2016 OWNER'S MANUAL

CADENZA

KIA

The Power to Surprise

Kia, THE COMPANY

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

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

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

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

Drive safely and enjoy your Kia!

Thank you for choosing a Kia vehicle.

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

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

The information and specifications provided in this manual were accurate at the time of printing. Kia reserves the right to discontinue or change specifications or design at any time without notice and without incurring any obligation. If you have questions, always check with your Kia dealer.

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

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HOW TO USE THIS MANUAL

We want to help you get the greatest possible driving pleasure from your vehicle. Your Owner's Manual can assist you in many ways. We strongly recommend that you read the entire manual. In order to minimize the chance of death or injury, you must read the WARNING and CAUTION sections in the manual.

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

The general layout of the manual is provided in the Table of Contents. Use the index when looking for a specific area or subject; it has an alphabetical listing of all located in the back of this 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 will find various types of safety instructions in this manual. These instructions were prepared to enhance your personal safety.

Carefully read and follow ALL procedures and recommendations provided in these instructions.

⚠ WARNING

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

⚠ CAUTION

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

✻ NOTICE

A NOTICE indicates interesting or helpful information is being provided.

FUEL REQUIREMENTS

Your new Kia vehicle is designed to use only unleaded fuel having a pump octane number ((R+M)/2) of 87 (Research Octane Number 91) or higher. (Do not use methanol blended fuels)

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

Never add any fuel system cleaning agents to the fuel tank other than what has been specified. (Consult an authorized Kia dealer for details.)

⚠ WARNING - Refueling

- **Do not "top off" after the nozzle automatically shuts off. Attempts to force more fuel into the tank can cause fuel overflow onto you and the ground causing a risk of fire.**
- **Always check that the fuel cap is installed securely to prevent fuel spillage, especially in the event of an accident.**

Tighten the cap until it clicks once. otherwise the Check Engine light will illuminate.

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.

Pursuant to EPA regulations, ethanol may be used in your vehicle. Do not use gasohol containing more than 10% ethanol, and do not use gasoline or gasohol containing any methanol. Ethanol provides less energy than gasoline and it attracts water, and it is thus likely to reduce your fuel efficiency and could lower your MPG results. Methanol may cause drivability problems and damage to the fuel system, engine control system and emission control system. Discontinue using gasohol of anykind if drivability problems occur. Vehicle damage or drivability problems may not be covered by the manufacturer's warranty if they result from the use of:

1. Gasoline or gasohol containing methanol.
2. Leaded fuel or leaded gasohol.

"E85" fuel is an alternative fuel comprised of 85 percent ethanol and 15 percent gasoline, and is manufactured exclusively for use in Flexible Fuel Vehicles. “E85” is not compatible with your vehicle. Use of “E85” may result in poor engine performance and damage to your vehicle's engine and fuel system. Kia recommends that customers do not use fuel with an ethanol content exceeding 10 percent.

✻ NOTICE

Your New Vehicle Limited Warranty does not cover damage to the fuel system or any performance problems caused by the use of “E85” fuel.

Other fuels

Using fuels that contain Silicone (Si), MMT (Manganese, Mn), Ferrocene (Fe), and Other metalic additives, may cause vehicle and engine damage or cause misfiring, poor acceleration, engine stalling, catalyst melting, clogging, abnormal corrosion, life cycle reduction, etc.

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

✻ NOTICE

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

Gasoline containing MMT

Some gasoline contains harmful manganese-based fuel additives such as MMT (Methylcyclopentadienyl Manganese Tricarbonyl).

Kia does not recommend the use of gasoline containing MMT.

This type of fuel can reduce vehicle performance and affect your emission control system.

The malfunction indicator lamp on the cluster may come on.

Do not use methanol

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

Fuel Additives

Kia recommends that you use good quality gasolines treated with detergent additives such as TOP TIER Detergent Gasoline, which helps prevent deposit formation in the engine. These gasolines will help the engine run cleaner and enhance performance of the Emission Control System. For more information on TOP TIER Detergent Gasoline, please go to the website (www.toptiergas.com).

For Customers who do not use TOP TIER Detergent Gasoline regularly, and have problems starting or the engine does not run smoothly, additives that you can buy separately may be added to the gasoline. If TOP TIER Detergent Gasoline is not available, one bottle of additive added to the fuel tank at 7,500 miles or every engine oil change is recommended. Additives are available from your authorized Kia dealer along with information on how to use them. Do not mix other additives.

Operation in foreign countries

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

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

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

VEHICLE DATA COLLECTION AND EVENT DATA RECORDERS

This vehicle is equipped with an event data recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, such as an air bag deployment or hitting a road obstacle, data that will assist in understanding how a vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less. The EDR in this vehicle is designed to record such data as:

- **How various systems in your vehicle were operating;**
- **Whether or not the driver and passenger safety belts were buckled/ fastened;**
- **How far (if at all) the driver was depressing the accelerator and/or brake pedal; and,**
- **How fast the vehicle was traveling.**

These data can help provide a better understanding of the circumstances in which crashes and injuries occur. NOTE: EDR data are recorded by your vehicle only if a non-trivial crash situation occurs; no data are recorded by the EDR under normal driving conditions and no personal data (e.g., name, gender, age, and crash location) are recorded. However, other parties, such as law enforcement, could combine the EDR data with the type of personally identifying data routinely acquired during a crash investigation.

To read data recorded by an EDR, special equipment is required, and access to the vehicle or the EDR is needed. In addition to the vehicle manufacturer, other parties, such as law enforcement, that have the special equipment, can read the information if they have access to the vehicle or the EDR.

Your vehicle at a glance

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Engine compartment **2-6**

EXTERIOR OVERVIEW

■ Front view

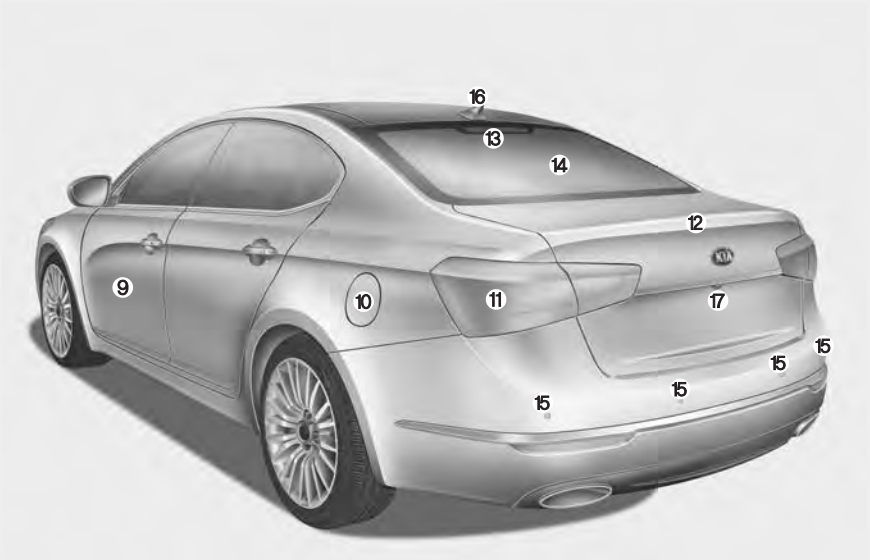


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❈ The actual shape may differ from the illustration.

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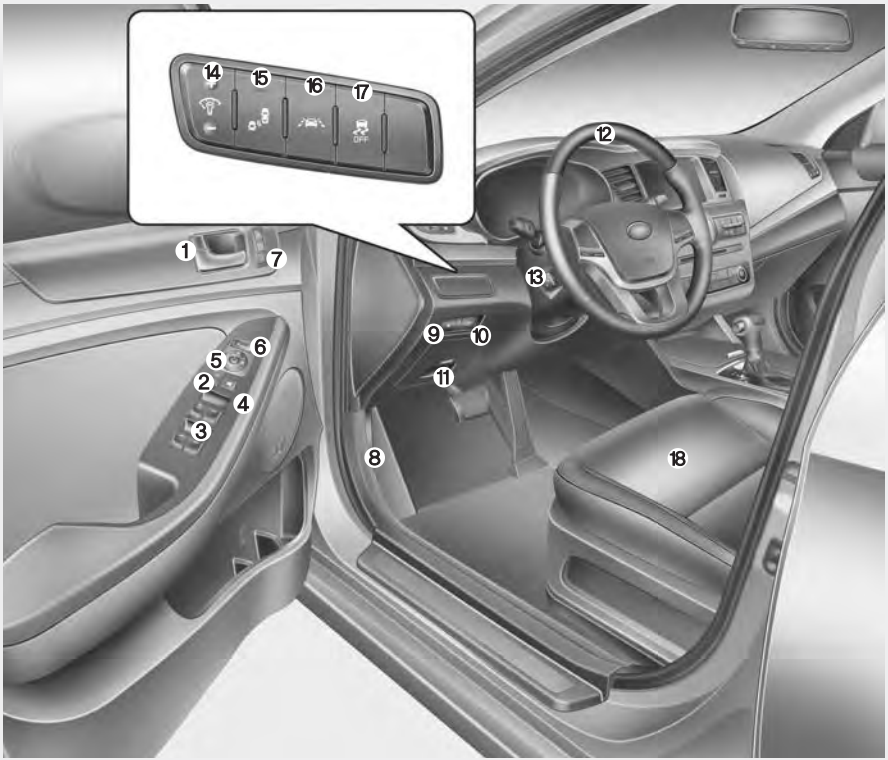


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✻ The actual shape may differ from the illustration.

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INSTRUMENT PANEL OVERVIEW



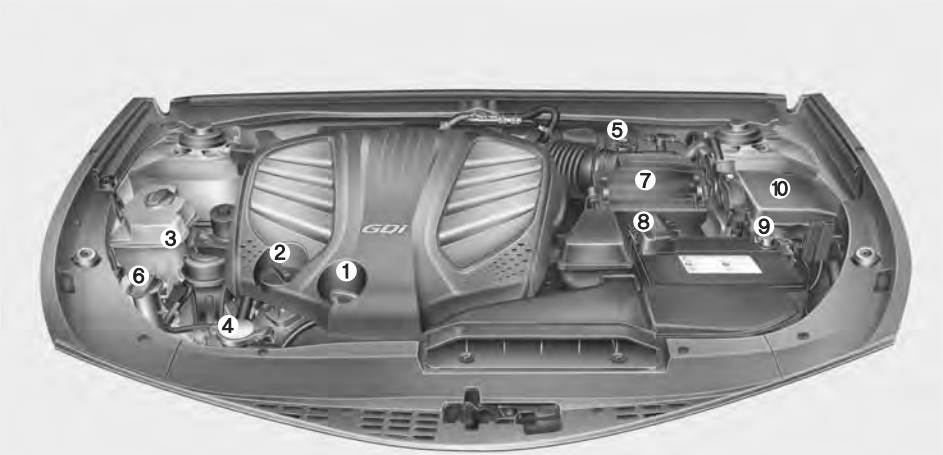
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❉ The actual shape may differ from the illustration.

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

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Safety features of your vehicle

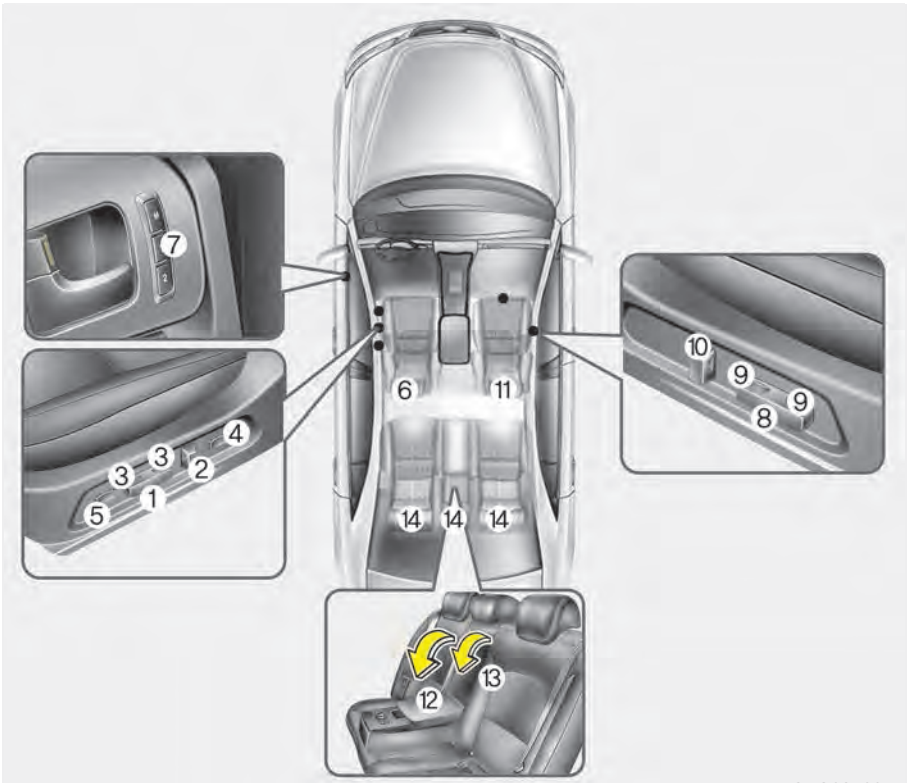
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SEAT



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Driver's seat

(1) Seat adjustment, forward / backward
(2) Seatback recliner
(3) Seat adjustment, height
(4) Lumbar support
(5) Cushion extension*
(6) Headrest
(7) Driver position memory system

Front passenger's seat

(8) Seat adjustment, forward / backward
(9) Seat adjustment, height
(10) Seatback recliner
(11) Headrest

Rear seat

(12) Armrest
(13) Ski through
(14) Headrest

* : if equipped

⚠ WARNING - Loose objects

Do not place anything in the driver's foot well or under the front seats. Loose objects in the driver's foot area could interfere with the operation of the foot pedals.

⚠ WARNING - Uprighting seat

Do not press the release lever on a manual seatback without holding and controlling the seatback. The seatback will spring upright possibly impacting you or other passengers.

⚠ WARNING - Seat cushion

Occupants should never sit on aftermarket seat cushions or sitting cushions. The passenger's hips may slide under the lap portion of the seat belt during an accident or a sudden stop.

⚠ WARNING - Driver responsibility for passengers



The driver must advise the passenger to keep the seatback in an upright position whenever the vehicle is in motion. If a seat is reclined during an accident, the restraint system's ability to restrain will be greatly reduced.

⚠ WARNING - Driver's seat

- **Never attempt to adjust the seat while the vehicle is moving. This could result in loss of control of your vehicle.**
- **Do not allow anything to interfere with the normal position of the seatback. Storing items against the seatback could result in serious or fatal injury in a sudden stop or collision.**
- **Sit as far back as possible from the steering wheel while still maintaining comfortable control of your vehicle. A distance of at least 10" from your chest to the steering wheel is recommended. Failure to do so could result in air bag inflation injuries to the driver.**

⚠ WARNING - Seat adjustment

- **Do not adjust the seat while wearing seat belts. Moving the seat forward will cause strong pressure on the abdomen.**
- **Do not place your hand near the seat bottom or seat track while adjusting the seat. Your hand could get caught in the seat mechanism.**

⚠ WARNING - Small Objects

Use extreme caution when picking up small objects trapped under the seats or between the seat and the center console. Your hands might be cut or injured by the sharp edges of the seats mechanism.

Front seat adjustment - power

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

⚠ WARNING - Unattended children

Do not leave children unattended in the vehicle. Children might operate features of the vehicle that could injure them.

When in operation, the power seat consumes a large amount of electrical power. To prevent unnecessary charging system drain, don't adjust the power seat longer than necessary while the engine is not running.

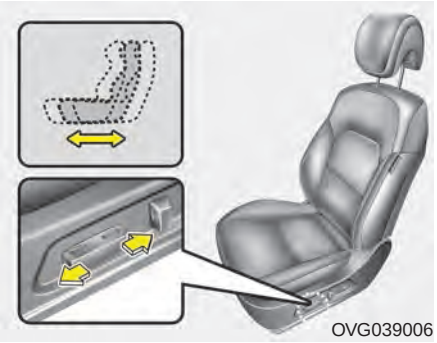
⚠ CAUTION - Power seat adjustments

The power seating controls function by electronic motor. Excessive operation may cause damage to the electrical equipment.

⚠ CAUTION - Power Seating

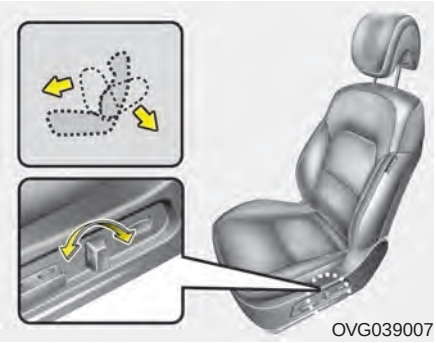
Do not operate two or more power seat control switches at the same time. Doing so may damage the power seat motor or electrical components.

Forward and backward



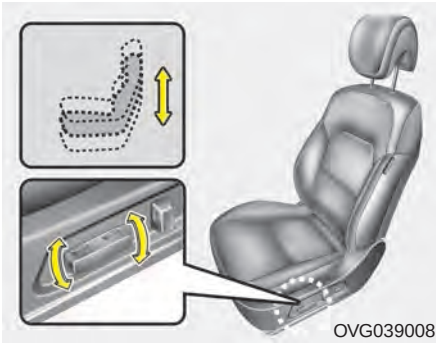
Push the control switch forward or backward to move the seat to the desired position. Release the switch once the seat reaches the desired position.

Seatback angle



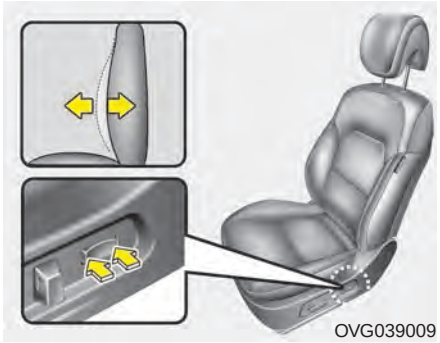
Push the control switch forward or backward to move the seatback to the desired angle. Release the switch once the seat reaches the desired position.

Seat cushion height



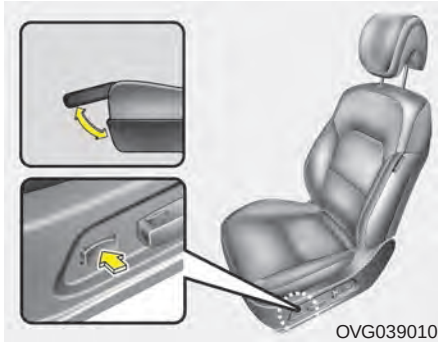
Pull the front portion of the control switch up to raise or down to lower the front part of the seat cushion. Pull the rear portion of the control switch up to raise or down to lower the rear part of the seat cushion. Release the switch once the seat reaches the desired position.

Lumbar support (for driver's seat)



The lumbar support can be adjusted by pressing the lumbar support switch on the side of the driver's seat. Press the front portion of the switch to increase support, or the rear portion of the switch to decrease support.

Cushion extension (for driver's seat, if equipped)



Press the front portion of the switch to raise the cushion extension, or the rear portion of the switch to lower it. Release the switch once the cushion extension reaches the desired position.

Driver position memory system



A driver position memory system is provided to store and recall the driver seat, outside rearview mirror and steering wheel positions* with a simple button operation. By saving the desired positions into the system memory, different drivers can reposition the driver seat, outside rearview mirror and steering wheel based upon their driving preference. If the battery is disconnected, the position memory will be lost and the driving positions should be restored in the system.

* : for electric type only

⚠ WARNING

Never attempt to operate the driver position memory system while the vehicle is moving. This could result in loss of control, and an accident causing death or serious injury.

Storing positions into memory using the buttons on the door

Storing driver's seat positions

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

Recalling positions from memory

1. The shift lever should be in P (Park) when :
   - The ignition switch is in ON or engine is running.
   - It is less than 20 minutes after the driver's door is opened with the ignition switch in OFF or ACC.
   - It is less than 30 seconds after the driver's door is closed with the ignition switch in OFF or ACC.
2. To recall the position in memory, press the desired memory button (1 or 2). The system will beep once, then the driver seat, outside rearview mirror and steering wheel will automatically adjust to the stored positions.
3. "Driver 1 (or 2) set is changed" will appear on the instrument cluster LCD display.

Adjusting the control switch for the driver seat while the system is recalling the stored position will cause the movement to stop and move in the direction that the control switch is moved.

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

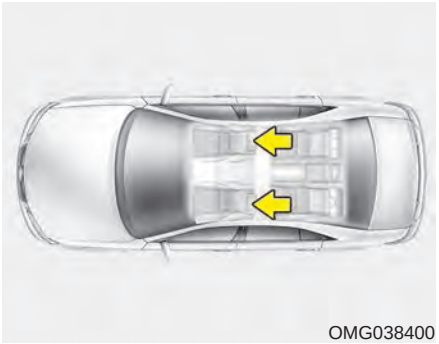
Easy access function

With the shift lever in the P position, the system will move the driver's seat automatically as follows:

- It will move the driver’s seat rearward when the engine start/stop button is turned to the OFF position.
- It will move the driver’s seat forward when the engine start/stop button is turned to the ACC or START position.

You can activate or deactivate this feature. Refer to "User settings" in chapter 4.

Headrest (for front seat)



OMG038400

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

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

For maximum effectiveness in case of an accident, the headrest should be adjusted so the middle of the headrest is at the same height of the center of gravity of an occupant's head. Generally, the center of gravity of most people's head is similar with the height of the top of their eyes.

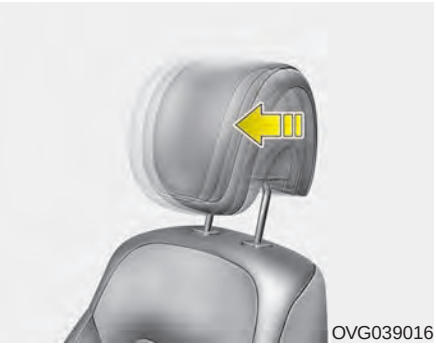
Also, adjust the headrest as close to your head as possible.

For this reason, the use of a cushion that holds the body away from the seatback is not recommended.

