaner or use a scraper to remove the foreign deposits as this may cause damage to the antenna elements.**
- **Avoid adding metallic coating such as Ni, Cd, and so on. These can disturb receiving AM and FM broadcast signals.**

Ignition switch / 4-3
Starting the engine / 4-5
Automatic transaxle / 4-8
Brake system / 4-14
Steering wheel / 4-21
Cruise control system / 4-24

Driving your vehicle

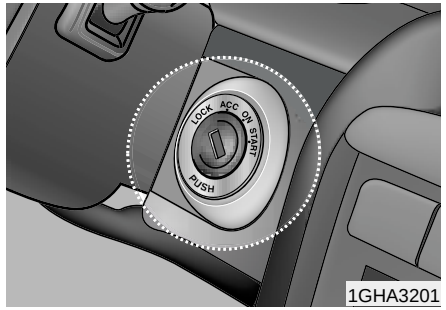
Traction control system / 4-29
Electronic stability program / 4-32
Electronic controlled suspension /4-35
Instrument cluster / 4-37
Gauges / 4-39
Warnings and indicators / 4-41
Back warning system / 4-50
Lighting / 4-54
Wipers and washers / 4-60
Defroster / 4-65
Hazard warning flasher / 4-66

Automatic climate control system / 4-67
Windshield defrosting and defogging / 4-83
Theft-alarm system / 4-85

1
2
3
4
5
6
7
8
9

Driving your vehicle

IGNITION SWITCH



1GHA3201

Illuminated ignition switch

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



1GHA3201A

Ignition switch and anti-theft steering column lock

Ignition switch position

LOCK

The steering wheel locks to protect against theft. The ignition key can be removed only in the LOCK position. When turning the ignition switch to the LOCK position, push the key inward at the ACC position and turn the key toward the LOCK position.

ACC (Accessory)

The steering wheel is unlocked and electrical accessories are operative.

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.

If difficulty is experienced in turning the ignition key to the START position, turn the steering wheel right and left to release the tension and then turn the key.

⚠ 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 immediate 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.**

(Continued)

(Continued)

- **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 put any movable things around the driver's seat as they can disturb your driving and may cause accidents.**

STARTING THE ENGINE

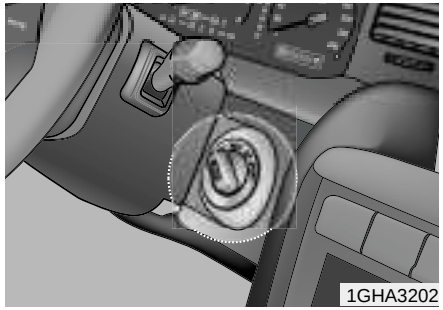
1. Make sure the parking brake is applied.
2. Place the transaxle shift lever in P (Park). Depress the brake pedal fully.

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

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

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.


1GHA3202

Starting and stopping the engine with e-key (if equipped)

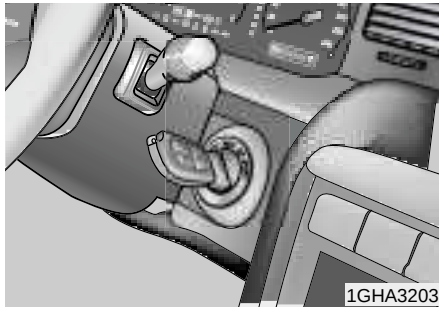
Starting the engine

When starting the engine without inserting the e-key

1. Make sure the parking brake is applied.
2. Place the transaxle shift lever in the P(park) position. You cannot start the engine when the shift lever is in the N(Neutral) position.

3. Leave the e-key inside the vehicle. But you must not place the e-key on the shelf behind the rear seats.
4. Depress the brake pedal.
5. If steps 3 and 4 have been completed, the immobilizer indicator ( ) illuminates on the instrument panel for approximately 10 seconds.
6. With the brake pedal depressed and held, start the engine by turning the ignition switch on.

   If the brake pedal is released or the ignition switch is not turned on within 10 seconds, the ignition switch will be locked. If this occurs, release the brake pedal and repeat step 4 to 6.


1GHA3203

If the battery is weak or the e-key does not work correctly, you can start the engine by inserting the e-key in the ignition switch. After inserting the e-key, you have 10 seconds to start the vehicle. After 10 seconds the ignition switch will be locked.

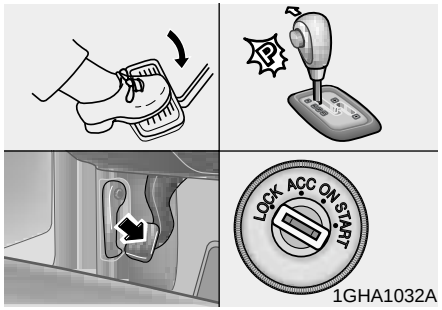
Therefore, if more than 10 seconds have passed, you will need to remove and re-insert the e-key to start the engine.

- In the event that you don't start the engine within 10 seconds and you have also depressed the brake pedal for more 10 seconds in succession of three times, the engine may not start. This has been designed to prevent related parts from overheating and if it appears to have occurred, you should wait for approximately 5 minutes before trying to start the engine again. If the engine still does not start after 5 minutes, have your vehicle inspected by an authorized Kia dealer.
- If the e-key is placed on the shelf behind the rear seats, the engine will not start.
- When a door opens and closes while the engine is running as well as the engine is started, checks the e-key in the vehicle. If the e-key were not for, the immobilizer indicator ( ) blinks. Always keep the e-key in your possession.

⚠ WARNING

The ignition switch will turn, and the engine will start, only when the e-key is in the vehicle and the brake has been depressed. (Note: E-key will NOT work if placed on shelf behind the rear seats!)

Never allow children or any person who is unfamiliar with the vehicle to touch the ignition switch or related parts.



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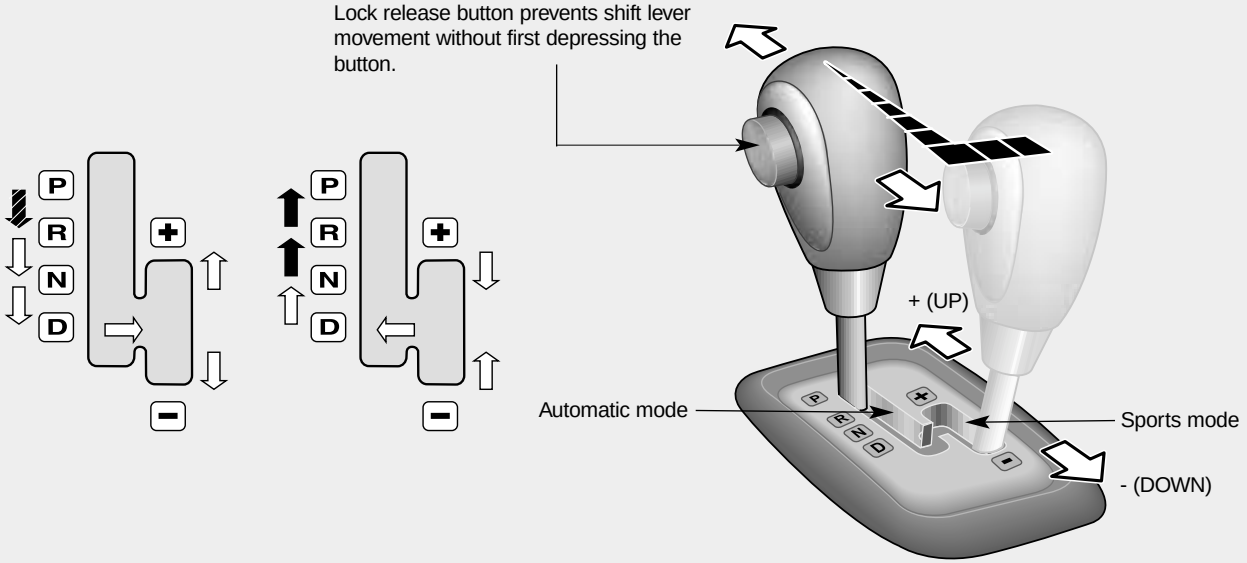
Stopping the engine

1. Depress the brake pedal while the vehicle stops.
2. Place the transaxle shift lever in P(park).
3. Set the parking brake pedal fully.
4. Turn the ignition switch to the LOCK position fully.

If the shift lever has not been set to P(park), the ignition switch will not turn to LOCK position.

If the ignition switch is in the ON position (without the e-key inserted) and then turned to ACC position, the ignition switch will not lock for 10 seconds. Therefore, you can start the engine again within those 10 seconds. However, if the shift lever is positioned in P, the ignition switch locks immediately.

AUTOMATIC TRANSAXLE

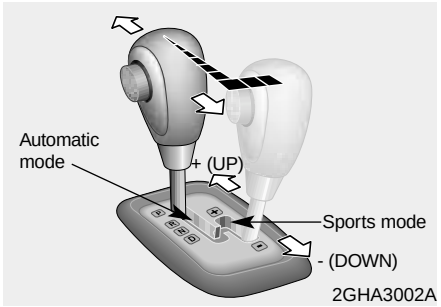


Depress the brake pedal and push the button when shifting.

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

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

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Automatic transaxle operation

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

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

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

⚠ WARNING - Automatic transaxle

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

✻ NOTICE

- **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

P (park)

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

⚠ WARNING

- **Shifting into P (Park) while the vehicle is in motion will cause the 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 so that it cannot be moved unless the lock release button is pushed in, AND set the parking brake fully.**

(Continued)

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- **Before leaving the driver's seat, always make sure the shift lever is in the P (PARK) position. Set the parking brake fully, shut the engine off and take the key with you. Unexpected and sudden vehicle movement can occur if you do not follow these precautions in the order specified.**
- **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.

✻ NOTICE

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

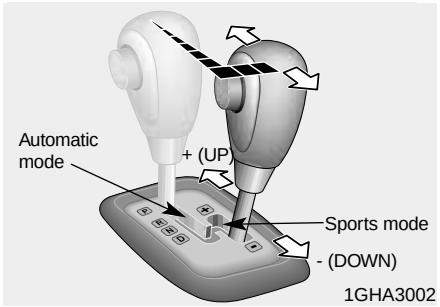
N (neutral)

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

D (drive)

This is the normal forward driving position. The transaxle will automatically shift through a 5-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 transaxle will automatically downshift to the next lower gear.



Sports mode

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

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

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

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

✻ NOTICE

- **Upshifts do not take place automatically in sports mode. The driver must execute upshifts in accordance with road conditions, taking care to keep the engine speed below the red zone.**
- **In sports mode, only the five forward gears can be selected. To reverse or park the vehicle, move the shift lever to the “R” or “P” position as required.**
- **In sports mode, downshifts are made automatically when the vehicle slows down. When the vehicle stops, 1st gear is automatically selected.**

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- **In sports mode, when the engine rpm approaches the red zone shift points are varied to upshift automatically.**
- **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 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.**

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.

Shift lock system

For your safety, the Automatic Transaxle has a shift lock system which prevents shifting the transaxle out of P (Park) unless the brake pedal is depressed.

- **Type A**

1. Depress and hold the brake pedal.
2. Depress the lock release button and move the shift lever.

- **Type B (If the ignition key interlock system is equipped)**

1. Depress and hold the brake pedal.
2. Start the engine or turn the ignition to the ON position.
3. Depress the lock release button and move the shift lever.

If the brake pedal is repeatedly depressed and released with the shift lever in the P (Park) position, a chattering sound near the shift lever may be heard. This is a normal condition.

Ignition key inter lock system (if equipped)

The ignition key cannot be removed unless the shift lever is in the P (Park) position. If the ignition switch is in any other position, the key cannot be removed.

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.

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

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

⚠ WARNING - 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.**

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- **Wet brakes may result in the vehicle not slowing down at the usual rate and pulling to one side when the brakes are applied. Applying the brakes lightly will indicate whether they have been affected in this way. Always test your brakes in this fashion after driving through deep water. To dry the brakes, apply them lightly while maintaining a safe forward speed until brake performance returns to normal.**

Disc brakes wear indicator

Your vehicle has disc brakes.

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

✻ NOTICE

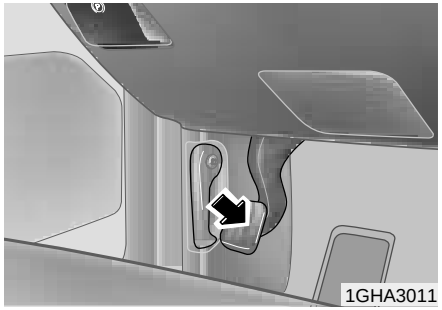
To avoid costly brake repairs, do not continue to drive with worn brake pads.

⚠ 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.

CAUTION

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

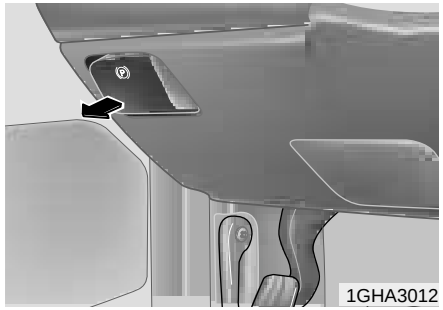


Parking brake

To set the parking brake, depress the parking brake pedal fully and firmly downward while applying the service brake.

CAUTION

Driving with the parking brake applied will cause excessive brake pad and brake rotor wear.



Manual release

To release the parking brake, pull the parking brake release lever while applying the service 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, have the system checked by an authorized Kia dealer.

WARNING - Parking brake

- **To prevent unintentional movement when stopped and leaving the vehicle, do not use the gearshift lever in place of the parking brake. Set the parking brake AND make sure the gearshift lever is securely positioned in P (Park).**
- **Never allow the person who is ignorant of the vehicle or children to touch the parking brake. If the parking brake is released by pulling the release lever, there is a risk of accident depending on the parking condition.**



W-75

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, 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.

Parking on curbed streets

- When parking your vehicle on an uphill grade, park as close to the curb as possible and turn the front wheels away from the curb so that the front wheels will contact the curb if the vehicle moves backward.
- When parking your vehicle on a downhill grade, park as close to the curb as possible and turn the front wheels toward the curb so that the front wheels will contact the curb if the vehicle moves forward.

Anti-lock brake system (ABS)

⚠ WARNING - ABS Brakes

Your ABS is not a substitute for good driving judgement. You can still have an accident. In fact, your ABS system will probably not be able to prevent an accident in the following driving conditions:

- **Dangerous driving, such as neglecting safety precautions, speeding, or driving too close to the vehicle in front of you.**
- **Driving at high speed in situations providing considerably less traction, such as wet conditions where hydroplaning could occur.**

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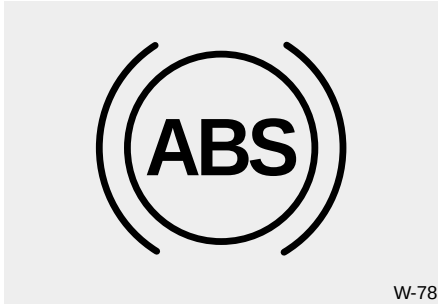
- **Driving too fast on poor road surfaces. The ABS is designed to improve maximum braking effectiveness on typical highways and roads in good condition. On poor road surfaces in poor condition, the ABS may actually reduce braking effectiveness.**

The ABS system 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 system is active.

In order to obtain the maximum benefit from your ABS system 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 system to control the force being delivered to the rear brakes.

- 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

✻ NOTICE

- **If the ABS warning light is on and stays on, you may have a problem with the ABS system. In this case, however, your regular brakes will work normally.**
- **The ABS warning light will stay on for 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 system. Contact an authorized Kia dealer as soon as possible.**

✻ NOTICE

- **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 car 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. Contact an authorized Kia dealer as soon as possible.**

✻ 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 turns 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.**

STEERING WHEEL

Power steering

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

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

Electronic power steering

The wheel speed sensor controls steering power according to the vehicle's speed.

The steering wheel becomes heavier as the vehicle's speed increases and becomes lighter as the vehicle's speed decreases for the better control of the steering wheel.

✻ NOTICE

- **Never hold the steering wheel against a stop (extreme right or left turn) 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.**
- **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 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.

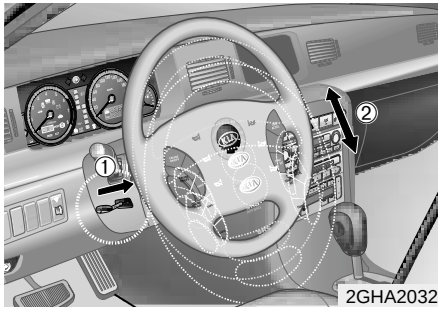
Tilt steering (if equipped)

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

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.

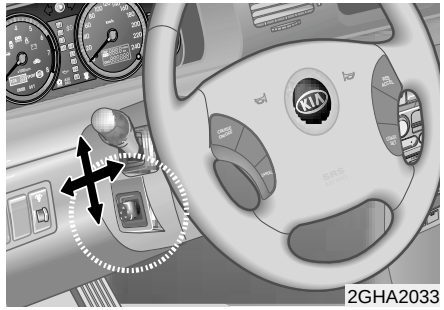
⚠ WARNING

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



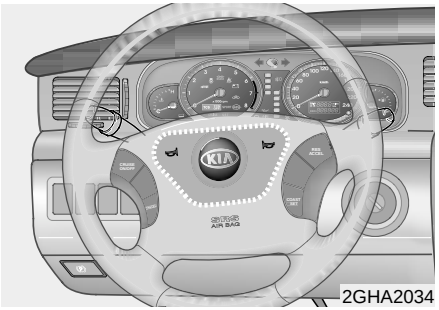
Manual type

To change the steering wheel angle, pull up on the lock release (①), adjust the steering wheel to the desired angle (②), then release the lock-release to lock the steering wheel in place. Be sure to adjust the steering wheel to the desired position before driving.


2GHA2033

Electric type

Adjust the steering wheel angle with the knob while the ignition key is ON. Never adjust the position of the steering wheel while driving.


2GHA2034

Horn

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

Check the horn regularly to be sure it operates properly.

CAUTION

- ***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.***
- ***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.***

CRUISE CONTROL SYSTEM (IF EQUIPPED)

The cruise control system allows you to program the vehicle to maintain a constant speed without resting your foot on the accelerator pedal.

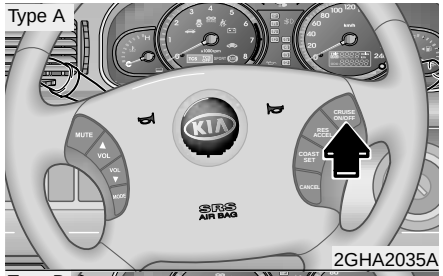
With cruise control, you can set and automatically maintain any speed of between 24 mph (40 km/h) and 96 mph (160 km/h).

⚠ WARNING - Cruise control

Do not use the cruise control feature under the following conditions:

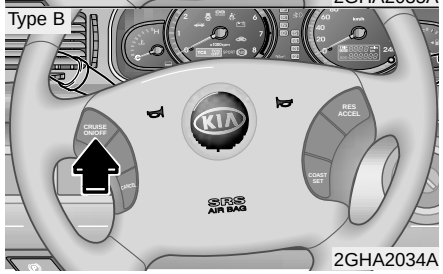
- **Heavy or unsteady traffic**
- **Slippery or winding roads**
- **Situations that involve varying speeds**

Type A



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Type B



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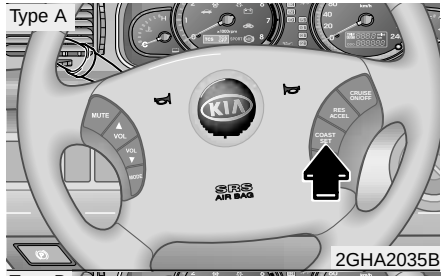
To set cruise control speed:

1. Push the CRUISE ON/OFF button on the steering wheel, to turn the system on. The CRUISE indicator light in the instrument cluster will illuminate.
2. Accelerate to the desired speed, which must be more than 24 mph (40 km/h) and less than 96 mph (160 km/h).

⚠ WARNING

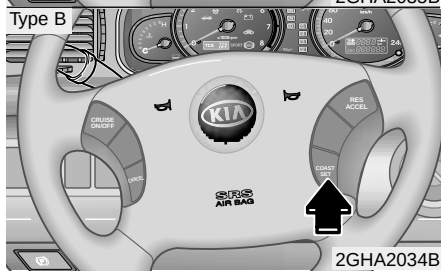
If the cruise control is left on, (CRUISE indicator light in the instrument cluster illuminated) the cruise control can be switched on accidentally. Keep the cruise control system off (CRUISE indicator light OFF) when cruise control is not in use.

Type A



2GHA2035B

Type B



2GHA2034B

3. Depress the COAST/SET switch, located on the steering wheel, and release it at the speed you want. Release the accelerator at the same time. The desired speed will automatically be maintained.

The SET function cannot be activated until approximately 2 seconds after the CRUISE ON/OFF button has been engaged.

On a steep grade, the vehicle may momentarily slow down while going downhill.

To cancel cruise control, do one of the following:

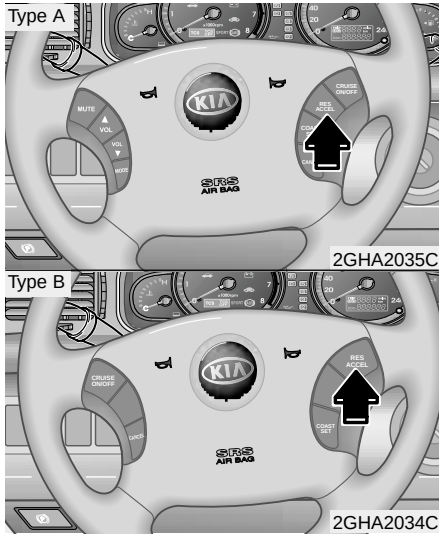
- Depress the brake pedal.
- Shift into N (Neutral).
- Depress the CANCEL switch located on the steering wheel.
- Depress the COAST/SET and RES/ACCEL switches at the same time.

Each of these actions will cancel cruise control operation (the "SET" indicator light in the instrument cluster will go OFF), but it will not turn the system off. If you wish to resume cruise control operation, depress the RES/ACCEL switch located on your steering wheel. You will return to your previously preset speed.

To turn cruise control off, do one of the following:

- Push the CRUISE ON/OFF button on the steering wheel (the CRUISE indicator light in the instrument cluster will go 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.



To increase cruise control set speed:

Follow either of these procedures:

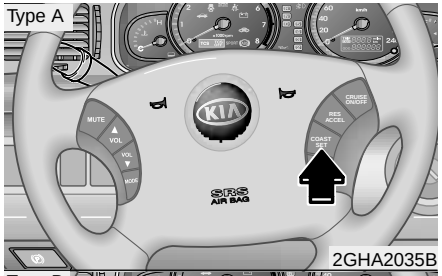
- Depress the RES/ACCEL switch and hold it. Your vehicle will accelerate. Release the switch at the speed you want.
- Depress the RES/ACCEL switch and release it immediately. The cruising speed will increase 1mph (1.6 km/h) by one touch and will be memorized to the reset speed.

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.

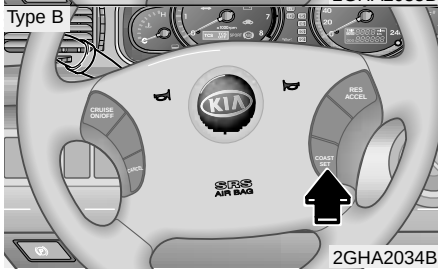
To return to the set speed, take your foot off the accelerator.

Type A



2GHA2035B

Type B



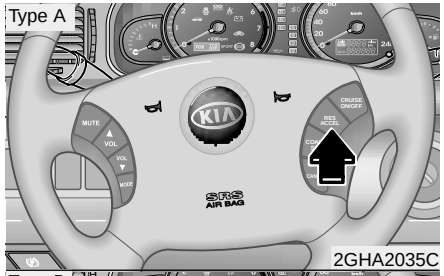
2GHA2034B

To decrease the cruising speed:

Follow either of these procedures:

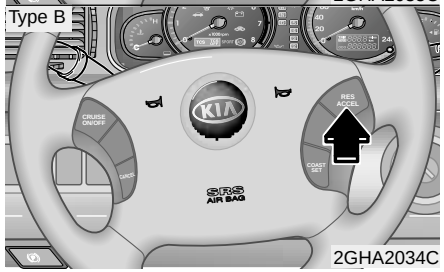
- Depress the COAST/SET switch and hold it. Your vehicle will gradually slow down. Release the switch at the speed you want to maintain.
- Depress the COAST/SET switch and release it immediately. The cruising speed will decrease 1mph (1.6 km/h) by one touch and will be memorized to the reset speed.

Type A



2GHA2035C

Type B



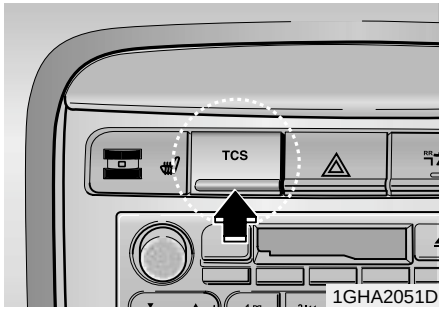
2GHA2034C

To resume cruising speed at more than 24 mph (40 km/h):

If something besides the CRUISE ON/OFF switch was used to cancel cruising speed and the system is still activated, the most recent set speed will automatically resume when the RES/ACCEL switch is depressed.

It will not resume, however, if the vehicle speed has dropped below 24 mph (40km/h).

TRACTION CONTROL SYSTEM (IF EQUIPPED)



The Traction Control System (TCS) helps the vehicle accelerate on slippery road surfaces by preventing the drive wheels from spinning excessively. It also provides improved driving force and steering.

TCS operation

TCS ON condition

-

- When the ignition is turned ON, TCS and TCS OFF indicator light, illuminate for approximately 3 seconds, then TCS is turned on.
- Press the TCS button for at least half a second after turning the ignition ON to turn TCS off. (TCS OFF indicator will illuminate). To turn the TCS on, press the TCS button (TCS OFF indicator light will go off).
- When starting the engine, you may hear a slight ticking sound. This is the TCS performing an automatic system self-check and does not indicate a problem.

When operating

TCS

When the TCS is in operation, TCS indicator light blinks.

- When the traction control system 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 mud or driving on a slippery road, pressing the accelerator pedal may not cause the engine rpm (revolutions per minute) to increase.

TCS operation off

TCS OFF state

TCS OFF

- To cancel TCS operation, press the TCS button (TCS OFF indicator light illuminates).
- If the ignition switch is turned to LOCK position when TCS is off, TCS remains off. Upon restarting the engine, the TCS will automatically turn on again.

■ TCS indicator light (blinks)

TCS

■ TCS OFF indicator light (comes on)

TCS OFF

Indicator light

When ignition switch is turned to ON, the indicator light illuminates, then goes off if TCS system is operating normally.

The TCS indicator light blinks whenever TCS is operating.

TCS OFF indicator light comes on when either the TCS is turned off with the button, or TCS fails to operate when turned on.

⚠ WARNING

The Traction 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 TCS indicator light is blinking, or when the road surface is slippery.

TCS OFF usage

When driving

- It's a good idea to keep the TCS turned on for daily driving whenever possible.
- To turn TCS off while driving, press the TCS button while driving on a flat road surface.

Never press TCS button while TCS is operating (TCS indicator light blinks).

If TCS is turned off while TCS is operating, the vehicle may slip out of control.

✻ NOTICE

- **When measuring the vehicle speed with a Chassis dynamo-meter, make sure the TCS is turned off (TCS OFF light illuminated). If the TCS is left on, it may prevent the vehicle speed from increasing, and cause a false diagnosis of a faulty speedometer.**
- **Turning the TCS off does not affect ABS or brake system operation.**

⚠ WARNING

Never press the TCS button while TCS is operating.

If the TCS is turned off while TCS is operating, the vehicle may slip out of control.

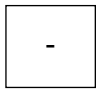
To turn TCS off while driving, press the TCS button while driving on a flat road surface.

ELECTRONIC STABILITY PROGRAM (IF EQUIPPED)

The Electronic Stability Program (ESP) monitors information from various vehicle sensors and then compares the driver's commands with the actual behavior of the vehicle. If an unstable condition occurs - a sudden evasive movement for example - ESP intervenes within fractions of a second via the engine computer and brake system and attempts to stabilize the vehicle.

ESP operation

ESP ON condition



- When the ignition is turned ON, ESP and ESP OFF indicator lights illuminate for approximately 3 seconds, then ESP is turned on.
- Press the ESP button for at least half a second after turning the ignition ON to turn ESP off. (ESP OFF indicator will illuminate). To turn the ESP on, press the ESP button (ESP OFF indicator light will go off).
- When starting the engine, you may hear a slight ticking sound. This is the ESP performing an automatic system self-check and does not indicate a problem.

When operating



When the ESP is in operation, ESP indicator light blinks.

- When the Electronic Stability Program 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, pressing the accelerator pedal may not cause the engine rpm (revolutions per minute) to increase.

ESP operation off

ESP OFF state

ESP OFF

- To cancel ESP operation, press the ESP button (ESP OFF indicator light illuminates).
- If the ignition switch is turned to LOCK position when ESP is off, ESP remains off. Upon restarting the engine, the ESP will automatically turn on again.

■ ESP indicator light (blinks)

ESP

■ ESP OFF indicator light (comes on)

ESP OFF

Indicator light

When ignition switch is turned to ON, the indicator light illuminates, then goes off if ESP system is operating normally.

The ESP indicator light blinks whenever ESP is operating.

ESP OFF indicator light comes on when either the ESP is turned off with the button, or ESP fails to operate when turned on.

⚠ WARNING

The Electronic Stability Program 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 ESP indicator light is blinking, or when the road surface is slippery.

ESP OFF usage

When driving

- It's a good idea to keep the ESP turned on for daily driving whenever possible.
- To turn ESP off while driving, press the ESP button while driving on a flat road surface.

Never press ESP button while ESP is operating (ESP indicator light blinks).

If ESP is turned off while ESP is operating, the vehicle may slip out of control.

✻ NOTICE

- **When measuring the vehicle speed with a Chassis dynamo-meter, make sure the ESP is turned off (ESP OFF light illuminated). If the ESP is left on, it may prevent the vehicle speed from increasing, and cause a false diagnosis of a faulty speedometer.**
- **Turning the ESP off does not affect ABS or brake system operation.**

⚠ WARNING

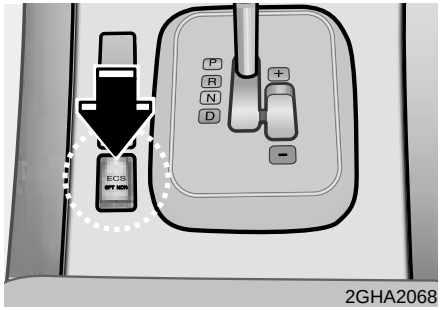
Never press the ESP button while ESP is operating.

If the ESP is turned off while ESP is operating, the vehicle may slip out of control.

To turn ESP off while driving, press the ESP button while driving on a flat road surface.

ECS (ELECTRONIC CONTROLLED SUSPENSION) (IF EQUIPPED)

The ECS monitors the road and driving conditions through various sensors, and controls the vehicle suspension to maximize passenger comfort by minimizing road impact on the vehicle. The driver can select either normal or sport modes, depending upon their driving preference.



2GHA2068

Selecting ECS mode

To select an ECS suspension mode, press the ECS button on the center console.

By pressing the ECS button, SPT (SPORT) mode is selected and the SPORT indicator light in the instrument panel will illuminate. Sport mode provides a tighter suspension and firmer ride.

Press the ECS button again to return NOR (normal) mode (SPORT indicator light in the instrument panel will go off). Normal mode provides a softer ride.

For normal driving conditions, use NOR (normal) mode.



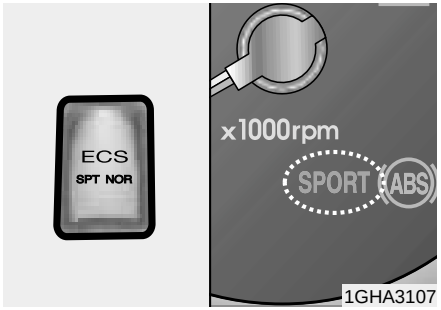
1GHA3106

When SPT (SPORT) mode is selected

(SPORT indicator light comes on in the cluster)

This mode is used for sporty driving such as driving on winding, mountainous roads or high speed driving. Damping effect of suspension is adjusted automatically as follows.

Damping Effect	Driving condition
Medium	Low, Medium, High speed driving
	Driving on bumpy road
	Fully accelerating in low speed
Hard	Braking is applied in medium or above speed
	Driving on a curve



When NOR (NORMAL) mode is selected

(SPORT indicator light goes off in the cluster)

Damping effect of suspension is adjusted as follows depending on the driving conditions in normal driving.

Damping Effect	Driving condition
Soft	Low, Medium speed driving
Medium	High speed driving
	Driving on bumpy road
	Fully accelerating in low speed
Hard	Driving on a curve
	Braking is applied in medium or above speed

When warning light turns on while driving

If ECS malfunctions, the SPORT indicator light in the cluster blinks every 0.5 second. Though ECS does not operate in this case, the vehicle can be driven.

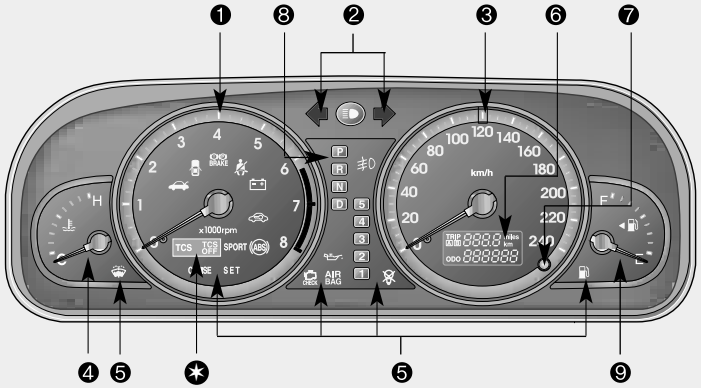
1. Move the vehicle and park in a safe location and turn the ignition off.
2. Start the engine. If blinking stops within approximately 4 minutes, the ECS is operating normally.
3. If SPORT indicator continues to blink, have the vehicle checked and repaired by an authorized Kia dealer. Though ECS does not operate in this case, the vehicle can be driven.

✻ NOTICE

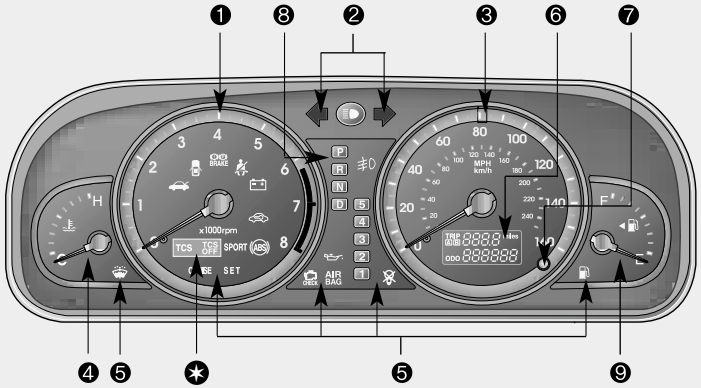
On vehicles equipped with ECS, you must wait at least three minutes after stopping the engine before raising the vehicle with a jack. This is to allow the automatic suspension to reposition properly.

INSTRUMENT CLUSTER

Type A



Type B

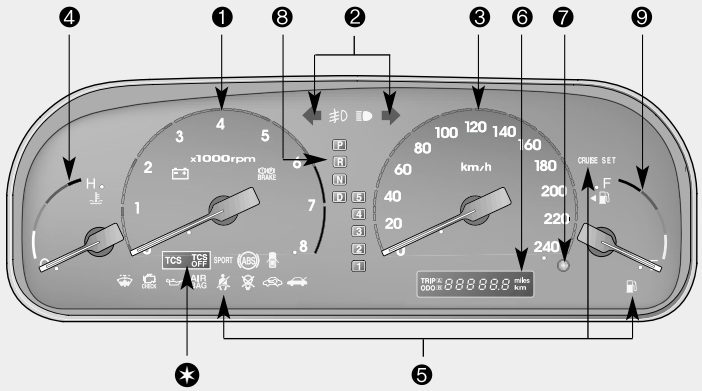


1. Tachometer
2. Turn signal indicators
3. Speedometer
4. Engine temperature gauge
5. Warning and indicator lights
6. Odometer / Tripmeter
7. Tripmeter mode/reset button
8. Shift position indicator (A/T only)
9. Fuel gauge

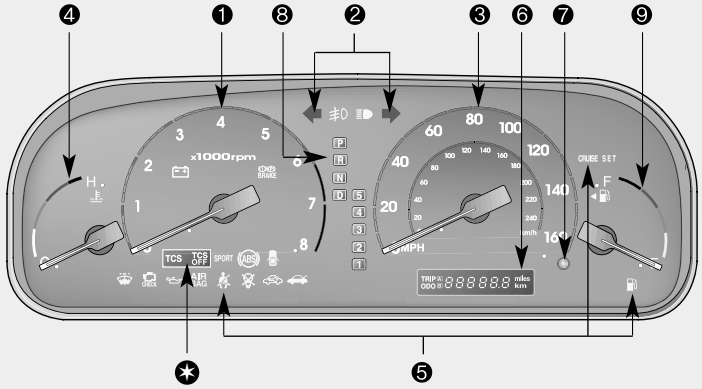
✶ will say ESP OFF if equipped with ESP

5GHA2101/5GHA2101A

Type C



Type D



1. Tachometer
2. Turn signal indicators
3. Speedometer
4. Engine temperature gauge
5. Warning and indicator lights
6. Odometer / Tripmeter
7. Tripmeter mode/reset button
8. Shift position indicator (A/T only)
9. Fuel gauge

✶ will say ESP OFF if equipped with ESP

5GHA2102/5GHA2102A

GAUGES

Speedometer

The speedometer indicates the forward speed of the vehicle.

Odometer/Tripmeter

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

Odometer

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

Tripmeter

TRIP A: Tripmeter A

TRIP B: Tripmeter B

The tripmeter indicates the distance of individual trips selected by the driver. Tripmeter A and B can be reset to 0 by pressing the reset button for 1 second or more, and then releasing.

Type A



5GHA2101

Type B



5GHA2102

Tachometer

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.

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

✻ NOTICE

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

Engine temperature gauge

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

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

✻ NOTICE

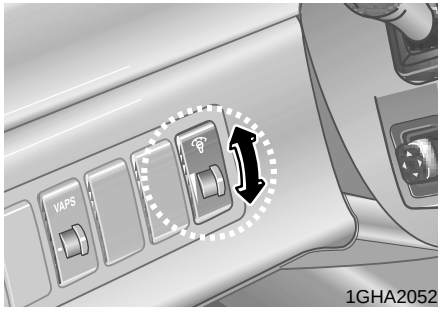
If the gauge pointer moves beyond the normal range area toward the “H” position, it indicates overheating that may damage the engine.

Fuel gauge

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

Fuel tank capacity - 70 liters.

The fuel gauge is supplemented by a low fuel warning light, which will illuminate when the fuel level has dropped to about 9 liters.



Instrument panel illumination (if equipped)

When the vehicle’s parking lights or headlights are on, rotate the illumination control knob to adjust the instrument panel illumination intensity.

WARNINGS AND INDICATORS

Warning lights / audible indicators

Checking operation

All warning lights are checked by turning the ignition switch ON (do not start the engine). Any light that does not illuminate should be checked by an Authorized Kia Dealer.

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

Anti-lock brake system (ABS) warning light (if equipped)



This light illuminates if the key is turned to ON and goes off in approximately 3 seconds if the system is operating normally.

If the light stays on, you may have a problem with your ABS system. Contact an authorized Kia dealer as soon as possible.

Electronic brake force distribution (EBD) system warning light (if equipped)





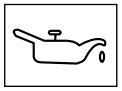
If two warning lights illuminate at the same time while driving, your vehicle has a problem with ABS and EBD system.

In this case, your ABS system and regular brake system may not work normally. Have the vehicle checked by an Authorized Kia Dealer as soon as possible.

⚠ WARNING

If the both ABS and Brake warning lights are ON and stay ON, your vehicle's brake system will not work normally. So you may experience an unexpected and dangerous situation when abrupt braking. In this case, avoid high speed driving and abrupt braking. Have your vehicle checked by Authorized Kia Dealer as soon as possible.

Engine oil pressure warning



This warning light indicates the engine oil pressure is low.

If the warning light illuminates while driving:

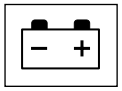
1. Drive safely to the side of the road and stop.
2. With the engine off, check the engine oil level. If the level is low, add oil as required.

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

✻ NOTICE

If the engine is not stopped immediately, severe damage could result.

Charging system warning



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

If the warning light comes on while the vehicle is in motion:

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

Safety belt warning



As a reminder to the driver and passenger, safety belt warning light will blink for approximately 6 seconds each time you turn the ignition switch ON.

If the driver's lap/shoulder belt is not fastened when the key is turned ON or if it is unfastened after the key is ON, the safety belt warning light blinks for 6 seconds. If the system does not operate as described, see an Authorized Kia Dealer for assistance.

Front fog light indicator (if equipped)



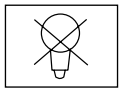
This light comes on when the front fog lights are ON.

Rear fog light indicator (if equipped)



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

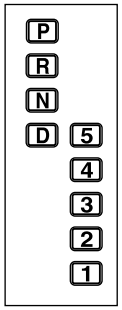
Stop/Tail light failure warning



This light indicates a malfunction in the stop/tail light circuit, such as a burned out bulb. If this indicator comes on, check for a burned out stop/tail lamp, if the indicator is still on have the vehicle checked by an authorized Kia dealer for service.

Shift pattern indicators

The individual indicators illuminate to show the shift lever selection.



Parking brake & brake fluid warning



Parking brake warning

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

Low brake fluid level warning

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

If the warning light remains on:

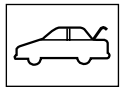
1. Drive carefully to the nearest safe location and stop your vehicle.
2. With the engine stopped, check the brake fluid level immediately and add fluid as required. Then check all brake components for fluid leaks.
3. Do not drive the vehicle if leaks are found, the warning light remains on or the brakes do not operate properly. Have it towed to any Authorized Kia Dealer for a brake system inspection and necessary repairs.

To check bulb operation, check whether the parking brake and brake fluid warning light illuminates when the ignition switch is in the ON position.

⚠ WARNING

Driving the vehicle with a warning light on is dangerous. If the brake warning light remains on, have the brakes checked and repaired immediately by an Authorized Kia Dealer.

Trunk lid open warning



This warning light activates when the trunk is not closed securely.

Low fuel level warning



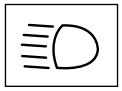
This warning light indicates the fuel tank is nearly empty. The warning light will come on when the fuel level has dropped to about 9 liters. Refuel as soon as possible.

Door ajar warning



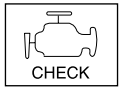
This warning light illuminates when a door is not closed securely with the ignition in any position.

Headlight high beam indicator



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

Malfunction indicator (if equipped)



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

Generally, your vehicle will continue to be drivable and will not need towing, but have the system checked by an Authorized Kia Dealer as soon as possible.

CAUTION

- ***Prolonged driving with the Emission Control System Malfunction Indicator Light (CHECK) illuminated may cause damage to the emission control systems which could effect drivability and/or fuel economy.***
- ***If the Emission Control System Malfunction Indicator Light (CHECK) begins to flash ON and OFF, potential catalytic converter damage is possible which could result in loss of engine power. Have the Engine Control System inspected as soon as possible by an authorized Kia Dealer.***

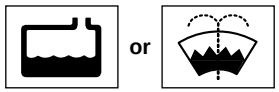
Air bag warning (if equipped)



This warning light will blink or illuminate for approximately 6 seconds each time you turn the ignition switch to the ON position.

If this indicator does not go out, or if it illuminates while the vehicle is being driven, see an authorized Kia Dealer for immediate service.

Low washer fluid level warning indicator (if equipped)



This warning light indicates the washer fluid reservoir is near empty. Refill the washer fluid as soon as possible.

Auto cruise indicator (if equipped)

CRUISE indicator



The indicator light illuminates when the cruise control system is enabled.

SET indicator



The indicator light illuminates when the cruise function switch (COAST/SET or RES/ACCEL) is ON.

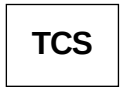
SPORT mode indicator (ECS warning light) (if equipped)



The ECS is automatically set to normal operation mode when the engine is turned on. The SPORT light will illuminate when the ignition switch is turned ON, but it should go off within 3 seconds.

For tighter suspension and firmer ride, press ECS button on the center console to select SPT(SPORT) mode, the SPORT indicator will turn on. For a softer ride, press the button again to select NOR(normal). If the SPORT indicator blinks for more than a few seconds, there may be a problem in the system. Take you car to an authorized Kia dealer and have the system checked.

TCS indicator (Traction Control System) (if equipped)



The TCS indicator will illuminate when the ignition switch is turned ON, but should go off after approximately 3 seconds. When the TCS is on, it monitors the driving conditions and under normal driving conditions, the TCS light will remain off. When a slippery or low traction condition is encountered, the TCS will operate, and the TCS indicator will blink to indicate the TCS is operating.

TCS OFF indicator (if equipped)

TCS OFF

The TCS OFF indicator will illuminate when the ignition switch is turned ON, but should go off after approximately 3 seconds. To switch to TCS OFF mode, press the TCS button. The TCS OFF indicator will illuminate indicating the TCS is deactivated. If this indicator stays on in the TCS ON mode, the TCS may have a malfunction. Take your car to the authorized Kia dealer and have the system checked.

ESP indicator (Electronic Stability Program) (if equipped)

ESP

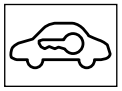
The ESP indicator will illuminate when the ignition switch is turned ON, but should go off after approximately 3 seconds. When the ESP is on, it monitors the driving conditions and under normal driving conditions, the ESP light will remain off. When a slippery or low traction condition is encountered, the ESP will operate, and the ESP indicator will blink to indicate the ESP is operating.

ESP OFF indicator (if equipped)

ESP OFF

The ESP OFF indicator will illuminate when the ignition switch is turned ON, but should go off after approximately 3 seconds. To switch to ESP OFF mode, press the ESP button. The ESP OFF indicator will illuminate indicating the ESP is deactivated. If this indicator stays on in the ESP ON mode, the ESP may have a malfunction. Take your car to the authorized Kia dealer and have the system checked.

Immobilizer indicator (if equipped)



Without e-key system

This light illuminates when the immobilizer key is inserted and turned to the ON position to start the engine.

If this light turns off or blinks when the ignition switch is in the ON position before starting the engine, have the system checked by an authorized Kia Dealer.

With e-key system (if equipped)

If any of the following occurs in a vehicle equipped with the e-key, the immobilizer indicator illuminates, blinks or the light goes off.

- If the ignition switch is in the LOCK position, the e-key is recognized in the vehicle, and you then depress the brake pedal the indicator illuminates for approximately 10 second. However, if the engine is started or the brake pedal is released within 10 seconds, the indicator will turn off immediately. See page 4-5 for more information regarding starting the engine with e-key.
- If the e-key is not in the vehicle the indicator blinks.
- When the ignition switch is in the ON position, the engine has not been started and the e-key is in the vehicle, the indicator will illuminate (until the engine is started), If the e-key is not in the vehicle, the indicator will turn off after blinking.
- When the ignition switch is turned to ON position without the e-key in the vehicle, the indicator light turns off after blinking.
- Once the door opens and closes with the ignition switch in the ACC or ON position, the system checks for the e-key. If the e-key is in the vehicle the indicator illuminates, but if it is not, the alarm will sound for 6 seconds. The indicator light will turn off in ACC position or it will illuminate in ON position.
- When the ignition switch is ON and the indicator turns off after 2 seconds, the system may have a problem. Have the vehicle checked by an authorized Kia dealer.
- When the e-key is not in the vehicle or the battery is weak, the indicator will blink and you will not be able to start the engine. If however the battery is weak you may still be able to start the engine by inserting the e-key in the ignition switch. If e-key system related parts have a problem the indicator blinks.

Safety belt warning chime

If the driver's seat belt is not fastened when the ignition key is turned “ON” or if it is disconnected after the key is ON, the safety belt warning chime will sound for approximately 6 seconds.

Door ajar warning chime (if equipped)

If a door is opened with the ignition switch ON, the warning chime will sound.

Key reminder warning chime

If the driver’s door is opened and the ignition key is left in the ignition switch in the LOCK or ACC position, the key reminder warning chime will sound. This is to prevent you from locking your keys in the vehicle.

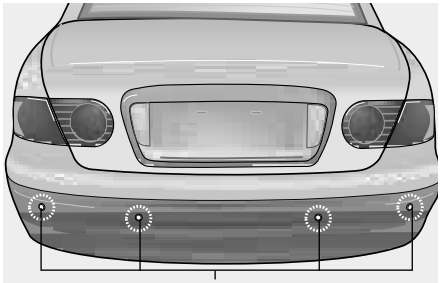
Overspeed warning chime (if equipped)

If you drive at a speed of 120 km/h or more, the overspeed warning chime will sound. This is to warn you from driving your vehicle with excessive speed.

Back warning (if equipped)

If the back warning sensor detects any object within 120 cm behind the vehicle when moving backward with ignition ON, back warning chime sound interval will become shorter as the distance decreases. See back warning system on the next page for further details.

BACK WARNING SYSTEM (IF EQUIPPED)



The back warning system assists the driver during backward movement of the vehicle by chiming if any object is sensed within the distance of 120 cm 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 back warning system.

⚠ WARNING

Back warning system should only be considered as a supplementary function. The driver must check the rear view. The operational function of back warning system can be affected by many factors and conditions of the surroundings, so the responsibility of backing up rests always with the driver.

Operation of the back warning system

Operating condition

- This system will activate when backing up with the ignition key ON.
- Sensing distance in backing up is approximately 120 cm.
- When more than two objects are sensed at the same time, the closest one will be recognized first.

Types of warning sound

- When an object is 120 cm to 71 cm from the rear bumper : Buzzer beeps intermittently
- When an object is 70 cm to 41 cm from the rear bumper : Buzzer sounds two beeps intermittently
- When an object is within 40cm of the rear bumper : Buzzer sounds continuously. The warning sound will decrease if distance to the objects remains unchanged for more than 3 seconds.

Non-operational conditions of back warning system

Back warning 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.)

There is a possibility of back warning 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 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.

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 back warning may not sound sequentially depending on the speed and shapes of the objects detected.
2. The back warning 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 40 cm from the sensor, or it may sense an incorrect distance. Use caution.
4. When sensor is frozen or stained with snow or water, sensor may be inoperative until the stains is 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 by the sensors, Always visually check behind the vehicle when driving backward.
Be sure to inform any drivers in the vehicle that may be unfamiliar with the system regarding the systems capabilities and limitations.
Your new vehicle warranty does not cover any accidents or damage to the vehicle or its occupants due to back warning system malfunction. Always drive safely and cautiously.

⚠ WARNING

Pay close attention when the vehicle is driven close to objects on the road, particularly pedestrians, 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.