⚠ WARNING - Headrest removal/adjustment

- **Do not operate the vehicle with the headrests removed. Headrests can provide critical neck and head support in a crash.**
- **Do not adjust the headrest height while the vehicle is in motion. Driver may lose control of the vehicle.**

Forward and backward adjustment



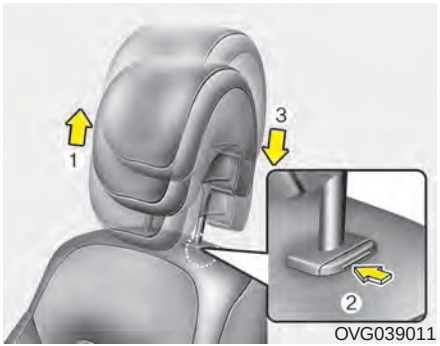
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The headrest may be adjusted forward to 4 different positions by pulling the headrest forward to the desired detent. To adjust the headrest to it's full rearward position, pull it fully forward to the farthest position and release it. Adjust the headrest so that it properly supports the head and neck.

⚠ CAUTION

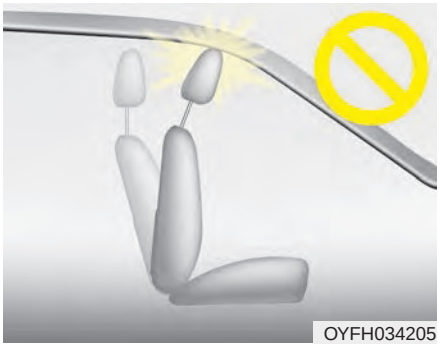
Excessive pulling or pushing may damage the headrest.

Adjusting the height up and down



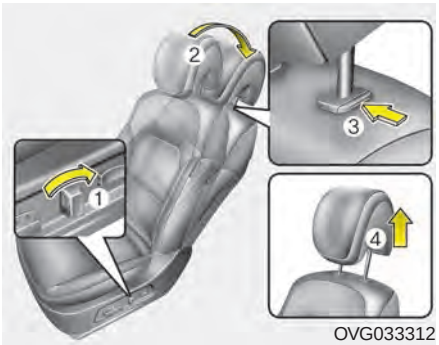
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To raise the headrest, pull it up to the desired position (1). To lower the headrest, push and hold the release button (2) on the headrest support and lower the headrest to the desired position (3).


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✻ NOTICE

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



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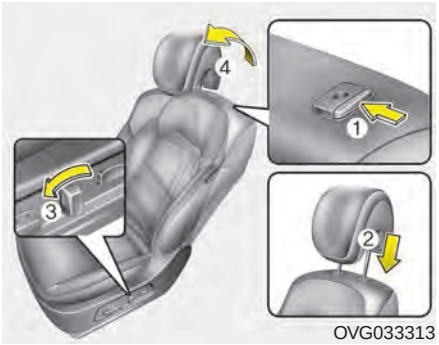
Removal/Reinstallation

To remove the headrest:

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

⚠ WARNING

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



OVG033313

To reinstall the headrest :

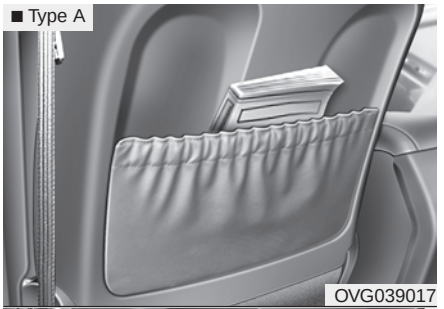
1. Put the headrest poles (2) into the holes while pressing the release button (1).
2. Recline the seatback (4) with the recline switch (3).
3. Adjust the headrest to the appropriate height.

⚠ WARNING - Headrest Reinstallation

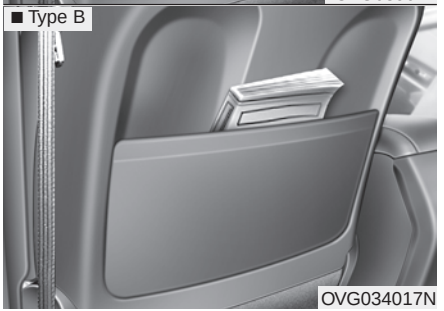
To reduce the risk of injury to the head or neck, always make sure the head rest is locked into position and adjusted properly after reinstalling.

Seatback pocket

■ Type A


OVG039017

■ Type B


OVG034017N

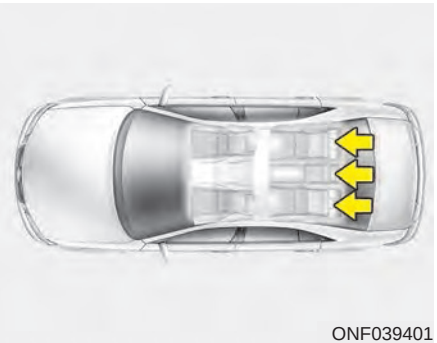
The seatback pocket is provided on the back of the front seatbacks.

⚠ WARNING - Seatback pocket

Do not put heavy or sharp objects in the seatback pocket. An occupant could contact such objects in a crash. Heavy objects in the front passenger seatback could also interfere with the air bag sensing system.

Rear seat adjustment

Headrest (for rear seat)

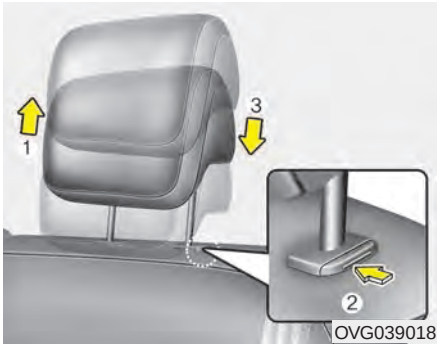


The rear seat is equipped with headrests in all the seating positions for the occupant's safety and comfort.

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

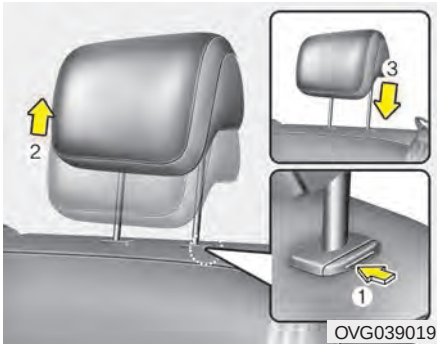
For maximum effectiveness in case of an accident, the headrest should be adjusted so the middle of the headrest is at the same height of the center of gravity of an occupant's head. Generally, the center of gravity of most people's head is similar with the height as the top of their eyes.

Also adjust the headrest as close to your head as possible. For this reason, the use of a cushion that holds the body away from the seatback is not recommended.



Adjusting the height up and down

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



Removal and reinstallation

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

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

Armrest



To use the armrest, pull it forward from the seatback.

SEAT BELTS

Seat belt restraint system

Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.

Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed.

A slack belt will greatly reduce the protection afforded to the wearer.

Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.

- For maximum restraint system protection, the seat belts must always be used whenever the vehicle is moving. A properly positioned shoulder belt should be positioned midway over your shoulder across your collarbone.
- Never allow children to ride in the front passenger seat. See child restraint system section for further discussion.

⚠ WARNING - Shoulder belt

- **Never wear the shoulder belt under your arm or behind your back. An improperly positioned shoulder belt cannot protect the occupant in a crash.**
- **Always wear both the shoulder portion and lap portion of the lap/shoulder belt.**

⚠ WARNING - Damaged seat belt

Replace the entire seat belt assembly if any part of the webbing or hardware is damaged as you can no longer be sure that a damaged seat belt will provide protection in a crash.

⚠ WARNING - Twisted seat belt

Make sure your seat belt is not twisted when worn. A twisted seat belt may not properly protect you in an accident and could even cut into your body.

⚠ WARNING - Seat belt buckle

Do not allow foreign material (gum, crumbs, coins, etc.) to obstruct the seat belt buckle. This may prevent the seat belt from fastening securely.

Seat belt warning (for driver's seat)



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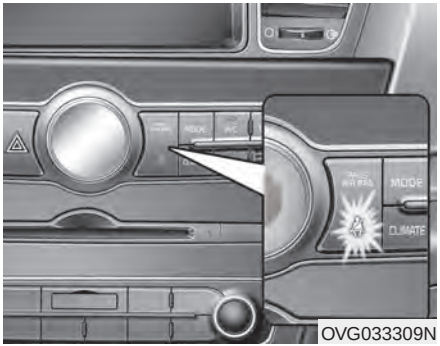
The driver's seat belt warning light and chime will activate to the following table when the ignition switch is in "ON" position.

Conditions		Warning Pattern	
Seat Belt	**Vehicle Speed**	**Light-Blink**	**Chime-Sound**
Unbuckled		6 seconds	
Buckled		6 seconds	None
Buckled → Unbuckled	Below 3 mph (5 km/h)	6 seconds	None
	3 mph~ 6 mph	6 seconds	
	Above 6 mph (10 km/h)	6 sec. on / 24 sec. off (11 times)	
Unbuckled	Above 6 mph (10 km/h) ↓ Below 3 mph (5 km/h)	6 seconds *1 ↓ Stop *2	

*1 Warning pattern repeats 11 times with an interval of 24 seconds. If the driver's seat belt is buckled, the light will stop within 6 seconds and chime will stop immediately.

*2 The light will stop within 6 seconds and chime will stop immediately.

Seat belt warning (for front passenger's seat)



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The front passenger's seat belt warning light will activate to the following table when the ignition switch is in "ON" position.

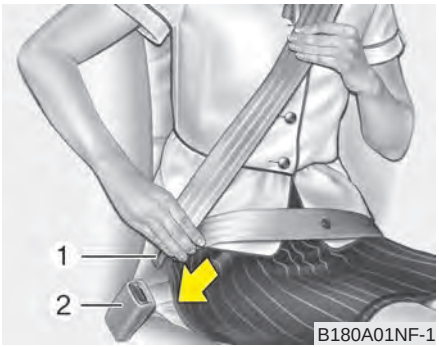
Conditions		Warning Pattern
Seat Belt	**Vehicle Speed**	**Light-Blink**
Unbuckled		6 seconds
Unbuckled	Above 6mph (10 km/h)	Continuously
Buckled		6 seconds
Buckled → Unbuckled	Above 6mph (10 km/h)	Continuously *1
	Below 6mph (10 km/h)	None

*1 The seat belt warning light will go off if the vehicle speed decreases below 3 mph (5 km/h). If the vehicle speed increases above 3 mph (5 km/h), the warning light will blink again.

Riding in an improper position adversely affects the front passenger's seat belt warning system. It is important for the driver to instruct the passenger as to the proper seating instructions as contained in this manual.

- You can find the front passenger's seat belt warning light on the center fascia panel.
- Although the front passenger seat is not occupied, the seat belt warning light will blink for 6 seconds.
- The seat belt warning light can blink when a briefcase or purse is placed on the front passenger seat.

Seat belt - Driver's 3-point system with emergency locking retractor



To fasten your seat belt:

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

The seat belt automatically adjusts to the proper length only after the lap belt portion is adjusted manually so that it fits snugly around your hips. If you lean forward in a slow, easy motion, the belt will extend and let you move around. If there is a sudden stop or impact, however, the belt will lock into position.

It will also lock if you try to lean forward too quickly.

✻ NOTICE

If you are unable to pull out the seat belt from the retractor, firmly pull the belt out and release it. Then you will be able to pull the belt out smoothly.



Height adjustment

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

The height of the adjusting seat belt should not be too close to your neck. The shoulder portion should be adjusted so that it lies across your chest and midway over your shoulder nearest the door and not your neck.

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

To raise the height adjuster, pull it up (1). To lower it, push it down (3) while pressing the height adjuster button (2).

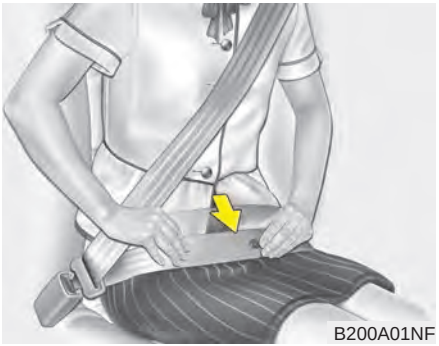
Release the button to lock the anchor into position. Try sliding the height adjuster to make sure that it has locked into position.

⚠ WARNING - Shoulder belt positioning

Never position the shoulder belt across your neck or face.

⚠ WARNING - Seat belt replacement

Replace your seat belts after being in an accident. Failure to replace seat belts after an accident could leave you with damaged seat belts that will not provide protection in the event of another collision.


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You should place the lap belt portion as low as possible and snugly across your hips. If the lap belt is located too high on your waist, it may increase the chance of injury in the event of a collision.

The arm closest to the seat belt buckle should be over the belt while the other arm should be under the belt as shown in the illustration.

Seat belts - Front passenger and rear seat 3-point system with combination locking retractor

To fasten your seat belt

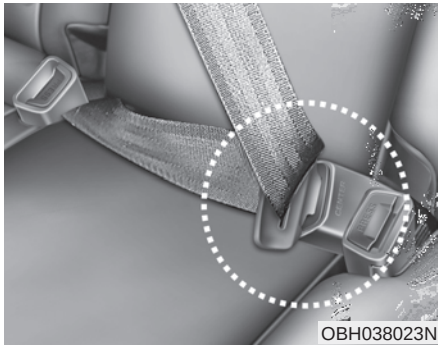
Combination retractor type seat belts are installed in the rear seat positions to help accommodate the installation of child restraint systems. Although a combination retractor is also installed in the front passenger seat position, it is strongly recommended that children always be seated in the rear seat. NEVER place an infant restraint system in the front seat of the vehicle.

This type of seat belt combines the features of both an emergency locking retractor seat belt and an automatic locking retractor seat belt. To fasten your seat belt, pull it out of the retractor and insert the metal tab into the buckle. There will be an audible "click" when the tab locks into the buckle.

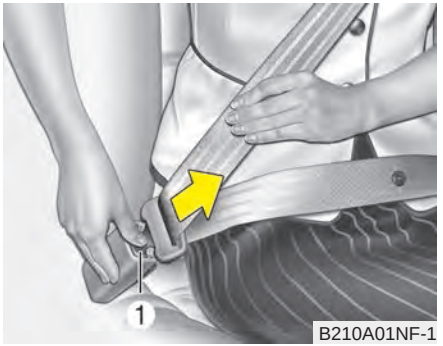
When not securing a child restraint, the seat belt operates in the same way as the driver's seat belt (Emergency Locking Retractor Type). It automatically adjusts to the proper length only after the lap belt portion of the seat belt is adjusted manually so that it fits snugly around your hips.

When the seat belt is fully extended from the retractor to allow the installation of a child restraint system, the seat belt operation changes to allow the belt to retract, but not to extend (Automatic Locking Retractor Type). Refer to “Using a child restraint system” in this chapter.

To convert from the automatic locking feature to the emergency locking operation mode, allow the unbuckled seat belt to fully retract.



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



To release the seat belt

The seat belt is released by pressing the release button (1) of the locking buckle. When it is released, the belt should automatically draw back into the retractor.

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

Pre-tensioner seat belt



Your vehicle is equipped with driver's and front passenger's pre-tensioner seat belts (retractor pretensioner and EFD (Emergency Fastening Device). The pre-tensioner seat belts may be activated, when a frontal collision is severe enough, together with the air bags.

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

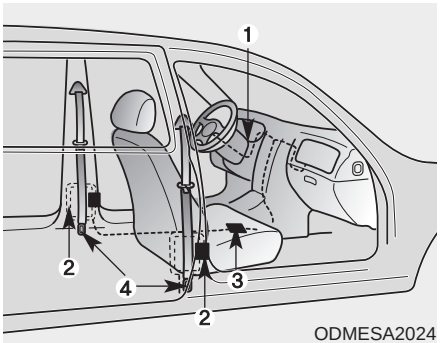
(1) Retractor Pretensioner

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

(2) EFD (Emergency Fastening Device)

The purpose of the EFD is to make sure that the pelvis belts fit in tightly against the occupant's lower body in certain frontal collisions.

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



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

1. SRS air bag warning light
2. Retractor pre-tensioner assembly
3. SRS control module
4. Emergency fastening device (EFD)

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

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

✻ NOTICE

- **Both the driver's and front passenger's seat belt pre-tensioner system may be activated not only in certain frontal collision but also in certain side collision or rollover, if the vehicle is equipped with a side or curtain air bag.**
- **When the pre-tensioner seat belts are activated, a loud noise may be heard and fine dust, which may appear to be smoke, may be visible in the passenger compartment. These are normal operating conditions and are not hazardous.**
- **Because the sensor that activates the SRS air bag is connected with the pre-tensioner seat belt, the SRS air bag warning light on the instrument panel will illuminate for approximately 6 seconds after the ignition switch has been turned to the ON position, and then it should turn off.**

⚠ WARNING - Skin Irritation

Wash all exposed skin areas thoroughly after an accident in which the pre-tensioner seat belts were activated. The fine dust from the pre-tensioner activation may cause skin irritation and should not be breathed for prolonged periods.

If the pre-tensioner seat belt system are not working properly, this warning light will illuminate even if there is no malfunction of the SRS air bag. If the SRS air bag warning light does not illuminate when the ignition switch is turned ON, or if it remains illuminated after illuminating for approximately 6 seconds, or if it illuminates while the vehicle is being driven, have an authorized Kia dealer inspect the pre-tensioner seat belt and SRS air bag system as soon as possible.

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

⚠ WARNING - Hot pre-tensioner

Do not touch the pre-tensioner seat belt assemblies for several minutes after they have been activated. When the pre-tensioner seat belt mechanism fires during a collision the pre-tensioner becomes hot and can burn you.

Seat belt precautions

Infant or small child

All 50 states have child restraint laws. You should be aware of the specific requirements in your state. Child and/or infant seats must be properly placed and installed in the rear seat. For more information about the use of these restraints, refer to “Child restraint system” in this chapter.

Larger children

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

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

⚠ WARNING - Small children

Do not allow small children to ride in the vehicle without an appropriate Child Restraint System. If the shoulder belt comes in contact with your child's neck or face, your child is too small to ride in the front of the vehicle without a CRS and will cause injury to your child's neck, throat and face.

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 on the hips, not across the abdomen.

⚠ WARNING - Pregnant women

Pregnant women must never place the lap portion of the seat belt above or on the abdomen where the fetus is located. The force of the seat belt during a collision will crush the fetus.

Injured person

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

One person per belt

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

Do not lie down

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

Care of seat belts

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

⚠ WARNING - Pinched Seat belts

Make sure that the webbing and/or buckle does not get caught or pinched in the rear seat when returning the rear seatback to its upright position. A caught or pinched webbing/buckle may become damaged and could fail during a collision or sudden stop.

Periodic inspection

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

Keep belts clean and dry

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

When to replace seat belts

The entire in-use seat belt assembly or assemblies should be replaced if the vehicle has been involved in an accident. This should be done even if no damage is visible. Additional questions concerning seat belt operation should be directed to an authorized Kia dealer.

CHILD RESTRAINT SYSTEM

Children riding in the car should sit in the rear seat and must always be properly restrained to minimize the risk of injury in an accident, sudden stop or sudden maneuver. According to accident statistics, children are safer when properly restrained in the rear seats than in the front seat. Larger children who are not in a child restraint should use one of the seat belts provided.

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

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

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

⚠ WARNING- Restraint location

Never install a child or infant seat on the front passenger's seat.

A child riding in the front passenger seat can be forcefully struck by an inflating air bag.

⚠ WARNING- Hot child restraint

A child restraint system can become very hot if it is left in a closed vehicle on a sunny day. Be sure to check the seat cover, buckles and latches before placing a child in the restraint system.

When the child restraint system is not in use, store it in the luggage area or fasten it with a seat belt so that it will not be thrown forward in case of a sudden stop or an accident.

⚠ WARNING - Holding children

Never hold a child in your arms or lap when riding in a vehicle. The violent forces created during a crash will tear the child from your arms and throw the child against the car's interior.

Always use a child restraint system which is appropriate for your child's height and weight.

⚠ WARNING - Seat belt use

Do not use one seat belt for two occupants at the same time. This will eliminate any safety benefit provided by the seat belt to the occupants.

⚠ WARNING - Unattended Children

Never leave children unattended in a vehicle. The vehicle can heat up very quickly, resulting in injuries to the child in the vehicle.

Using a child restraint system

Rear- facing child restraint system



Forward-facing child restraint system



For small children and babies, the use of a child seat or infant seat is required. This child seat or infant seat should be of appropriate size for the child and should be installed in accordance with the manufacturer's instructions.

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

Since all passenger seat belts move freely under normal conditions and only lock under extreme or emergency conditions (emergency lock mode), you must manually change these seat belts to the auto lock mode to secure a child restraint.

If the seat belt does not operate as described in this section, have the system checked immediately by your authorized Kia dealer.

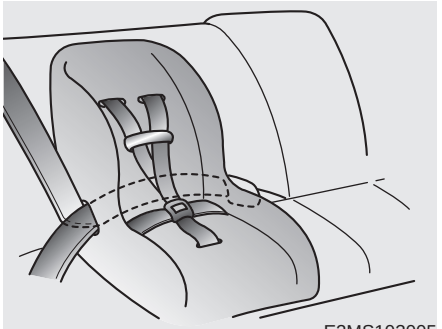
⚠ WARNING - Child seat installation

- **Always follow the instructions provided by the child restraint system manufacturer. Child restraint system manufacturers know their products best.**
- **Failure to observe this manual's instructions regarding child restraint system and the instructions provided with the child restraint system could result in the improper installation of the child restraint system which may reduce the protection to your child in a crash or a sudden stop.**

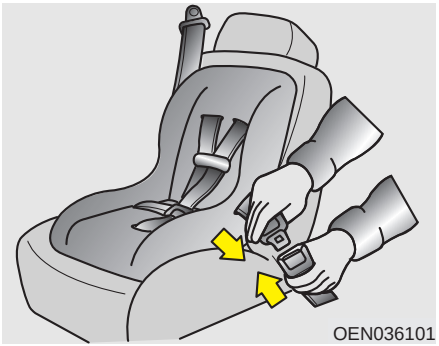
✻ NOTICE

If the vehicle headrest prevents proper installation of a child seat (as described in the child seat system manual), the headrest of the respective seating position shall be readjusted or entirely removed.

Placing a passenger seat belt into the auto lock mode


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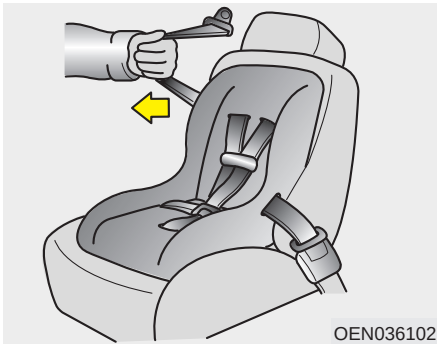
The auto lock mode will help prevent the normal movement of the child in the vehicle from causing the seat belt to loosen and compromise the child restraint system. To secure a child restraint system, use the following procedure.


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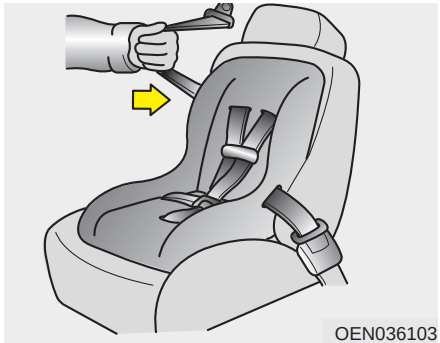
To install a child restraint system on the outboard or center rear seats, do the following:

1. Place the child restraint system in the seat and route the lap/shoulder belt around or through the restraint, following the restraint manufacturer's instructions. Be sure the seat belt webbing is not twisted.
2. Fasten the lap/shoulder belt latch into the buckle. Listen for the distinct "click" sound.

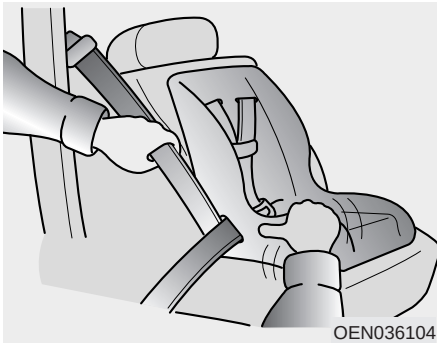
Position the release button so that it is easy to access in case of an emergency.


OEN036102

3. Pull the shoulder portion of the seat belt all the way out. When the shoulder portion of the seat belt is fully extended, it will shift the retractor to the "Auto Lock" (child restraint) mode.


OEN036103

4. Slowly allow the shoulder portion of the seat belt to retract and listen for an audible "clicking" or "ratcheting" sound. This indicates that the retractor is in the "Auto Lock" mode. If no distinct sound is heard, repeat steps 3 and 4.


OEN036104

5. Remove as much slack from the belt as possible by pushing down on the child restraint system while feeding the shoulder belt back into the retractor.
6. Push and pull on the child restraint system to confirm that the seat belt is holding it firmly in place. If it is not, release the seat belt and repeat steps 2 through 6.
7. Double check that the retractor is in the “Auto Lock” mode by attempting to pull more of the seat belt out of the retractor. If you cannot, the retractor is in the “Auto Lock” mode.

The lap/shoulder belt automatically returns to the “emergency lock mode” whenever the belt is allowed to retract fully.

Therefore, the preceding seven steps must be followed each time a child restraint is installed.

To remove the child restraint, press the release button on the buckle and then pull the lap/shoulder belt out of the restraint and allow the seat belt to retract fully.

⚠ WARNING - Auto lock mode

Set the retractor to Automatic Lock mode when installing any child restraint system.

If the retractor is not in the Auto Lock mode, the child restraint can move when your vehicle turns or stops suddenly.

Securing a child restraint seat with tether anchorage system


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Child restraint hook holders are located on the package tray.


OVG033031

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

   For vehicles with adjustable headrests, route the tether strap under the headrest and between the headrest posts, otherwise route the tether strap over the top of the seatback. In case of interference between the child restraint seat and the headrest remove the particular head restraint for better fitment of the child restraint seat.

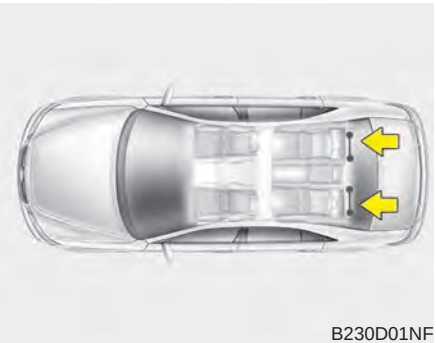
2. Connect the tether strap hook to the appropriate child restraint hook holder and tighten to secure the child restraint seat.

⚠ WARNING - Tether strap

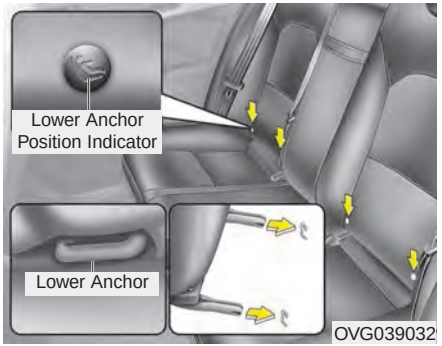
Never mount more than one child restraint to a single tether or to a single lower anchorage point. The increased load caused by multiple seats may cause the tethers or anchorage points to break.

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

Securing a child restraint seat with child seat lower anchor system


B230D01NF

Some child seat manufacturers make child restraint seats that are labeled as LATCH or LATCH-compatible child restraint seats. LATCH stands for "Lower Anchors and Tethers for Children". These seats include two rigid or webbing mounted attachments that connect to two LATCH anchors at specific seating positions in your vehicle. This type of child restraint seat eliminates the need to use seat belts to attach the child seat in the rear seats.



Child restraint symbols are located on the left and right rear seat backs to indicate the position of the lower anchors for child restraints.

⚠ WARNING - Unused rear seatbelts

Always fasten the seatbelts behind the child restraint seat when they are not used to secure the child seat. Failure to do so may result in child strangulation.

LATCH anchors have been provided in your vehicle. The LATCH anchors are located in the left and right outboard rear seating positions. Their locations are shown in the illustration. There is no LATCH anchor provided for the center rear seating position.

The LATCH anchors are located between the seatback and the seat cushion of the rear seat left and right outboard seating positions.

When you install your child's restraint system using the LATCH anchors buckle the shoulder lap belt, then lock the retractor and pull the belt to remove the slack in the belt so it lies flat against the vehicle seat.

Follow the child seat manufacturer's instructions to properly install child restraint seats with LATCH or LATCH-compatible attachments.

Once you have installed the LATCH child restraint, assure that the seat is properly attached to the LATCH and tether anchors.

Also, test the child restraint seat before you place the child in it. Tilt the seat from side to side. Also try to tug the seat forward. Check to see if the anchors hold the seat in place.

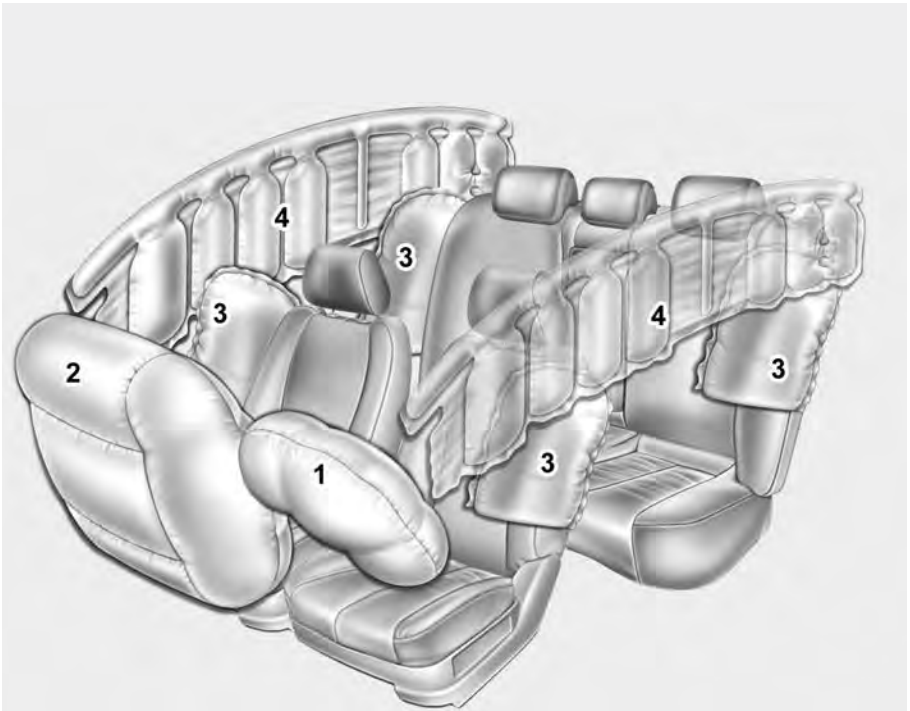
⚠ WARNING - LATCH lower anchors

Never attempt to attach a LATCH equipped seat in the center seating position. LATCH lower anchors are only to be used with the left and right rear outboard seating positions. You may damage the anchors or the anchors may fail and break in a collision.

✻ NOTICE

The recommended weight for the LATCH system is under 65 lb (30 kg).
How to calculate the child restraint weight :
Child restraint weight =
65 lb (30 kg) - Child weight

AIR BAG - ADVANCED SUPPLEMENTAL RESTRAINT SYSTEM



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

OVG033033

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

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.

How does the air bag system operate

- Air bags are activated (able to inflate if necessary) only when the ignition switch is turned to the ON or START the appropriate position.
- Air bags inflate instantly in the event of serious frontal or side collision (if equipped with side air bag or curtain air bag) in order to help protect the occupants from serious physical injury.
- There is no single speed at which the air bags will inflate.

  Generally, air bags are designed to inflate based upon the severity of a collision and its direction. These two factors determine whether the sensors produce an electronic deployment/ inflation signal.
- Air bag deployment depends on a number of complex 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 air bags will completely inflate and deflate in an instant.

  It is virtually impossible for you to see the air bags inflate during an accident. It is much more likely that you will simply see the deflated air bags hanging out of their storage compartments after the collision.
- In order to help provide protection in a severe collision, the air bags must inflate rapidly. The speed of air bag inflation is a consequence of extremely short time in which a collision occurs and the need to get the air bag between the occupant and the vehicle structures before the occupant impacts those structures. This speed of inflation reduces the risk of serious or life-threatening injuries in a severe collision and is thus a necessary part of air bag design.

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

⚠ WARNING - Airbag Inflation

Sit as far back as possible from the steering wheel while still maintaining comfortable control of the your vehicle. A distance of at least 10" (25cm) from your chest to the steering wheel is recommended. Failure to do so can result in airbag inflation injuries to the driver.

Noise and smoke

When the air bags inflate, they make a loud noise and they leave smoke and powder in the air inside of the vehicle. This is normal and is a result of the ignition of the air bag inflator. After the air bag inflates, you may feel substantial discomfort in breathing due to the contact of your chest to both the seat belt and the air bag, as well as from breathing the smoke and powder. **Open your doors and/or windows as soon as possible after the impact in order to reduce discomfort and prevent prolonged exposure to smoke and powder.**

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

⚠ WARNING
- Hot components

Do not touch the air bag storage area's internal components immediately after air bag inflation. The air bag related parts in the steering wheel, instrument panel and the roof rails above the front and rear doors are very hot. Hot components can result in burn injuries.

Installing a child restraint on a front passenger's seat is forbidden



1JBH3051

Never place a rear-facing child restraint in the front passenger's seat. If the air bag 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's seat either. If the front passenger air bag inflates, it would cause serious or fatal injuries to the child.

⚠ WARNING - Air bag deployment

When children are seated in the rear outboard seats of a vehicle equipped with side and/or curtain air bags, install the child restraint system as far away from the door side as possible. Inflation of the side and/or curtain air bags could impact the child.

Air bag warning light



W7-147

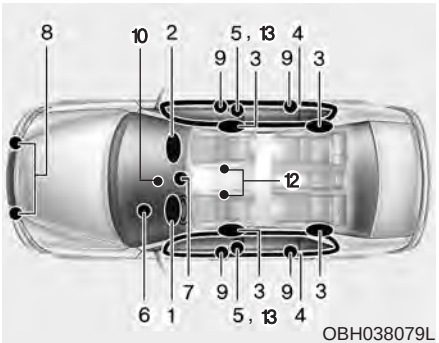
The purpose of the air bag warning light in your instrument panel is to alert you of a potential problem with your air bag - Supplemental Restraint System (SRS).

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

Have the system checked by an authorized Kia dealer if:

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

SRS components and functions



The SRS consists of the following components:

1. Driver's front air bag module
2. Passenger's front air bag module
3. Side air bag modules
4. Curtain air bag modules
5. Retractor pre-tensioner assemblies
6. Air bag warning light
7. SRS control module (SRSCM)
8. Front impact sensors
9. Side impact sensors
10. PASSENGER AIR BAG “OFF” indicator (Front passenger’s seat only)
11. Occupant detection system (Front passenger’s seat only)
12. Driver’s and front passenger’s seat belt buckle sensors
13. Anchor pre-tensioner assembly

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

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

If any of the following conditions occurs, this indicates a malfunction of the SRS. Have an authorized Kia dealer inspect the air bag system as soon as possible.

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

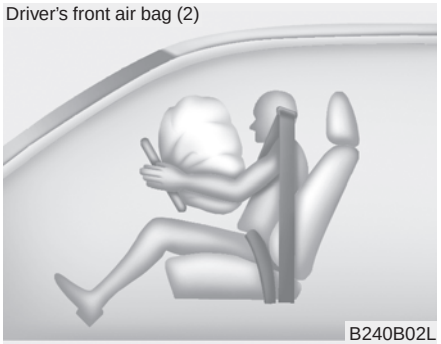
Driver's front air bag (1)



B240B01L

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

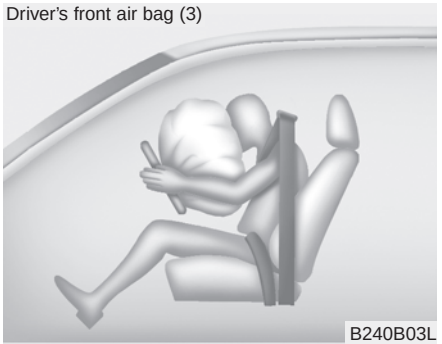
Driver's front air bag (2)



B240B02L

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

Driver's front air bag (3)

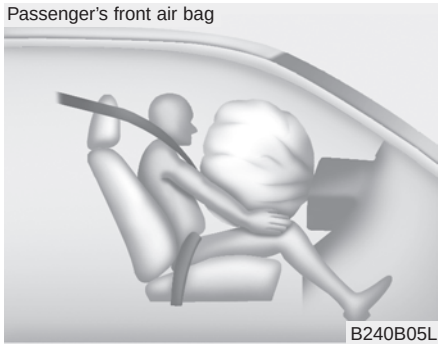


B240B03L

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

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

Passenger's front air bag



B240B05L

⚠ WARNING - Air bag obstructions

Do not install or place any accessories on the steering wheel, instrument panel, or on the front passenger's panel above the glove box in a vehicle Such objects may become dangerous projectiles if the air bag deploys.

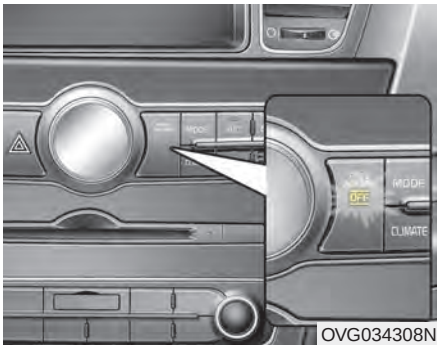
✻ NOTICE

Before you replace a fuse or disconnect a battery terminal, turn the ignition switch to the LOCK position and remove the ignition key. Never remove or replace the air bag related fuse(s) when the ignition switch is in the ON position. Failure to heed this warning will cause the SRS air bag warning light to illuminate.

⚠ WARNING - Flying objects

Do not place any objects (an umbrella, bag, etc.) between the front door and the front seat. Such objects may become dangerous projectiles if the side airbag inflates.

Occupant detection system



OVG034308N

Your vehicle is equipped with an occupant detection system in the front passenger's seat.

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

Main components of occupant detection system

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

If the front passenger seat is occupied by a person that the system determines to be of adult size, and he/she sits properly (sitting upright with the seatback in an upright position, centered on the seat cushion with their seat belt on, legs comfortably extended and their feet on the floor), the PASSENGER AIR BAG “OFF” indicator will turn off and the front passenger's air bag will be able to inflate, if necessary, in frontal crashes.

You will find the PASSENGER AIR BAG “OFF” indicator on the center facia panel. This system detects the conditions 1~4 in the following table and activates or deactivates the front passenger air bag based on these conditions.

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

- The ODS (Occupant Detection System) may not function properly if the passenger takes actions which can defeat the detection system. These include:

(1) Failing to sit in an upright position.

(2) Leaning against the door or center console.

(3) Sitting towards the sides or the front of the seat.

(4) Putting legs on the dashboard or resting them on other locations which reduce the passenger weight on the front seat.

(5) Improperly wearing the safety belt.

(6) Reclining the seat back.

(7) Wearing a thick cloth like ski wear or hip protection wear.

(8) Put on the seat an additional thick cushion.

Condition and operation in the front passenger occupant detection system

Condition detected by the occupant detection system	Indicator/Warning light		Devices
	PASSENGER AIR BAG “OFF” indicator light	SRS warning light	Front passenger air bag
1. Adult *1 or child age 13 and up*2	Off	Off	Activated
2. Infant or child restraint system with 12 months old*3 *4	On	Off	Deactivated
3. Unoccupied	On	Off	Deactivated
4. Malfunction in the system	Off	On	Activated

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

*2) Do not allow children to ride in the front passenger seat. When a smaller child than the same age sits in the front passenger seat, the system may recognize him/her as an infant depending on his/her physique or posture.

*3) Never install a child restraint system on the front passenger seat.

*4) The PASSENGER AIR BAG "OFF" indicator may turn on or off when a child above 12 months to 12 years old (with or without child restraint system) sits in the front passenger seat. This is a normal condition.

✻ NOTICE

Do not modify or replace the front passenger seat. Don't place anything on or attach anything such as a blanket, front seat cover or aftermarket seat heater to the front passenger seat. This can adversely affect the occupant detection system.

⚠ WARNING - ODS system

Riding in an improper position adversely affects the occupant detection system (ODS) and may result in the deactivation of front passenger air bag. It is important for the driver to instruct the passenger as to the proper seating instructions as contained in this manual.

(Continued)

(Continued)


OVQ036013N

- **Never put a heavy load, an active electronic device or blanket in the front passenger seat or seatback pocket.**


OVQ036014N

- **Never place the feet on the front passenger seatback.**


1KMN3663

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


1KMN3662

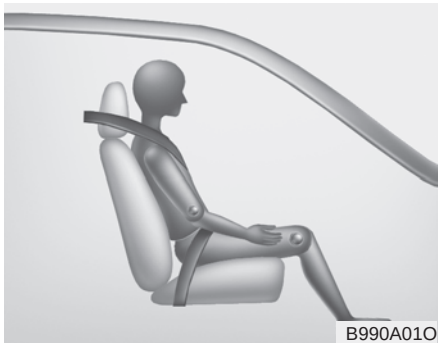
- **Never excessively recline the front passenger seatback.**


1KMN3665

- **Never place the feet on the dashboard.**


1KMN3664

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


B990A01O

When an adult is seated in the front passenger seat, if the PASSENGER AIR BAG “OFF” indicator is on, turn the ignition switch to the LOCK position and ask the passenger to sit properly (sitting upright with the seat back in an upright position, centered on the seat cushion with their seat belt on, legs comfortably extended and their feet on the floor). Restart the engine and have the person remain in that position. This will allow the system to detect the person and to enable the passenger air bag.

If the PASSENGER AIR BAG “OFF” indicator is still on, ask the passenger to move to the rear seat.

⚠ WARNING - “AIR BAG OFF” light

Do not allow an adult passenger to ride in the front seat when the PASSENGER AIR BAG “OFF” indicator is illuminated, because the air bag will not deploy in the event of a crash. The driver must instruct the passenger to reposition himself in the seat. Failure to properly position yourself may lead to air bag deactivation resulting in air bag non-deployment in a collision. If the PASSENGER AIR BAG “OFF” indicator remains illuminated after the passenger repositions themselves properly and the car is restarted, it is recommended that passenger move to the rear seat because the passenger's front air bag will not deploy.

✻ NOTICE

The PASSENGER AIR BAG “OFF” indicator illuminates for about 4 seconds after the ignition switch is turned to the ON position or after the engine is started. If the front passenger seat is occupied, the occupant detection sensor will then classify the front passenger after several more seconds.

⚠ WARNING - ODS Interference

- **Do not place a heavy load or an active electronic device (ex. laptop computer, after market DMB/navigation/satellite audio, video game machine, MP3, etc.) in the front passenger seatback pocket or on the front passenger seat.**
- **Do not hang onto the front passenger seat.**
- **Do not hang any items such as seatback table on the front passenger seatback.**
- **Do not place feet on the front passenger seatback.**
- **Do not place any items under the front passenger seat.**
- **Do not place sharp objects on the front passenger seat. These may damage the occupant detection system, if they puncture the seat cushion.**

(Continued)

(Continued)

- **Do not spill any liquids on the seat.**

Any of the above could interfere with the proper operation of the ODS sensor thereby increasing the risk of an injury in an accident.

✻ NOTICE

Air bags can only be used once - have an authorized Kia dealer replace the air bag immediately after deployment.

Any child age 12 and under should ride in the rear seat. Children too large for child restraints should use the available lap/shoulder belts. No matter what type of crash, children of all ages are safer when restrained in the rear seat.

✻ NOTICE

Do not modify or replace the front passenger seat. Don't place anything on or attach anything such as a blanket, front seat covers or after market seat heater to the front passenger seat. This can adversely affect the occupant detection system.

If the occupant detection system is not working properly, the SRS air bag warning light on the instrument panel will illuminate because the passenger's front air bag is connected with the occupant detection system. If there is a malfunction of the occupant detection system, the PASSENGER AIR BAG “OFF” indicator will not illuminate and the passenger's front air bag will inflate in frontal impact crashes even if there is no occupant in the front passenger's seat.

Driver's and passenger's front air bag

Driver's front air bag



OVG033020

Passenger's front air bag



OVG033021

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

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

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

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

⚠ CAUTION - Seat Track Sensor

Do not place any objects underneath the front seats as they could damage the seat track position sensor or interfere with the occupant detection system.

The advanced SRS offers the ability to control the air bag inflation with two levels. A first stage level is provided for moderate-severity impacts. A second stage level is provided for more severe impacts.

The passenger's front air bag is designed to help reduce the injury of children sitting close to the instrument panel in low speed collisions. However, children are safer if they are restraint in the rear seat.

According to the impact severity, seating position and seat belt usage, the SRSCM (SRS Control Module) controls the air bag inflation. Failure to properly wear seat belts can increase the risk or severity of injury in an accident.

Additionally, your vehicle is equipped with an occupant detection system in the front passenger's seat. The occupant detection system detects the presence of a passenger in the front passenger's seat and will turn off the front passenger's air bag under certain conditions. For more detail, see "Occupant detection system" in this section.

Do not place any objects that may cause magnetic fields near the front seat. These may cause a malfunction of the seat track position sensor.