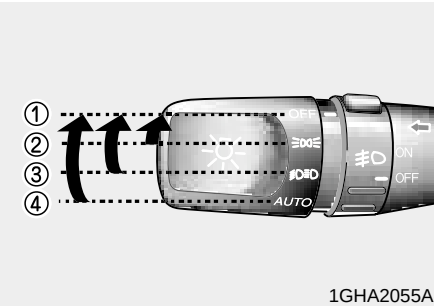
LIGHTING

Battery saver function

- The purpose of this feature is to prevent the battery from being discharged . The system automatically turns off the small light when the driver removes the ignition key and opens the driver- side door.
- With this feature, the taillight will be turned off automatically if the driver parks on the side of 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 tail-lights OFF and ON again using the light switch on the steering column.



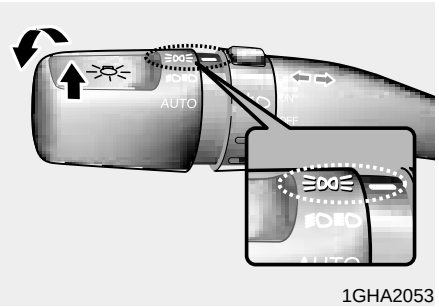
1GHA2055A

Lighting control

The light switch has a Headlight and a Taillight position.

To operate the lights, turn the knob at the end of the control lever to one of the following positions:

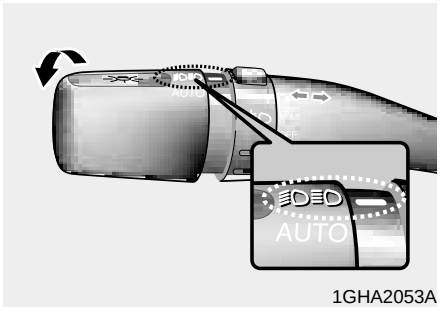
① OFF position
② Taillight position
③ Headlight position
④ Auto light position



1GHA2053

Taillight position ( )

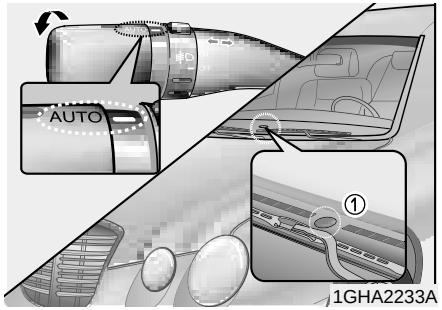
When the light switch is in the taillight position (1st position), the tail, position, license and instrument panel lights are ON.



1GHA2053A

Headlight position (≡D≡D)

When the light switch is in the headlight position (2nd position) the head, tail, position, license and instrument panel lights are ON.



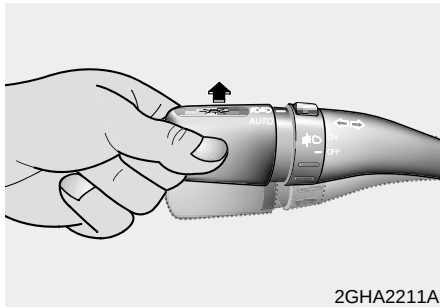
1GHA2233A

Auto light position (if equipped)

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.

✻ NOTICE

- **Never place anything over sensor (①) located on the instrument panel, this will ensure better autolight system control.**
- **Don't clean the sensor using a window cleaner, the cleanser may leave a light film which could interfere with sensor operation.**
- **If your vehicle has window tint or other types of coating on the front windshield, the Auto light system may not work properly.**



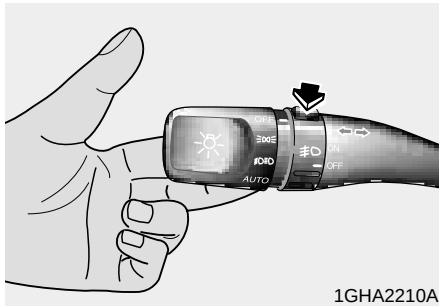
2GHA2211A

High - beam operation

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

The high-beam indicator will light when the headlight high beams are switched on.

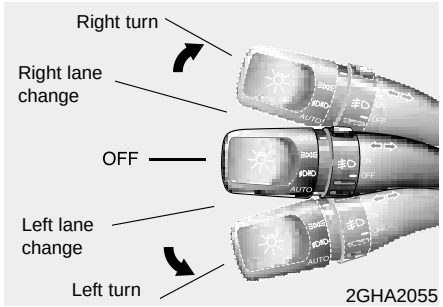
To prevent the battery from being discharged, do not leave the lights on for a prolonged time while the engine is not running.



1GHA2210A

Flashing headlights

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.



2GHA2055

Turn 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. 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.

Lane change signals

To signal a lane change, move the turn signal lever slightly and hold it in position. The lever will return to the OFF 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.

✻ NOTICE

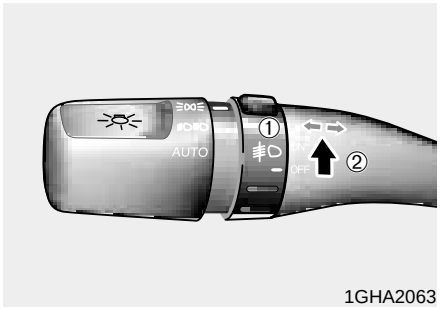
If an indicator flash is abnormally quick or slow, bulb may be burned out or have a poor electrical connection in the circuit.

Automatic headlight aiming (if equiped)

To provide better driver visibility and reduce eye fatigue, the headlight aiming (direction) is automatically controlled depending on vehicle load and vehicle angle (when vehicle is loaded with passengers, cargo or used for towing, the additional load can alter the headlight aiming point on the road surface). This system provides constant automatic headlight aiming under various vehicle conditions and angles to ensure the headlights are always pointed in the right direction.

✻ NOTICE

If the automatic headlight aiming system does not operate when the vehicle is loaded with passengers and the front portion of the vehicle is at an elevated angle, or it is not adjusting correctly, have the vehicle checked and repaired by an authorized Kia dealer. Do not attempt to adjust the headlights manually, damage to the automatic headlight aiming system could occur.



1GHA2063

Front fog light (if equipped)

Fog lights are used to provide improved visibility and avoid accidents when visibility is poor due to fog, rain or snow etc. The fog lights will turn on when fog light switch (①) is turned to ON (②) after the headlight switch or tail light switch is turned on.

To turn off the fog lights, turn the switch to OFF.

✻ NOTICE

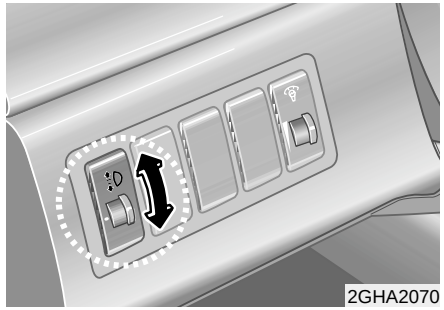
When in operation, the fog lights consume large amounts of vehicle electrical power. Only use the fog lights when visibility is poor or unnecessary battery and generator drain could occur.

Daytime running light (if equipped)

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

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

1. The head light switch is ON.
2. The taillight switch is ON.
3. Engine stops.

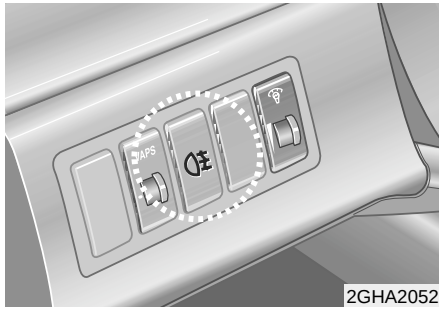

2GHA2070

Headlight leveling device (if equipped)

This manual system is provided to avoid obstructing oncoming drivers vision with your headlights. The headlight level can be adjusted by rotating the thumb-wheel switch in accordance with the following settings.

Switch Setting:

Position	Loading on		
	Frt. seats	Rear seats	Rear Trunk
0	1 driver	-	-
	2 persons	-	-
1	2 persons	3 persons	-
2	2 persons	3 persons	258 kg
3	1 driver	-	514 kg

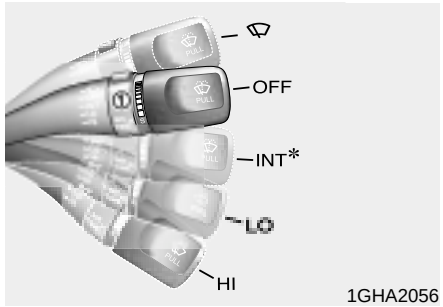

2GHA2052

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).

To turn the rear fog lights off, press the rear fog light switch again or turn the headlight switch to the OFF position.

WIPERS AND WASHERS



1GHA2056

Windshield wipers

Type A

Operates as follows when the ignition switch is turned ON.

OFF : Wiper is not in operation

INT : Wiper operates intermittently at the same wiping intervals. Use this mode in a light rain or mist. To vary the speed setting, turn the speed control knob(①). (S : slow operation, F: fast operation)

LO : Normal wiper speed

HI : Fast wiper speed

: For a single wiping cycle, push the lever forward and release it with the lever in the OFF position. The wipers will operate continuously if the lever is pushed upward and held.

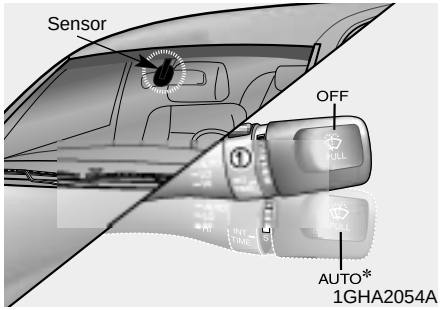
✻ NOTICE

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.

Type B

Operates as follows when the ignition switch is turned ON.

OFF/LO/HI/ : See the explanation for type A operation.



AUTO (if equipped)

; The rain sensor located on the upper end of windshield glass senses the amount of rainfall and controls the wiping cycle for the proper intervals. 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). (S : slow operation, F: fast operation.)

If the ignition switch is turned ON when the wiper switch is set in AUTO mode, or wiper switch is set in AUTO mode when the ignition switch is ON, wiper will operate once to perform a self-check of the system. Set the wiper to OFF position when the wiper is not in use.

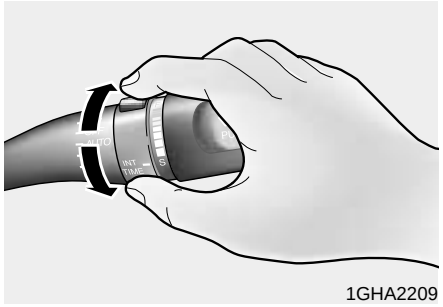
✻ NOTICE

When washing the vehicle, set the wiper switch in the OFF position to stop the auto wiper operation.
Wiper may operate and be damaged if the switch is set in AUTO mode while washing 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 you vehicle warranty.
When the starting the vehicle in winter, set the wiper switch in the OFF 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.

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:

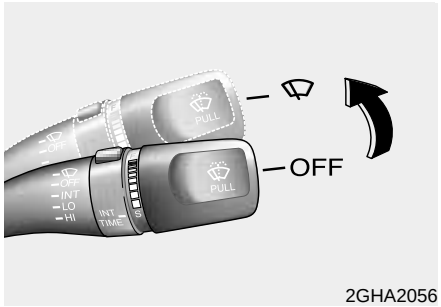
- ***Do not touch the upper end of the windshield glass facing the rain sensor.***
- ***Do not wipe the upper end of the windshield glass with a damp or wet cloth.***
- ***Do not put pressure on the windshield glass.***



1GHA2209

Variable intermittent wipers

Set the lever to the INT or AUTO position and choose the desired wiper interval by turning the ring.



2GHA2056

One - touch wiper

For a single wiping cycle, push the lever upward and release it with the lever in the OFF position.

The wipers will operate continuously if the lever is pushed upward and held.

✻ NOTICE

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



1GHA2210

Windshield washers

In the OFF position, pull the lever gently toward you to spray washer fluid on the windshield and to run the wipers 2-3 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.

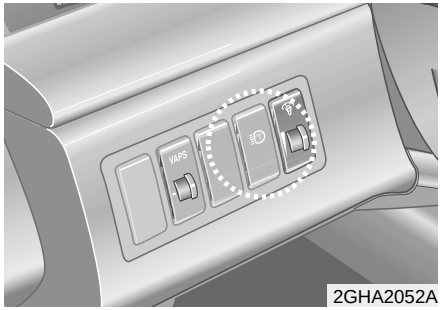
The reservoir filler neck is located in the front of the engine compartment on the passenger side.

✻ NOTICE

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 1st warming the windshield with the defrosters; the washer solution could freeze on contact with the windshield and obscure your vision.

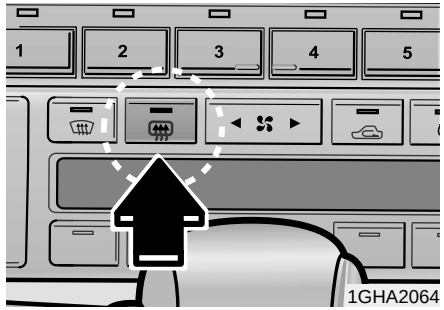


2GHA2052A

Headlight washer (if equipped)

To operate the headlight washer, turn on the headlight switch while the engine is running. Press the headlight washer button to operate the washer. Release the button to stop the operation.

DEFROSTER



The defroster heats the window to remove frost, fog and thin ice from the interior and exterior of the rear window, while engine is running.

✻ NOTICE

- **To prevent damage to the conductors bonded to the inside surface of the bottom of the front windshield and the rear window, never use sharp instruments or window cleaners containing abrasives to clean the window.**
- **To prevent the battery from being discharged, operate the defroster only while the engine is running.**
- **The front windshield defroster is designed to defrost wiper blades. If you want to defrost and defog on the front windshield, refer to "Windshield Defrosting and Defogging" in this section.**

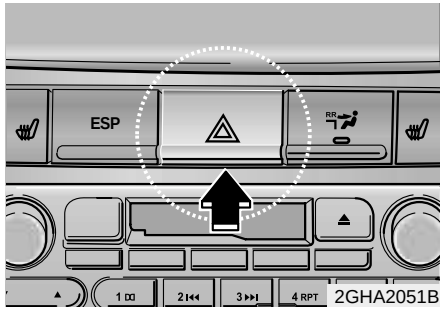
To activate the rear window defroster, press the rear window defroster button located in the center console switch panel. The indicator on the rear window defroster button illuminates when the defroster is ON.

If your vehicle is equipped with the front windshield defroster, it will be operating at the same time when you operate the rear window defroster.

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 20 minutes or when the ignition switch is turned off. To turn off the defroster, press the rear window defroster button again.

HAZARD WARNING FLASHER



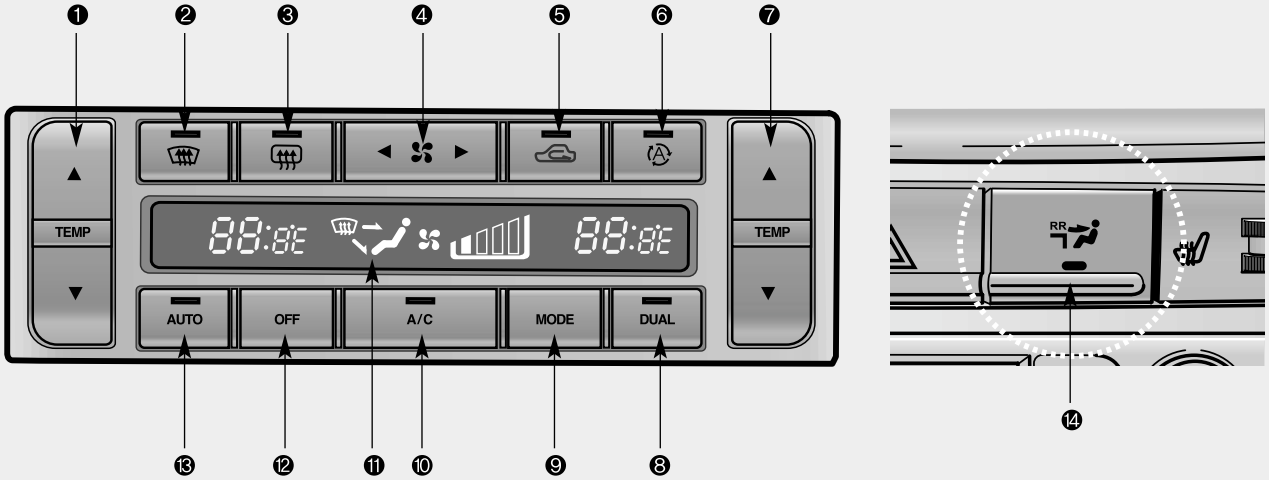
2GHA2051B

The hazard warning flasher causes the rear tail lights and front turn signal lights to flash on and off, which serves as a warning to other drivers to exercise caution when approaching or passing your vehicle.

To activate the flasher, depress the hazard warning flasher switch. This switch operates in any ignition switch position.

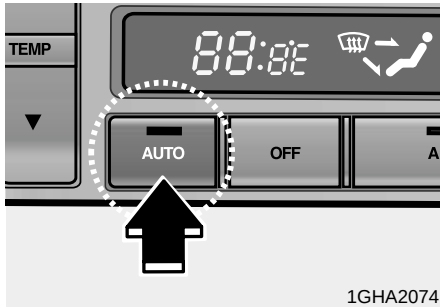
To turn the flashers off, depress the switch again.

AUTOMATIC CLIMATE CONTROL SYSTEM



1. Driver's temperature control button
2. Front windshield defrost button
3. Rear window defrost button
4. Fan speed control button
5. Air intake control button
6. AQS (air quality control system) button
7. Passenger's temperature control button
8. Dual temperature control selection button
9. Mode selection button
10. Air conditioning button
11. Indicator light
12. OFF button
13. AUTO (automatic control) button
14. Rear climate control selection button

1GHA2072/1GHA2223



1GHA2074

Automatic operation

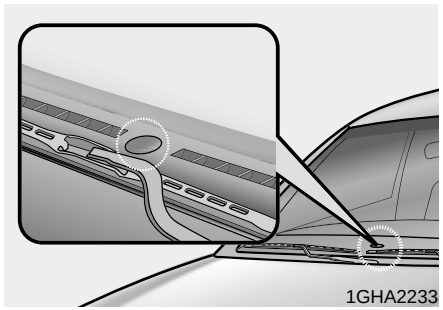
The automatic climate control system is controlled by simply setting the desired temperature.

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

1. Push the AUTO button. The indicator light will come on and the modes, fan speeds, air intake and air-conditioning will be controlled automatically by temperature setting.
2. Push the TEMP button to set the desired temperature.

   If the temperature is set to the lowest setting 17°C/62°F, the air conditioning system will operate continuously.
3. To turn the automatic operation off, press any button except temperature control button and AQS button. If you press the mode selection button, air-conditioning button, defrost button, air intake control button or fan speed button, the selected function will be controlled manually while other functions operate automatically.

Regardless of the temperature setting, when using automatic operation, the air conditioning system will automatically turn on to decrease the humidity inside the vehicle, even if the temperature is set to warm.


1GHA2233

✻ NOTICE

Never place anything over the sensor located on the instrument panel to ensure better control of the heating and cooling system.

Manual operation

The heating and cooling system can be controlled manually as well by pushing buttons other than the AUTO button. In this case, the system works sequentially according to the order of buttons selected.

When pressing any button except AUTO button while automatic operation, the functions of the buttons not selected will be controlled automatically.

Press the AUTO button in order to convert to full automatic control of the system.

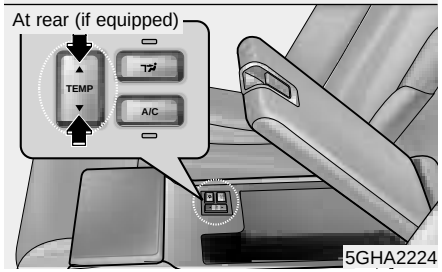
When turning the system on using any button except AUTO button, the functions of the buttons not selected will be selected to previous positions. If the battery has been discharged or disconnected, the previous status of buttons is canceled and initialized. Set the each control mode to the desired position.

At front



1GHA2078

At rear (if equipped)

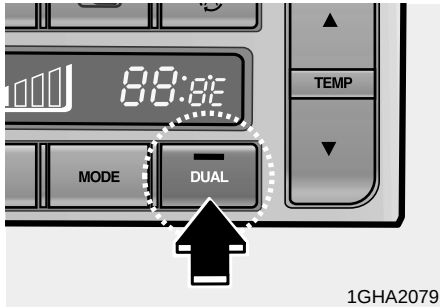


5GHA2224

Temperature control button

The temperature will increase to the maximum 32°C/90°F (HI) by pushing the up button. Each push of the button will cause the temperature to increase by 0.5 °C/1°F.

The temperature will decrease to the minimum 17°C/62°F (Lo) by pushing the down button. Each push of the button will cause the temperature to decrease by 0.5°C/1°F. When set to the lowest temperature setting, the air conditioning will operate continuously.



1GHA2079

Dual temperature control selection button

Adjusting the driver and passenger side temperature individually

1. Press the DUAL button to operate the driver and passenger side temperature individually (the indicator light in the button illuminates). Pressing the right temperature control button will automatically switch to the DUAL mode as well.
2. Press the left temperature control to adjust the driver side temperature. Press the right temperature control to adjust the passenger side temperature.

Adjusting the driver and passenger side temperature equally

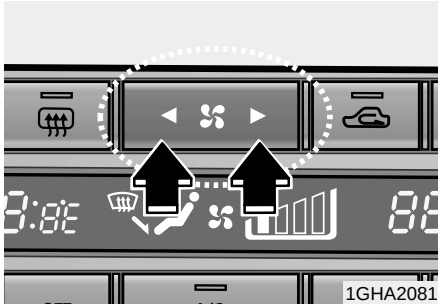
1. Press the DUAL button again to deactivate DUAL mode (the indicator light in the button is off). The passenger side temperature will be set to the same as the driver side temperature.
2. Press the left temperature control button. The driver and passenger side temperature will be adjusted equally.

Temperature conversion

If the battery has been discharged or disconnected, the temperature mode will reset as Centigrade degree.

This is normal condition and you can switch the temperature mode between Centigrade to Fahrenheit as follows;

While depressing the MODE button, depress the DUAL button for 3 seconds or more. The display will change from Centigrade to Fahrenheit, or from Fahrenheit to Centigrade.



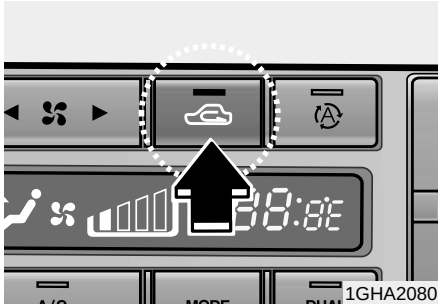
Fan speed control button

The fan speed can be set to the desired speed by pressing the appropriate fan speed control button.

The higher the fan speed is, the more air is delivered.

Pressing the “OFF” button turns off the fan.

- - Low speed
- - Medium speed
- - High speed
- - Maximum speed



Air intake control button

This is used to select outside (fresh) air position or recirculated air position.

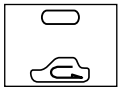
To change the air intake control position, push the control button.

Recirculated air position

The indicator light on the button is illuminated when the air intake control is set to the recirculated air position.

With the recirculated air position selected, air from passenger compartment will be drawn through the heating system and heated or cooled according to the function selected.

Outside (fresh) air position



The indicator light on the button is not illuminated when the air intake control is set to the 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.

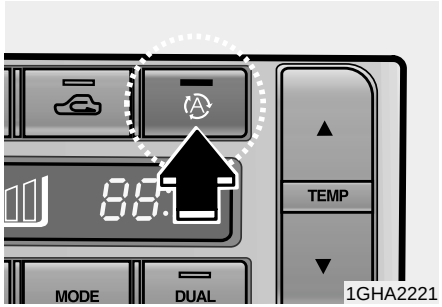
When starting the vehicle, the system is automatically set to the outside (fresh) air position. Press the button once to select the recirculated air position.

✻ NOTICE

It should be noted that prolonged operation of the heating in recirculated air position will cause fogging of the windshield and side windows and the air within the passenger compartment will 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

- **Continued climate control system operation in the recirculated air position may allow humidity to increase inside vehicle which may fog the glass and obscure visibility.**
- **Do not sleep in a vehicle with 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.**
- **Continued climate control system operation in the reciruclated 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.**



Air quality control system

The air inflow from outside vehicle can be automatically controlled. Press the button to activate the “Air Quality Control System”.

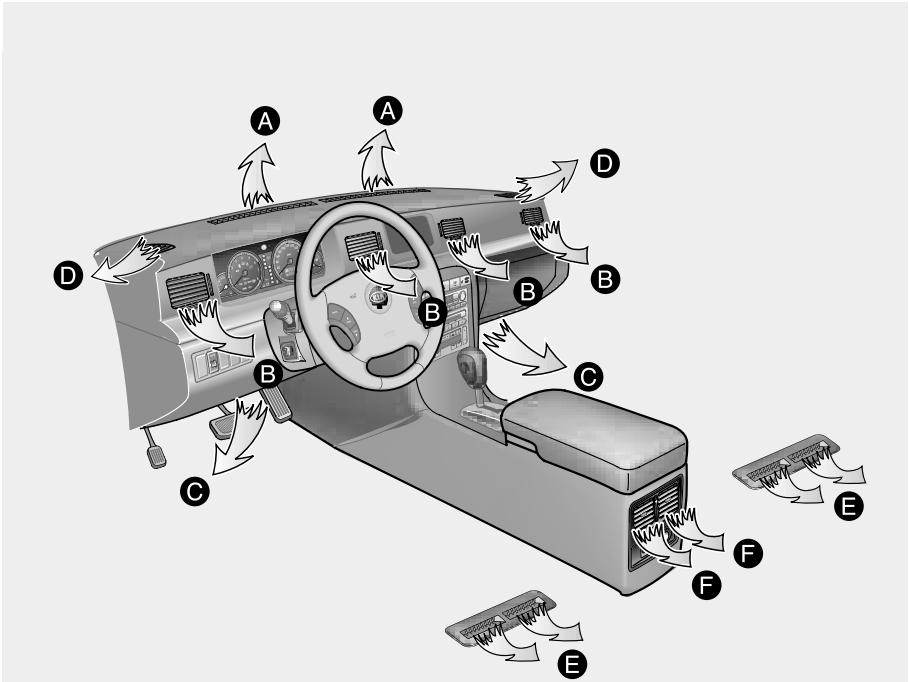
When using AQS mode, AQS(Air Quality Control System) automatically senses outdoor air pollutants and minimizes them from entering the vehicle, however, unpleasant or foul odors that might be present may still be noticeable within the vehicle.