Manufacturers are required by government regulations to provide a contact point concerning modifications to the vehicle for persons with disabilities, which modifications may affect the vehicle's advanced air bag system. That contact is Kia's toll-free Customer Assistance center at 1-800-333-4KIA. However, Kia does not endorse nor will it support any changes to any part or structure of the vehicle that could affect the advanced air bag system, including the occupant detection system.

⚠ WARNING - Replacement / Modifications

The front passenger seat, dashboard or door should not be replaced except by an authorized Kia dealer using original Kia parts designed for this vehicle and model. Any other such replacement or modification could adversely affect the operation of the occupant detection system and your advanced air bags.

Advanced air bags are combined with pre-tensioner seat belts to help provide enhanced occupant protection in frontal crashes. Front air bags are not intended to deploy in collisions in which sufficient protection can be provided by the pre-tensioner seat belt alone.

⚠ WARNING - SRS Wiring

Do not tamper with or disconnect SRS wiring or other components of the SRS system. Doing so could result in injury, due to accidental deployment of the air bags or by rendering the SRS inoperative.

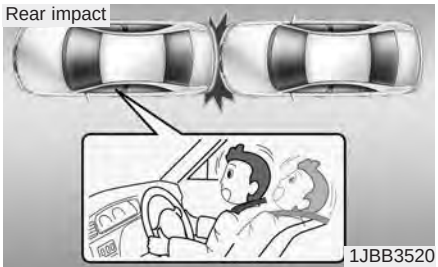
Front air bags are not intended to deploy in side-impact, rear-impact or rollover crashes. In addition, front air bags will not deploy in frontal crashes below the deployment threshold.

⚠ WARNING - Modifications

Modification to the seat structure can cause the air bag to deploy at a different level than should be provided.

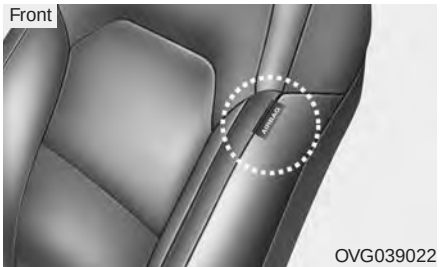
Side air bag

Rear impact



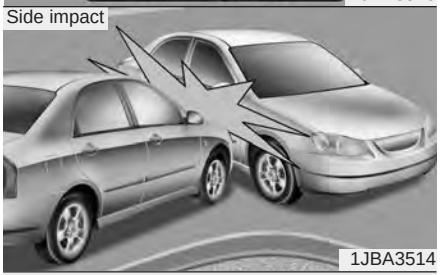
1JBB3520

Front



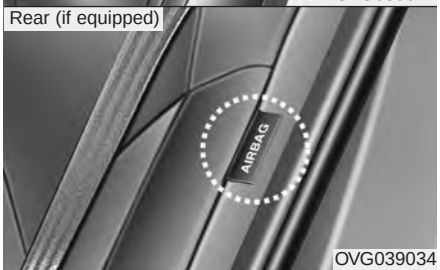
OVG039022

Side impact



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Rear (if equipped)



OVG039034

Rollover



1JBA3522



OVG039035

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

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

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

The side air bags are designed to deploy only during certain side-impact collisions, depending on the crash severity, angle, speed and point of impact. The side air bags are not designed to deploy in all side impact situations.

The side air bag is supplemental to the driver's and the passenger's seat belt systems and is not a substitute for them. Therefore your seat belts must be worn at all times while the vehicle is in operation.

⚠ WARNING - Unexpected deployment

Avoid impact to the side air bag sensor when the ignition switch is ON to prevent unexpected deployment of the side air bag.

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

⚠ WARNING - Deployment

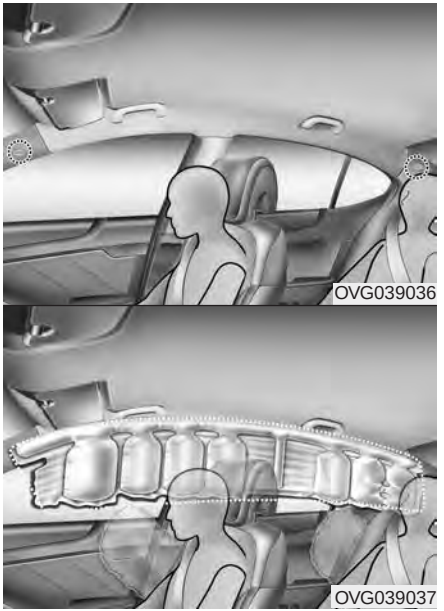
Do not install any accessories including seat covers, on the side or near the side air bag as this may affect the deployment of the side air bags.

If seat or seat cover is damaged, have the vehicle checked and repaired by an authorized Kia dealer. Inform that your vehicle is equipped with side air bags and an occupant detection system.

⚠ WARNING - Flying objects

Do not place any objects (an umbrella, bag, etc.) between the front door and the front seat. Such objects may become dangerous projectiles if the side air bag inflates.

Curtain air bag



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

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

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

The curtain air bags are designed to deploy only during certain side impact collisions, depending on the crash severity, angle, speed and impact. The curtain air bags are not designed to deploy in all side impact situations, collisions from the front or rear of the vehicle or in most rollover situations.

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

✻ NOTICE

Never try to open or repair any components of the side curtain air bag system. This should only be done by an authorized Kia dealer.

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

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

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

Air bag collision sensors



OVG035038N/OVG033039/OVG035040N/OVG039041/OVG033042N

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

⚠ WARNING - Air bag sensors

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

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

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

Problems may arise if the sensor installation angles are changed due to the deformation of the front bumper, body or B pillar where side collision sensors are installed. Have the vehicle checked and repaired by an authorized Kia dealer.

Installing aftermarket bumper guards or replacing a bumper with non-genuine parts may adversely affect your vehicle's collision and air bag deployment performance.

Air bag inflation conditions



Front air bags

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





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

Side air bags

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

Although the front air bags (driver's and front passenger's air bags) are designed to inflate in frontal collisions, they also may inflate in other types of collisions if the front impact sensors detect a sufficient frontal force in another type of impact. Side impact and curtain air bags are designed to inflate in certain side impact collisions. They may inflate in other type of collisions where a side force is detected by the sensors.

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

Air bag non-inflation conditions



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

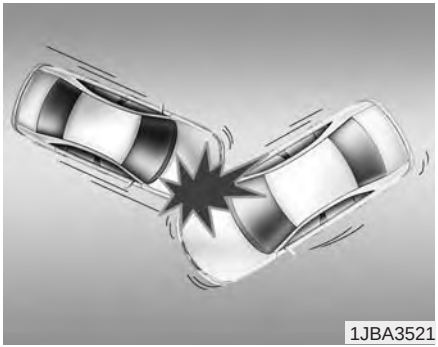

OED036100

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

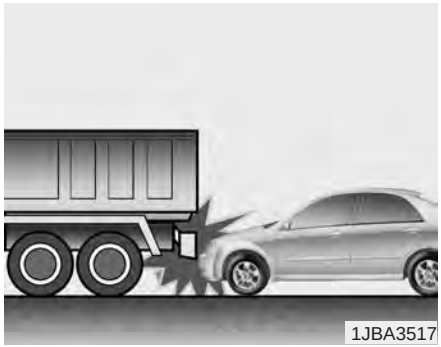


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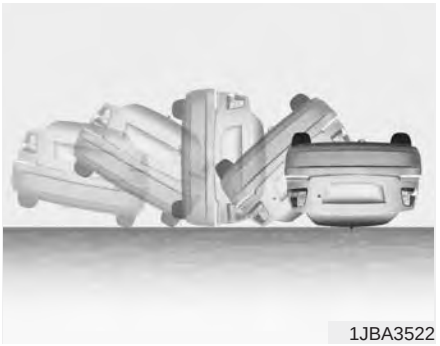
- Front air bags may not inflate in side impact collisions, because occupants move to the direction of the collision, and thus in side impacts, front air bag deployment would not provide additional occupant protection.


1JBA3521

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


1JBA3517

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


1JBA3522

- Air bags do not inflate in all rollover accidents, even though the vehicle is equipped with side air bags and curtain air bags.

  However, side and/or curtain air bags may inflate when the vehicle is rolled over following (or after) side impact collision.


1JBA3518

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

SRS Care

The SRS is virtually maintenance-free and there are no parts you can safely service by yourself. If the SRS air bag warning light does not illuminate, or continuously remains on, have your vehicle immediately inspected by an authorized Kia dealer.

Any work on the SRS system, such as removing, installing, repairing, or any work on the steering wheel must be performed by an authorized Kia dealer. Improper handling of the SRS system may result in serious personal injury.

For cleaning the air bag pad covers, use only a soft, dry cloth or one which has been moistened with plain water. Solvents or cleaners could adversely affect the air bag covers and proper deployment of the system.

⚠ WARNING - Tampering with SRS

Do not tamper with or disconnect SRS wiring, or other components of the SRS system. Doing so could result in the accidental inflation of the air bags or by rendering the SRS inoperative.

If components of the air bag system must be discarded, or if the vehicle must be scrapped, certain safety precautions must be observed. An authorized Kia dealer knows these precautions and can give you the necessary information. Failure to follow these precautions and procedures could increase the risk of personal injury.

Adding equipment to or modifying your air bag-equipped vehicle

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

Air bag warning label


OVG033044


OVG033310N


OVG039048

Air bag warning labels, some required by the U.S. National Highway Traffic Safety Administration (NHTSA), are attached to alert the driver and passengers of potential risks of the air bag system.

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SMART KEY

Record your key number



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

⚠ WARNING - Smart key

Never leave the keys in your vehicle with unsupervised children. Leaving children unattended in a vehicle with a smart key is dangerous. Children copy adults and they could press the start button. The 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 death.

Smart key functions

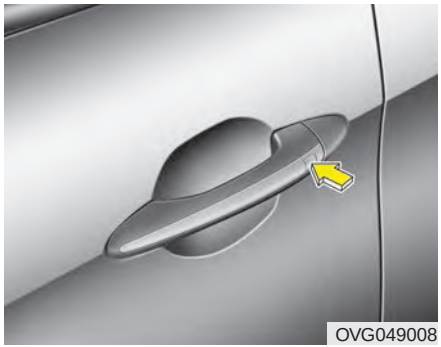


OKH042004

1. Door lock
2. Door unlock
3. Trunk open
4. Panic alarm

With smart key, you can lock or unlock doors (and trunk) and start the engine without inserting the key. Refer to the following, for more details.

Locking



OVG049008

Pressing the button of the front outside door handles with all doors closed and any door unlocked, locks all the doors. The hazard warning lights will blink and the chime will sound once to indicate that all doors are locked. The button will only operate when the smart key is within 0.7~1 m (28~40 in.) from the outside door handle. If you want to make sure that a door has locked or not, you should check the door lock button inside the vehicle or pull the outside door handle.

In some instances, when the outside door button is selected, the doors will not lock and an audible chime will sound for 3 seconds if any of the following occurs:

- The smart key is in the vehicle.
- The ignition switch is in the ACC or ON position.
- Any door except the trunk is opened.

Unlocking

Pressing the button of the driver's (or front passenger's) outside door handle with all doors closed and locked, unlocks the driver's door.

If you press the button of the driver's outside door handle again within 4 seconds, The other doors will be unlocked. But if you press the button of the driver's outside door handle again after 4 seconds, all doors will be locked. The hazard warning lights will blink and the chime will sound twice to indicate that the driver's door is unlocked. Also, the outside rearview mirrors will automatically unfold if the outside rearview mirror folding switch is in the AUTO position.

The button will only operate when the smart key is within 28~40 in. (0.7~1 m) from the outside door handle.

Start-up

You can start the engine without inserting the key. For detailed information refer to “Starting the engine with a smart key” in chapter 5.

Smart key precautions

- If you lose your smart key, you will not be able to start the engine. Tow the vehicle, if necessary, and contact an authorized Kia dealer.
- A maximum of 3 smart keys can be registered to a single vehicle. If you lose a smart key, you should immediately take the vehicle and key to your authorized Kia dealer to protect it from potential theft.
- The smart key will not work if any of following occurs:
  - The smart key is close to a radio transmitter such as a radio station or an airport which can interfere with normal operation of the smart key.
  - The smart key near a mobile two-way radio system or a cellular phone.
  - Another vehicle’s smart key is being operated close to your vehicle.

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

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

⚠ CAUTION - Transmitter

Keep the smart key away from water or any liquid as it can become damaged and not function properly.

Remote keyless entry system operations



Lock (1)

All doors are locked if the lock button is pressed. If all doors (and trunk) are closed, the hazard warning lights will blink once to indicate that all doors (and trunk) are locked.

Also, if the lock button is pressed once more within 4 seconds, the hazard warning lights will blink and the chime will sound once to confirm that the door is locked.

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

Unlock (2)

The driver's door is unlocked if the unlock button is pressed once. The hazard warning lights will blink (for smart key, the chime also sounds) twice to indicate that the driver's door is unlocked.

All doors are unlocked if the unlock button is pressed once more within 4 seconds. The hazard warning lights will blink (for smart key, the chime also sounds) twice again to indicate that all doors are unlocked. After pressing this button, the doors will lock automatically unless you open any door within 30 seconds.

✻ NOTICE

If the keyless entry system is inoperative due to exposure to water or liquids, it will not be covered by your manufacturer's vehicle warranty.

Trunk open (3)

The trunk is opened if the button is pressed for more than 1 second.

Once the trunk is opened and then closed, the trunk will lock automatically.

Panic alarm (4)

The horn sounds and the hazard warning lights blink for about 30 seconds if this button is pressed for more than 0.5 seconds. To stop the horn and lights, press any button on the transmitter.

Transmitter precautions

The transmitter (or smart key) will not work if any of following occurs:

- You exceed the operating distance limit (about 90 feet [30 m]).
- The battery in the transmitter (or smart key) is weak.
- Other vehicles or objects may be blocking the signal.
- The weather is extremely cold.
- The transmitter (or smart key) 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 (or smart key) does not work properly, open and close the door with the ignition key. If you have a problem with the transmitter (or smart key), contact an authorized Kia dealer.

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

Pursuant to Code of Federal Regulations, Title 47, Part 15 ("FCC Rules")

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

✻ NOTICE

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

Battery replacement



OKH042006

A battery should last for several years, but if the smart key is not working properly, try replacing the battery with a new one. If you are unsure how to use or replace the battery, contact an authorized Kia dealer.

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

The smart key is designed to give you years of trouble-free use, however it can malfunction if exposed to moisture or static electricity. If you are unsure how to use or replace the battery, contact an authorized Kia dealer.

Using the wrong battery can cause the transmitter or smart key to malfunction. Be sure to use the correct battery.

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

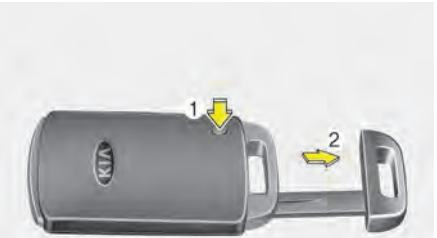
Dispose the battery according to your local law(s) or regulation.

⚠ CAUTION - Transmitter damage

Do not drop, wet or expose the keyless entry system transmitter to heat or sunlight.

Mechanical key operations

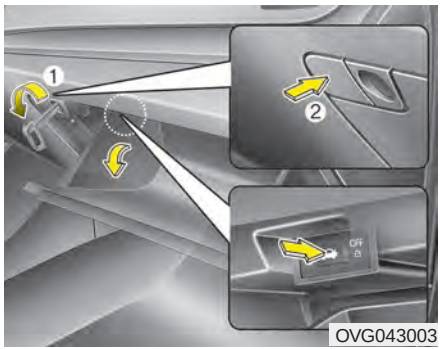
- Used to lock and unlock the glove box.
- Lock and unlock the doors when the vehicle or smart key battery is discharged.



OKH042008

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

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



Restrictions in handling keys

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

1. Press and hold the release button and remove the mechanical key.
2. Unlock the glove box by using the mechanical key (1) then open it (2).
3. Set the trunk lid control button to the OFF position (unpressed).
4. Close and lock the glove box using the mechanical key.

When leaving your keys with a parking lot attendant or valet, perform above steps 1 to 4, remove the mechanical key from the smart key and leave the smart key with the attendant. In this manner the smart 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 the mechanical key and set the trunk lid control button to the ON position (pressed). In this position the trunk will open with the trunk lid button or smart key.

Immobilizer system

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

Whenever the ENGINE START/STOP button is changed to the ON position, the immobilizer system checks and verifies if the key is valid or not.

If the key is valid, the engine will start.

If the key is invalid, the engine will not start.

To deactivate the immobilizer system

Change the ENGINE START/STOP button to the ON position.

To activate the immobilizer system

Change the ENGINE START/STOP button to the OFF position. The immobilizer system activates automatically. Without a valid smart key for your vehicle, the engine will not start.

✻ NOTICE

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

✻ NOTICE

Keep each key separate in order to avoid a starting malfunction.

Do not put metal accessories near the ignition switch.

Metal accessories may interrupt the transponder signal and may prevent the engine from being started.

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

⚠ CAUTION - Immobilizer damage

Do not expose your immobilizer system to moisture, static electricity and rough handling. This may damage your immobilizer.

⚠ CAUTION - Immobilizer alterations

Do not change, alter or adjust the immobilizer system because it could cause the immobilizer system to malfunction.

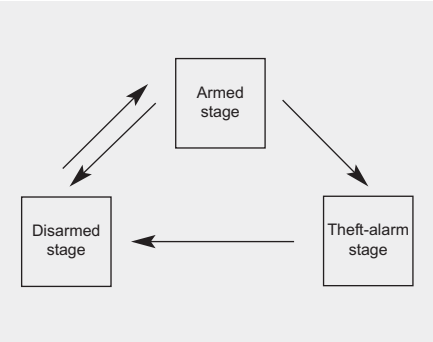
Pursuant to Code of Federal Regulations, Title 47, Part 15 ("FCC Rules")

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

THEFT-ALARM SYSTEM



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

Armed stage

Park the vehicle and stop the engine.

Arm the system as described below.

1. Turn off the engine.
2. Make sure that all doors (and trunk) and engine hood are closed and latched.
3. • Lock the doors by depressing the door lock button on the transmitter (or smart key).

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

   If any door, trunk or engine hood remains open, the hazard warning lights won't operate and theft-alarm will not arm. After this, if all doors, trunk and engine hood are closed, the hazard warning lights blink once.

   • Lock the doors by pressing the button of the front outside door handles with the smart key in your possession.

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

   If any door remains open, the hazard warning lights won't operate and theft-alarm will not arm. Close the door and try again to lock the doors.

   If trunk or engine hood remains open, the hazard warning lights won't operate and theft-alarm will not arm. Close the trunk or engine hood. The hazard warning lights blink once and theft-alarm arms.

The theft-alarm system by the key can be activated by an authorized Kia dealer.

If you want this feature, consult an authorized Kia dealer.

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

Theft-alarm stage

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

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

The horn will sound and the hazard warning lights will blink continuously for approximately 27 seconds. To turn off the system, unlock the doors with the smart key.

Disarmed stage

The system will be disarmed when:

Transmitter

- The door unlock button is pressed.
- The engine is started. (within 3 seconds)
- The ignition switch is in the “ON” position for 30 seconds or more.

Smart key

- The door unlock button is pressed.
- The button of the front outside door is pressed while carrying the smart key.
- The engine is started. (within 3 seconds)

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

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

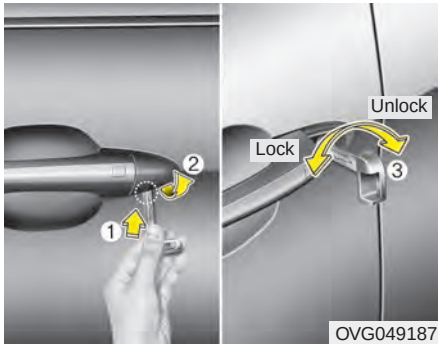
- Avoid trying to start the engine while the alarm is activated. The vehicle starting motor is disabled during the theft-alarm stage.

  If the system is not disarmed with the transmitter, insert the key into the ignition switch, turn the ignition switch to the ON position and wait for 30 seconds. Then the system will be disarmed.
- If you lose your keys, consult your authorized Kia dealer.
- If the system is not disarmed with the transmitter, insert the key into the ignition switch and start the engine. Then the system will be disarmed.
- If you lose your keys, consult your authorized Kia dealer.

DOOR LOCKS

Operating door locks from outside the vehicle

Mechanical key



- After removing the cover (1) ~ (2), turn the key toward the rear of the vehicle to unlock and toward the front of the vehicle to lock (3), (4).
- If you lock/unlock the driver's door with a key, only the driver's door will lock/unlock.
- Once the doors are unlocked, they may be opened by pulling the door handle.
- When closing the door, push the door by hand. Make sure that doors are closed securely.

Smart key

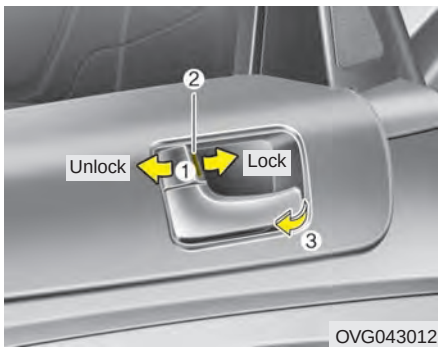
- Doors can be locked and unlocked with the transmitter (or smart key). (if equipped)
- Doors can be locked and unlocked pressing the button of the outside door handle with the smart key in your possession.
- Once the doors are unlocked, they may be opened by pulling the door handle.
- When closing the door, push the door by hand. Make sure that doors are closed securely.

✻ NOTICE

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

Operating door locks from inside the vehicle

With the door lock button



- To unlock a door, push the door lock button (1) to the “Unlock” position. The red mark (2) on the button will be visible.
- To lock a door, push the door lock button (1) to the “Lock” position. If the door is locked properly, the red mark (2) on the door lock button will not show.
- To open a door, pull the door handle (3) outward.
- If the inner door handle of the front door is pulled when the door lock button is in the lock position, the button will unlock and the door will open. (if equipped)
- Front doors cannot be locked if the ignition key is in the ignition switch (or if the smart key is in the vehicle) and any front door is opened. (if equipped)

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

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

With central door lock switch





Operate by pressing the central door lock switch.

- Press the switch to the "Lock" position (1), all vehicle doors will lock.
- Press the switch to the "Unlock" position (2), all vehicle doors will unlock.
- If the key is in the ignition switch (or if the smart key is in the vehicle) and any front door is opened, the doors will not lock when the “Lock” position (1) of the central door lock switch is pressed. (if equipped)

⚠ WARNING - Doors

The doors should always be fully closed and locked while the vehicle is in motion to prevent accidental opening of the door.

⚠ WARNING - Unattended children/ animals

Never leave children or animals unattended in your vehicle.

An enclosed vehicle can become extremely hot, causing death or severe injury to unattended children or animals who cannot escape the vehicle.

Impact sensing door unlock system

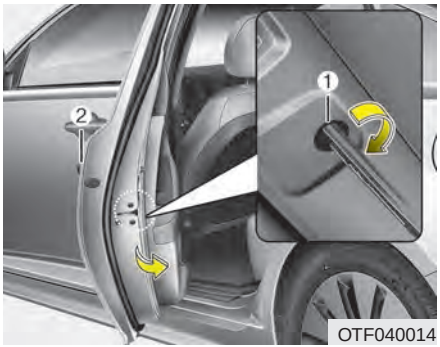
All doors will automatically unlock when an impact causes the air bags to deploy.

Auto door lock/unlock feature (if equipped)

- All doors will automatically lock when the transaxle shift lever is shifted out of P (Park).
- All doors will automatically unlock when the transaxle shift lever is shifted into P (Park).

You can activate or deactivate the auto door lock/unlock features in the vehicle. Refer to "LCD display" in this chapter.

Child-protector rear door lock



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

1. Open the rear door.
2. Insert a key (or screwdriver) into the hole and turn it to the lock ( ) position. the child safety lock (1) 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 even when the inner door handle is pulled.
3. Close the rear door.

To open the rear door, pull the outside door handle (2).

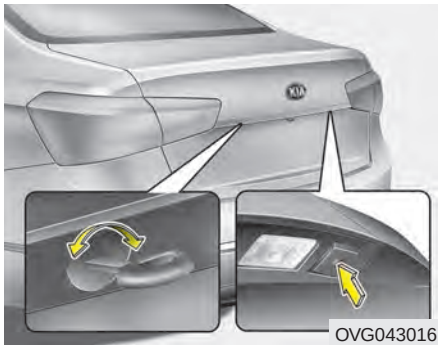
Even though the doors may be unlocked, the rear door will not open by pulling the inner door handle until the rear door child safety lock is unlocked.

⚠ WARNING - Rear door locks

Use the rear door safety locks whenever children are in the vehicle. If a child accidently opens the rear doors while the vehicle is motion, they can fall out.

TRUNK

Opening the trunk


OVG043016

- Press the trunk unlock button for more than 1 second on the transmitter (or smart key).
- Press the button on the trunk handle with the smart key in your possession.
- Insert the mechanical key into the lock and turn it clockwise.

  Once the trunk is opened and then closed, the trunk locks automatically.


OVG043017

- To open the trunk from inside the vehicle, press the trunk lid release button.

  Once the trunk is opened and then closed, the trunk locks automatically.

✻ NOTICE

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

⚠ WARNING

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

⚠ CAUTION

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

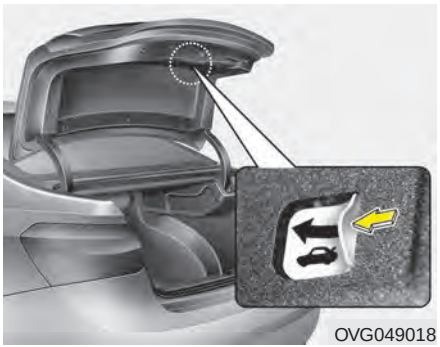
Closing the trunk

To close, lower the trunk lid, then press down on it until it locks. To be sure the trunk lid is securely fastened, always check by trying to pull it up again.

⚠ WARNING - Exhaust Fumes

The trunk lid should always be kept completely closed while the vehicle is in motion. If it is left open or ajar, exhaust gases may enter the car and serious illness or death may result.

Emergency trunk safety release

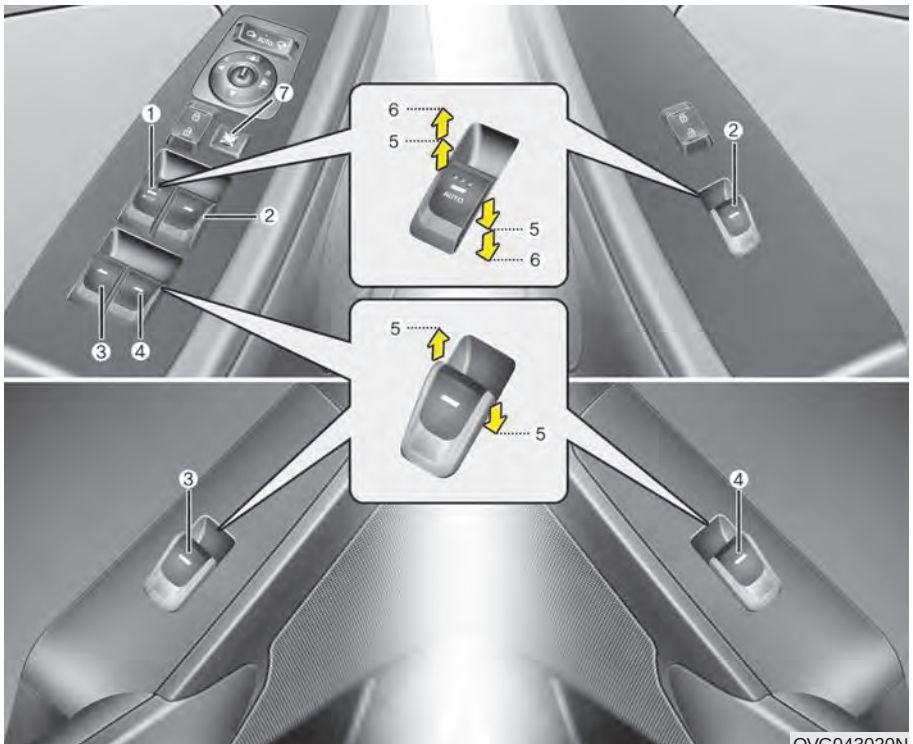

OVG049018

Your vehicle is equipped with an emergency trunk release lever located inside the trunk. If someone is inadvertently locked in the trunk, moving the handle in the direction of the arrow will release the trunk latch mechanism and open the trunk.

⚠ WARNING

- **No one should be allowed to occupy the trunk at any time. The trunk is a very dangerous location in the event of a crash.**
- **Use the release lever for emergencies only. Use extreme caution, especially while the vehicle is in motion.**

WINDOWS



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

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

Power windows

The ignition switch must be in the ON position for power windows to operate. Each door has a power window switch that controls the door's window. The driver has a power window lock switch which can block the operation of passenger windows.

The power windows can be operated for approximately 30 seconds after the ignition key is removed or turned to the ACC or LOCK position. However, if the front doors are opened, the power windows cannot be operated even within the 30 second period.

✻ NOTICE

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

Window opening and closing (if equipped)



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 to the first detent position (5).

Auto up/down window (if equipped)

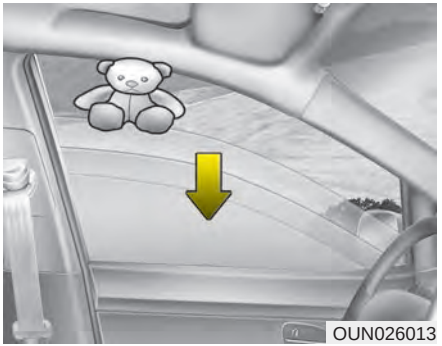


OVG043023

Pressing 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 press and release the switch to the opposite direction of the movement.

If the power window is not operated correctly, the automatic power window system must be reset as follows:

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


OUN026013

Automatic reversal

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

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

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

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

⚠ WARNING

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

Power window lock button


OVG043024N

- The driver can disable the power window switches on the rear passenger doors by pressing the power window lock switch, located on the driver's door to the LOCK position (pressed).

- **When the power window lock button is in the LOCK position (pressed),**
  - **Driver's master control : Can operate all window.**
  - **Front passenger's control : Can operate front passenger's window.**
  - **Rear passenger's control : Can not operate rear passenger's window.**

⚠ CAUTION - Opening / closing Window

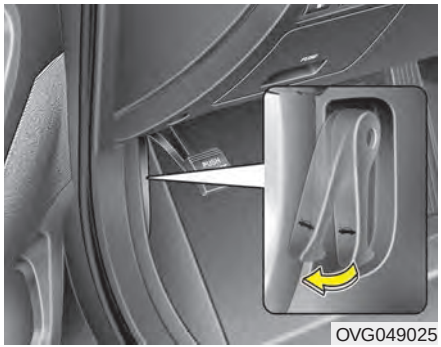
To prevent possible damage to the power window system, do not open or close two windows or more at the same time. This will also ensure the longevity of the fuse.

Do not allow children to play with the power windows. Keep the driver's door power window lock switch in the LOCK position (pressed).

Always double check to make sure all arms, hands, head and other obstructions are safely out of the way before closing a window.

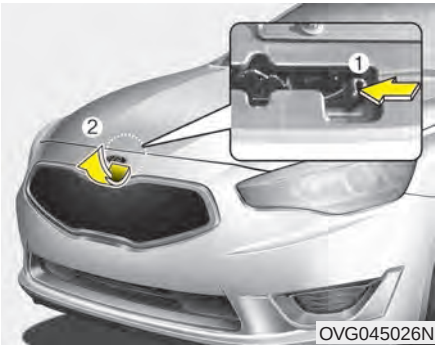
HOOD

Opening the hood


OVG049025

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

Open the hood after turning off the engine on a flat surface, shifting the shift lever to the P(Park) position for automatic transaxle and to the 1st(First) gear or R(Reverse) for manual transaxle, and setting the parking brake.



OVG045026N

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

⚠ WARNING - Unsecured engine hood

Always double check to be sure that the hood is firmly latched before driving away. If it is not latched, the hood could fly open while the vehicle is being driven, causing a total loss of visibility, which might result in an accident.

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.

⚠ WARNING

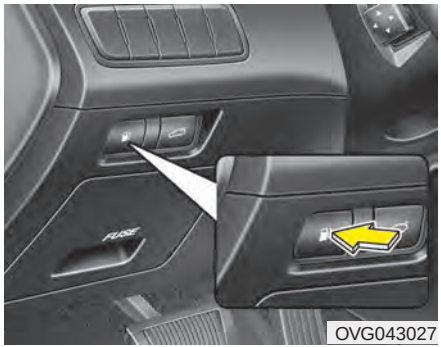
Before closing the hood, ensure that all obstructions are removed from the hood opening. Closing the hood with an obstruction present in the hood opening may result in property damage or severe personal injury.

⚠ WARNING - Fire Risk

Do not leave gloves, rags or any other combustible material in the engine compartment. Doing so may cause a heat-induced fire.

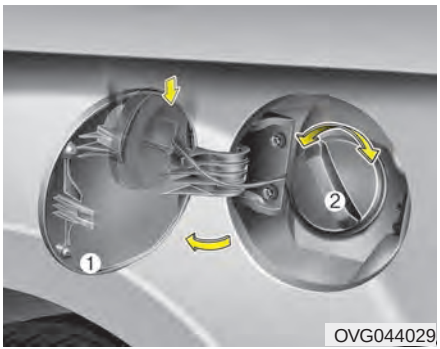
FUEL FILLER LID

Opening the fuel filler lid



The fuel filler lid must be opened from inside the vehicle by pushing the fuel filler lid opener.

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



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

Closing the fuel filler lid

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

⚠ WARNING - Refueling

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.

If pressurized fuel sprays out, it can cover your clothes or skin and subject you to the risk of fire and burns.

Always check that the fuel cap is installed securely to prevent fuel spillage in the event of an accident.

⚠ WARNING - Fire/explosion risk

Read and follow all warnings posted at the gas station facility. Failure to follow all warnings will result in severe personal injury, severe burns or death due to fire or explosion.

⚠ WARNING - Static electricity

- **Before touching the fuel nozzle, you should eliminate potentially dangerous static electricity discharge by touching another metal part of the vehicle, a safe distance away from the fuel filler neck, nozzle, or other gas source.**
- **Do not get back into a vehicle once you have begun refueling since you can generate static electricity by touching, rubbing or sliding against any item or fabric (polyester, satin, nylon, etc.) capable of producing static electricity. Static electricity discharge can ignite fuel vapors resulting in rapid burning. If you must re-enter the vehicle, you should once again eliminate potentially dangerous static electricity discharge by touching a metal part of the vehicle, away from the fuel filler neck, nozzle or other gasoline source.**

⚠ WARNING - Portable fuel container

When using an approved portable fuel container, be sure to place the container on the ground prior to refueling. Static electricity discharge from the container can ignite fuel vapors causing a fire. Once refueling has begun, contact with the vehicle should be maintained until the filling is complete. Use only approved portable plastic fuel containers designed to carry and store gasoline.

⚠ WARNING - Cell phone fires

Do not use cellular phones while refueling. Electric current and/or electronic interference from cellular phones can potentially ignite fuel vapors causing a fire.

⚠ WARNING - Refueling& Vehicle fires

When refueling, always shut the engine off. Sparks produced by electrical components related to the engine can ignite fuel vapors causing a fire. Once refueling is complete, check to make sure the filler cap and filler door are securely closed, before starting the engine.

⚠ WARNING - Smoking

DO NOT use matches or a lighter and DO NOT SMOKE or leave a lit cigarette in your vehicle while at a gas station especially during refueling. Automotive fuel is highly flammable and can, when ignited, result in fire.

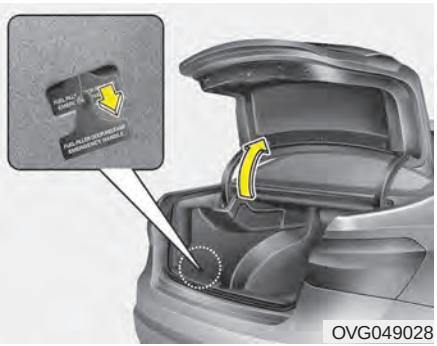
Make sure to refuel your vehicle according to the "Fuel requirements" suggested in section 1.

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.

⚠ CAUTION - Exterior paint

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

Emergency fuel filler lid release



If the fuel filler lid does not open using the remote fuel filler lid release, you can open it manually by pulling the handle outward slightly.

⚠ CAUTION

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

PANORAMIC SUNROOF (IF EQUIPPED)

■ Type A



OVG049031

■ Type B



OVG044031N

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

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

In cold and wet climates, the sunroof may not work properly due to freezing conditions.

After the vehicle is washed or in a rainstorm, be sure to wipe off any water that is on the sunroof before operating it.

The sunroof cannot slide when it is in the tilt position nor can it be tilted while in an open or slide position.

⚠ CAUTION - Sunroof control lever

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

⚠ WARNING - Sunroof operation

When closing the sunroof, make sure there are no body parts in the movement range of the sliding roof. Parts of the body could become trapped or crushed.

Sunroof open warning (if equipped)

■ Type A



OVG043337E

■ Type B



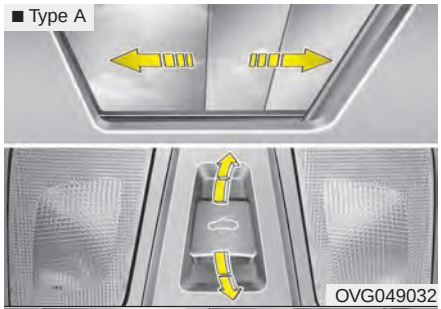
OVG043338E

If the driver removes the ignition key (smart key: turns off the engine) and opens the driver-side door when the sunroof is not fully closed, the warning chime will sound for a few seconds and a message "Sunroof Open" will appear on the LCD display.

Close the sunroof securely when leaving your vehicle.

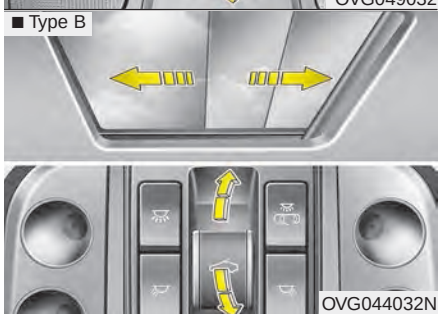
Sliding the sunroof

■ Type A



OVG049032

■ Type B



OVG044032N

When the sunshade is closed

If you pull the sunroof control lever backward to the second detent position, the sunshade will slide all the way open then the sunroof glass will slide all the way open.

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

When the sunshade is opened

If you pull the sunroof control lever backward, the sunroof glass will slide all the way open. To stop the sunroof movement at any point, pull or push the sunroof control lever momentarily.

Closing the sunroof

To close the sunroof glass only

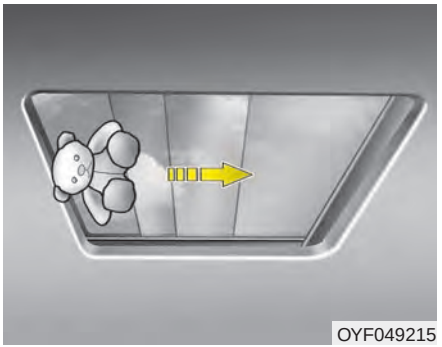
Push the sunroof control lever forward to the first detent position or pull the lever downward.

To close the sunroof glass with the sunshade

Push the sunroof control lever forward to the second detent position. The sunroof glass will close then the sunshade close automatically.

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

Automatic reversal


OYF049215

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

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

⚠ WARNING - Sunroof

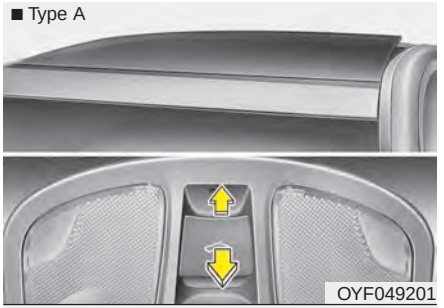
Do not extend the face, neck, arms or body outside through the sunroof opening while driving or operating the sunroof.

⚠ CAUTION

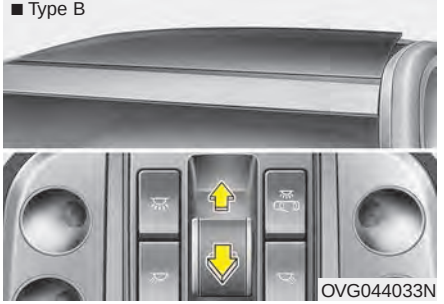
To prevent damage to the sunroof, periodically remove any dirt that may accumulate on the guide rail.

Tilting the sunroof

■ Type A


OYF049201

■ Type B


OVG044033N

When the sunshade is closed

If you push the sunroof control lever upward, the sunshade will slide all the way open then the sunroof glass will tilt.

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

When the sunshade is opened

If you push the sunroof control lever upward, the sunroof glass will tilt.

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

⚠ CAUTION - Sunroof motor damage

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.

Sunshade



- To open the sunshade, pull the sunroof control lever backward to the first detent position.
- To close the sunshade when the sunroof glass is closed, push the sunroof control lever forward.

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

✻ NOTICE

It is normal for wrinkles to form on the blind because of its material characteristic.

Resetting the sunroof

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

1. Turn the ignition switch to the ON position and close the sunroof completely.
2. Release the control lever.
3. Push and hold the control lever forward (for more than 10 seconds) until the sunroof tilts and slightly moves. Then, release the lever.
4. Push the sunroof control lever forward in the direction of close until the sunroof operates as follows:

   SUNSHADE OPEN → TILT OPEN → SLIDE OPEN → SLIDE CLOSE → SUNSHADE CLOSE

   Then, release the control lever.

   When this is complete, the sunroof system is reset.

❊ For more detailed information, contact an authorized Kia dealer.

✻ NOTICE

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

STEERING WHEEL

Electric power steering (EPS)

Power steering uses the motor 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.

The motor driven power steering is controlled by the power steering control unit which senses the steering wheel torque and vehicle speed to command the motor.

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

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.

✻ NOTICE

The following symptoms may occur during normal vehicle operation:

- **The steering effort is increased immediately after turning the ignition switch on. This happens as the system performs the EPS system diagnostics. When the diagnostics are completed, the steering wheel will return to its normal condition**
- **A click noise may be heard from the EPS relay after the ignition switch is turned to the ON or LOCK position.**
- **Motor noise may be heard when the vehicle is at a stop or at a low driving speed.**
- **The steering effort increases if the steering wheel is rotated continuously when the vehicle is not in motion. However, after a few minutes, it will return to its normal conditions.**
- **When you operate the steering wheel in low temperature, abnormal noise could occur. If temperature rises, the noise will disappear. This is a normal condition.**

⚠ WARNING

If the steering wheel becomes too warm, turn the system off. The heated steering wheel may cause burns even at low temperatures, especially if used for long periods of time.

If the Electric Power Steering System does not operate normally, the warning light will illuminate on the instrument cluster. The steering wheel may become difficult to control or operate abnormally. Take your vehicle to an authorized Kia dealer and have the vehicle checked as soon as possible.

Tilt and telescoping steering

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

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

⚠ WARNING - Steering wheel adjustment

Never adjust the angle and height of the steering wheel while driving. You may lose steering control.

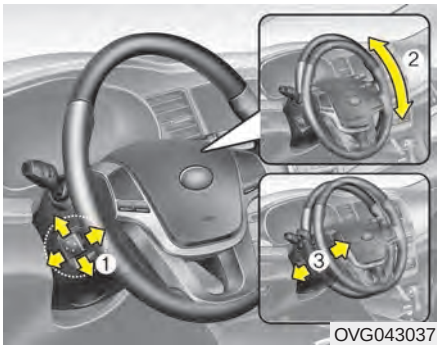
Manual type



To change the steering wheel angle and height:

1. Pull down the lock-release lever (1).
2. Adjust the steering wheel to the desired angle (2) and height (3).
3. Pull up the lock-release lever to lock the steering wheel in place.

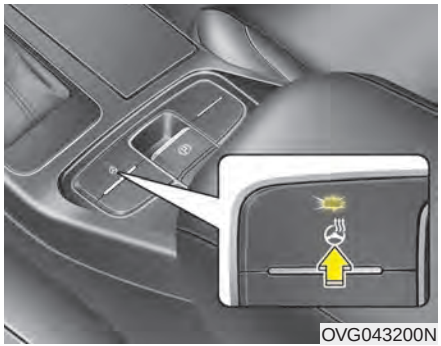
Electric type



To change the steering wheel angle and height:

- Move the switch (1) up and down to adjust the angle (2).
- Move the switch forward or rearward to adjust the height (3).

Heated steering wheel (if equipped)


OVG043200N

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

To turn the heated steering wheel off, press the button once again. The indicator on the button will turn off and notify you on the LCD display.

⚠ CAUTION

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

Horn


OXM043305

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

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

MIRRORS

Inside rearview mirror

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

Do not place objects in the rear seat which would interfere with your vision through the rear window.