To deactivate the system;

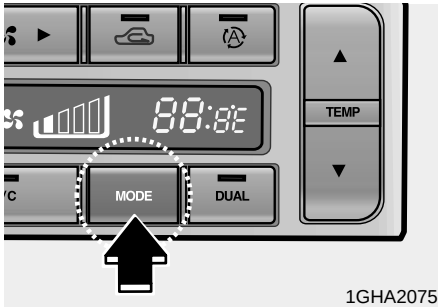
- press the button again.
- press the air intake button.
- press the AUTO button.
- set the mode to the defrost ( ) or floor-defrost ( ) position.
- set the temperature control to Lo or HI position while automatic operation (the indicator light in the AUTO button is illuminate).

CAUTION

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



2GHA2220A

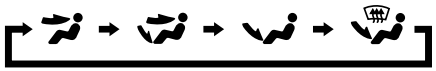


1GHA2075

Mode selection button

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 position

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

Face - floor position

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

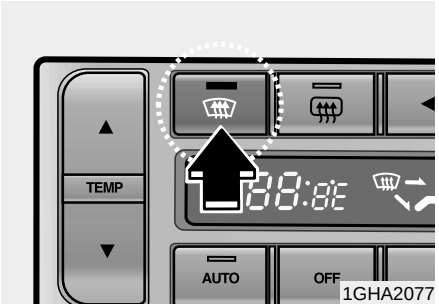
Floor position

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

Floor - defrost position

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

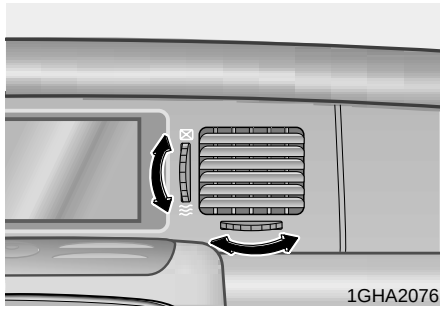
The air conditioning will automatically operate based on the ambient temperature and outside(fresh) air position will be selected automatically.



Defrost button

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

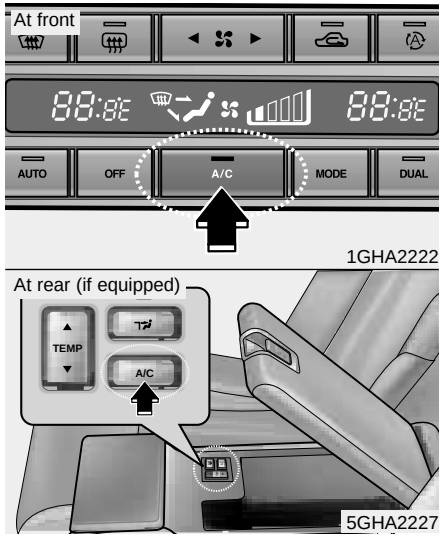
When the defrost button is pressed, the outside (fresh) air position will automatically be selected and air will be discharged through the windshield defrost vents. The air conditioning will automatically operate based on ambient temperature.



Instrument panel vents

If air flow control is not satisfactory, check the instrument panel vents. The outlet port (Ⓑ) can be opened or closed separately using the vertical thumbwheel. To close the vent, rotate it upward to the maximum position. To open the vent, rotate it downward.

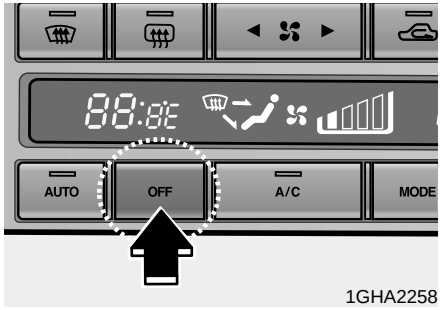
Also, you can adjust the direction of air delivery from these vents using vertical or horizontal thumbwheels as shown.



Air conditioning button

Push the A/C button to turn the air conditioning system on (indicator light will illuminate).

Push the button again to turn the air conditioning system off.



OFF button

Push the OFF button to turn off the air climate control system. However you can still operate the mode, air intake and AQS buttons as long as the ignition switch is ON.

System operation

Ventilation

1. Set the mode to the position.
2. Set the air intake to the desired 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 to the desired 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 on.

- If cool air is desired at face level for bi-level operation, set the mode to the position.
- If the windshield fogs up, set the mode to the , position.

Air conditioning

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

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

- If warmer air is desired at floor level for bi-level operation, set the mode to the position and adjust the temperature control to maintain maximum comfort.
- When maximum cooling is desired, set the temperature control to the Lo (17°C/62°F) and set the air intake to the recirculated air position, then set the fan speed to the highest speed.

✻ NOTICE

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

Air conditioning system operation tips

- If the vehicle has been parked in direct sunlight during hot weather, open the windows for a short time to let the hot air inside the vehicle escape.
- To help reduce moisture inside of windows on rainy humid days, decrease the humidity inside the vehicle by operating the air conditioning system.
- During air conditioning system operation, you may occasionally notice a slight change in engine speed at idle as the air conditioning compressor cycles on. This is a normal system operation characteristics.

- Use the air conditioning system every month if only for a few minutes to ensure maximum system performance.
- When using the air conditioning system, you may notice clear water dripping (or even pudding) on the ground under the passenger side of the vehicle. This is a normal system operation characteristics.
- The air conditioning system includes a function that automatically turns the air conditioning compressor off if engine coolant temperature approaches an over heating level. The air conditioning compressor operation will resume once engine coolant temperature returns to the normal range. Also, the air conditioning compressor is automatically turned off for a few seconds when the accelerator is fully depressed (wide open throttle).
- When operating the air conditioning system use the outside (fresh) air position.
- Operating the air conditioning system in the recirculated air position does provide maximum cooling, however, continual operation in this mode may cause the air inside the vehicle to become stale.

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, have the system inspected by an authorized Kia dealer.

Air conditioner refrigerant and compressor lubricant

The system complies with SAE J-639.

Item	Type	Amount
Refrigerant	R-134a	625 ~ 675 g
Compressor lubricant	PAG(FD46XG)	140 ~ 160 cc

CAUTION

Have the system inspected by a qualified service technician because the air conditioner refrigerant is high pressure. Improper service may cause serious injury.

✻ NOTICE

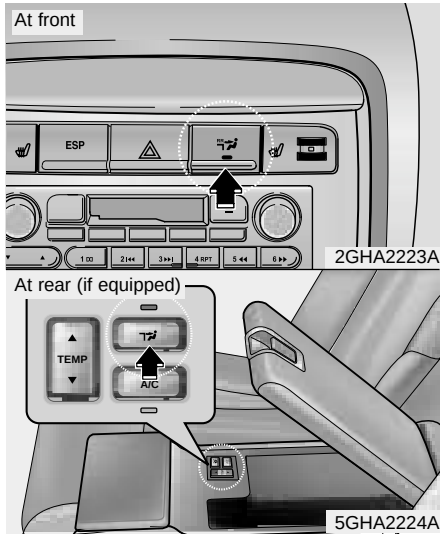
When the performance of the air conditioner is reduced by a low amount of refrigerant, keep pipes under vacuum after the refrigerant in pipes should be drained thoroughly, and then add the amount of refrigerant as required.

When draining the refrigerant in pipes, a small amount of lubricants may come out. Therefore, make sure to put in 30~50 cc of compressor lubricants together.

If the amount of compressor lubricant is low, compressor wear is promoted. It may cause damage to the compressor and abnormal operation of air conditioner, and damage to the engine.

Rear climate control

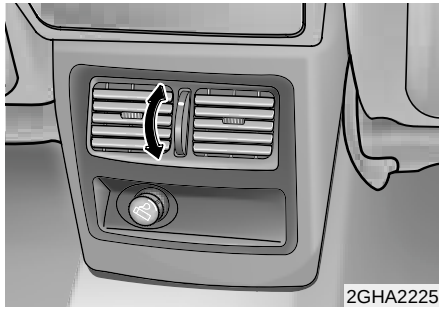
The rear climate control system allows the rear passengers to adjust the temperature and airflow distribution using the control panel located on the back of the center console, facing the rear passenger compartment. The rear climate control system only operates when the front climate control system is on and, supplements the functions of the front climate control system for increased rear passenger comfort.



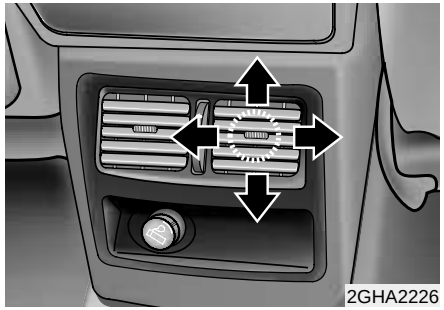
Operating the rear climate control system

To operate the rear climate control system, perform the following:

1. Press the rear climate control selection button ( ) (the indicator light will illuminate).

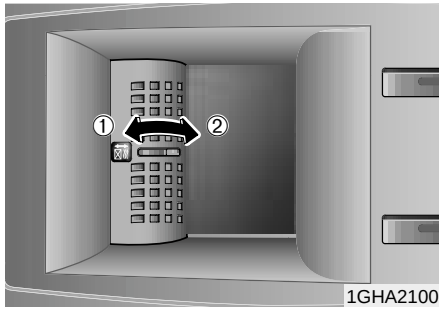


2. Turn the temperature control knob located between the vents on the rear control panel to adjust the temperature. Turn the knob up (RED mark) when warm air is desired, or down (BLUE mark) when cool air is desired.



2GHA2226

3. Adjust the direction of the airflow using the vent control lever.



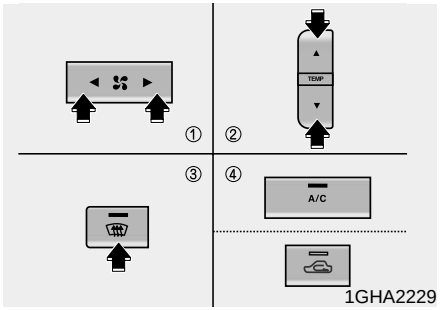
1GHA2100

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. Press the rear climate control selection button ( ) in the front control panel (the indicator light in the button illuminates).
2. Turn the open/close lever of the vent installed in the center console box to the open position.
   ① Close
   ② Open
3. Turn the temperature control knob located between the vents on the rear control panel to adjust the temperature. When the cool box is not used, turn the lever to its closed position. Turn the knob up (RED mark) when warm air is desired, or down (BLUE mark) when cool air is desired.

WINDSHIELD DEFROSTING AND DEFOGGING



1GHA2229

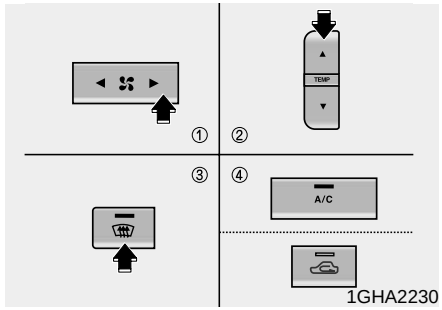
To defog inside windshield

1. Select desired fan speed
2. Select desired temperature.
3. Press the defrost button ( ).
4. The air-conditioning will be turned on according to the detected ambient temperature and outside (fresh) air position will be selected.

If you don't want the air-conditioning or outside (fresh) air position, press the corresponding button to cancel the operation.

⚠ WARNING

Do not use defrost position during cooling operation in extremely humid weather. The difference between the temperature of the outside air and that of the windshield could cause the outer surface of the windshield to fog up, causing loss of visibility.



1GHA2230

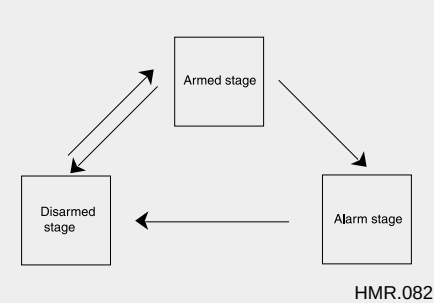
To defrost outside windshield

1. Set fan speed to the or position.
2. Set temperature to the extreme hot (25°C~32°C) position.
3. Press the defrost button ( ).
4. The air-conditioning will be turned on according to the detected ambient temperature and outside (fresh) air position will be selected.

If you don't want the air-conditioning or outside (fresh) air position, press the corresponding button to cancel the operation.

- For maximum defrosting, set the temperature control button to the hot position and the fan speed control button to the highest speed.
- If warm air to the floor is desired while defrosting or defogging, set the mode selection button 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 inside of the windshield.

THEFT-ALARM SYSTEM (IF EQUIPPED)



HMR.082

Theft alarm system will not operate when the ignition key is in the ignition switch.

If the doors are locked by the transmitter key, unlock the doors with the transmitter.

If the lock button ( ) on the transmitter is pressed when the key is not in the ignition and any vehicle door or the trunk is open, then, the doors will lock but the theft alarm system will not activate. However, the theft alarm system will automatically activate then the open door(s) or trunk is closed and locked.

Armed stage

When the ignition switch is in the “LOCK” position, and key is not in the ignition, the system will be armed and the hazard lights will flash once when the following conditions are met:

- The hood, trunk and doors are all closed and the lock button ( ) on the transmitter is pressed.
- If a door or the trunk is not opened within approximately 30 seconds after unlocking with the transmitter, all doors will be locked again and theft alarm system armed.

Alarm stage

The alarm will be activated when:

1. Any door is opened without using the transmitter
2. The trunk lid is opened with anything except the transmitter (opening the trunk with the key will cause the alarm to sound).

The alarm sound and flash will be ON for 30 seconds. During this time, the engine will not start.

Withheld alarm

When the alarm is armed, the alarm will not sound if the trunk lid is opened with the transmitter. However, if the trunk lid is opened after approximately 30 seconds when the trunk lid is not opened completely, alarm will sound. The door and hood sensors remain armed even if the trunk is open. If the door or hood are opened, the alarm will sound.

Disarmed stage

If the following conditions are met, the alarm system will be deactivated and hazard flasher light will flash twice.

- When the unlock button ( ) on the transmitter is pressed. If a door or the trunk is not opened within approximately 30 seconds after unlocking with the transmitter, all doors will be locked again and theft alarm system armed.
- When the ignition key is in the ON position for 30 seconds or more.

Fuel requirements / 5-2
Emission control system / 5-3
Before driving / 5-5
Suggestions for economical operation / 5-6
Special driving conditions / 5-7
Trailer towing / 5-13
Overloading / 5-21
Label information / 5-22

Driving tips

FUEL REQUIREMENTS

Gasoline engine (unleaded)

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.

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

✻ NOTICE

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 Kia has specified. (Consult an Authorized Kia Dealer for details.)

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.

Discontinue using gasohol of any kind if drivability problems occur.

Vehicle damage or driveability 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.

✻ NOTICE

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

EMISSION CONTROL SYSTEM

The emissions 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.

Vehicle modifications

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

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

Engine exhaust gas precautions (carbon monoxide)

⚠ WARNING

Engine exhaust gases contain carbon monoxide (CO). Though colorless and odorless, it is dangerous and could be lethal if inhaled. Follow the instructions following to avoid CO poisoning.

- Carbon monoxide can be present with other exhaust fumes. Therefore, if you smell exhaust fumes of any kind inside your vehicle, have it inspected and repaired immediately by an authorized Kia dealer or other competent repair shop. 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.
- 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.

Operating precautions for catalytic converters

⚠ 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 dry grass, paper, leaves, etc.

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

Therefore, the following precautions must be observed:

- Use only UNLEADED FUEL for gasoline engine (unleaded).
- 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 a qualified technician.

Failure to observe these precautions could result in damage to the catalytic converter and to your vehicle. Additionally, such actions could void your warranties.

BEFORE DRIVING

Before entering vehicle:

- Be sure that all windows, outside mirror(s), and outside lights are clean.
- Check the condition of the 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 Section 7, Maintenance.

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 - 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.

You are much more likely to have a serious accident if you drink 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.

Driving while under the influence of drugs is as dangerous or more dangerous than driving drunk.

SUGGESTIONS FOR 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:

- Avoid lengthy warm-up idling. Once the engine is running smoothly, begin driving. Remember, engine warm-up may take a little longer on cold days.
- Save fuel by accelerating slowly after stopping.
- Keep the engine in tune and follow the recommended periodic maintenance schedule. This will increase the life of all parts and lower your operating costs.
- Do not use the air conditioner unnecessarily.
- Slow down when driving on rough roads.
- For longer tire life and better fuel economy, always keep the tires inflated to the recommended pressures.
- Maintain a safe distance from other vehicles to avoid sudden stops. This will reduce wear on brake linings and pads. Driving in such a way will also save fuel because extra fuel is required to accelerate back to driving speed.
- Do not carry unnecessary weight in the vehicle.
- Do not rest your foot on the brake pedal while driving. This can cause needless wear, possible damage to the brakes, and poor fuel economy.
- Improper wheel alignment results in faster tire wear and lower fuel economy.
- 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, have an authorized Kia dealer perform scheduled inspections and maintenance.

⚠ 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 without the engine running. Instead, downshift to an appropriate gear for engine braking effect.

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 movements in braking or steering.
- When braking, pump the brake pedal with a light up-and-down motion until the vehicle is stopped.

✻ NOTICE

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.

✻ NOTICE

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, explode and injure bystanders.

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.

Winter driving

- We recommend that you carry emergency equipment, including tire chains, a window scraper, windshield de-icer, a bag of sand or salt, flares, a small shovel and jumper cables.
- Make sure you have sufficient ethylene-glycol coolant in the radiator.
- Check the battery condition and cables. Cold temperatures reduce the capacity of any battery, so it must be in excellent condition to provide enough winter starting power.
- Make sure the engine oil viscosity is suitable for cold weather.
- Check the ignition system for loose connections and damage.
- Use antifreeze-formulated windshield washer fluid. (Do not use engine coolant antifreeze.)
- Do not use the parking brake if it might freeze. When parking, shift to P (Park) with an automatic transaxle and block the rear wheels.

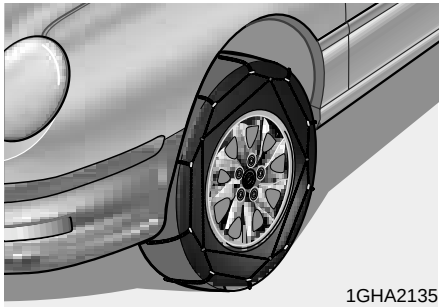
Snow tires

If you mount snow tires on your Kia, 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.



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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. Damage to your vehicle caused by improper snow chain use is not covered by your vehicle manufacturers warranty.

Install them only on the front tires.

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. Cable-type, or plastic-type snow chain can also be used.***
- ***Always check chain installation for proper mounting after driving approximately 0.5 to 1 km 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

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 park (P), 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.**
- **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.**

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.

HLA (Hydraulic Lash Adjuster) noise

The engine HLA's keep the gap between the valve and cam at zero regardless of the valve expansion.

Occasionally, you may hear temporary or continuous noise (clatter) from the engine when starting or idling. This noise will usually go away by following a few simple steps:

CAUTION

Do not run the engine at more than 3000 rpm until the noise goes away. Damage to the HLA's could occur.

If the temporary noise occurs when starting a cold engine:

This is a normal condition. This noise will disappear after the engine oil has reached normal operating pressure.

If the noise occurs when starting the engine after the engine has not been operated for more than 48 hours; or engine has been cranked excessively:

This condition may be caused by oil draining from the HLA's. This allows air to enter the HLA causing insufficient lubricating oil in the HLA. This will usually disappear within 15 minutes with the engine running at 2000~3000 rpm. If the noise does not disappear, have the engine oil pressure, engine lubrication system and HLA's inspected by an Authorized Kia Dealer.

TRAILER TOWING

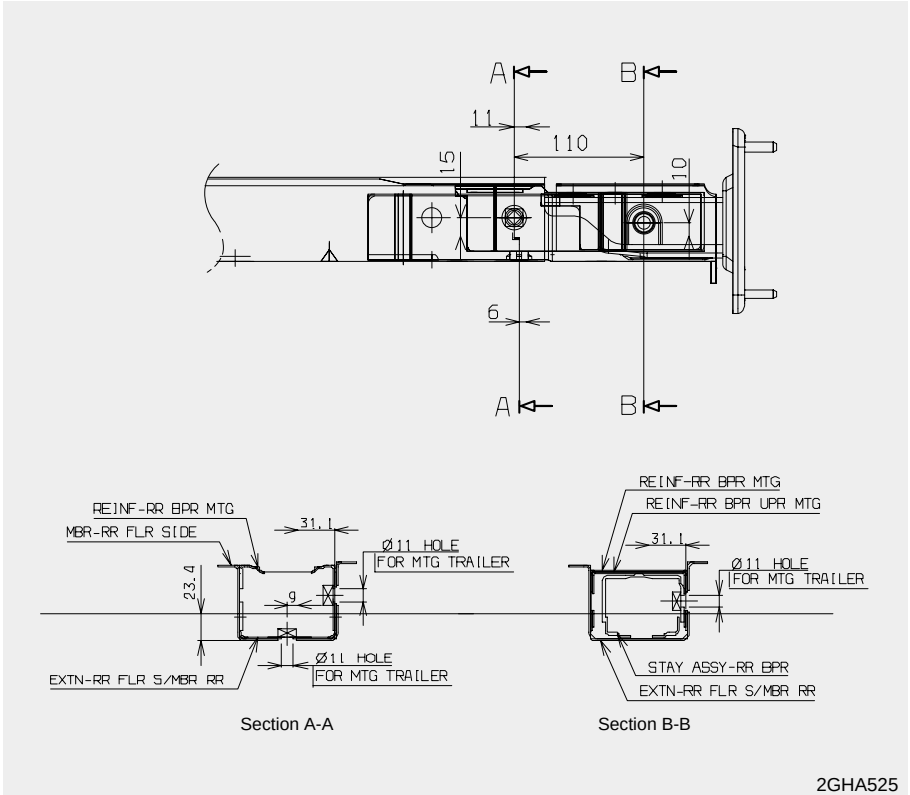
⚠ WARNING - Towing a trailer

If you don't use the correct equipment and drive properly, you can lose control when you pull a trailer. For example, if the trailer is too heavy, the brakes may not work well - or even at all. You and your passengers could be seriously or fatally injured. Pull a trailer only if you have followed all the steps in this section.

✻ NOTICE

Pulling a trailer improperly can damage your vehicle and result in costly repairs not covered by your warranty. To pull a trailer correctly, follow the advice in this section.

Item		Specification
Maximum trailer weight kg (lbs.)	Without brake System	750 (1653)
	With brake System	2100 (4630)
Maximum permissible static vertical load on the coupling device kg (lbs.)		85 (187)
Recommended distance from rear wheel center to coupling point mm (Inch)		1277 (50)



Section A-A Section B-B

2GHA525

Your vehicle can tow a trailer. To identify what the vehicle trailering capacity is for your vehicle, you should read the information in “Weight of the Trailer” that appears later in this section. Remember that trailering is different than just driving your vehicle by itself. Trailering means changes in handling, durability, and fuel economy. Successful, safe trailering requires correct equipment, and it has to be used properly.

This section contains many time-tested, important trailering tips and safety rules. Many of these are important for your safety and that of your passengers. Please read this section carefully before you pull a trailer.

Load-pulling components such as the engine, transaxle, wheel assemblies, and tires are forced to work harder against the load of the added weight. The engine is required to operate at relatively higher speeds and under greater loads. This additional burden generates extra heat. The trailer also adds considerably to wind resistance, increasing the pulling requirements.

If you do decide to pull a trailer

Here are some important points if you decide to pull a trailer:

- Consider using a sway control. You can ask a hitch dealer about sway control.
- After your odometer indicates 800 km (500 miles) or more, you can tow a trailer. For the first 800 km (500 miles) that you tow a trailer, don't drive over 80 km/h (50 mph) and don't make starts at full throttle. This helps your engine and other parts of your vehicle "wear" in at the heavier loads.
- Always drive your vehicle at a moderate speed (less than 60 mph (100 km/h)).
- The important considerations have to do with weight:

Weight of the trailer

How heavy can a trailer safely be? It should never weigh more than 2100 kg (4630 lbs.) with trailer brakes. But even that can be too heavy.

It depends on how you plan to use your trailer. For example, speed, altitude, road grades, outside temperature and how much your vehicle is used to pull a trailer are all important. The ideal trailer weight can also depend on any special equipment that you have on your vehicle.

Weight of the trailer tongue

The tongue load of any trailer is an important weight to measure because it affects the total gross vehicle weight (GVW) of your vehicle. This weight includes the curb weight of the vehicle, any cargo you may carry in it, and the people who will be riding in the vehicle. And if you will tow a trailer, you must add the tongue load to the GVW because your vehicle will also be carrying that weight.

The trailer tongue should weigh a maximum of 4% of the total loaded trailer weight. After you've loaded your trailer, weigh the trailer and then the tongue, separately, to see if the weights are proper. If they aren't, you may be able to correct them simply by moving some items around in the trailer.