⚠ WARNING - Mirror adjustment

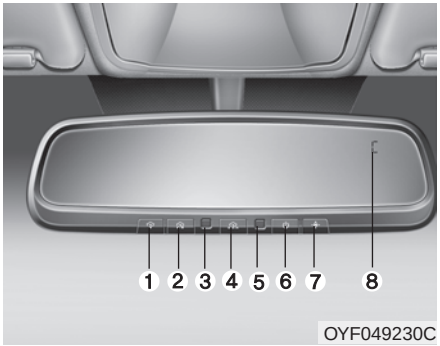
Do not adjust the rearview mirror while the vehicle is moving. This could result in loss of control.

Electric chromic mirror (ECM) with HomeLink® system and compass (if equipped)

Your vehicle may be equipped with a Gentex Automatic-Dimming Mirror with a Z-Nav® Electronic Compass Display and an Integrated HomeLink® Wireless Control System.

During nighttime driving, this feature will automatically detect and reduce rearview mirror glare while the compass indicates the direction the vehicle is pointed. The HomeLink® Universal Transceiver allows you to activate your garage door(s), electric gate, home lighting, etc.

❊ HomeLink® is registered trademark of Gentex Corporation.



(1) Channel 1 button
(2) Channel 2 button
(3) Status indicator LED
(4) Channel 3 button
(5) Rear light sensor
(6) Dimming ON/OFF button
(7) Compass control button
(8) Compass display

Automatic-Dimming Night Vision Safety™ (NVS®) Mirror

The NVS® Mirror in your vehicle is the most advanced way to reduce annoying glare in the rearview mirror during any driving situation. For more information regarding NVS® mirrors and other applications, please refer to the Gentex Corporation's website:

www.gentex.com

❇ Night Vision Safety™ is a registered trademark of Gentex Corporation.

⚠ CAUTION

The NVS® Mirror automatically reduces glare during driving conditions based upon light levels monitored in front of the vehicle and from the rear of the vehicle. These light sensors are visible through openings in the front and rear of the mirror case. Any object that obstructs either light sensor will degrade the automatic dimming control feature.

Automatic-dimming function

Your mirror will automatically dim upon detecting glare from the vehicles traveling behind you. The auto-dimming function can be controlled by the Dimming ON/OFF Button:

1. Pressing the ⏻ button turns the auto-dimming function OFF which is indicated by the green Status Indicator LED turning off.
2. Pressing the ⏻ button again turns the auto-dimming function ON which is indicated by the green Status Indicator LED turning on.

❇ NOTICE

The mirror defaults to the ON position each time the vehicle is started.

Z-Nav™ Compass Display

The NVS® Mirror in your vehicle is also equipped with a Z-Nav® Compass that shows the vehicle Compass heading in the Display Window using the 8 basic cardinal headings (N, NE, E, SE, etc.).

❇ Z-Nav™ is a registered trademark of Gentex Corporation.

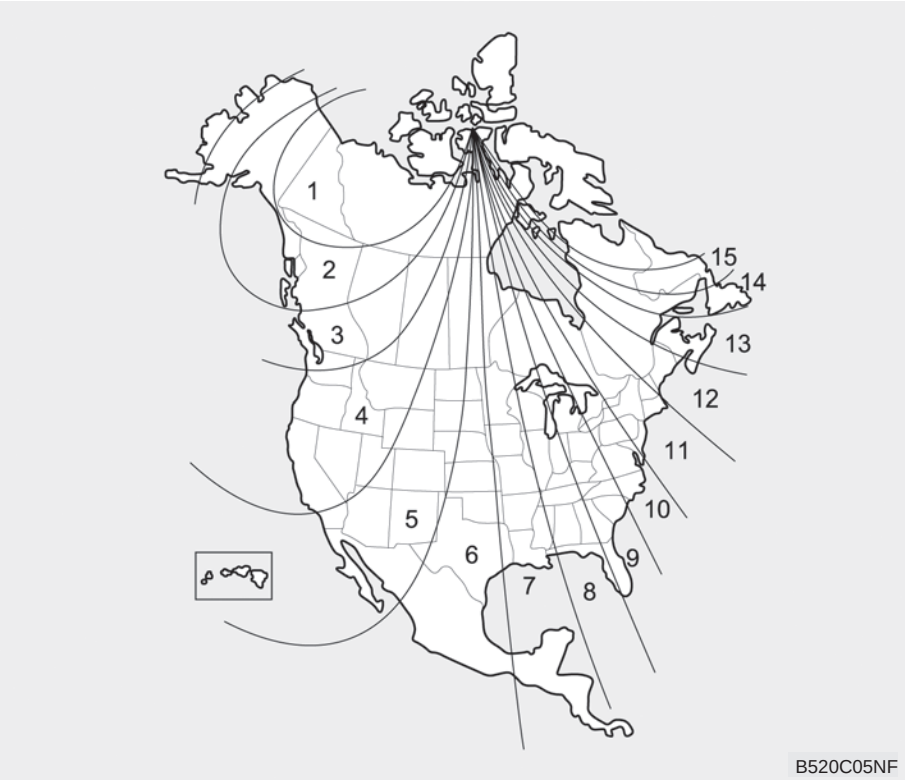
Compass function

The Compass can be turned ON and OFF and will remember the last state when the ignition is cycled. To turn the display feature ON/OFF:

1. Press and release the button to turn the display feature OFF.
2. Press and release the button again to turn the display back ON.

Additional options can be set with press and hold sequences of the button and are detailed below.

There is a difference between magnetic north and true north. The compass in the mirror can compensate for this difference when it knows the Magnetic Zone in which it is operating. This is set either by the dealer or by the user. The operating Zone Numbers for North America are shown in the figure on the following section.



To adjust the Zone setting:

1. Determine the desired Zone Number based upon your current location on the Zone Map.
2. Press and hold the button for more than 3 but less than 6 seconds, the current Zone Number will appear on the display.
3. Pressing and holding the button again will cause the numbers to increment (Note: they will repeat …13, 14, 15, 1, 2, …). Releasing the button when the desired Zone Number appears on the display will set the new Zone.
4. Within about 5 seconds the compass will start displaying a compass heading again.

There are some conditions that can cause changes to the vehicle magnets, such as installing a ski rack or a CB antenna. Body repair work on the vehicle can also cause changes to the vehicle's magnetic field. In these situations, the compass will need to be re-calibrated to quickly correct for these changes. To re-calibrate the compass:

1. Press and hold the button for more than 6 seconds. When the compass memory is cleared a "C" will appear in the display.
2. To calibrate the compass, drive the vehicle in 2 complete circles at less than 5 mph (8 km/h).

Integrated HomeLink® Wireless Control System

The HomeLink® Wireless Control System provides a convenient way to replace up to three hand-held radio-frequency (RF) transmitters with a single built-in device. This innovative feature will learn the radio frequency codes of most current transmitters to operate devices such as gate operators, garage door openers, entry door locks, security systems, even home lighting. Both standard and rolling code-equipped transmitters can be programmed by following the outlined procedures. Additional HomeLink® information can be found at: www.homelink.com or by calling 1-800-355-3515.

Retain the original transmitter of the RF device you are programming for use in other vehicles as well as for future HomeLink® programming. It is also suggested that upon the sale of the vehicle, the programmed HomeLink® buttons be erased for security purposes.

Programming HomeLink®

✻ NOTICE

- **When programming a garage door opener, it is advised to park the vehicle outside of the garage.**
- **It is recommended that a new battery be placed in the hand-held transmitter of the device being programmed to HomeLink® for quicker training and accurate transaxle of the radio-frequency signal.**
- **Some vehicles may require the ignition switch to be turned to the second (or "accessories") position for programming and/or operation of HomeLink®.**
- **In the event that there are still programming difficulties or questions after following the programming steps listed below, contact HomeLink® at: www.homelink.com or 1-800-355-3515.**

Standard programming

To train most devices, follow these instructions:

1. For first-time programming, press and hold the two outside buttons, HomeLink® Channel 1 and Channel 3 Buttons, until the indicator light begins to flash (after 20 seconds). Release both buttons. Do not hold the buttons for longer than 30 seconds.
2. Position the end of your hand-held transmitter 1-3 inches (2-8 cm) away from the HomeLink® buttons while keeping the indicator light in view.
3. Simultaneously press and hold both the HomeLink® and hand-held transmitter button. DO NOT release the buttons until step 4 has been completed.
4. While continuing to hold the buttons the red Indicator Status LED will flash slowly and then rapidly after HomeLink® successfully trains to the frequency signal from the hand-held transmitter. Release both buttons.

5. Press and hold the just-trained HomeLink® button and observe the red Status Indicator LED. If the indicator light stays on constantly, programming is complete and your device should activate when the HomeLink® button is pressed and released.
6. To program the remaining two HomeLink® buttons, follow steps 2 through 5.

Rolling code programming

Rolling code devices which are "code-protected" and manufactured after 1996 may be determined by the following:

- Reference the device owner's manual for verification.
- The handheld transmitter appears to program the HomeLink® Universal Transceiver but does not activate the device.
- Press and hold the trained HomeLink® button. The device has the rolling code feature if the indicator light flashes rapidly and then turns solid after 2 seconds.

To train rolling code devices, follow these instructions:

1. At the garage door opener receiver (motor-head unit) in the garage, locate the "learn" or "smart" button. This can usually be found where the hanging antenna wire is attached to the motor-head unit. Exact location and color of the button may vary by garage door opener brand.

   If there is difficulty locating the training button, reference the device owner's manual or please visit our Web site at www.homelink.com.
2. Firmly press and release the "learn" or "smart" button (which activates the "training light").

✻ NOTICE

There are 30 seconds in which to initiate step 3.

3. Return to the vehicle, firmly press and hold for two seconds the desired HomeLink® button then release. Repeat the "press/hold/release" sequence a second time to complete the programming. (Some devices may require you to repeat this sequence a third time to complete the programming.)
4. Press and hold the just-trained HomeLink® button and observe the red Status Indicator LED. If the indicator light stays on constantly, programming is complete and your device should activate.
5. To program the remaining two HomeLink® buttons, follow either steps 1 through 4 above for other Rolling Code devices or steps 2 through 5 in Standard Programming for standard devices.

Gate operator & Canadian programming

During programming, your handheld transmitter may automatically stop transmitting. Continue to press the Integrated HomeLink® Wireless Control System button (note steps 2 through 4 in the Standard Programming portion of this document) while you press and re-press ("cycle") your handheld transmitter every two seconds until the frequency signal has been learned. The indicator light will flash slowly and then rapidly after several seconds upon successful training.

Operating HomeLink®

To operate, simply press and release the programmed HomeLink® button. Activation will now occur for the trained device (i.e. garage door opener, gate operator, security system, entry door lock, home/office lighting, etc.). For convenience, the hand-held transmitter of the device may also be used at any time.

Reprogramming a single HomeLink® button

To program a new device to a previously trained HomeLink® button, follow these steps:

1. Press and hold the desired HomeLink® button. Do NOT release until step 4 has been completed.
2. When the indicator light begins to flash slowly (after 20 seconds), position the handheld transmitter 1 to 3 inches away from the HomeLink® surface.
3. Press and hold the handheld transmitter button. The HomeLink® indicator light will flash, first slowly and then rapidly.
4. When the indicator light begins to flash rapidly, release both buttons.
5. Press and hold the just-trained HomeLink® button and observe the red Status Indicator LED. If the indicator light stays on constantly, programming is complete and your new device should activate.

Erasing HomeLink® buttons

Individual buttons cannot be erased. However, to erase all three programmed buttons:

1. Press and hold the two outer HomeLink® buttons until the indicator light begins to flash-after 20 seconds.
2. Release both buttons. Do not hold for longer than 30 seconds.

The Integrated HomeLink® Wireless Control System is now in the training (learn) mode and can be programmed at any time following the appropriate steps in the Programming sections above.

FCC ID: NZLZTVHL3

IC: 4112A-ZTVHL3

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

The transceiver has been tested and complies with FCC and Industry Canada rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

NVS® and ZNav® are registered trademarks. Nav® are of Gentex Corporation, Zeeland, Michigan.

HomeLink® is a registered trademark owned by Johnson Controls Technology Company, Holland, Michigan.

Outside rearview mirror

Be sure to adjust mirror angles before driving.

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

The right outside rearview mirror is convex. Objects seen in the mirror are closer than they appear.

Use your interior rearview mirror or direct observation to determine the actual distance of following vehicles when changing lanes.

⚠ CAUTION - Rearview mirror

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.

⚠ WARNING - Mirror adjustment

Do not adjust or fold the outside rearview mirrors while the vehicle is moving. This could result in loss of control.

Adjusting outside rearview mirror



The electric remote control mirror switch allows you to adjust the position of the left and right outside rearview mirrors. To adjust the position of either mirror the ignition switch should be in the ACC or ON position.

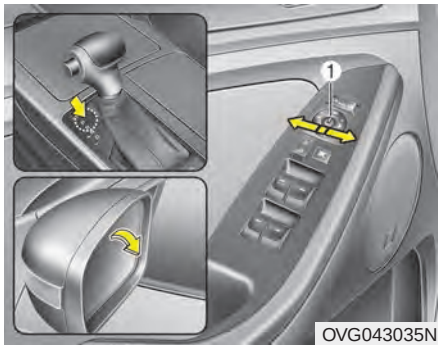
Move the lever (1) to R or L to select the right side mirror or the left side mirror, then press a corresponding point on the mirror adjustment control to position the selected mirror up, down, left or right.

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

⚠ CAUTION - Outside mirror

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

Reverse parking aid function (if equipped)



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

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

Neutral : When the remote control outside rearview mirror switch is placed in the middle, the outside rearview mirrors will not operate while the vehicle is moving rearward.

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

1. The ignition switch is in the OFF position.
2. Shift lever is moved to any position except R (Reverse).
3. Remote control outside rearview mirror switch is placed in the middle.

Folding the outside rearview mirror (if equipped)



The outside rearview mirror can be folded or unfolded by pressing the switch as below.

Left (1) : The mirror will unfold.

Right (2) : The mirror will fold.

Center (AUTO, 3) :

The mirror will fold or unfold automatically as follows:

- The mirror will fold or unfold when the door is locked or unlocked by the smart key.
- The mirror will fold or unfold when the door is locked or unlocked by the button on the outside door handle.
- The mirror will unfold when you approach the vehicle (all doors closed and locked) with a smart key in possession. (if equipped)

⚠ CAUTION

- Electric type outside rearview mirror

The electric type outside rearview mirror operates even though the ignition switch is in the OFF position. However, to prevent unnecessary battery discharge, do not adjust the mirrors longer than necessary while the engine is not running.

In case it is an electric type outside rearview mirror, don't fold it by hand. It could cause motor failure.

INSTRUMENT CLUSTER

■ **Type A**



■ **Type B**



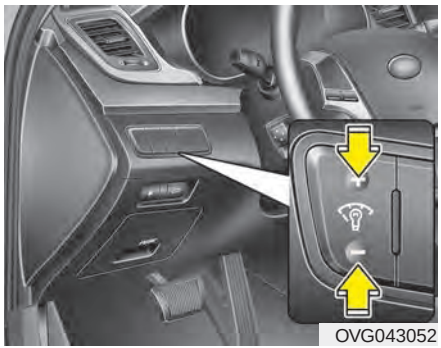
1. Tachometer
2. Speedometer
3. Engine coolant temperature gauge
4. Fuel gauge
5. LCD display
6. Warning and indicator lights (if equipped)
7. Turn signal indicator lights

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

OVG043050N/OVG043051N

Instrument Cluster Control

Adjusting Instrument Cluster Illumination



OVG043052

The brightness of the instrument panel illumination is changed by pressing the illumination control button ("+" or "-") when the ignition switch or Engine Start/Stop button is ON, or the tale lights are turned on.

■ Type A



OVG043302E

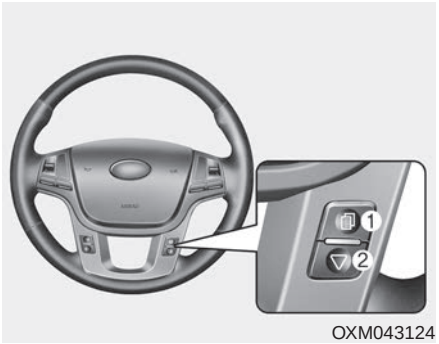
■ Type B



OVG043303E

- If you hold the illumination control button ("+" or "-"), the brightness will be changed continuously.
- If the brightness reaches to the maximum or minimum level, an alarm will sound.

LCD Display Control



OXM043124

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

(1) : MODE button for changing modes or SELECT button for setting the selected item

(2) ▽ : MOVE button for changing items or RESET button for resetting the selected item

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

Gauges

Speedometer

■ Type A



OVG043053N

■ Type B



OVG043054N

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

Tachometer

■ Type A



OVG043055

■ Type B



OVG043056

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

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

⚠ CAUTION

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

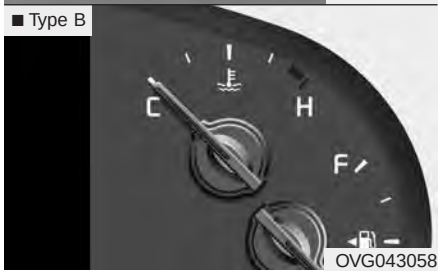
Engine Coolant Temperature Gauge

■ Type A



OVG043057

■ Type B



OVG043058

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

⚠ CAUTION

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

Do not continue driving with an overheated engine. If your vehicle overheats, refer to "If the Engine Overheats" in chapter 6.

Fuel Gauge

■ Type A



OVG043059

■ Type B



OVG043060

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

✻ NOTICE

- **The fuel tank capacity is given in chapter 8.**
- **The fuel gauge is supplemented by a low fuel warning light, which will illuminate when the fuel tank is nearly empty.**
- **On inclines or curves, the fuel gauge pointer may fluctuate or the low fuel warning light may come on earlier than usual due to the movement of fuel in the tank.**

✻ NOTICE

Running out of fuel can expose vehicle occupants to danger.
You must stop and obtain additional fuel as soon as possible after the warning light comes on or when the gauge indicator comes close to the "E (Empty)" level.

⚠ CAUTION

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

✻ NOTICE

Fuel display may not be accurate if you are filling in sloping places.

Odometer

■ Type A



OVG043061N

■ Type B



OVG043062N

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

- Odometer range : 0 ~ 999999 miles or kilometers.

Outside Temperature Gauge

■ Type A



OVG043063N

■ Type B



OVG043064N

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

- Temperature range : -40°F ~ 140°F (-40°C ~ 60°C)

The outside temperature on the display may not change immediately like a general thermometer to prevent the driver from being inattentive.

The temperature unit (from °F to °C or from °C to °F) can be changed by using the “User Settings” mode of the LCD display.

❈ For more details, refer to “LCD Display” in this chapter.

Transaxle Shift Indicator

Automatic Transaxle Shift Indicator

■ Type A



OVG043065

■ Type B



OVG043066

This indicator displays which automatic transaxle shift lever is selected.

- Park : P
- Reverse : R
- Neutral : N
- Drive : D
- Sports Mode : 1, 2, 3, 4, 5, 6

LCD DISPLAY

LCD Modes

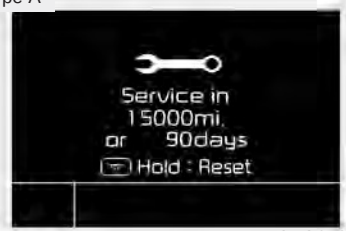
Modes	Symbol		Explanation
	Type A	Type B	
Trip Computer			This mode displays driving information like the tripmeter, fuel economy, and so on. For more details, refer to “Trip Computer” in this chapter.
SCC/LDWS (if equipped)	-		This mode displays the state of the Advanced Smart Cruise Control system (ASCC) and Lane Departure Warning System (LDWS). For more details, refer to "Advanced Smart Cruise Control system (ASCC)" or "Lane Departure Warning System (LDWS)" in chapter 5.
A/V			This mode displays the state of the A/V system.
Turn By Turn (if equipped)	-		This mode displays the state of the navigation.
Information			This mode informs of service interval (mileage or days).
			This mode informs of warning messages related to washer fluid or malfunction of Blind Spot Detection system (BSD) and so on.
User Settings			On this mode, you can change settings of the doors, lamps and so on.

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

Service Mode

Service in

■ Type A



OVG043304N

■ Type B



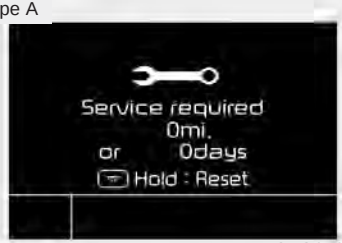
OVG043388N

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

If the remaining mileage or time reaches 900 mi. (1,500 km) or 30 days, "Service in" message is displayed for several seconds each time you set the ignition switch or Engine Start/Stop Button to the ON position.

Service required

■ Type A



OVG043387N

■ Type B



OVG043305N

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

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

- Press the RESET button ▽ for more than 1 second.

Service in OFF

■ Type A



OVG043393E

■ Type B



OVG043394E

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

✻ NOTICE

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

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

Master Warning Mode



- This warning light informs the driver the following situations
  - Low washer fluid
  - TPMS
  - Blind Spot Detection (BSD) (if equipped)
  - Fuel cap open
  - Service required

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

If the warning situation is solved, the master warning light will be turned off and the LCD Modes Icon will be changed back to its previous icon (*i*).

(ex : refill the washer fluid)

User Settings Mode

Description

■ Type A



OVG043308E

■ Type B



OVG043309E

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

Door

Auto Door Lock

- Off:

  The auto door lock operation will be deactivated.
- Speed:

  All doors will be automatically locked when the vehicle speed exceeds 9.3mph (15km/h).
- Shift Lever:

  All doors will be automatically locked if the automatic transaxle shift lever is shifted from the P (Park) position to the R (Reverse), N (Neutral), or D (Drive) position.

Auto Door Unlock

- Off:

  The auto door unlock operation will be canceled.

- Key Out or Power Off:

  All doors will be automatically unlocked when the ignition key is removed from ignition switch or Engine Start/Stop Button is set to the OFF position.

- Shift Lever:

  All doors will be automatically unlocked if the automatic transaxle shift lever is shifted to the P (Park) position.

Two Press Unlock

- Off:

  The two press unlock function will be deactivated. Therefore, all doors will unlock if the door is unlocked.

- On:

  The driver's door will unlock if the door is unlocked. When the door is unlocked again within 4 seconds, all doors will unlock.

Lock/Unlock sound

- Off:

  The Lock/Unlock sound operation will be deactivated.

- On:

  When you locking (or unlocking) the door by pressing the lock (or unlock) button on the transmitter or door out handle, the confirm sound will operate.

Horn Feedback

- Off:

  The Horn feedback operation will be deactivated.