⚠ WARNING

- **Never load a trailer with more weight in the rear than in the front. The front should be loaded with approximately 60% of the total trailer load; the rear should be loaded with approximately 40% of the total trailer load.**
- **Never exceed the maximum weight limits of the trailer or trailer towing equipment. Improper loading can result in damage to your vehicle and/or personal injury. Check weights and loading at a commercial scale or highway patrol office equipped with scales.**
- **An improperly loaded trailer can cause loss of vehicle control.**

Hitches

It's important to have the correct hitch equipment. Crosswinds, large trucks going by, and rough roads are a few reasons why you'll need the right hitch. Here are some rules to follow:

- Will you have to make any holes in the body of your vehicle when you install a trailer hitch? If you do, then be sure to seal the holes later when you remove the hitch.

  If you don't seal them, deadly carbon monoxide (CO) from your exhaust can get into your vehicle, as well as dirt and water.
- The bumpers on your vehicle are not intended for hitches. Do not attach rental hitches or other bumper-type hitches to them. Use only a frame-mounted hitch that does not attach to the bumper.

Safety chains

You should always attach chains between your vehicle and your trailer. Cross the safety chains under the tongue of the trailer so that the tongue will not drop to the road if it becomes separated from the hitch.

Instructions about safety chains may be provided by the hitch manufacturer or by the trailer manufacturer. Follow the manufacturer's recommendation for attaching safety chains. Always leave just enough slack so you can turn with your trailer. And, never allow safety chains to drag on the ground.

Trailer brakes

If your trailer weighs more than 750 kg (1653 lbs.) loaded, then it needs its own brakes and they must be adequate. Be sure to read and follow the instructions for the trailer brakes so you'll be able to install, adjust and maintain them properly.

- Don't tap into your vehicle's brake system.

⚠ WARNING

Do not use a trailer with its own brakes unless you are absolutely certain that you have properly set up the brake system. This is not a task for amateurs. Use an experienced, competent trailer shop for this work.

Driving with a trailer

Towing a trailer requires a certain amount of experience. Before setting out for the open road, you must get to know your trailer. Acquaint yourself with the feel of handling and braking with the added weight of the trailer. And always keep in mind that the vehicle you are driving is now a good deal longer and not nearly so responsive as your vehicle is by itself.

Before you start, check the trailer hitch and platform, safety chains, electrical connector(s), lights, tires and mirror adjustment. If the trailer has electric brakes, start your vehicle and trailer moving and then apply the trailer brake controller by hand to be sure the brakes are working. This lets you check your electrical connection at the same time.

During your trip, check occasionally to be sure that the load is secure, and that the lights and any trailer brakes are still working.

Following distance

Stay at least twice as far behind the vehicle ahead as you would when driving your vehicle without a trailer. This can help you avoid situations that require heavy braking and sudden turns.

Passing

You'll need more passing distance up ahead when you're towing a trailer. And, because you're a good deal longer, you'll need to go much farther beyond the passed vehicle before you can return to your lane.

Backing up

Hold the bottom of the steering wheel with one hand. Then, to move the trailer to the left, just move your hand to the left. To move the trailer to the right, move your hand to the right. Always back up slowly and, if possible, have someone guide you.

Making turns

When you're turning with a trailer, make wider turns than normal. Do this so your trailer won't strike soft shoulders, curbs, road signs, trees, or other objects. Avoid jerky or sudden maneuvers. Signal well in advance.

Turn signals when towing a trailer

When you tow a trailer, your vehicle has to have a different turn signal flasher and extra wiring. The green arrows on your instrument panel will flash whenever you signal a turn or lane change. Properly connected, the trailer lights will also flash to alert other drivers you're about to turn, change lanes, or stop.

When towing a trailer, the green arrows on your instrument panel will flash for turns even if the bulbs on the trailer are burned out. Thus, you may think drivers behind you are seeing your signals when, in fact, they are not. It's important to check occasionally to be sure the trailer bulbs are still working. You must also check the lights every time you disconnect and then reconnect the wires.

Do not connect a trailer lighting system directly to your vehicle's lighting system. Use only an approved trailer wiring harness.

Your Authorized Kia Dealer can assist you in installing the wiring harness.

CAUTION

Failure to use an approved trailer wiring harness could result in damage to the vehicle electrical system and/or personal injury.

Driving on grades

Reduce speed and shift to a lower gear before you start down a long or steep downgrade. If you don't shift down, you might have to use your brakes so much that they would get hot and no longer operate efficiently.

On a long uphill grade, shift down and reduce your speed to around 70 km/h (45 mph) to reduce the possibility of engine and transaxle overheating.

If your trailer weighs more than 750 kg (1653 lbs.) and you have an automatic transaxle, you should drive in D (Drive) when towing a trailer.

Operating your vehicle in D (Drive) when towing a trailer will minimize heat buildup and extend the life of your transaxle.

✻ NOTICE

- **When towing a trailer on steep grades (in excess of 12%) pay close attention to the engine coolant temperature gauge to ensure the engine does not overheat. If the needle of the coolant temperature gauge moves across the dial towards "H" (HOT), pull over and stop as soon as it is safe to do so, and allow the engine to idle until it cools down. You may proceed once the engine has cooled sufficiently.**
- **Don't drive over 25 km (15 miles) on steep grades (in more than 12%) when your trailer weighs maximum 2100 kg (4630 lbs.). You must decide driving speed depending on trailer weight and uphill grade to reduce the possibility of engine and transaxle overheating.**

Parking on hills

Generally, you should not park your vehicle, with a trailer attached, on a hill. People can be seriously or fatally injured, and both your vehicle and the trailer can be damaged if they begin a downhill trajectory.

⚠ WARNING - Parking on a hill

Parking your vehicle on a hill with a trailer attached could cause serious injury or death, should a down hill trajectory happen.

However, if you ever have to park your trailer on a hill, here's how to do it:

1. Apply your brakes, but don't shift into gear.
2. Have someone place chocks under the trailer wheels.
3. When the wheel chocks are in place, release the brakes until the chocks absorb the load.
4. Reapply the brakes. Apply your parking brake, and then shift to P (Park) for an automatic transaxle.
5. Release the brakes.

⚠ WARNING - Parking brake

It can be dangerous to get out of your vehicle if the parking brake is not firmly set.

If you have left the engine running, the vehicle can move suddenly. You or others could be seriously or fatally injured.

When you are ready to leave after parking on a hill

1. With the automatic transaxle in P (Park), apply your brakes and hold the brake pedal down while you:
   - Start your engine;
   - Shift into gear; and
   - Release the parking brake.
2. Slowly remove your foot from the brake pedal.
3. Drive slowly until the trailer is clear of the chocks.
4. Stop and have someone pick up and store the chocks.

Maintenance when trailer towing

Your vehicle will need service more often when you regularly pull a trailer. Important items to pay particular attention include engine oil, automatic transaxle fluid, axle lubricant and cooling system fluid. Brake condition is another important item to frequently check. Each item is covered in this manual, and the Index will help you find them quickly. If you're trailering, it's a good idea to review these sections before you start your trip.

Don't forget to also maintain your trailer and hitch. Follow the maintenance schedule that accompanied your trailer and check it periodically. Preferably, conduct the check at the start of each day's driving. Most importantly, all hitch nuts and bolts should be tight.

✻ NOTICE

Due to higher load during trailer usage, overheating might occur in hot days or during uphill driving. If the coolant gauge indicates overheating, switch off the A/C and stop the vehicle in a safe area to cool down the engine.

OVERLOADING

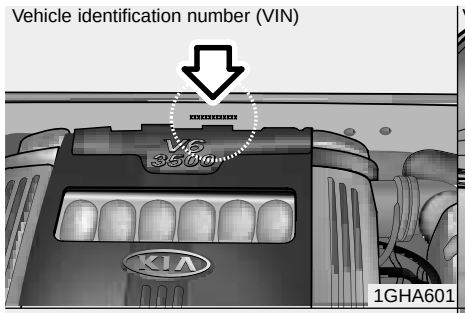
CAUTION

The gross axle weight rating (GAWR) and the gross vehicle weight rating (GVWR) for your vehicle are on the manufacturer's label attached to the driver's door. Exceeding these ratings can cause an accident or vehicle damage. You can calculate the weight of your load by weighing the items (or people) before putting them in the vehicle. Be careful not to overload your vehicle.

LABEL INFORMATION

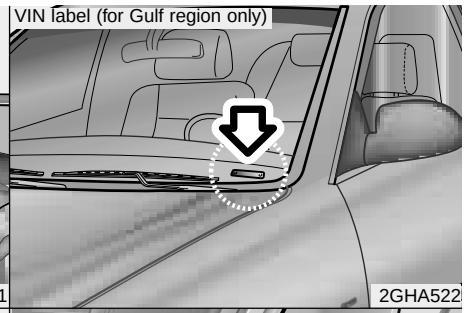
There are several important labels and identification numbers located on your vehicle. The label locations are identified in the illustrations follows:

Vehicle identification number (VIN)



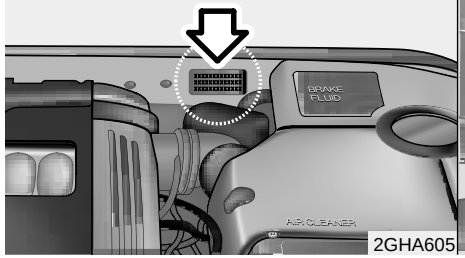
1GHA601

VIN label (for Gulf region only)



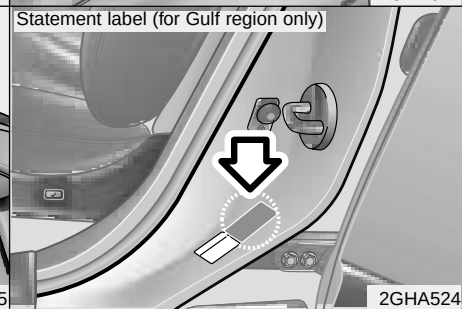
2GHA522

Manufacturer's label (Identification label)

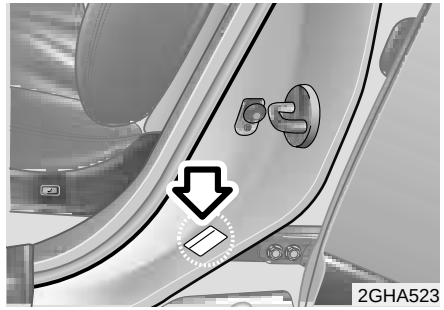


2GHA605

Statement label (for Gulf region only)



2GHA524

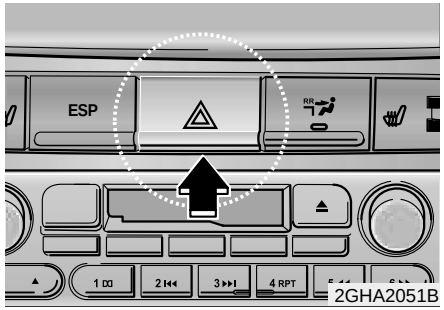


Tire specification / pressure label

Road warning / 6-2
Overheating / 6-3
Emergency starting / 6-4
Electrical circuit protection / 6-7
Towing / 6-14
If you have a flat tire / 6-19
Emergency commodity (If equipped) / 6-24

In case of an emergency

ROAD WARNING



2GHA2051B

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.

OVERHEATING

If your temperature gauge indicates overheating, if you experience a loss of power, or if you hear a loud knocking or pinging noise, the engine has probably overheated. Should any of these symptoms occur, use the following procedure:

1. Turn on the hazard warning flasher, then drive to the nearest safe location and stop your vehicle; set the automatic transaxle in P (Park) and apply the parking brake.
2. Make sure the air conditioner is off.
3. If coolant or steam is boiling out of the radiator, stop the engine and call an authorized Kia Dealer for assistance.

   If coolant is not boiling out, allow the engine to idle and open the hood to permit the engine to cool gradually.

   If the temperature does not go down with the engine idling, stop the engine and allow sufficient time for it to cool.
4. The coolant level should then be checked. If the level in the reservoir is low, look for leaks at the radiator hoses and connections, heater hoses and connections, radiator, and water pump. If you find a major leak or another problem that may have caused the engine to overheat, do not operate the engine until it has been corrected. Call an authorized Kia Dealer for assistance. If you do not find a leak or other problem, carefully add coolant to the reservoir.

⚠ WARNING - Removing radiator cap

Do not remove the radiator cap when the engine and radiator are hot. Scalding hot coolant and steam may blow out under pressure. This could cause serious injury.

If the engine frequently overheats, have the cooling system checked and repaired by an authorized Kia Dealer.

EMERGENCY STARTING

Jump starting

Jump starting can be dangerous if done incorrectly. Therefore, to avoid harm to yourself or damage to your vehicle or battery, follow the jump starting procedures on this page. If in doubt, we strongly recommend that you have a competent technician or towing service jump start your vehicle.

✻ NOTICE

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

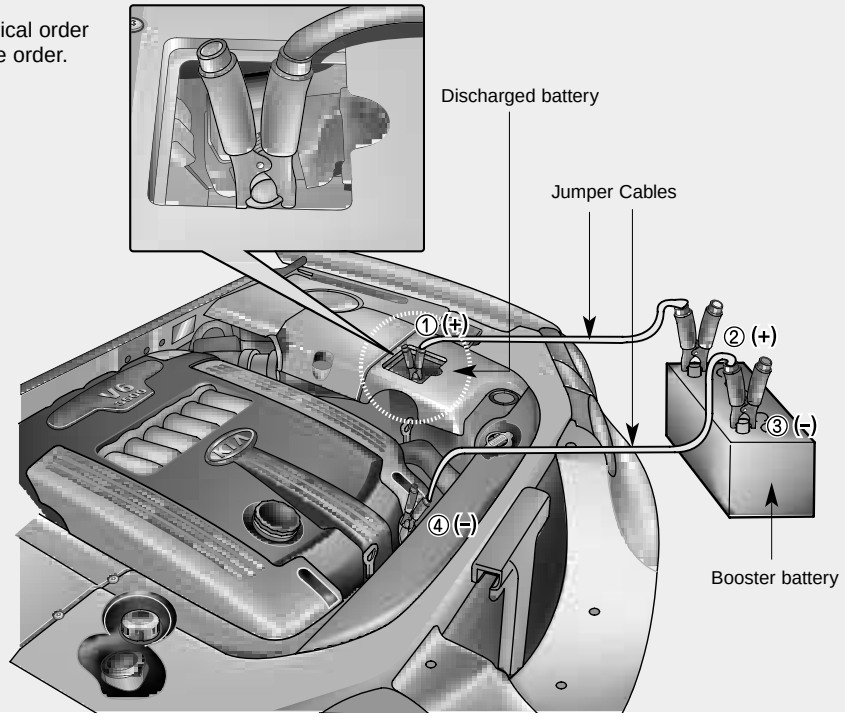
- **Keep all flames or sparks away from the battery. The battery produces hydrogen gas which may explode if exposed to flame or sparks.**
- **Do not attempt to jump start the vehicle if the discharged battery is frozen or if the electrolyte level is low; the battery may rupture or explode.**

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 to touch.

Connecting jumper cables

Connect cables in numerical order and disconnect in reverse order.



3. Turn off all unnecessary electrical loads.
4. Connect the jumper cables in the exact sequence shown in the previous illustration. First connect one end of a jumper cable to the positive terminal of the discharged battery, then connect the other end to the positive terminal on the booster battery. Proceed to connect one end of the other jumper cable to the negative terminal of the booster battery, then the other end to a solid, stationary, metallic point (for example, the engine lifting bracket) away from the battery. Do not connect it to or near any part that moves when the engine is cranked. Do not connect the jumper cable from the negative terminal of the booster battery to the negative terminal of the discharged battery.

   Do not allow the jumper cables to contact anything except the correct battery terminals or the correct ground. Do not lean over the battery when making connections.
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, you should have your vehicle checked by an authorized Kia Dealer.

Push-starting

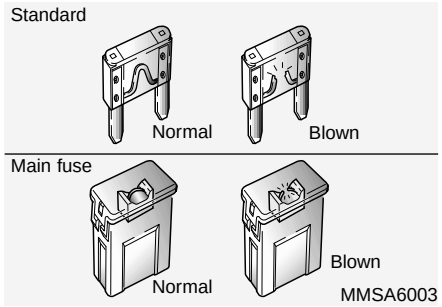
Vehicles equipped with automatic transaxle cannot be push-started.

Follow the directions in this section for jump-starting.

CAUTION

Never tow a vehicle to start it because the sudden surge forward when the engine starts could cause a collision with the tow vehicle.

ELECTRICAL CIRCUIT PROTECTION



Fuses

A vehicle's electrical system is protected from electrical overload damage by fuses.

This vehicle has two fuse panels, one located in the driver's side kick panel, the other in the engine compartment near the battery.

If any of your vehicle's lights, accessories, or controls do not work, check the appropriate circuit fuse. If a fuse has blown, the element inside the fuse will be melted.

Always replace a blown fuse with one of the same rating.

If the replacement fuse blows, this indicates an electrical problem. Avoid using the system involved and immediately consult an authorized Kia Dealer.

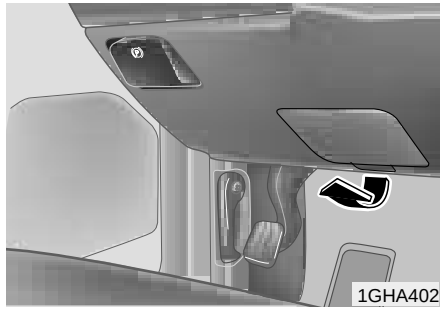
Two kinds of fuses are used: standard for lower amperage rating and main for higher amperage ratings.

Fuse replacement

⚠ WARNING - Fuse replacement

- **Never replace a fuse with anything but another fuse of the same rating.**
- **A higher capacity fuse could cause damage and possibly a fire.**
- **Never install a wire instead of the proper fuse - even as a temporary repair. It may cause extensive wiring damage and possibly a fire.**
- **Do not use a screwdriver or any other metal object to remove fuses because it may cause a short circuit and damage the system.**

If the electrical system does not work, first check the driver's side fuse panel.


1GHA402

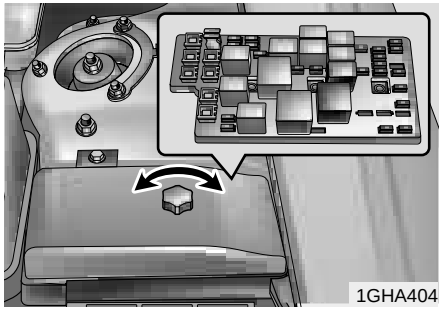
1. Turn the ignition switch and all other switches off.
2. Pull the suspected fuse straight out. Use the removal tool provided on the main fuse box in the engine compartment.
3. Check the removed fuse; replace it if it is blown.

   Spare fuses are provided in the 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, consult an authorized Kia Dealer.

If you do not have a spare, use a fuse of the same rating from a circuit you may not need for operating the vehicle, such as the radio or room lamp fuse.

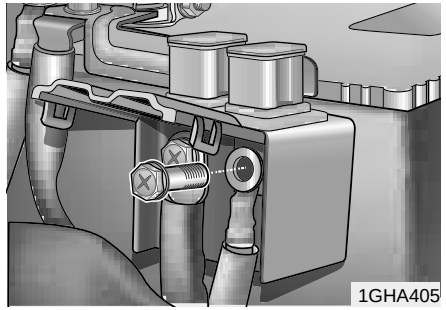
If the headlights or other electrical components do not work and the fuses are OK, check the fuse block in the engine compartment. If a fuse is blown, it must be replaced.


1GHA404

1. Turn the ignition switch and all other switches off.
2. Remove the fuse box cover by removing the bolt on the cover and unhooking the tab on one end and tilting the cover back toward the other end.
3. Check the fuses. If one is blown, replace it with a new one of the same rating.

✻ NOTICE

After checking the fuse box in the engine compartment, securely install the fuse box cover. If not, electrical failures may occur from water leaking in.

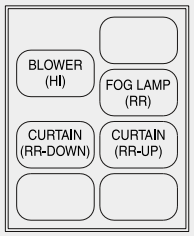

1GHA405

If the BATT (60A) or ALT (140A) fuse are blown, it must be removed as follows:

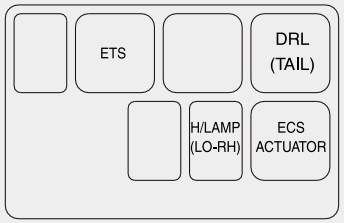
1. Disconnect the negative battery cable.
2. Remove the screws shown in the picture above.
3. Replace the fuse with a new one of the same rating.
4. Reinstall in the reverse order of removal.

Relay panel description

Passenger-side panel



Engine compartment



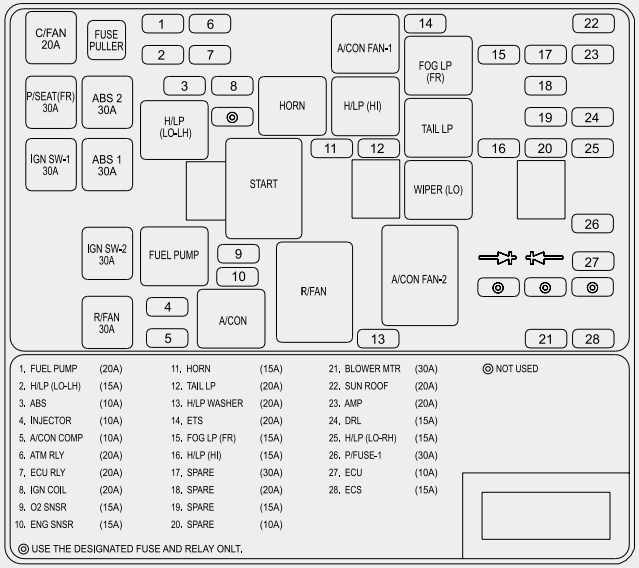
2GHA601/2GHA602

Relay name	Relay description
BLOWER (HI)	Air conditioner blower relay (high)
CURTAIN (RR-DOWN)	Electric curtain relay (rear-down)
FOG LAMP (RR)	Fog light relay (rear)
CURTAIN (RR-UP)	Electric curtain relay (rear-up)
ETS	Electronic throttle system relay
DRL (TAIL)	Daytime running light (Taillight) relay
H/LAMP (LO-RH)	Headlight relay (low beam-right)
ECS ACTUATOR	Electronic control system actuator relay

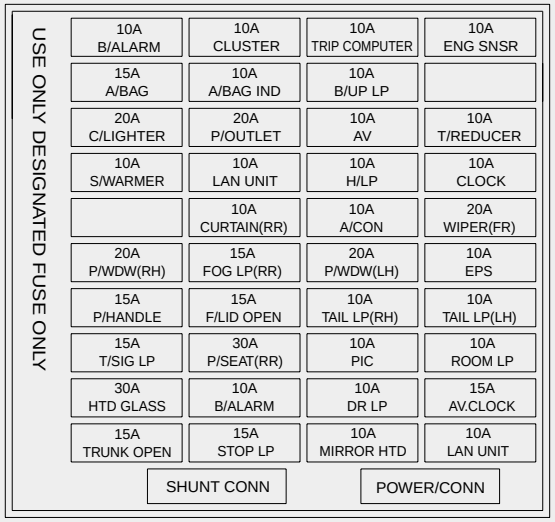
Fuse/Relay panel description

Inside the fuse/relay box covers, you can find the fuse/relay label describing fuse/relay name and capacity.