- On:

  After locking the door by pressing the lock button on the transmitter, if you press the lock button again within 4 seconds, the warning sound will operate once to indicate that all doors are locked.

Lamp

One touch turn lamp

If this item is checked, the lane change signals will blink 3, 5 or 7 times when the turn signal lever is moved slightly.

Head Lamp Delay

If this item is checked, the headlamp delay and headlamp welcome function will be activated.

Welcome Light (if equipped)

If this item is checked, the welcome light function of the pocket lamp will be activated.

Settings

Temperature Unit

Convert the temperature unit from °C to °F or from °F to °C.

Speed Unit (for type B cluster)

Convert the speedometer unit km/h to MPH or MPH to km/h

At this time MPH or km/h unit displayed in the upper-right corner.

Speedometer Size (for type B cluster)

Adjust the size of the numbers on the cluster you prefer (normal or large)

AVG Fuel Eco Reset

- Auto Reset:

  The average fuel economy will reset automatically when refueling.
- Manual Reset:

  The average fuel economy will not reset automatically whenever refueling.

For more details, refer to “Trip Computer” in this chapter.

Seat Easy Access (if equipped)

If this item is checked, the driver’s seat will automatically move forward or rearward for the driver to enter or exit the vehicle comfortably.

Steering Easy Access (if equipped)

If this item is checked, the steering wheel will automatically move upward or downward for driver to enter or exit the vehicle comfortably.

Welcome Sound

If this item is checked, the welcome sound function will be activated.

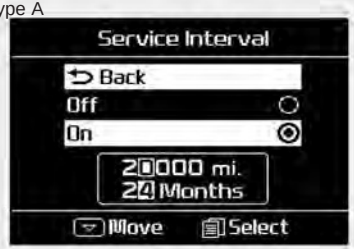
Steering Position

If this item is checked, the warning function regarding the steering wheel alignment will be activated.

For more details, refer to "Warning Messages" in this chapter.

Service Interval

■ Type A



OVG043361N

■ Type B



OVG043310N

On this mode, you can activate the service interval function with mileage (mi. or km) and period (months).

A/V Mode

■ Type A



OVG043071

■ Type B



OVG043072

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

Turn By Turn Mode

■ Type B



OVG043073E

This mode displays the state of the navigation.

Warning Messages

Shift to "P" position

■ Type A



OVG043321E

■ Type B



OVG043322E

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

■ Type A



OVG043315E

■ Type B



OVG043316E

Low Key Battery

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

■ Type A



OVG043395E

■ Type B



OVG043396E

Press start button while turn steering

■ Type A



OVG043389E

■ Type B



OVG043390E

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

■ Type A



OVG043391E

■ Type B



OVG043392E

Steering wheel unlocked

■ Type A



OVG043325E

■ Type B



OVG043326E

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

Check steering wheel lock

■ Type A



OVG043311E

■ Type B



OVG043312E

system

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

Press brake pedal to start engine

■ Type A



OVG043313E

■ Type B



OVG043314E

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

Key not in vehicle

■ Type A



OVG043317E

■ Type B



OVG043318E

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

Key not detected

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

Press start button again

■ Type A



OVG043319E

■ Type B



OVG043320E

- This warning message illuminates if you can not operate the Engine Start/Stop Button when there is a problem with the Engine Start/Stop Button system.
- It means that you could start the engine by pressing the Engine Start/ Stop Button once more.

■ Type A



OVG043329E

■ Type B



OVG043330E

- If the warning illuminates each time you press the Engine Start/Stop Button, have your vehicle inspected by an authorized Kia dealer.

Press start button with smart key

■ Type A



OVG043323E

■ Type B



OVG043324E

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

Check fuse "BRAKE SWITCH"

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

Shift to "P" or "N" to start engine

■ Type A



OVG043333E

■ Type B



OVG043334E

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

✻ NOTICE

■ Type A



OVG043335E

■ Type B



OVG043336E

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

Door Open

■ Type A



OVG043337E

■ Type B



OVG043338E

- It means that any door is open.

Trunk Open

■ Type A



OVG043339E

■ Type B



OVG043340E

- It means that the trunk is open.

Sunroof Open (if equipped)

■ Type A



OVG043331E

■ Type B



OVG043332E

- The warning message illuminates if you turn off the engine and then open the driver's door when the sunroof is open.

Align steering wheel

■ Type A



OVG043327E

■ Type B



OVG043328E

- This warning message illuminates if you start the engine when the steering wheel is turned to more than 90 degrees to the left or right.
- It means that you should turn the steering wheel and make the angle of the steering wheel be less than 30 degrees.

Low Washer Fluid

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

TRIP COMPUTER

Overview

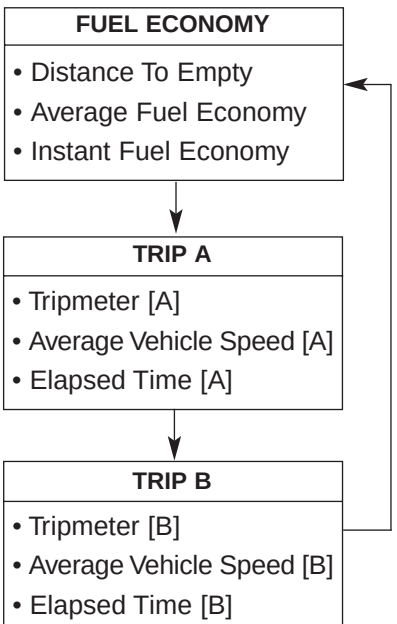
Description

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

✻ NOTICE

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

Trip Modes



To change the trip mode, press the MOVE button ▽.

Fuel Economy

■ Type A



OVG043067N

■ Type B



OVG043069N

Range (1)

- The range is the estimated distance the vehicle can be driven with the remaining fuel.
  - Distance range : 30 ~ 9999 mi or 50 ~ 9999 km.
- If the estimated distance is below 30 mi. (50 km), the trip computer will display "---" as range.

✻ NOTICE

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

Average Fuel Economy (2)

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

Manual reset

To clear the average fuel economy manually, press the RESET button ▽ on the steering wheel for more than 1 second when the average fuel economy is displayed.

Automatic reset

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

Under "Auto Reset" mode, the average fuel economy will be cleared to zero (---) when the vehicle speed exceeds 1 km/h after refueling more than 1.6 gallons (6 liters).

✻ NOTICE

The average fuel economy is not displayed for more accurate calculation if the vehicle does not drive more than 0.19 miles (300 meters) since the Engine Start/Stop button is turned to ON.

Instant Fuel Economy (3)

- This mode displays the instant fuel economy during the last few seconds when the vehicle speed is more than 6.2 MPH (10 km/h).
  - Fuel economy range: 0 ~ 50 MPG or 0 ~ 30 L/100km

Trip A/B

■ Type A



OVG043341N

■ Type B



OVG043386N

Tripmeter (1)

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

Average Vehicle Speed (2)

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

✻ NOTICE

- **The average vehicle speed is not displayed if the driving distance is less than 0.19 miles (300 meters) since the Engine Start/Stop button is turned to ON.**
- **Even if the vehicle is not in motion, the average vehicle speed keeps going while the engine is running.**

Elapsed Time (3)

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

✻ NOTICE

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

WARNING AND INDICATOR LIGHTS

Warning lights

✻ NOTICE - Warning lights

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

Air bag Warning Light



This warning light illuminates:

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

  In this case, have your vehicle inspected by an authorized Kia dealer.

Seat Belt Warning Light



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

For more details, refer to the “Seat Belts” in chapter 3.

Parking Brake & Brake Fluid Warning Light



This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds
  - It remains on if the parking brake is applied.
- When the parking brake is applied.
- When the brake fluid level in the reservoir is low.
  - If the warning light illuminates with the parking brake released, it indicates the brake fluid level in reservoir is low.

If the brake fluid level in the reservoir is low:

1. Drive carefully to the nearest safe location and stop your vehicle.
2. With the engine stopped, check the brake fluid level immediately and add fluid as required (For more details, refer to “Brake Fluid” in chapter 7).

   Then check all brake components for fluid leaks. If any leaks in the brake system is still found, the warning light remains on, or the brakes do not operate properly, do not drive the vehicle.

   In this case, have your vehicle towed to an authorized Kia dealer and inspected.

Dual-diagonal braking system

Your vehicle is equipped with dual-diagonal braking systems. This means you still have braking on two wheels even if one of the dual systems should fail.

With only one of the dual systems working, more than normal pedal travel and greater pedal pressure are required to stop the vehicle.

Also, the vehicle will not stop in as short a distance with only a portion of the brake system working.

If the brakes fail while you are driving, shift to a lower gear for additional engine braking and stop the vehicle as soon as it is safe to do so.

Driving the vehicle with a warning light ON is dangerous. If the Parking Brake & Brake Fluid Warning Light illuminates with the parking brake released, it indicates that the brake fluid level is low.

In this case, have your vehicle inspected by an authorized Kia dealer.

Anti-lock Brake System (ABS) Warning Light



This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the ABS (The normal braking system will still be operational without the assistance of the anti-lock brake system).

  In this case, have your vehicle inspected by an authorized Kia dealer.

Electronic Brake force Distribution (EBD) System Warning Light



These two warning lights illuminate at the same time while driving:

- When the ABS and regular brake system may not work normally.

  In this case, have your vehicle inspected by an authorized Kia dealer.

⚠ WARNING - Electronic Brake force Distribution (EBD) System Warning Light

When both ABS and Parking Brake & Brake Fluid Warning Lights are on, the brake system will not work normally and you may experience an unexpected and dangerous situation during sudden braking thereby increasing the risk of a crash or injury.

In this case, avoid high speed driving and abrupt braking. Have your vehicle inspected by an authorized Kia dealer as soon as possible.

✻ NOTICE - Electronic Brake force Distribution (EBD) System Warning Light

When the ABS Warning Light is on or both ABS and Parking Brake & Brake Fluid Warning Lights are on, the speedometer, odometer, or trip-meter may not work. Also, the EPS Warning Light may illuminate and the steering effort may increase or decrease.
In this case, have your vehicle inspected by an authorized Kia dealer as soon as possible.

Electronic Power Steering (EPS) Warning Light



This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It remains on until the engine is started.
- When there is a malfunction with the EPS.

  In this case, have your vehicle inspected by an authorized Kia dealer.

Malfunction Indicator Lamp (MIL)



This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It remains on until the engine is started.
- When there is a malfunction with the emission control system.

  In this case, have your vehicle inspected by an authorized Kia dealer.

⚠ CAUTION - Malfunction Indicator Lamp (MIL)

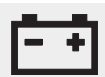
Driving with the Malfunction Indicator Lamp (MIL) on may cause damage to the emission control systems which could effect drivability and/or fuel economy.

⚠ CAUTION - Catalytic converter

If the Malfunction Indicator Lamp (MIL) illuminates, potential catalytic converter damage is possible which could result in loss of engine power.

In this case, have your vehicle inspected by an authorized Kia dealer as soon as possible.

Charging System Warning Light



This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It remains on until the engine is started.
- When there is a malfunction with either the alternator or electrical charging system.

If there is a malfunction with either the alternator or electrical charging system:

1. Drive carefully to the nearest safe location and stop your vehicle.
2. Turn the engine off and check the alternator drive belt for looseness or breakage.

   If the belt is adjusted properly, there may be a problem in the electrical charging system.

   In this case, have your vehicle inspected by an authorized Kia dealer as soon as possible.

Engine Oil Pressure Warning Light



This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It remains on until the engine is started.
- When the engine oil pressure is low.

If the engine oil pressure is low:

1. Drive carefully to the nearest safe location and stop your vehicle.
2. Turn the engine off and check the engine oil level (For more details, refer to “Engine Oil” in section 7). If the level is low, add oil as required.

   If the warning light remains on after adding oil or if oil is not available, have your vehicle inspected by an authorized Kia dealer as soon as possible.

⚠ CAUTION - Engine damage

If the engine does not stop immediately after the engine oil pressure warning light is illuminated and stays on while the engine is running, serious engine damage may result.

- If the warning light stays on while the engine is running, it indicates that there may be serious engine damage or malfunction. In this case,
  1. Stop the vehicle as soon as it is safe to do so.
  2. Turn off the engine and check the oil level. If the oil level is low, fill the engine oil to the proper level.
  3. Start the engine again. If the warning light stays on after the engine is started, turn the engine off immediately. In this case, have your vehicle inspected by an authorized Kia dealer.

Low Fuel Level Warning Light



This warning light illuminates:

When the fuel tank is nearly empty.

If the fuel tank is nearly empty:

Add fuel as soon as possible.

⚠ CAUTION - Low Fuel Level

Driving with the Low Fuel Level warning light on or with the fuel level below “0 or E” can cause the engine to misfire and damage the catalytic converter (if equipped).

Low Tire Pressure Warning Light



This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When one or more of your tires are significantly underinflated (The location of the underinflated tires are displayed on the LCD display).

  For more details, refer to “Tire Pressure Monitoring System (TPMS)” in chapter 6.

This warning light remains on after blinking for approximately 60 seconds or repeats blinking and off at the intervals of approximately 3 seconds:

- When there is a malfunction with the TPMS.

  In this case, have your vehicle inspected by an authorized Kia dealer as soon as possible.

  For more details, refer to “Tire Pressure Monitoring System (TPMS)” in chapter 6.

⚠ WARNING
- Low tire pressure

- **Significantly low tire pressure makes the vehicle unstable and can contribute to loss of vehicle control and increased braking distances.**
- **Continued driving or low pressure tires will cause the tires to overheat and fail.**

- The TPMS cannot alert you to severe and sudden tire damage caused by external factors.
- If you notice any vehicle instability, immediately take your foot off the accelerator pedal, apply the brakes gradually with light force, and slowly move to a safe position off the road.

Door Ajar Warning Light



This warning light illuminates:
When a door is not closed securely.

Trunk Open Warning Light



This warning light illuminates:
When the trunk is not closed securely.

Adaptive Front Lighting System (AFLS) Warning Light (if equipped)

AFLS

This warning light blinks:

- Once you set the Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the AFLS.

If there is a malfunction with the AFLS:

1. Drive carefully to the nearest safe location and stop your vehicle.
2. Turn the engine off and restart the engine. If the warning light remains on, have your vehicle inspected by an authorized Kia dealer.

Master Warning light



- This warning light informs the driver the following situations
  - Low washer fluid
  - TPMS
  - Blind spot detection (BSD) (if equipped)
  - Fuel cap open
  - Service required

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

If the warning situation is solved, the master warning light will be turned off and the LCD Modes Icon will be changed back to its previous icon (*i*).

(ex : refill the washer fluid)

Electric Parking Brake (EPB) Warning Light (if equipped)

EPB

This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the EPB.

  In this case, have your vehicle inspected by an authorized Kia dealer.

✻ NOTICE - Electric Parking Brake (EPB) Warning Light

The Electric Parking Brake (EPB) Warning Light may illuminates when the Electronic Stability control (ESC) Indicator Light comes on to indicates that the ESC is not working properly (This does not indicate malfunction of the EPB).

AUTO HOLD Indicator Light (if equipped)

AUTO HOLD

This indicator light illuminates:

- [White] When you activate the auto hold system by pressing the AUTO HOLD button.
- [Green] When you stop the vehicle completely by depressing the brake pedal with the auto hold system activated.
- [Yellow] When there is a malfunction with the auto hold system.

  In this case, have your vehicle inspected by an authorized Kia dealer.

❈ For more details, refer to “Auto Hold” in chapter 5.

Indicator Lights

Electronic Stability Control (ESC) Indicator Light



This indicator light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the ESC system.

  In this case, have your vehicle inspected by an authorized Kia dealer.

This indicator light blinks:

While the ESC is operating.

For more details, refer to “Electronic Stability Control (ESC)” in chapter 5.

Electronic Stability Control (ESC) OFF Indicator Light



This indicator light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When you deactivate the ESC system by pressing the ESC OFF button.

For more details, refer to “Electronic Stability Control (ESC)” in chapter 5.

Advanced Smart Cruise Control (ASCC) Warning Light (if equipped)



This warning light illuminates:

- When there is a malfunction with advanced smart cruise control system.

In this case, have your vehicle inspected by an authorized Kia dealer.

Advanced Smart Cruise Control (ASCC) Radar Warning Light (if equipped)



This warning light illuminates:

- When the radar of the advanced smart cruise control system or its cover is stained.

Remove the stains with a soft cloth

❈ For more details, refer to “Advanced Smart Cruise Control (ASCC) System” in chapter 5.

Immobilizer Indicator Light (With Smart Key)



This indicator light illuminates for up to 30 seconds:

- When the vehicle detects the smart key in the vehicle properly while the Engine Start/Stop Button is ACC or ON.
  - At this time, you can start the engine.
  - The indicator light goes off after starting the engine.

This indicator light blinks for a few seconds:

- When the smart key is not in the vehicle.
  - At this time, you can not start the engine.

This indicator light illuminates for 2 seconds and goes off:

- When the vehicle can not detect the smart key which is in the vehicle while the Engine Start/Stop Button is ON.

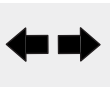
  In this case, have your vehicle inspected by an authorized Kia dealer.

This indicator light blinks:

- When the battery of the smart key is weak.
  - At this time, you can not start the engine. However, you can start the engine if you press the Engine Start/Stop Button with the smart key. (For more details, refer to “Starting the Engine” in section 5).
- When there is a malfunction with the immobilizer system.

  In this case, have your vehicle inspected by an authorized Kia dealer.

Turn Signal Indicator Light



This indicator light blinks:

- When you turn the turn signal light on.

If any of the following occurs, there may be a malfunction with the turn signal system. In this case, have your vehicle inspected by an authorized Kia dealer.

- The indicator light does not blink but illuminates.
- The indicator light blinks more rapidly.
- The indicator light does not illuminate at all.

High Beam Indicator Light



This indicator light illuminates:

- When the headlights are on and in the high beam position
- When the turn signal lever is pulled into the Flash-to-Pass position.

Light ON Indicator Light



This indicator light illuminates:

- When the tail lights or headlights are on.

Front Fog Indicator Light



This indicator light illuminates:

- When the front fog lights are on.

Washer Fluid Warning Light



This warning light illuminates:

- When the washer fluid level in the reservoir is nearly empty.

  In this case, you should refill the washer fluid.

Cruise Indicator Light

CRUISE

This indicator light illuminates:

- When the cruise control system is enabled.

For more details, refer to “Cruise Control System” in chapter 5.

Cruise SET Indicator Light

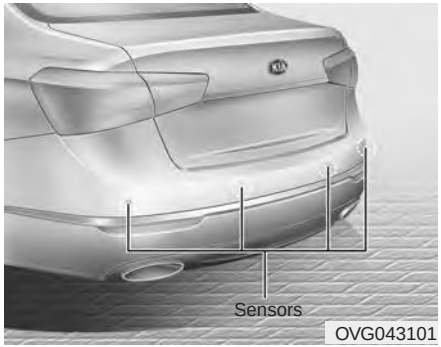
SET

This indicator light illuminates:

- When the cruise control speed is set.

For more details, refer to “Cruise Control System” in chapter 5.

BACK-UP WARNING SYSTEM (IF EQUIPPED)



The back-up warning system assists the driver during backward movement of the vehicle by chiming if any object is sensed within a distance of 47 in. (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-up warning system.

⚠ WARNING - Back-up Warning System

Never rely solely on the Back-up Warning system. Always perform a visual inspection to make sure the vehicle is clear of all obstructions before moving the vehicle in any direction. Stop immediately if you are aware of a child anywhere near your vehicle. Some objects may not be detected by the sensors, due to the object's size or material.

Operation of the back-up warning system

Operating condition

- This system will activate when backing up with the ignition switch ON.

  If the vehicle is moving at a speed over 3 mph (5 km/h), the system may not be activated correctly.
- The sensing distance while the back-up warning system is in operation is approximately 47 in. (120 cm) at the rear bumper center area, 23.5 in. (60 cm) at the rear bumper both side area.
- When more than two objects are sensed at the same time, the closest one will be recognized first.

Types of warning sound and indicator

Types of warning sound	Indicator	
	Type A	Type B
When an object is 47 in to 24 in (120 cm to 61 cm) from the rear bumper: Buzzer beeps intermittently.		
When an object is 23 in to 12 in (60 cm to 31 cm) from the rear bumper: Buzzer beeps more frequently.		
When an object is within 11 in. (30 cm) of the rear bumper: Buzzer sounds continuously.		

✻ NOTICE

It may not operate if it's distance from the object is already less than approximately 10 in when the system is ON.

✻ NOTICE

If the indicator blinks, the system must be checked by an authorized Kia dealer.

Non-operational conditions of back-up warning system

The back-up warning system may not operate properly when:

1. Moisture is frozen to the sensor. (It will operate normally when the moisture has been cleared.)
2. The sensor is covered with foreign matter, such as snow or water, or the sensor cover is blocked. (It will operate normally when the material is removed or the sensor is no longer blocked.)
3. Driving on uneven road surfaces (unpaved roads, gravel, bumps, gradient).
4. Objects generating excessive noise (vehicle horns, loud motorcycle engines, or truck air brakes) are within range of the sensor.
5. Heavy rain or water spray exists.
6. Wireless transmitters or mobile phones are within range of the sensor.
7. The sensor is covered with snow.
8. Trailer towing

The detecting range may decrease when:

1. The sensor is stained with foreign matter such as snow or water. (The sensing range will return to normal when removed.)
2. Outside air temperature is extremely hot or cold.

The following objects may not be recognized by the sensor:

1. Sharp or slim objects such as ropes, chains or small poles.
2. Objects which tend to absorb the sensor frequency such as clothes, spongy material or snow.
3. Undetectable objects smaller than 40 in. (1 m) in height and narrower than 6 in. (14 cm) in diameter.

Back-up warning system precautions

- The back-up warning system may not sound sequentially depending on the speed and shapes of the objects detected.
- The back-up warning system may malfunction if the vehicle bumper height or sensor installation has been modified or damaged. Any non-factory installed equipment or accessories may also interfere with the sensor performance.
- The sensor may not recognize objects less than 11 in. (30 cm) from the sensor, or it may sense an incorrect distance. Use caution.
- When the sensor is frozen or stained with snow, dirt, or water, the sensor may be inoperative until the stains are removed using a soft cloth.
- Do not push, scratch or strike the sensor. Sensor damage could occur.

✻ NOTICE

This system can only sense objects within the range and location of the sensors; It can not detect objects in other areas where sensors are not installed. Also, small or slim objects, such as poles or objects located between sensors may not be detected by the sensors.
Always visually check behind the vehicle when backing up.
Be sure to inform any drivers of the vehicle that may be unfamiliar with the system regarding the systems capabilities and limitations.