Engine compartment



Driver-side kick panel



2GHA603/2GHA604

Engine compartment

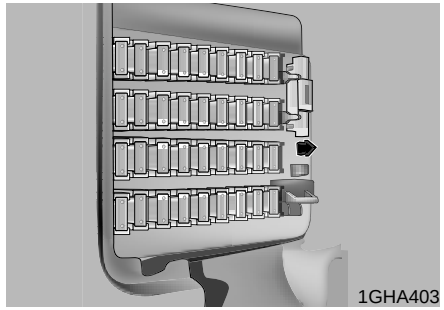
	Description	Fuse rating	Protected component
1	FUEL PUMP	20A	Fuel pump
2	H/LP (LO-LH)	15A	Headlight (low-left)
3	ABS	10A	Anti-lock brake system
4	INJECTOR	10A	Injector
5	A/CON COMP	10A	Air-conditioner compressor
6	ATM RLY	20A	Automatic transaxle control relay
7	ECU RLY	20A	Engine control unit relay
8	IGN COIL	20A	Ignition coil
9	O2 SNSR	15A	Oxygen sensor
10	ENG SNSR	15A	Power train control system sensors
11	HORN	15A	Horn
12	TAIL LP	20A	Tail light
13	H/LP WASHER	20A	Headlight washer
14	ETS	20A	Electronic throttle system
15	FOG LP (FR)	15A	Fog light (front)
16	H/LP (HI)	15A	Headlight (high)
17	SPARE	30A	spare fuse
18	SPARE	20A	spare fuse
19	SPARE	15A	spare fuse
20	SPARE	10A	spare fuse
21	BLOWER MTR	30A	Blower motor
22	SUN ROOF	20A	Sunroof
23	AMP	20A	Amp
24	DRL	15A	Daytime running light

	Description	Fuse rating	Protected component
25	H/LP (LO-RH)	15A	Headlight (low beam-right)
26	P/FUSE-1	30A	All electrical system
27	ECU	10A	Engine control unit
28	ECS	15A	Electronic control suspension
◎	NOT USED		Not used
	C/FAN	20A	Condenser fan
	P/SEAT (FR)	30A	Power seat (front)
	IGN SW-1	30A	Ignition switch
	ABS 2	30A	Anti-lock brake system
	ABS 1	30A	Anti-lock brake system
	IGN SW-2	30A	Ignition switch
	R/FAN	30A	Radiator fan
	H/LP (LO-LH)	-	Headlight relay (low beam-left)
	FUEL PUMP	-	Fuel pump relay
	HORN	-	Horn relay
	START	-	Start motor relay
	A/CON	-	Air conditioner relay
	A/CON FAN-1	-	Air conditioner fan relay
	H/LP (HI)	-	Headlight relay (high beam)
	R/FAN	-	Radiator fan relay
	FOG LP (FR)	-	Fog light relay (front)
	TAIL LP	-	Taillight relay
	WIPER (LO)	-	Wiper relay (low)
	A/CON FAN-2	-	Air conditioner fan relay

Driver side kick panel

Description	Fuse rating	Protected component
B/ALARM	10A	Burglar alarm
A/BAG	15A	Airbag
C/LIGHTER	20A	Cigar lighter
S/WARMER	10A	Seat warmer
P/WDW(RH)	20A	Power window (right)
P/HANDLE	15A	Power steering wheel
T/SIG LP	15A	Turn signal light
HTD GLASS	30A	Defroster
TRUNK OPEN	15A	Trunk lid opener
CLUSTER	10A	Cluster
A/BAG IND	10A	Airbag indicator
P/OUTLET	20A	Electrical power socket
LAN UNIT	10A	Lan unit
CURTAIN(RR)	10A	Electric curtain (rear)
FOG LP(RR)	15A	Fog light (rear)
F/LID OPEN	15A	Fuel filler lid opener
P/SEAT(RR)	30A	Power seat (rear)
B/ALARM	10A	Burglar alarm
STOP LP	15A	Stop light
TRIP COMPUTER	10A	Trip computer
B/UP LP	10A	Back-up light
AV	10A	Audio
H/LP	10A	Headlight

Description	Fuse rating	Protected component
A/CON	10A	Air-conditioning system
P/WDW(LH)	20A	Power window (left)
TAIL LP(RH)	10A	Taillight (right)
PIC	10A	Personal identification card
DR LP	10A	Door courtesy lamp
MIRROR HTD	10A	Outside review mirror defroster
ENG SNSR	10A	Power train control system sensors
T/REDUCER	10A	Seat belt tension reducer
CLOCK	10A	Clock
WIPER(FR)	20A	Wiper (front)
EPS	10A	Electronic power steering
TAIL LP(LH)	10A	Tail light (left)
ROOM LP	10A	Room lamp
AV, CLOCK	15A	Audio, Clock
LAN UNIT	10A	Lan unit
SHUNT CONN	-	Switch illumination
POWER/CONN	-	Power connector



Power connector

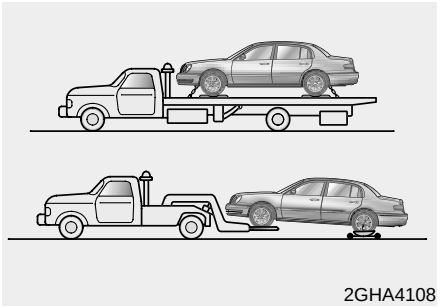
Your vehicle is equipped with a power connector to prevent battery discharge if your vehicle is parked without being operated for prolonged periods. Use the following procedures before parking the vehicle for prolonged period.

1. Turn off the engine.
2. Turn off the headlights and tail lights.
3. Open the driver-side kick panel cover and pull up the “POWER/CONN”.

✻ NOTICE

- **If the power connector is pulled up from the fuse panel, the warning chime, AV system, clock and room lamps, etc., will not operate. Some items must be reset after replacement. (Refer to “Items to be reset…” on page 7-33)**
- **Even though the power connector is pulled up, the battery can still be discharged by operation of the headlights or other electrical devices.**

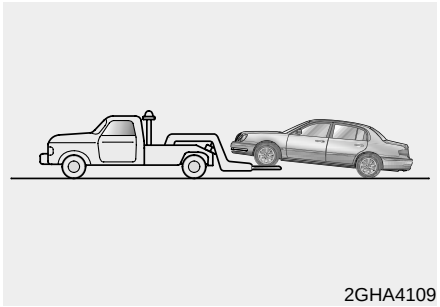
TOWING



2GHA4108

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 is recommended.

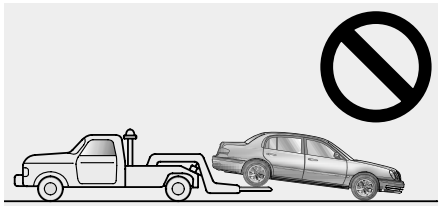
For trailer towing guidelines information, refer to section 5 “Driving Tips”.



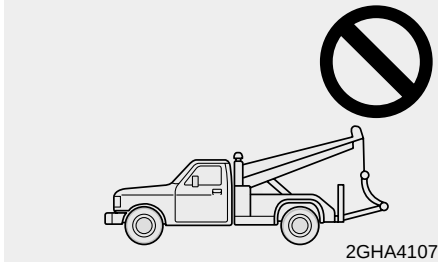
2GHA4109

It is acceptable to tow the vehicle with the rear wheels on the ground (without dollies) and the front wheels off the ground.

When being towed by a commercial tow truck and wheel dollies are not used, the front of the vehicle should always be lifted, not the rear.



2GHA4106



2GHA4107

✻ NOTICE

- **Do not tow the vehicle backwards with the front 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.**

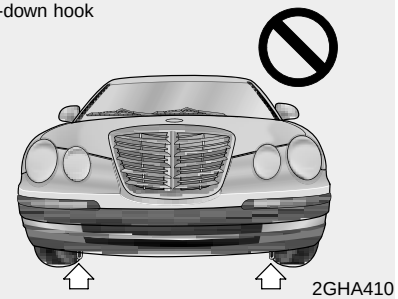
When towing your vehicle in an emergency without wheel dollies :

1. Set the ignition switch in the ACC position.
2. Place the transaxle shift lever in N (Neutral).
3. Release the parking brake.

✻ NOTICE

Failure to place the transaxle shift lever in N (Neutral) may cause internal damage to the transaxle.

Tie-down hook



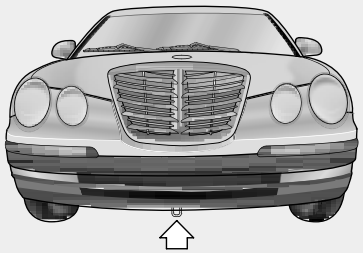
2GHA410

Tie-down hook (for flatbed towing)

CAUTION

Do not use the hooks under the front 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 will be damaged and this could lead to serious injury.

• Front



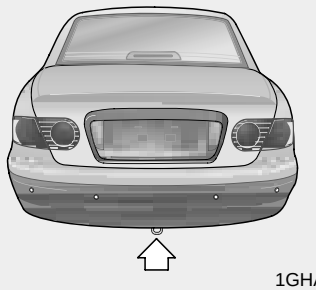
1GHA410

Towing with a vehicle other than a tow truck

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.

• Rear



1GHA417A

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 speeds. Also, the wheels, axles, power train, steering and brakes must all be in good condition.

- Do not try to tow your vehicle when the wheels are stuck in mud, sand or other condition 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.

✻ NOTICE

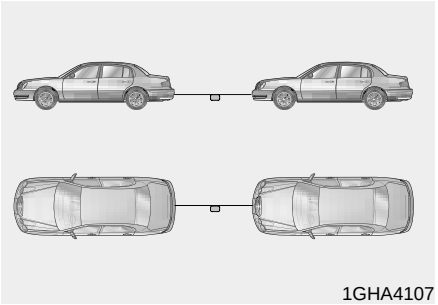
- **Attach a towing strap to the tow hook.**
- **Using a portion of the vehicle other than the tow hooks for towing may damage the body of your vehicle.**
- **Use only a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing hook provided.**

CAUTION

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 towing vehicle can hardly move, do not forcibly continue the towing. 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.***

- Before emergency towing, check that the hook is not broken or damaged.
- Fasten the towing cable or chain securely to the hook.
- Do not jerk the hook. Apply steady and even force.
- To avoid damaging the hook, do not pull from the side or at a vertical angle. Always pull straight ahead.



1GHA4107

- 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.

When your vehicle is being towed by another vehicle other than a tow truck (In case of an emergency)

- Turn the ignition switch to ACC so the steering wheel isn't locked.
- Place the transaxle shift lever in N (Neutral).
- Release the parking bake.
- Vehicle equipped with automatic transaxles should not exceed 45 km/h (28 mph) and should not be towed more than 80 km (50 miles).

- 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.

✻ NOTICE

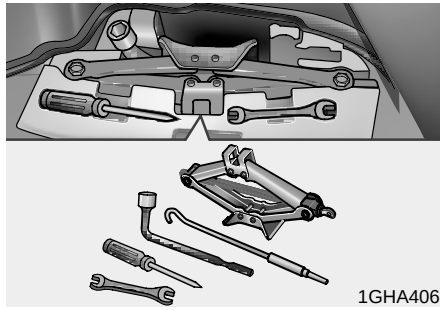
To prevent internal damage to the transaxle, never tow your vehicle from the rear (backwards) with all four tires in contact with the surface.

Tips for towing a stuck vehicle

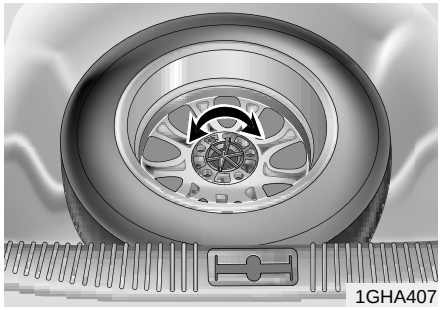
The following methods are effective when your vehicle is stuck in mud, sand or similar substances that prevent the vehicle from being driven out under its own power.

- Remove the soil and sand, etc. from the front and the back of the tires.
- Place a stone or wood under the tires.

IF YOU HAVE A FLAT TIRE


1GHA406

The spare tire, jack, jack handle, wheel lug nut wrench and spanner are stored in the trunk compartment. Move the carpeting out of the way to reach this equipment.


1GHA407

Removing the spare tire

Turn the tire hold-down wing bolt counterclockwise.

Store the tire in the reverse order of removal.

To prevent the spare tire and tools from “rattling” while the vehicle is in motion, store them properly.

Changing tires

Jacking instructions

The jack is provided for emergency tire changing only.

Follow jacking instructions to reduce the possibility of personal injury.

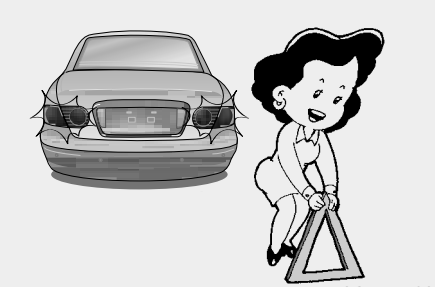
⚠ WARNING - Changing tires

- **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 level firm ground whenever possible. If you cannot find a firm, level place off the road, call a towing service company for assistance.**
- **Do not exceed the jack's maximum permissible load: 1,000 kg (2,210 lbs.).**
- **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 jack support.**

(Continued)

(Continued)

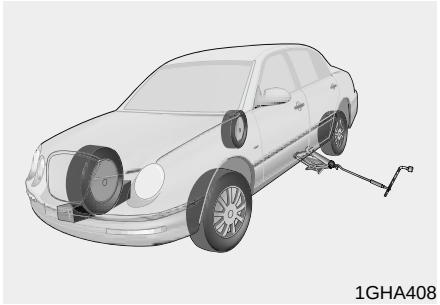
- **The vehicle can easily roll off the jack causing serious injury or death. No person should place any portion of their body under a vehicle that is supported only by a jack ; use vehicle support stands.**
- **Do not start or run the engine while the vehicle is on the jack.**
- **Do not allow anyone to 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.**



2GHA4102

Tire replacement

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.

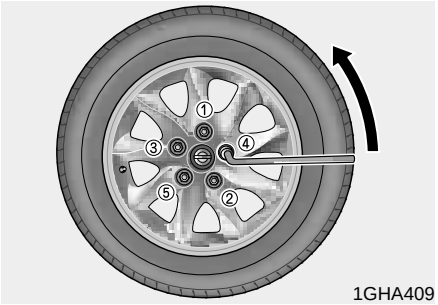


1GHA408

4. Remove the wheel lug nut wrench, jack, jack handle, and spare tire from the vehicle.
5. Block both the front and rear of the wheel that is diagonally opposite the jack position.

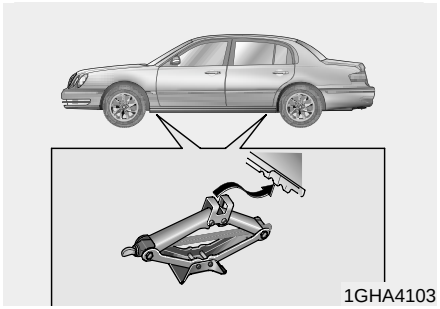
⚠ WARNING - Changing a tire

- **To prevent vehicle movements while changing a tire, always set the parking brake fully, and always block the wheel diagonally opposite the wheel being changed.**
- **It is recommended that the wheels of the vehicle be chocked, and that no person should remain in a vehicle that is being jacked.**



1GHA409

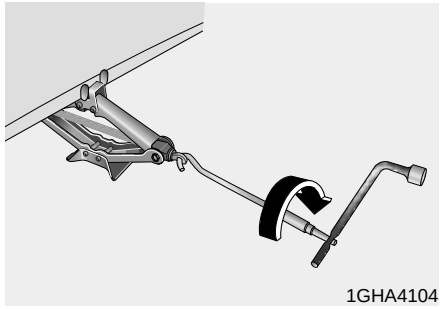
6. Loosen the wheel lug nuts counterclockwise one turn each, but do not remove any nut until the tire has been raised off the ground.


1GHA4103

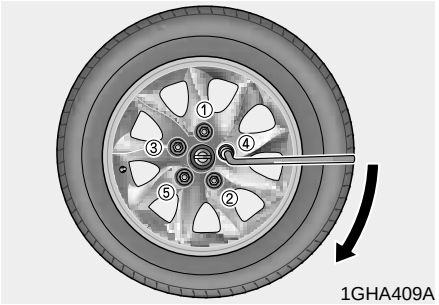
7. Place the jack at the front or rear jacking position closest to the tire you are changing. Place the jack at the designated locations under the frame. The jacking positions are plates welded to the frame with two tabs and a raised dot to index with the jack.

⚠ 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.


1GHA4104

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. Remove the wheel lug nuts by turning them counterclockwise, then remove the wheel.
10. Mount the spare tire into position and install the wheel lug nuts with the beveled edge inward.



1GHA409A

11. Once the wheel lug nuts have been tightened, lower the vehicle fully to the ground and continue to tighten the lug nuts until they are fully secured. Tighten the wheel lug nuts firmly in a “star” pattern.

    If you are unsure of the tightness of the wheel lug nuts, have them checked at the nearest service station. The specified tightening torque is 9~11 kg•m (65-79 lb•ft, 88-107 N•m). Improperly tightened wheel lug nuts could cause shaking the brake pedal while pressing it.

CAUTION

Your vehicle has metric threads on the wheel studs and nuts. Make certain during wheel removal that the same nuts 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.

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

Check the inflation pressures as soon as possible after installing the spare tire. Adjust it to the specified pressure, if necessary. Refer to Section 8, Specifications.

EMERGENCY COMMODITY (IF EQUIPPED)

There are some emergency commodities in the vehicle to help you respond to the emergency situation.

Fire extinguisher

The fire extinguisher is located in the trunk.

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 “Recommended Inflation Pressure” on the page 8-2.
6. Reinstall the inflation valve cap.

Maintenance services / 7-3
Normal maintenance schedule / 7-5
Maintenance under severe usage conditions / 7-8
Owner maintenance / 7-9
Engine compartment / 7-12
Engine oil and oil filter / 7-13
Engine cooling system / 7-16
Brakes / 7-19
Parking brake / 7-20
Power steering / 7-21
Steering wheel / 7-22
Automatic transaxle / 7-22
Lubricants and fluids / 7-25
Air cleaner / 7-25
Air conditioner air filter / 7-27

Maintenance 7

Air purifier filter / 7-28
Wiper blades / 7-29
Battery / 7-31
Tires and wheels / 7-34

1
2
3
4
5
6
7 Maintenance
8
9

Bulb replacement / 7-41
Lubricant specifications / 7-48
Exterior care / 7-50
Interior care / 7-54

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.

Should you have any doubts concerning the inspection or servicing of your vehicle, we strongly recommend that you have an Authorized Kia Dealer perform this work.

An Authorized Kia Dealer has factory-trained technicians and genuine Kia parts to service your vehicle properly. For expert advice and quality service, see an Authorized Kia Dealer.

Inadequate, incomplete or insufficient servicing may result in operational problems with your vehicle that could lead to vehicle damage, an accident, or personal injury.

Owner's responsibility

✻ NOTICE

Maintenance Service and Record Retention are the owner's responsibility.

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 Kia warranties.

Detailed warranty information is provided in your Warranty & Consumer Information Book.

Repairs and adjustments required as a result of improper maintenance or a lack of required maintenance are not covered.

We recommend to have your car repaired and maintained by an authorized KIA dealer or repairer : this person shall indeed meet our quality standards and may give you a service of high quality level.

Scheduled maintenance service

Follow Normal Maintenance Schedule if the vehicle is usually operated where none of the following conditions apply. If any of the following conditions apply, follow Maintenance Under Severe Usage Conditions.

- Repeated short distance driving.
- Driving in dusty conditions.
- Driving with extensive use of brakes.
- Driving in areas where salt or other corrosive materials are being used.
- Driving on rough or muddy roads.
- Extended periods of idling or low speed operation.
- Driving for a prolonged period in cold temperatures and/or extremely humid climates.

If your vehicle is operated under the above conditions, you should inspect, replace or refill more frequently than the following Normal Maintenance Schedule. After 96 month or 120,000 km (80,000 miles) continue to follow the prescribed maintenance intervals.

NORMAL MAINTENANCE SCHEDULE

MAINTENANCE INTERVALS / 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
Drive belts *1		I	I	I	I	I	I	I	I
Engine oil and Engine oil filter		R	R	R	R	R	R	R	R
Automatic transaxle fluid	Europe	I	I	I	I	I	R	I	I
	Except Europe	I	I	I	I	I	I	I	I
Engine timing belt					I		R		
Air cleaner element		I	I	R	I	I	R	I	I
Spark plugs		Replace every 100,000 km (60,000 miles)							
Cooling system (Including coolant level adjustment)		I	I	I	I	I	I	I	I
Engine coolant	Europe *2	At first, replace at 90,000 km or 60 months: after that, replace every 45,000 km or 24 months							
	Except Europe	Replace every 45,000 km (30,000 miles) or 24 months							

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

*1 : Adjust alternator and air conditioner drive belt, and power steering drive belt. Inspect and if necessary correct or replace.

*2 : When adding coolant, use only a qualified coolant additive 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.

NORMAL MAINTENANCE SCHEDULE (cont.)

MAINTENANCE INTERVALS / 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
Vapor hose and fuel filler cap		I		I		I		I
Fuel tank air filter	I	I	R	I	I	R	I	I
Vacuum and crankcase ventilation hoses		I		I		I		I
Fuel filter				R				R
Fuel lines and hoses	I	I	I	I	I	I	I	I
Battery condition	I	I	I	I	I	I	I	I
All electrical systems		I		I		I		I
Brake lines, Hoses and connections	I	I	I	I	I	I	I	I
Brake pedal		I		I		I		I
Parking brake		I		I		I		I
Brake fluid	I	R	I	R	I	R	I	R
Disc brake	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 INTERVALS / 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
Power steering fluid		I	I	I	I	I	I	I	I
Power steering system and hoses		I	I	I	I	I	I	I	I
Drive shaft and boots			I		I		I		I
Tire*3 (Pressure & Tread wear)		I	I	I	I	I	I	I	I
Front 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 conditioner refrigerant		I	I	I	I	I	I	I	I
Air conditioner compressor		I	I	I	I	I	I	I	I
Air conditioner air filter		R	R	R	R	R	R	R	R
Air purifier filter*	Except Europe	R	R	R	R	R	R	R	R

I : Inspect and if necessary, adjust, correct, clean or replace.
R : Replace or change

*3 : Rotate every 12,000 km (7,500 miles)
* : If equipped

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 filter		R	Every 7,500 km (5,000 miles) or 6 months	A, B, C, F, H
Air cleaner element		R	More frequently	C, E
Air conditioner air filter		R	Every 7,000 km (4,500 miles)	C, E
Engine timing belt		R	Every 60,000 km (40,000 miles) or 48 months	D, E, F, G
Spark plug		R	More frequently	B, H
Steering gearbox		I	More frequently	C, D, E, F, G
Automatic transaxle fluid	For Europe	R	Every 45,000 km (30,000 miles)	A, C, E, F, G, H, I
	Except Europe	R	Every 40,000 km (25,000 miles)	A, C, E, F, G, H, I
Brake pads, calipers and rotors		I	More frequently	C, D, G, H
Parking brake		I	More frequently	C, D, G, H
Drive shaft and boots		I	More frequently	C, D, E, F

Severe Driving Conditions

A : Repeated short distance driving
B : Extensive idling
C : Driving in dusty, rough roads
D : Driving in areas using salt or other corrosive materials or in very cold weather
E : Driving in sandy areas
F : More than 50 % driving in heavy city traffic during hot weather above 32°C (90°F)
G : Driving in mountainous areas.
H : Towing a trailer
I : Driving for patrol car, taxi, commercial car or vehicle towing
J : Driving over 170km/h (106 mile/h)

OWNER MAINTENANCE

Owner maintenance schedule

The following lists are vehicle checks and inspections that should be performed by the owner or qualified service technician at the frequencies indicated to help ensure safe, dependable operation of your vehicle.

Any adverse conditions should be brought to the attention of your dealer or qualified service technician for service advice as soon as possible.

These Owner Maintenance Checks are generally not covered by warranties and you may be charged for labor, parts and lubricants used.

When you stop for fuel:

- Check the engine oil level.
- Check coolant level in coolant reservoir.

⚠ 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 serious injury.

- Check the windshield washer fluid level.
- Look for low or under-inflated tires.

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 strange sounds, pulling to one side, increased brake pedal travel or “hard-to-push” brake pedal.
- If any slipping or changes in the operation of your transaxle occurs, check the transaxle fluid level.
- Check automatic transaxle P (Park) function.
- Check parking brake.
- Check for fluid leaks under your vehicle (water dripping from the air conditioning system after use is normal).

At least monthly:

- Check coolant level in the coolant recovery reservoir.
- Check the operation of all exterior 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 radiator, heater and air conditioning hoses for leaks or damage.
- Check windshield washer spray and wiper operation. Clean wiper blades with clean cloth dampened with washer fluid.
- Check headlight alignment.
- Check 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 body and door drain holes.
- Lubricate door hinges and checks, and hood hinges.
- Lubricate door and hood locks and latches.
- Lubricate door rubber weatherstrips.
- Check the air conditioning system before the warm weather season.
- Check the power steering fluid level.
- Inspect and lubricate automatic transaxle linkage and controls.
- Clean battery and terminals.
- Check the brake fluid level.

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.

As explained earlier in this section, several procedures can be done only by a qualified service technician with special tools.

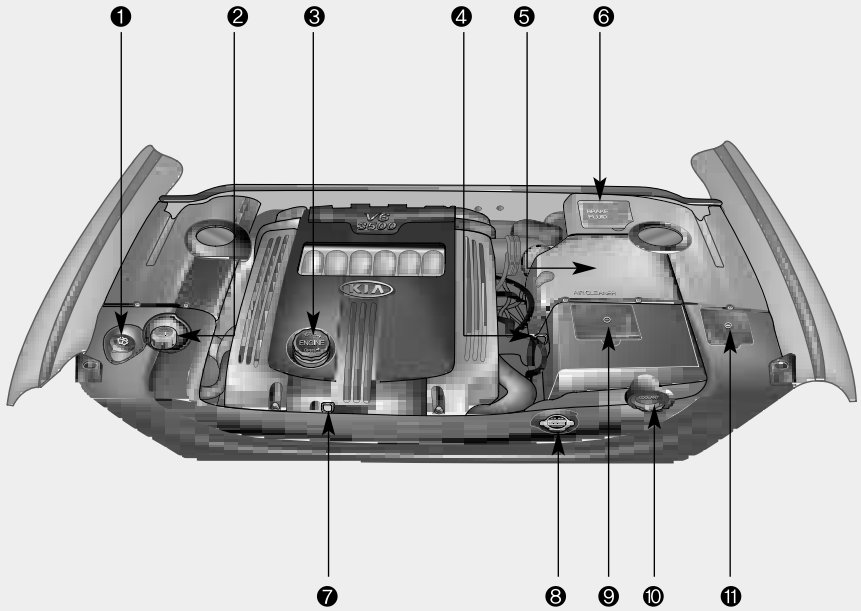
✻ NOTICE

Improper owner maintenance during the warranty period may affect warranty coverage. For details, read the separate Kia Warranty & Maintenance book provided with the vehicle. If you're unsure about any servicing or maintenance procedure, have it done 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, have it done by a qualified technician.**
- **Working under the hood with the engine running is dangerous. It becomes even more dangerous when you wear 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



1. Windshield washer fluid reservoir
2. Power steering fluid reservoir
3. Engine oil filler cap
4. Auto transaxle oil dipstick
5. Air cleaner
6. Brake/clutch fluid reservoir
7. Engine oil dipstick
8. Radiator cap
9. Positive battery terminal
10. Engine coolant reservoir
11. Negative battery terminal

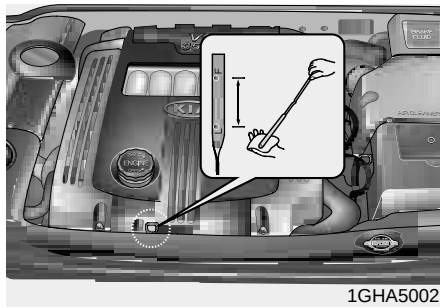
1GHA411

ENGINE OIL AND OIL FILTER

Checking the engine oil level

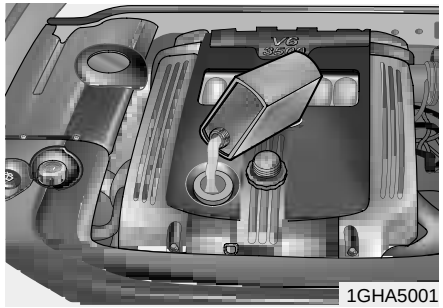
1. Be sure the vehicle is on level ground.
2. Start the engine and allow it to reach normal operating temperature.
3. Turn the engine off and wait for a few minutes (about 5 minutes) for the oil to return to the oil pan.
4. Pull the dipstick out, wipe it clean, and re-insert it fully.
5. Pull the dipstick out again and check the level. The level should be between F and L.

If it is near or at L, add enough oil to bring the level to F. **Do not overfill.**



1GHA5002

Use only the specified engine oil. (Refer to "Recommended Lubricants" later in this section.)



1GHA5001

Changing the engine oil and filter

Change engine oil and filter according to the Scheduled Maintenance at the beginning of this section.

⚠ WARNING - Engine oil

- **Continuous contact with USED engine oil has caused skin cancer in laboratory mice. Protect your skin by washing with soap and water.**
- **Keep all engine oil out of the reach of children.**

1. Warm the engine up for a few minutes and then turn it off. Remove the oil filler cap.
2. Drain the oil into a suitable container after removing the oil filler cap and drain plug.

CAUTION

Both the oil and engine are hot. Do not burn yourself.

3. Remove the engine oil filter with an oil filter wrench.

✻ NOTICE

Do not allow the oil filter gasket to remain on the oil filter mounting surface. This will cause oil leakage and engine damage. Remove the old gasket completely so that a new gasket may be properly seated.

4. Use a clean rag to clean the oil filter mounting surface on the engine.
5. Apply a small amount of engine oil to the new oil filter O-ring seal.
6. Install the oil filter and tighten it. (Refer to the oil filter caution label for tightening instructions.)
7. Install a new washer on the drain plug. Don't use an old washer repeatedly.
8. Replace the drain plug after the oil has thoroughly drained. Torque the plug to 3.5~4.5 kg•m (26~32 lb•ft, 35~44 N•m).
9. Refill the engine with new oil to the F mark on the dipstick. Do not overfill.
10. Reinstall the oil filler cap securely.
11. Start the engine and inspect around the oil filter seal for leaks. Stop the engine.
12. Check the oil level and fill to the F mark as necessary.

Oil capacity (with filter change)

With filter change :
4.3 liters (4.5 US qt.)

Without filter change :
4.0 liters (4.2 US qt.)

Use only the specified Service Grade engine oil. (Refer to "Recommended Lubricants" later in this section.)

✻ NOTICE

- **Although oil filters may have the same external appearance, their internal designs differ significantly. These filters are not interchangeable. To avoid potential engine damage, use only the specified filter. Consult an Authorized Kia Dealer.**
- **Follow these instructions carefully. An improper oil filter installation can cause oil leakage and engine damage. Drained engine oil should be disposed of properly, according to local environmental protection agency codes. It should not be thrown down the drain or in the trash.**

ENGINE COOLING SYSTEM

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.

Checking the coolant level

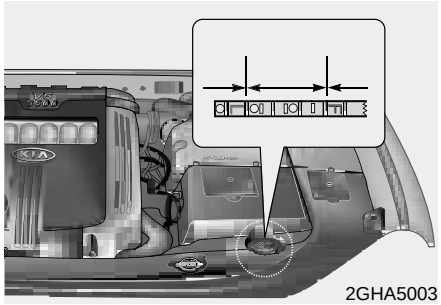
⚠ WARNING - Removing radiator cap

- **Never attempt to remove the radiator cap while the engine is operating or hot. Doing so might lead to cooling system and engine damage and could result in serious personal injury from escaping hot coolant or steam.**
- **Turn the engine off and wait until it cools down. Even then, use extreme care when removing the radiator cap. Wrap a thick towel around it, and turn it counterclockwise slowly to the first stop. Step back while the pressure is released from the cooling system. When you are sure all the pressure has been released, press down on the cap, using a thick towel, and continue turning counterclockwise to remove it.**

(Continued)

(Continued)

- **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.**


2GHA5003

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 level gauge attached to the coolant reservoir cap 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, see an Authorized Kia Dealer for a cooling system inspection.

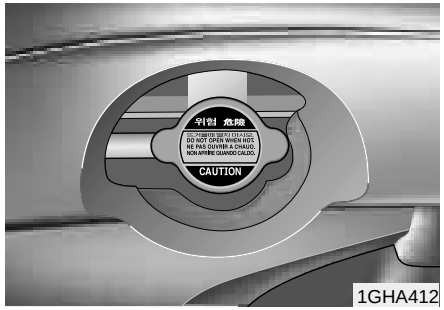
Changing coolant

Change coolant according to the Maintenance Schedule.

- Use only soft (de-mineralized) water in the coolant mixture.
- The engine in your vehicle has aluminum engine parts and must be protected by an ethylene-glycol-based coolant to prevent corrosion and freezing.
- DO NOT USE alcohol or methanol coolant 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.

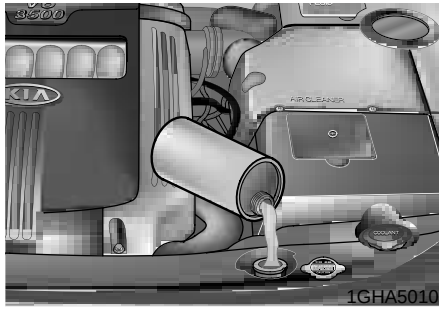
Ambient Temperature	Mixture Percentage (volume)	
	Coolant Solution	Water
-15°C (5°F)	35	65
-25°C (-13°F)	40	60
-35°C (-31°F)	50	50
-45°C (-49°F)	60	40



1GHA412

⚠ WARNING

Do not remove the radiator cap when the engine and radiator are hot. Scalding hot coolant and steam may blow out under pressure. This could cause serious injury.



1GHA5010

1. Turn the radiator cap counterclockwise to remove it.
2. Loosen the radiator drain plug and drain the coolant into a suitable container.
3. With the plug loose, flush the system with running water.
4. Drain the system completely and retighten the drain plug. Add the necessary amount of ethylene-glycol based coolant and water to provide the required protection against freezing and corrosion. In extremely cold climates, add ethylene-glycol based coolant in accordance with the instructions of the manufacturer.
5. Run the engine at idle with the radiator cap off. Slowly add additional coolant as necessary.
6. At this point, wait until the engine reaches normal operating temperature. Depress the accelerator two or three times; then add coolant as required. **Be careful not to burn yourself.**
7. Reinstall the radiator cap. Inspect all connections for leaks and recheck the coolant level in the reservoir. Recheck again after a few days and add coolant as necessary.

BRAKES

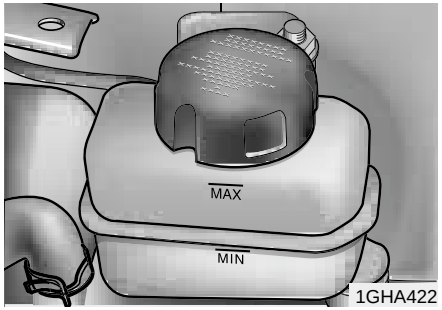


1GHA5005

Checking brake fluid level

Check the fluid level in the reservoir periodically. The fluid level should be between MAX and MIN 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.



1GHA422

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, have the brake system checked by an Authorized Kia Dealer.

Use only the specified brake fluid. (Refer to "Recommended Lubricants" later in this section.)

Never mix different types of fluid.

⚠ WARNING

In the event the brake system requires frequent additions of fluid, the vehicle should be inspected by an Authorized Kia Dealer.

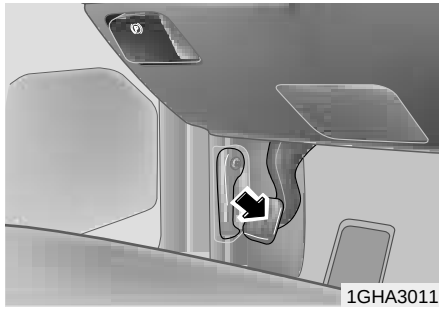
⚠ WARNING

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 thrown out. Don't put in the wrong kind of fluid. For example, just a few drops of mineral-based oil, such as engine oil, in your brake clutch system can damage brake clutch system parts.

PARKING BRAKE

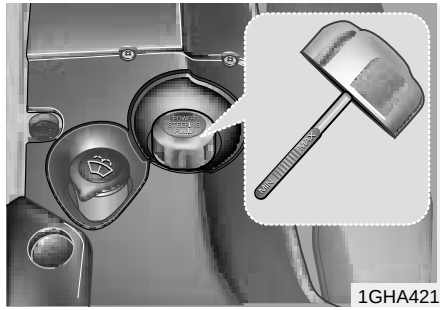

1GHA3011

Checking the parking brake

Check whether the stroke is within specification when the parking brake pedal is depressed with 20 kg (44 lb, 196 N) 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, have the parking brake adjusted by an Authorized Kia Dealer.

Stroke : 88~98 mm (3.5~3.8 in)

POWER STEERING


1GHA421

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 level gauge attached to the cap.

Before adding power steering fluid, thoroughly clean the area around the reservoir cap to prevent power steering fluid contamination.

If the level is low, add fluid to the MAX level.

In the event the power steering system requires frequent addition of fluid, the vehicle should be inspected by an Authorized Kia Dealer.

✻ NOTICE

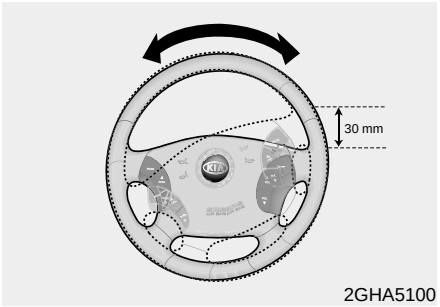
- **To avoid damage to the power steering pump, do not operate the vehicle for prolonged periods with a low power steering fluid level.**
- **Never start the engine when the reservoir tank is empty.**
- **When adding fluid, be careful that dirt does not get into the tank.**
- **Too little fluid can make the steering wheel heavier or strange noise can be generated.**
- **The use of the non-specified fluid could reduce the effectiveness of the power steering wheel and cause damage to it.**

Use only the specified power steering fluid. (Refer to "Recommended Lubricants" later in this section.)

Power steering hose

Check the connections for oil leaks, severe damage and the twists in the power steering hose before driving.

STEERING WHEEL



2GHA5100

Park the vehicle on level ground and place the tire wheels in the straight-ahead position. Turn the steering wheel to the left and right with a little force and check the free play until you get a feel for resistance against the tire wheels movement.

Standard value: 30 mm or less

✻ NOTICE

If the measured value exceeds the standard value, have the system checked by an authorized Kia dealer.

AUTOMATIC TRANSAXLE


1GHA5004

Checking the automatic transaxle fluid level

The automatic transaxle fluid level should be checked regularly.

The volume of the transaxle fluid changes with temperature. Although it is best to check the level after having driven the vehicle for at least 30 minutes, the level can be checked after warming the fluid using the following procedure.

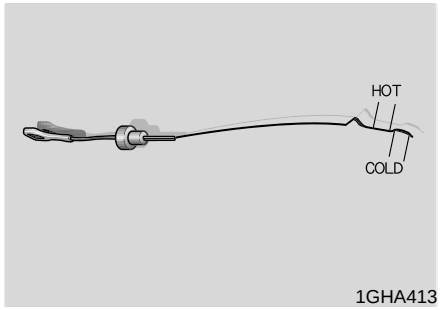
1. Park the vehicle on level ground and firmly apply the parking brake.
2. Allow the engine to idle for about 2 minutes.
3. Depress the brake pedal and move the shift lever slowly through all ranges then set it in P (Park).
4. With the engine still idling, pull out the dipstick, wipe it clean and reinsert it fully.
5. Pull out the dipstick again and check the fluid level.

CAUTION

- ***Low fluid level causes transaxle slippage. Overfilling can cause foaming, loss of fluid and transaxle malfunction.***
- ***The use of a non-specified fluid could result in transaxle malfunction and failure.***

WARNING - Parking brake

To avoid sudden movement of the vehicle, apply parking brake and depress the brake pedal before moving the shift lever.



If the fluid has been warmed to normal operating temperature of approximately 70~80°C (158~176°F), the fluid level should be within “HOT” range.

✻ NOTICE

“COLD” scale is for reference only and should NOT be used to determine transaxle fluid level.

✻ NOTICE

New automatic transaxle fluid should be red. The red dye is added so the assembly plant can identify it as automatic transaxle fluid and distinguish it from engine oil or antifreeze. The red dye, which is not an indicator of fluid quality, is not permanent. As the vehicle is driven, the automatic transaxle fluid will begin to look darker. The color may eventually appear light brown. Therefore, have an Authorized Kia dealer change the automatic transaxle fluid according to the Scheduled Maintenance at the beginning of this section.

Changing the automatic transaxle fluid

1. Raise and suitably support the vehicle.

⚠ WARNING - Lifting your vehicle

If you raise your vehicle, always ensure that it is supported at all four jacking or lift points for the vehicle. Only if this level of support is provided can you ensure that the vehicle will remain stable and not fall off the jack stands or other supports. If you do not provide such support, the vehicle may fall off the jack stands, or other supports, causing serious injury or death.

2. Remove the drain plug located at the bottom of the transaxle pan.
3. After the oil has drained completely, install a new washer on the plug, reinstall the drain plug, and tighten to 290~340 kg•cm (21~24 lb•in, 29~33 N•m).
4. Lower the vehicle.
5. Remove the automatic transaxle dipstick located near the center of the engine compartment bulkhead and, using a funnel, add approximately 2 liters (2 US quarts) of automatic transaxle fluid.

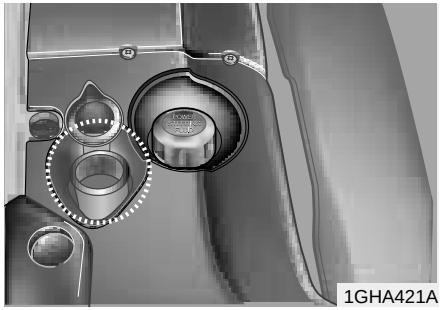
Use only the specified automatic transaxle fluid. (Refer to "Recommended Lubricants" later in this section.)

✻ NOTICE

Do NOT overfill the automatic transaxle reservoir. Doing so can cause a seal "blow out", loss of fluid, and damage to the transaxle. If you overfill the reservoir, you must drain the excess prior to driving the vehicle. The transaxle will hold 2.5L when completely empty. However, it is likely that there will be fluid left in the transaxle after draining, especially if the front of the vehicle was raised to remove the drain plug.

6. Check the fluid level. If necessary, add a small amount of fluid and check the level again. Continue this process until the level reads within "HOT" range.
7. Replace the dipstick and properly dispose of the used transaxle fluid.

LUBRICANTS AND FLUIDS


1GHA421A

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.

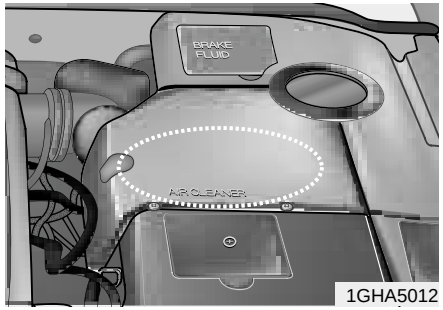
⚠ WARNING
- **Do not use radiator coolant or antifreeze in the washer fluid reservoir.**
- **Radiator coolant can severely obscure visibility when sprayed on the windshield and may cause loss of vehicle control or damage to paint and body trim.**
- **Windshield Washer fluid agents contain some amounts 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 it's 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.**

Body lubrication

All moving points of the body, such as door hinges, hood hinges, and locks, should be lubricated each time the engine oil is changed. Use a non-freezing lubricant on locks during cold weather.

Make sure the engine hood secondary latch keeps the hood from opening when the primary latch is released.

AIR CLEANER

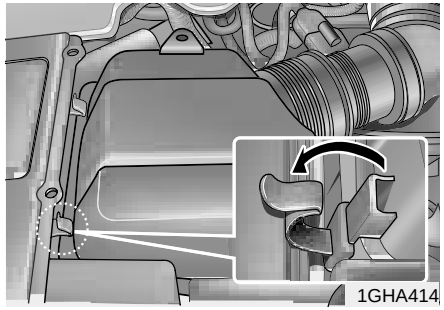


1GHA5012

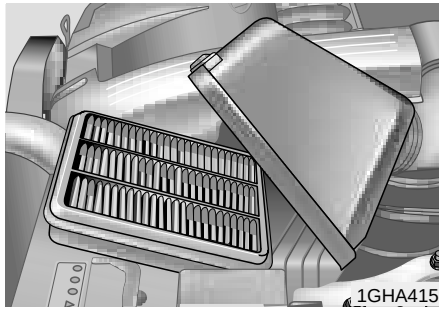
Element replacement

A viscous paper air cleaner filter is used. It must be replaced when necessary, and should not be cleaned and reused.

1. Remove the engine compartment cover on the air cleaner.



2. Loosen the air cleaner cover attaching clips and open the cover.
3. Wipe the inside of the air cleaner housing with a clean, damp cloth.



4. Replace the air cleaner element. We recommend that the air cleaner element be replaced with genuine Kia parts.
5. Lock the cover with the cover attaching clips.

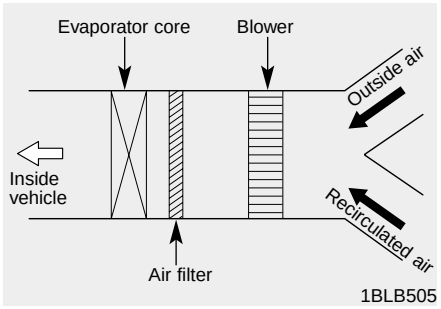
Replace the element according to the Scheduled Maintenance Section.

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.***
- ***Driving without an air cleaner encourages backfiring, which could cause a fire in the engine compartment.***
- ***When removing the air cleaner element, be careful that dust or dirt does not enter the air intake, or damage may result.***

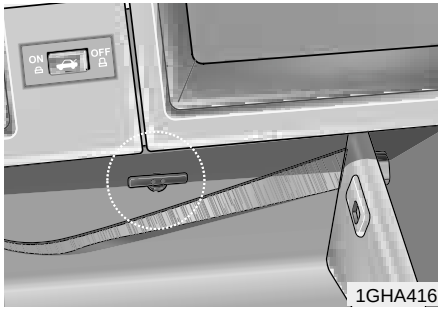
AIR CONDITIONER AIR FILTER



1BLB505

The air conditioner air filter located between the evaporator core and blower filters the air coming into the vehicle.

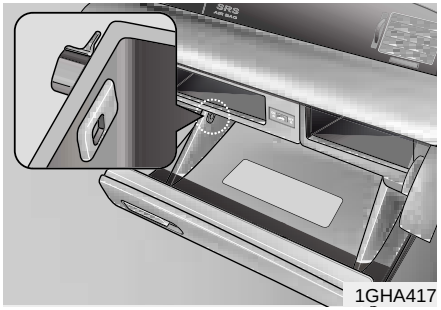
If dust or other pollutants accumulate in the filter for a period of time, the air flow from the air vents may be decreased and the dust intake may increase. Therefore the air filter should be replaced at the intervals shown in the maintenance schedule. Especially if the vehicle is operated in dusty or sandy areas, replace the filter more often than the recommended intervals.



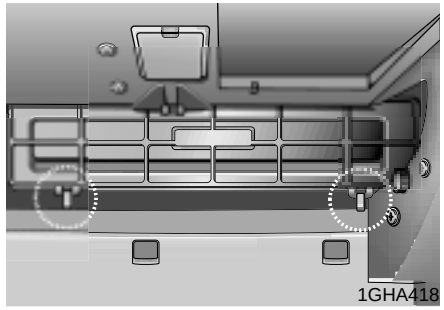
1GHA416

Filter replacement

1. Open the glove box part way, reach inside and pull out the elastic line and push the retaining clip though the hole in the rear of the glove box. Allow the glove box to open.


1GHA417

2. With the glove box open, grasp both sides of the glove box, push inward on the stoppers and pull them over the trim panel to allow the glove box hang freely on the hinges.


1GHA418

3. Pull the hooks under the air conditioner air filter cover upwards and remove the cover.



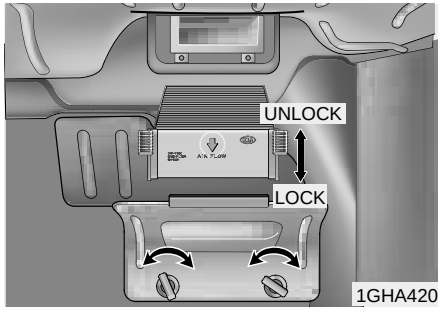
2GHA419

4. Replace the air conditioner filter.
5. Reassemble in the reverse order of disassembly.

✻ NOTICE

When replacing the air conditioner air filter install it according to the "UP" and "DOWN" identification marks. Otherwise, the system may produce noise and the effectiveness of the filter may be reduced.

AIR PURIFIER FILTER
(IF EQUIPPED)



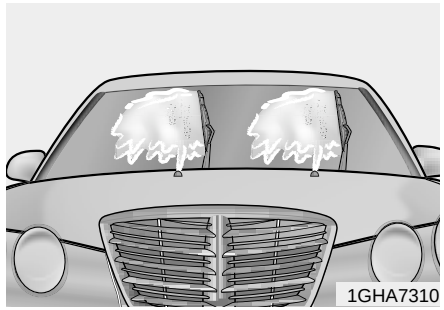
1GHA420

1. Open the trunk.
2. Loosen both plastic retaining screws on the service cover located on the upper, right area of the trunk compartment and remove the cover.
3. Push up on the locking clips located on the sides of the air purifier filter panel to release the air purifier filter.
4. Replace the air purifier filter.
5. Reassemble in the reverse order of disassembly.

✻ NOTICE

When installing a new air purifier filter, install with the arrow mark on the filter pointing downwards. Otherwise, noise can be generated and the effectiveness of the filter can be reduced.

WIPER BLADES



Wiper blade maintenance

✻ NOTICE

Commercial hot waxes applied by automatic car washes have been known to make the windshield difficult to clean.

Contamination of either the windshield or the wiper blades with foreign matter can reduce the effectiveness of the windshield wipers. Common sources of contamination are insects, tree sap, and hot wax treatments used by some commercial car washes. If the blades are not wiping properly, clean both the window and the blades with a good cleaner or mild detergent, and rinse thoroughly with clean water.

✻ NOTICE

To prevent damage to the wiper blades, do not use gasoline, kerosene, paint thinner, or other solvents on or near them.

Windshield wiper blade replacement

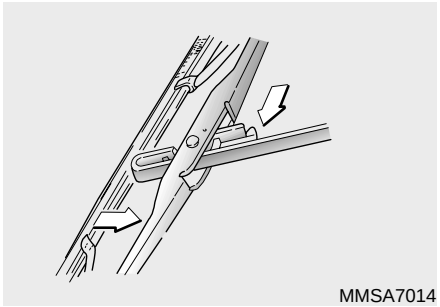
When the wipers no longer clean adequately, the blades may be worn or cracked, and require replacement.

✻ NOTICE

To prevent damage to the wiper arms or other components, do not attempt to move the wipers manually.

✻ NOTICE

The use of a non-specified wiper blade could result in wiper malfunction and failure.



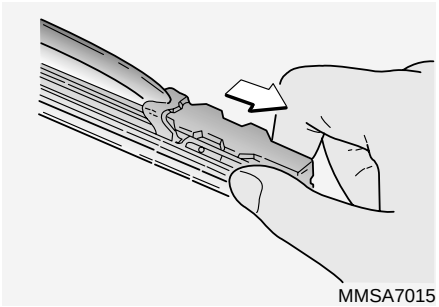
MMSA7014

1. Raise the wiper arm and turn the wiper blade assembly to expose the plastic locking clip.

   Compress the clip and slide the blade assembly downward; then lift it off the arm.

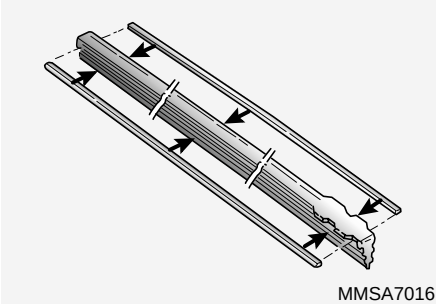
✻ NOTICE

Do not allow the wiper arm to fall against the windshield.



MMSA7015

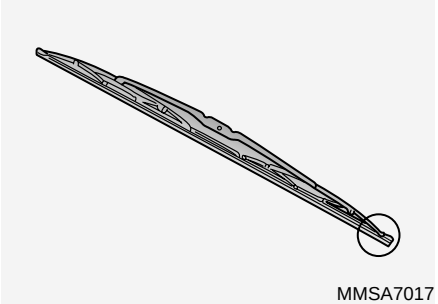
2. Firmly grasp the end of the rubber blade and pull until the tabs are free of the metal support.


MMSA7016

3. Remove the metal retainers from the rubber blade and install them in the new rubber blade.

✻ NOTICE

Do not bend the metal retainers.


MMSA7017

4. Carefully insert a new rubber blade and install the blade assembly in the reverse order of removal.

Install the blade with the tabs facing towards the bottom of the wiper arm.

BATTERY

⚠ WARNING - Battery dangers

Always read the following instructions carefully when handling a battery.

Keep lighted cigarettes and all other flames or sparks away from the battery.

Hydrogen, which is a highly combustible gas, is always present in battery cells and may explode if ignited.

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)

(Continued)



If any electrolyte gets into your eyes, flush your eyes with clean water for at least 15 minutes and get immediate medical attention. If possible, continue to apply water with a sponge or cloth until medical attention is received.

If electrolyte gets on your skin, thoroughly wash the contacted area. If you feel a pain or a burning sensation, get medical attention immediately.

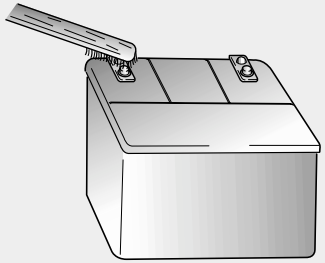


Wear eye protection when charging or working near a battery. Always provide ventilation when working in an enclosed space.

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- **When lifting a plastic-cased battery, excessive pressure on the case may cause battery acid to leak, resulting in personal injury. Lift with a battery carrier or with your hands on opposite corners.**
- **Never attempt to charge the battery when the battery cables are connected.**
- **The electrical ignition system works with high voltage. Never touch these components with the engine running or the ignition switched on.**



CBGQ0705

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.

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.

Items to be reset after the battery has been discharged or the battery has been disconnected.

- Driver seat position memory system (See page 3-40)
- Power window (See page 3-20)
- Clock (See page 3-106)
- Climate control system (See pages 4-67)
- Audio (See the audio manual)
- Sunroof (See page 3-111)

⚠ 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.**

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- **Disconnect the battery charger in the following order.**

1. **Turn off the battery charger main switch.**
2. **Unhook the negative clamp from the negative battery terminal.**
3. **Unhook the positive clamp from the positive battery terminal.**

✻ NOTICE

- **Before performing 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.**

TIRES AND WHEELS

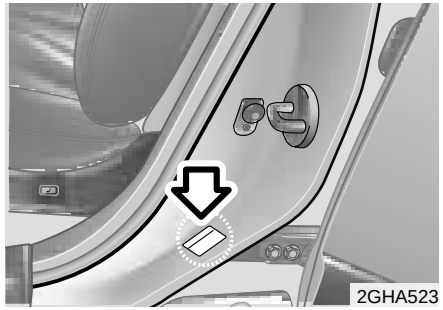
Tires care

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.

Inflation pressures

All tire pressures (including the spare) should be checked every day 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.



All specifications (sizes and pressures) can be found on a label attached to the front driver’s door sill.

⚠ WARNING

Severe underinflation (70 kPa (10 psi) or more) can lead to severe heat build-up, especially on hot days and when driving at high speed. This can potentially cause tread separation and other tire irregularities to appear that can result in the loss of vehicle control leading to severe injury or death.

✻ NOTICE

- **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 underinflated.**
- **Underinflation results in excessive wear, poor handling, reduced fuel economy, and the possibility of blowouts from overheated tires. Also, low tire pressure can cause poor sealing of the tire bead. If the tire pressure is excessively low, wheel deformation and/or tire separation is possible. So, keep your tire pressures at the proper levels. If a tire frequently needs refilling, have it checked by an Authorized Kia Dealer.**

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- **Overinflation produces a harsh ride, handling problems, excessive wear at the center of the tire tread, and a greater possibility of damage from road hazards.**
- **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 the cap have been lost, install 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.

Tire rotation

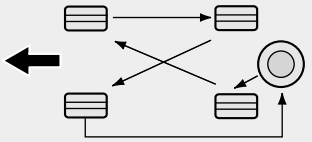
To equalize tread wear, it is recommended that the tires be rotated every 12,000 km (7,500 miles) or sooner if irregular wear develops.

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 also if you can see fabric or cord. After rotation, be sure to bring the front and rear tire pressures to specification and check lug nut tightness.

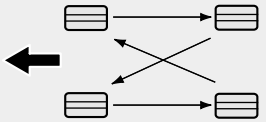
Refer to Section 8, Specifications.

With a full-size spare tire



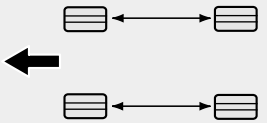
CBGQ0706

Without a spare tire



CBGQ0707

Directional tires (if equipped)

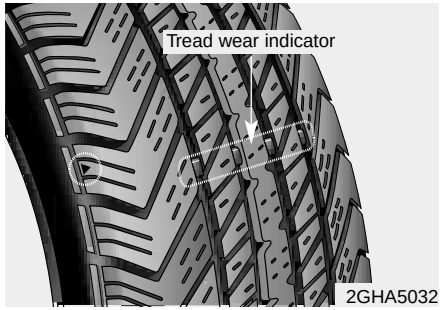


CBGQ0707A

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.



Tire replacement

If the tire is worn evenly, a tread wear indicator will appear as a solid band across the tread. This shows there is less than 1.6 mm (1/16 inch) 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.

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.

✻ NOTICE

Improper wheel weights can damage your vehicle's aluminum wheels. Use only approved wheel weights.

⚠ WARNING

- **When replacing tires, never mix radial, bias-belted, and bias-type tires. All four tires should be of the same size, design and construction. Use only the tire sizes listed on the Tire Label found below the door striker on the driver's side. Make sure that all tires and wheels are the same size and have the same load-carrying capacity. Use only tire and wheel combinations recommended on the Tire Label or by an Authorized Kia Dealer. Failure to follow these precautions can adversely affect the safety and handling of your vehicle.**

(Continued)

(Continued)

- **The use of any other tire size or type may seriously affect ride, handling, ground clearance, tire clearance, and speedometer calibration.**
- **Driving on worn-out tires is very hazardous and will reduce braking effectiveness, steering accuracy, and traction.**
- **It is best to replace all four tires at the same time. If that is not possible, or necessary, then replace the two front or two rear tires as a pair. Replacing just one tire can seriously affect your vehicle's handling.**

Wheel replacement

When replacing the metal wheels for any reason, make sure the new wheels are equivalent to the original factory units in diameter, rim width and offset.

⚠ 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 calibration, headlight aim and bumper height.

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 car. The following explains what the letters and numbers in the tire size designation mean.

Example tire size designation:

225/60 R16 98V

225 - Tire width in millimeters.

60 - Aspect ratio. The tire's section height as a percentage of its width.

R - Tire construction code (Radial).

16 - Rim diameter in inches.

98 - Load Index, a numerical code associated with the maximum load the tire can carry.

V - 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:

6.5 JX16

6.5 - Rim width in inches.

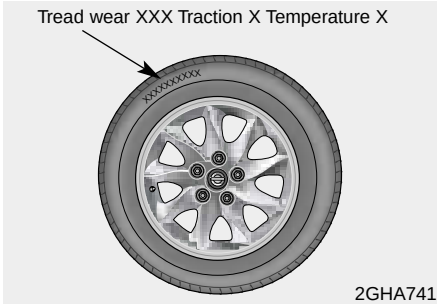
J - Rim contour designation.

16 - Rim diameter in inches.

Tire speed ratings

The chart below shows many of the different speed ratings currently being used for passenger car. The speed rating symbol 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)



Uniform tire quality grading

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 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, performance may differ from the norm because of 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 Kia vehicles may vary with respect to grade.

Traction - A, B & C

The traction grades, from highest to lowest, are A, B and C. The grades represent the tires 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. The grades represent 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 tires to degenerate and reduce tires life, and excessive temperature can lead to sudden tires failure. Grades A and B represent higher levels of performance on the laboratory test wheel than the minimum required by the law.

⚠ 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 tires failure. This can cause loss of vehicle control and serious injury or death.

Checking a tire life

If any tires that are over 6 years based on the manufacturing date, tire strength and performance decline with age naturally (even if the tires are not used like a spare tire). Therefore, the tires should be replaced by new ones including the spare tire. You can find the manufacturing date on the tire sidewall (possibly only on the inside of the wheel), which has DOT marking. DOT is serial numbers on tires, which consist of a combination of numbers and English letters. You can check the manufacturing date to the last four position of the DOT.

DOT : XXXX XXXX OOOO

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 1602 represents that the tire was produced in the 16th week of 2002.

⚠ WARNING

A tire more than 6 years old may cause separation of the cord layers inside the tire leading to loss of vehicle or a serious injury. Therefore, make sure to check the manufacturing date and replace the old tire in 6 years after the tire manufacturing date.

BULB REPLACEMENT

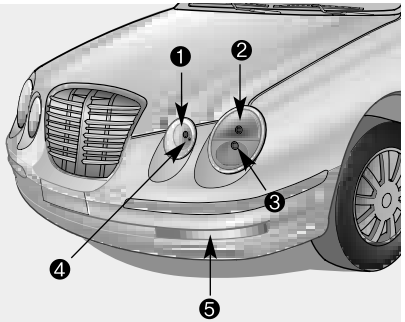
⚠ WARNING - Working on the lights

Prior to working on the light, firmly apply the parking brake and ensure that the ignition switch is turned to the "LOCK" position to avoid sudden movement of the vehicle and burning your fingers or receiving an electric shock.

Use only the bulbs of the specified wattage.

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 the bulb. Especially if you must remove the front bumper to replace the light bulbs in the front of the vehicle. This may result in damage to the vehicle.



① Headlight (High)
② Headlight (Low)
③ Front fog light
④ Position light
⑤ Front turn signal light

1GHA5013

Headlight bulb replacement

✻ NOTICE

After heavy, driving rain or washing, headlight and taillight 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.



2GHA744

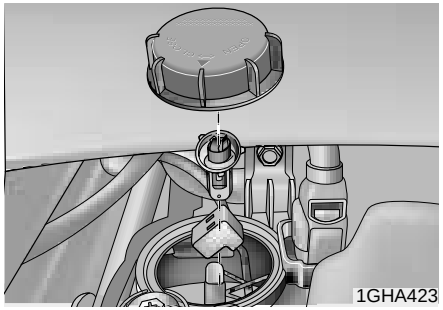
⚠ WARNING - Halogen bulbs

- **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. A bulb should be operated only when installed in a headlight.**

(Continued)

(Continued)

- **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.**



1GHA423

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.

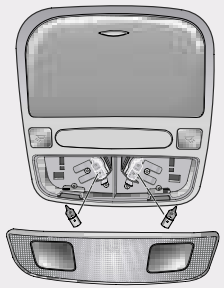
Headlight (HID type), position and front fog light, and turn signal light bulb replacement

If the light bulb is not operating, have the vehicle checked by an authorized Kia Dealer.

⚠ WARNING - HID Headlight low beam (if equipped)

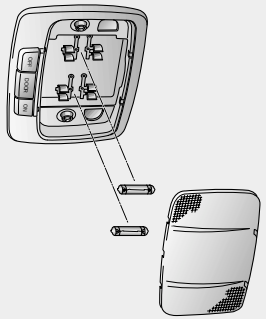
Do not attempt to replace or inspect the low beam (XENON bulb) due to electric shock danger. If the low beam (XENON bulb) is not working, have your vehicle checked by an Authorized Kia Dealer.

Front map lamp



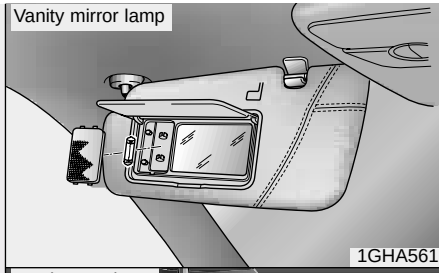
2GHA424

Center dome lamp



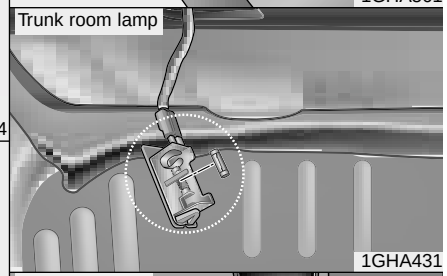
2GHA746

Vanity mirror lamp



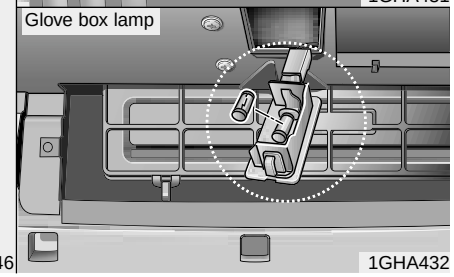
1GHA561

Trunk room lamp



1GHA431

Glove box lamp



1GHA432

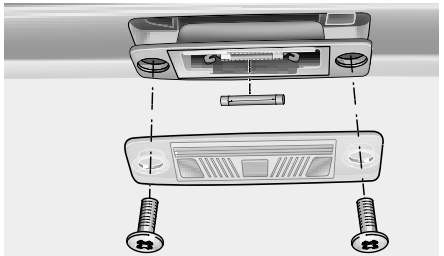
Interior lights bulb replacement

1. Using a flat-blade screwdriver, gently pry the lens from the interior light housing.

CAUTION

Prior to working on the Interior Lights, ensure that the "OFF" button is depressed to avoid burning your fingers or receiving an electric shock.

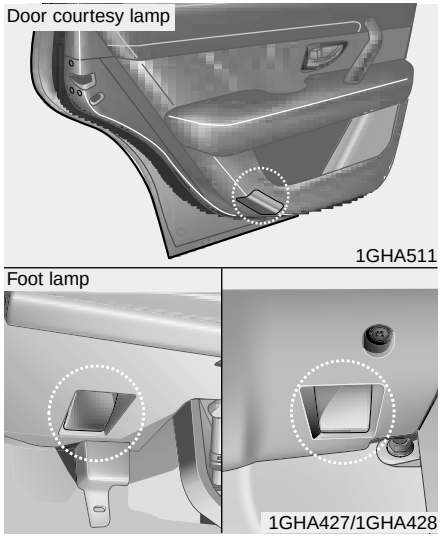
2. Remove the bulb by pulling it straight out.
3. Install a new bulb.
4. Align the lens tabs with the interior light housing notches and snap the lens into place.



1GHA433

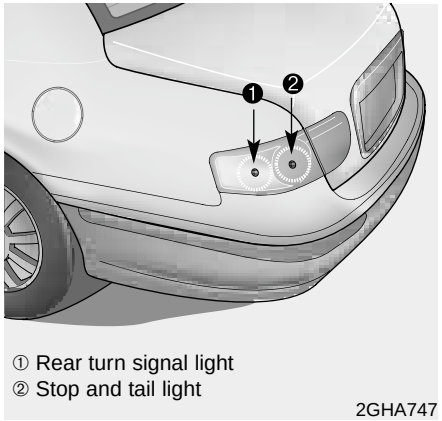
License plate light

1. Loosen the lens retaining screws with a cross-tip 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 and foot lamp bulb replacement

If the light bulb is not operating, have the vehicle checked by an authorized Kia Dealer.

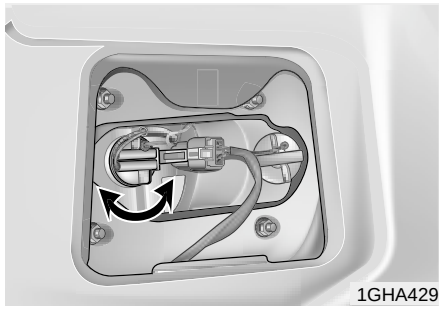


Rear combination light bulb replacement

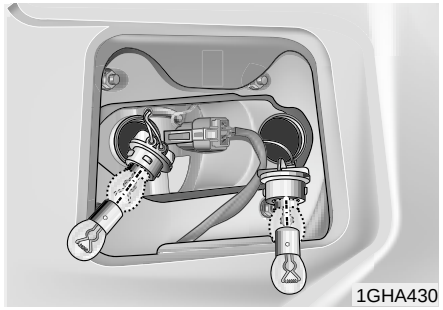
1. Open the trunk lid.



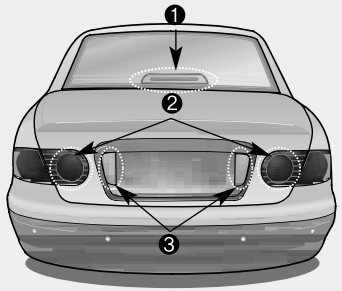
2. Remove the service cover by turning the plastic screw counterclockwise and removing the cover.



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 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. Replace the service cover and tighten the screw.

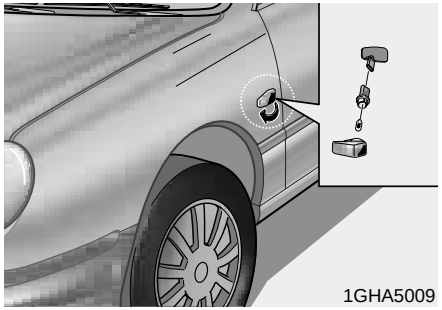


① High mounted stop light
② Rear fog light or Tail light
③ Back-up light

1GHA5008

Rear fog or tail, back-up and high mounted stop light bulb replacement

If the light bulb is not operating, have the vehicle checked by an authorized Kia Dealer.



1GHA5009

Side repeater light

1. Remove the light assembly from the vehicle by pushing the lens forward and pulling the assembly out.
2. Disconnect the bulb electrical connector.
3. Separate the socket and the lens parts by turning the socket counter clockwise until the tabs on the socket align with the slots on the lens part.
4. Remove the bulb by pulling it straight out.
5. Insert a new bulb in the socket.
6. Reassemble the socket and the lens part.
7. Connect the bulb electrical connector.
8. Reinstall the light assembly to the body of the vehicle.

LUBRICANT SPECIFICATIONS

Recommended lubricants

To help achieve proper engine and powertrain performance and durability, use only lubricants of the proper quality. The correct lubricants also help promote engine efficiency that results in improved fuel economy.

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.

These lubricants and fluids are recommended for use in your vehicle.

Lubricant	Classification
Engine oil *1	API Service SL or above, ILSAC GF-3 or above
Automatic transaxle fluid	DIAMOND ATF SP-III or SK ATF SP-III
Power steering fluid	PSF-IV
Brake fluid	FMVSS116 DOT-3 or DOT-4

*1 Refer to the recommended SAE viscosity numbers on the next page.

Recommended SAE viscosity number

✻ NOTICE

Always be sure to clean the area around any filler plug, drain plug, or dipstick before checking or draining any lubricant. This is especially important in dusty or sandy areas and when the vehicle is used on unpaved roads. Cleaning the plug and dipstick areas will prevent dirt and grit from entering the engine and other mechanisms that could be damaged.

Engine oil viscosity (thickness) has an effect on fuel economy and cold weather operating (starting and oil flow). Lower viscosity engine oils can provide better fuel economy and cold weather performance, however, higher viscosity engine oils are required for satisfactory lubrication in hot weather. Using oils of any viscosity other than those recommended could result in engine damage.

When choosing an oil, consider the range of temperature your vehicle will be operated in before the next oil change. 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	
Engine Oil *[1]							20W-50			
							15W-40			
							10W-30			
							5W-20, 5W-30			

1. For better fuel economy, it is recommended to use the engine oil of a viscosity grade SAE 5W-20,5W-30 (API SL / ILSAC GF-3). However, if the engine oil is not available in your country, select the proper engine oil using the engine oil viscosity chart.

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.

✻ NOTICE

Do not use strong soap, chemical detergents or hot water, and do not wash the vehicle in direct sunlight or when the body of the vehicle is warm.

⚠ 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.

CAUTION

- ***Water washing in the engine compartment may cause the failure of electrical circuits located in the engine compartment.***
- ***Pay extreme attention to wash the engine compartment by using water.***

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.

✻ NOTICE

- **Wiping dust or dirt off the body with a dry cloth will scratch the finish.**
- **Do not use steel wool, abrasive cleaners, or strong detergents containing highly alkaline or caustic agents on chrome-plated or anodized aluminum parts. This may result in damage to the protective coating and cause discoloration or paint deterioration.**

Finish damage repair

Deep scratches or stone chips in the painted surface must be repaired promptly. Exposed metal will quickly rust and may develop into a major repair expense.

✻ NOTICE

If your vehicle is damaged and requires any metal repair or replacement, be sure the body shop applies anti-corrosion materials to the parts repaired or replaced.

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 doors, rocker panels, and frame members have drain holes that should not be allowed to clog with dirt; trapped water in these areas can cause rusting.

⚠ 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.
- 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 acid detergent. It may damage and corrode the aluminum wheels coated with a clear protective finish.

INTERIOR CARE

Interior general precautions

Prevent caustic solutions such as perfume and cosmetic oil from contacting the dashboard because they may cause damage or discoloration. If they do contact the dashboard, wipe them off immediately. See the instructions that follow for the proper way to clean vinyl.

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 glass cleaner. Follow the directions on the glass cleaner container.

✻ NOTICE

Do not scrape or scratch the inside of the rear window. This may result in damage to the rear window defroster grid.

Specifications

SPECIFICATIONS

The specifications given here are for general information only. Please check with an authorized Kia dealer for more precise and more up-to-date information.

Dimensions

Item	mm (in)
Overall length	4,979 (196.0)
Overall width	1,850 (72.8)
Overall height	1,486 (58.5)
Front tread	1,570 (61.8)
Rear tread	1,560 (61.4)
Wheelbase	2,800 (110.2)

Tires

Item		Front	Rear
Tire size		225/60R16 98V	225/60R16 98V
Inflation pressure kg/cm^2 (psi, kPa)	Normal load*1	2.15 (31, 215)	2.10 (30, 210)
	Maximum load	2.25 (33, 225)	2.10 (30, 210)
Wheel size		6.5J x 16	6.5J x 16
Wheel lug nut torque kg·m (lb·ft, N·m)		9~11 (65~79, 88~107)	9~11 (65~79, 88~107)

*1 Normal load : Up to 4 persons

Light Bulbs

Light Bulb	Wattage
Headlights (High/Low)	55/55 or 35 *1)
Front turn signal lights (LED type)	13.2
Position lights	5
Side repeater lights	5
Front fog lights (if equipped)	55
Rear fog lights (if equipped)	21
Stop and tail lights	21/5
Rear turn signal lights	21
Back-up lights	16
High mounted stop light (LED type)	2.54
License plate lights	5
Front map lamp	5
Center dome lamp	10
Door courtesy lamps	5
Vanity mirror lamps	3
Trunk room lamp	5
Foot lamp	5
Glove box lamp	5

*1) HID type

Capacities

Lubricant	Volume (*l*)	Classification
Engine oil *1 (with filter change)	4.3	API Service SL or above, ILSAC GF-3 or above
Transaxle fluid	8.5	DIAMOND ATF SP-III, SK ATF SP-III
Power steering	1.0	PSF-IV
Coolant	10.2	Ethylene glycol base for aluminum radiator
Brake fluid	0.7~0.8	FMVSS116 DOT-3 or DOT-4
Fuel	70	-

*1 Refer to the recommended SAE viscosity numbers on the page 7-49.

1
2
3
4
5
6
7
8
Index 9

A

Air cleaner ····· 7-25
Air conditioner air filter ····· 7-27
Air purifier ····· 3-109
Air purifier filter ····· 7-29
Airbags-supplemental restraint system ····· 3-66
Antenna ····· 3-112
Automatic climate control system ····· 4-67
Automatic transaxle ····· 4-8, 7-22

B

Back warning system ····· 4-50
Battery ····· 7-31
Before driving ····· 4-2
Brake system ····· 4-14
Brakes ····· 7-19
Bulb replacement ····· 7-41

C

Cruise control system ····· 4-24

D

Defroster ····· 4-65
Door locks ····· 3-13
Driver position memory system ····· 3-40

E

e-key (Electronic key) ····· 3-9
Electrical circuit protection ····· 6-7
Electronic controlled suspension ····· 4-35
Electronic stability program ····· 4-32
Emergency commodity ····· 6-24
Emergency starting ····· 6-4
Emission control system ····· 5-3
Engine compartment ····· 7-12
Engine cooling system ····· 7-16
Engine oil and oil filter ····· 7-13
Exterior care ····· 7-50
Exterior overview ····· 2-2

F

Fuel filler lid ····· 3-91
Fuel requirements ····· 5-2

G

Gauges ····· 4-39

H

Hazard warning flasher ····· 4-66
Hood ····· 3-90
How to use this manual ····· 1-2

I

If you have a flat tire ····· 6-10
Ignition switch ····· 4-3
Immobilizer system ····· 4-5
Instrument cluster ····· 4-37
Instrument panel overview ····· 2-5
Interior care ····· 7-54
Interior features ····· 3-102
Interior lights ····· 3-98
Interior overview ····· 2-4

K

Key ····· 3-3

L

Label information ····· 8-22
Lighting ····· 4-54
Lubricant specifications ····· 8-2
Lubricants and fluids ····· 7-25

M

Maintenance services ····· 7-3
Maintenance under severe usage conditions ····· 7-8
Mirrors ····· 3-94

N

Normal maintenance schedule ····· 7-5

O

Overheating ····· 6-3
Overloading ····· 5-21
Owner maintenance ····· 7-9

P

Parking brake ····· 7-20
Power steering ····· 7-21

R

Remote keyless entry ····· 3-6
Road warning ····· 6-2

S

Safety belts ····· 3-42
Seat ····· 3-2
Special driving conditions ····· 5-7
Specifications ····· 8-3
Starting the engine ····· 5-4
Steering wheel ····· 4-21, 7-22
Storage compartment ····· 3-99
Suggestions for economical operation ····· 5-6
Sunroof ····· 3-109

T

Theft-alarm system ····· **4-85**
Tires and wheels ····· **7-34**
Towing ····· **6-14**
Traction control system ····· **4-29**
Trailer towing ····· **5-13**
Trunk ····· **3-85**

V

Vehicle break-in process ····· **1-3**

W

Warnings and indicators ····· **4-41**
Window ····· **3-18**
Windshield defrosting and defogging ····· **4-83**
Wiper blades ····· **7-29**
Wipers and washers ····· **4-60**