⚠ WARNING - Back-up Warning System

Never rely solely on the back-up warning system when backing up. Always perform a visual inspection to make sure the vehicle is clear of all obstructions before moving the vehicle in any direction. Stop immediately if you are aware of a child anywhere near your vehicle. Some objects may not be detected by the sensors, due to the object's size or material.

Self-diagnosis

If you don't hear an audible warning sound or if the buzzer sounds intermittently when shifting the shift lever into the R (Reverse) position, this may indicate a malfunction in the parking assist system. If this occurs, the system must be checked by an authorized Kia dealer.

Your new vehicle warranty does not cover any accidents or damage to the vehicle or injuries to its occupants due to a back-up warning system malfunction. Always drive safely and cautiously.

REARVIEW CAMERA DISPLAY


OVG043107


OVG043106L

The rearview camera display will activate when the back-up light is ON with the ignition switch ON and the shift lever in the R (Reverse) position.

This system is a supplemental system that shows behind the vehicle through the AVN monitor while backing-up.

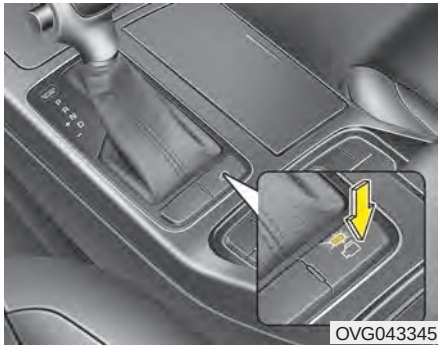
The rearview camera is not a substitute for proper and safe backing-up procedures. Always drive safely and use caution when backing up. The rearview camera may not display every object behind the vehicle.

❈ If your vehicle is equipped with AVN(Audio, Video and Navigation) system, rearview display will show behind the vehicle through the AVN monitor while backing-up. Refer to a separately supplied manual for detailed information.

⚠ WARNING - Backing Up & Using Camera

Never rely solely on the rear view camera when backing up. Prior to entering your vehicle always do a visual check of the area behind your vehicle, and before backing up be aware of your surroundings and supplement the rear view camera by looking over your shoulders and checking your rear view mirrors. Due to the difficulty of ensuring that the area behind you remains clear, always back up slowly and stop immediately if you even suspect that a person, and especially a child, might be behind you.

SURROUND VIEW MONITORING SYSTEM (SVM) (IF EQUIPPED)


OVG043345

The Surround View Monitoring System (SVM) is not a substitute for proper and safe parking procedures.

The Surround View Monitoring System (SVM) may not detect every object surrounding the vehicle.

Always drive safely and use caution when parking.

The Surround View Monitoring System (SVM) can assist in parking by allowing the driver to see around the vehicle. Push the button into the [ON] position to operate the system.

To cancel the system, push the button again.

Operating conditions

- When the Engine Start/Stop Button is ON position
- When the transaxle is on D, N or R
- When the vehicle speed is not over 12 mph (20km/h)

• When the vehicle speed exceeds 12 mph, the SVM system will automatically turn off.

  If the vehicle speed falls below 12 mph, after the SVM automatically turned off, the SVM will not automatically operate. Press the SVM button to operate the SVM system.

• When the vehicle moves backwards, regardless of On/Off of button and vehicle speed, the SVM is operated.

• When the trunk and driver/passenger door are opened and the outside mirror is folded, the warning is illuminated in SVM system.

• If the SVM system is not operating normally, the system should be checked by an authorized Kia dealer.

This system is a supplementary function only. It is the responsibility of the driver to always check the area around the vehicle before and while moving.

WELCOME SYSTEM (IF EQUIPPED)

Welcome light (if equipped)


OVG045191N

When all the doors (and trunk) are locked and closed, the puddle lamp will come on for about 15 seconds if any of the below is performed.

- Without smart key system
  - When the door unlock button is pressed on the transmitter.
- With the smart key system
  - When the door unlock button is pressed on the smart key.
  - When the button of the outside door handle is pressed.
  - When the vehicle is approached with the smart key in possession.

Also, if the outside rearview mirror folding switch is in the AUTO position, the outside rearview mirror will unfold automatically.

Interior light

When the interior light switch is in the DOOR position and all doors (and trunk) are locked and closed, the room lamp will come on for 30 seconds if any of the below is performed.

When the door unlock button is pressed on the smart key.

When the button of the outside door handle is pressed.

At this time, if you press the door lock or unlock button, the room lamp will turn off immediately.

HAZARD WARNING FLASHER


OVG065001N

The hazard warning flasher should be used whenever you find it necessary to stop the car in a hazardous location. When you must make such an emergency stop, always pull off the road as far as possible.

The hazard warning lights are turned on by pressing in the hazard switch. Both turn signal lights will blink. The hazard warning lights will operate even though the key is not in the ignition switch. To turn the hazard warning lights off, push the switch again.

LIGHTING

Battery saver function

- The purpose of this feature is to prevent the battery from being discharged. The system automatically turns off the parking lights when the driver removes the ignition key (smart key: turns off the engine) and opens the driver-side door.
- With this feature, the parking lights 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, (smart key: turns off the engine) perform the following:

  1) Open the driver-side door.
  2) Turn the parking lights OFF and ON again using the light switch on the steering column.

Headlight escort function (if equipped)

The headlights (and/or parking lights) will remain on for approximately 5 minutes after the ignition key is removed or turned to the ACC or LOCK position. However, if the driver's door is opened and closed, the headlights are turned off after 15 seconds.

The headlights can be turned off by pressing the lock button on the transmitter (or smart key) twice or turning off the light switch from the headlight or Auto light position.

If the driver gets out of the vehicle through other doors (except driver's door), the battery saver function does not operate and the headlight escort function does not turn off automatically causing the battery to be discharged. In this case, make sure to turn off the headlights before getting out of the vehicle.

Daytime running light (if equipped)

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

- The DRL system turns ON when:
  1. The headlight switch is OFF or the taillight switch is ON.
  2. The parking brake is released.

- The DRL system turns OFF when:
  1. The headlight switch is ON.
  2. The engine is OFF.
  3. The parking brake is applied.

Lighting control



OKH042189

The light switch has a Headlight and a Parking light position.

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

(1) OFF/O position

(2) Auto light position

(3) Parking light position

(4) Headlight position

Parking light position ( )



OKH042191

When the light switch is in the parking light position, the tail, license and instrument panel lights will turn ON.

Headlight position ( )



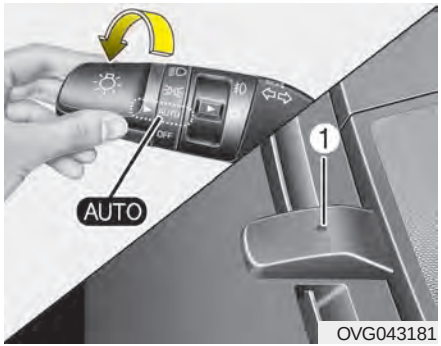
OKH042192

When the light switch is in the headlight position, the head, tail, license and instrument panel lights will turn ON.

✻ NOTICE

The ignition switch must be in the ON position to turn on the headlights.

Auto light/AFLS position



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.

If your vehicle is equipped with the adaptive front lighting system (AFLS), it will also operate when the headlamp is ON.

⚠ CAUTION

- ***Never place anything over the sensor (1) located on the instrument panel, this will ensure better auto-light system control.***
- ***Don't clean the sensor using a window cleaner, the cleaner may leave a light film which could interfere with sensor operation.***

✻ NOTICE

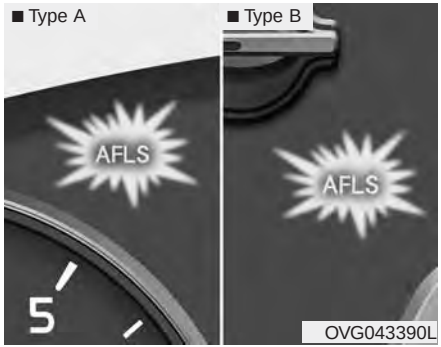
If your vehicle has window tint or other types of coating on the front windshield, the Auto light system may not work properly.

AFLS (Adaptive Front Lighting System) (if equipped)



Adaptive front lighting system uses the steering angle and vehicle speed, to keep your field of vision wide by swiveling and leveling the headlamp.

Change the switch to the AUTO position when the engine is running. The adaptive front lighting system will operate when the headlamp is ON. To turn off the AFLS, change the switch to other positions. After turning the AFLS off, headlamp swiveling no longer occurs, but leveling operates continuously.



If the AFLS malfunction indicator comes on, the AFLS is not working properly. Drive to the nearest safe location and restart the engine. If the indicator is still on, have the system checked by an authorized Kia dealer.

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.

⚠ WARNING

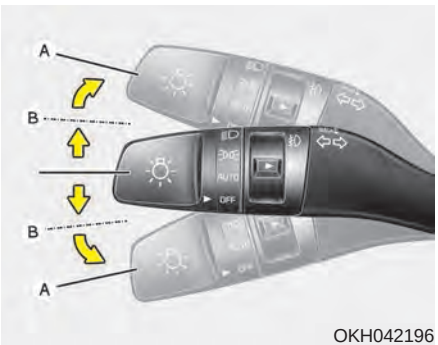
Do not use high beam when there are other vehicles. Using high beam could obstruct the other driver's vision.



OKH042193

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.

Turn signals and lane change signals



OKH042196

The ignition switch must be on for the turn signals to function. To turn on the turn signals, move the lever up or down (A). The green arrow indicators on the instrument panel indicate which turn signal is operating.

They will self-cancel after a turn is completed. If the indicator continues to flash after a turn, manually return the lever to the OFF position.

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

If an indicator stays on and does not flash or if it flashes abnormally, one of the turn signal bulbs may be burned out and will require replacement.

One-touch lane change function

To activate an one-touch lane change function, move the turn signal lever slightly and then release it. The lane change signals will blink 3, 5 or 7 times.

You can choose one-touch lane change blinking function in “One touch turn lamp” of “User setting”. Refer to “User setting” in chapter 4.

✻ NOTICE

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

Front fog light



Fog lights are used to provide improved visibility 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 after low beam light is turned on.

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

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.

Headlight leveling device (if equipped)

Automatic type

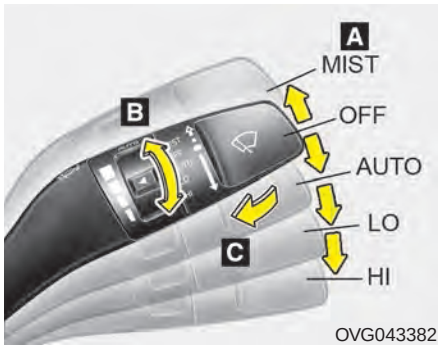
To ensure the proper headlight beam is used under various conditions, the headlight beam levels are automatically adjusted depending on the number of passengers, the weight in the trunk, and other driving conditions.

✻ NOTICE

If the automatic headlight leveling device is not working properly have your vehicle inspected by an authorized Kia dealer.

WIPERS AND WASHERS

Windshield wiper/washer



OVG043382

A : Wiper speed control

- MIST – Single wipe
- OFF – Off
- INT – Intermittent wipe
  AUTO – Auto control wipe (if equipped)
- LO – Low wiper speed
- HI – High wiper speed

B : Intermittent or Auto control wipe time adjustment

C : Wash with brief wipes*

* if equipped

Windshield wipers



OKH042198

Operates as follows when the ignition switch is turned ON.

MIST : 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.

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).
In this position, the wiping intervals are also varied automatically depending on your vehicle speed. (if equipped)

LO : Normal wiper speed

HI : Fast wiper speed

✻ NOTICE

If there is heavy accumulation of snow or ice on the windshield, defrost the windshield for about 10 minutes, or until the snow and/or ice is removed before using the windshield wipers to ensure proper operation.

Auto control (if equipped)



The rain sensor located on the upper end of the windshield glass senses the amount of rainfall and controls the wiping cycle for the proper interval.

The more it rains, the faster the wiper operates. When the rain stops, the wiper stops.

To vary the speed setting, turn the speed control knob (1).

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

⚠ CAUTION

When the ignition switch is ON and the windshield wiper switch is placed in the AUTO mode, use caution in the following situations to avoid damaging the rain sensors on the windshield:

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

⚠ CAUTION

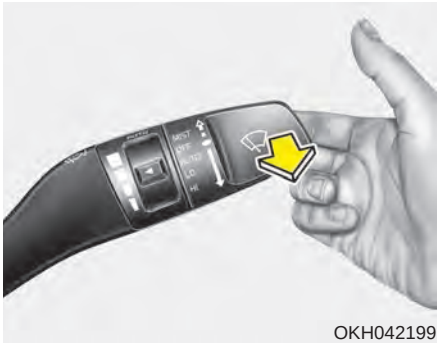
When washing the vehicle, set the wiper switch in the OFF position to stop the auto wiper operation.

The wiper may operate and be damaged if the switch is set in the AUTO mode while washing the vehicle.

Do not remove the sensor cover located on the upper end of the passenger side windshield glass. Damage to system parts could occur and may not be covered by your vehicle warranty.

When starting the vehicle in winter, set the wiper switch in the OFF 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.

Windshield washers (if equipped)



OKH042199

In the OFF position, pull the lever gently toward you to spray washer fluid on the windshield and to run the wipers 1-3 cycles.

Use this function when the windshield is dirty.

The spray and wiper operation will continue until you release the lever.

If the washer does not work, check the washer fluid level. If the fluid level is not sufficient, you will need to add appropriate non-abrasive windshield washer fluid to the washer reservoir.

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

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

⚠ CAUTION - Washer pump

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

⚠ WARNING - Obscured vision

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

⚠ CAUTION

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

INTERIOR LIGHT

Do not use the interior lights for extended periods when the engine is not running.

It may cause battery discharge.

⚠ WARNING - Interior lights

Do not use the interior lights when driving in the dark. Accidents could happen because the view may be obscured by interior lights.

Automatic turn off function (if equipped)

The interior lights automatically turn off approximately 20 minutes after the ignition switch is turned off.

If your vehicle is equipped with the theft alarm system, the interior lights automatically turns off approximately 5 seconds after the system is armed stage.

Front lamps

Type A



(1) Front Map Lamp
(2) Front Door Lamp
(3) Front Room Lamp

Front Map Lamp :

Push the lens to turn the map lamp on or off. This light produces a spot beam for convenient use as a map lamp at night or as a personal lamp for the driver and the front passenger.

Front Door Lamp (DOOR) :

In the DOOR position, the map lamp and the room lamp come on when any door is opened regardless of the ignition switch position.

When doors are unlocked by the transmitter (or smart key), the map lamp and the room lamp come on for approximately 30 seconds as long as any door is not open.

The map lamp and the room lamp goes out gradually after approximately 30 seconds if the door is closed. However, if the ignition switch is ON or all doors are locked, the map lamp and the room lamp will turn off immediately. If a door is opened with the ignition switch in the ACC or OFF position, the map lamp and the room lamp stays on for about 20 minutes. However, if a door is opened with the ignition switch in the ON position, the map lamp and the room lamp stays on continuously.

Front Room Lamp :

OFF : The lights turn off even if a door is opened.

When the lamp is turned ON by pressing the lens (1), the lamp does not turn off even if the switch (2) is in the OFF position.

ON : The map lamp and the room lamp stay on at all times.

Type B



(1) Front Map Lamp
(2) Front Door Lamp
(3) Front Room Lamp

Front Map Lamp :

Press either of these switch (1) to turn the map lamp on or off. This light produces a spot beam for convenient use as a map lamp at night or as a personal lamp for the driver and the front passenger.

Front Door Lamp :

The front or rear room lamps come on when the front or rear doors are opened if the engine is running or not. When doors are unlocked by the remote key or smart key, the front and rear lamps come on for approximately 30 seconds as long as any door is not opened. The front and rear room lamps go out gradually after approximately 30 seconds if the door is closed. However, if the ignition switch is in the ON position or all doors are locked, the front and rear lamps will turn off immediately.

If a door is opened with the ignition switch in the ACC position or the OFF position, the front and rear lamps stay on for about 20 minutes. However, if a door is opened with the ignition switch in the ON position, the lamps stays on continuously.

Front Room Lamp :

Press this switch to turn the front and rear room lamps on and off.

Rear Lamps

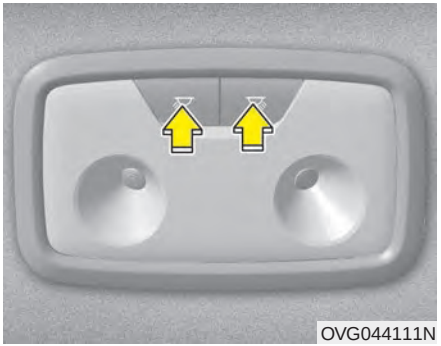
Type A



Rear Room Lamp:

Press the lens to turn the room lamp on and off.

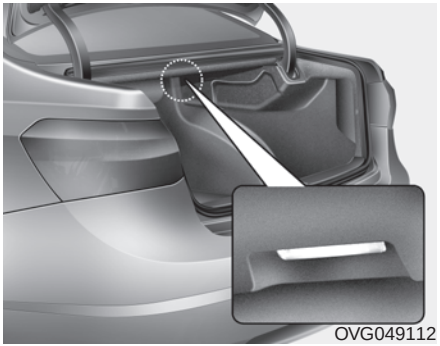
Type B



Rear Room Lamp :

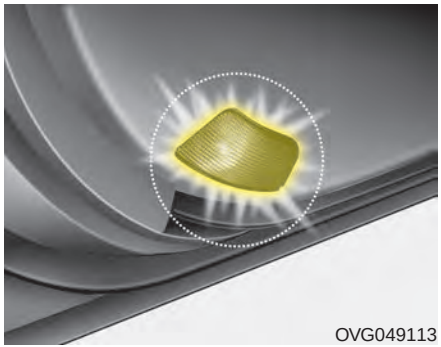
Press this switch to turn the room lamp on and off.

Trunk room lamp



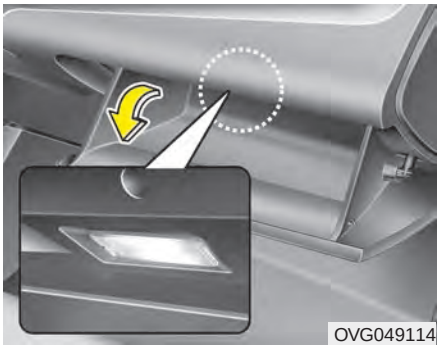
The trunk room lamp comes on when the trunk is opened. The trunk light comes on only with the trunk lid open. To prevent battery discharge, close the trunk lid securely after accessing the trunk.

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.

Glove box lamp



The glove box lamp comes on when the glove box is opened.

To prevent unnecessary charging system drain, close the glove box securely after using the glove box.

Vanity mirror lamp



Opening the lid of the vanity mirror will automatically turn on the mirror light.

⚠ CAUTION - Vanity mirror lamp (if equipped)

Always have the switch in the off position when the vanity mirror lamp is not in use. If the sunvisor is closed without the lamp off, it may discharge the battery or damage the sunvisor.

DEFROSTER

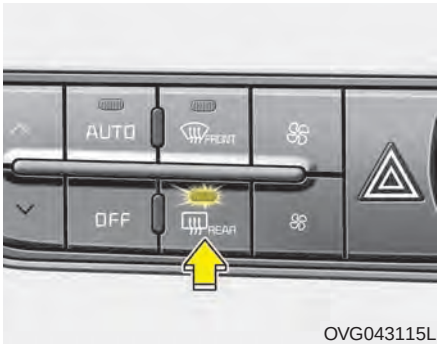
⚠ CAUTION - Conductors

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

✻ NOTICE

If you want to defrost and defog the front windshield, refer to "Windshield Defrosting and Defogging" in this section.

Rear window defroster



OVG043115L

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

To activate the rear window defroster, press the rear window defroster button located in the center facia switch panel.

The indicator on the rear window defroster button illuminates when the defroster is ON.

If there is heavy accumulation of snow on the rear window, brush it off before operating the rear defroster.

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

Outside rearview mirror defroster (if equipped)

If your vehicle is equipped with the outside rearview mirror defrosters, they will operate at the same time you turn on the rear window defroster.

Wiper deicer (if equipped)

If your vehicle is equipped with the wiper deicer, it will be operating at the same time you turn on the rear window defroster.

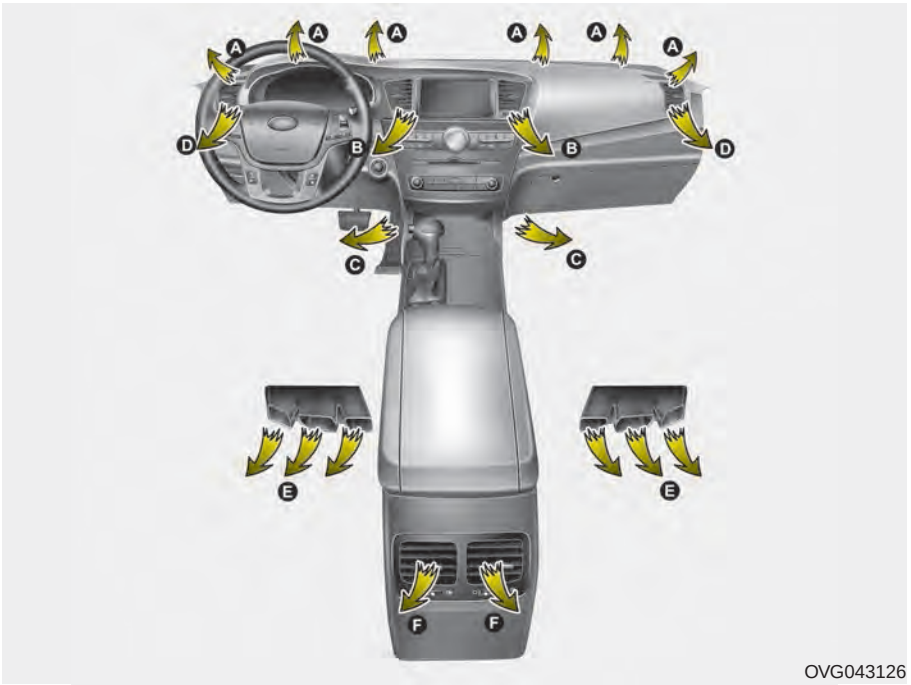
AUTOMATIC CLIMATE CONTROL SYSTEM



1. Driver's temperature control button
2. AUTO (automatic control) button
3. Front windshield defroster button
4. Fan speed control button
5. OFF button
6. Rear window defroster button
7. Mode selection button
8. Air intake control button
9. Dual temperature control selection button
10. Passenger's temperature control button
11. Air conditioning button
12. Climate information screen selection button

OVG044121N

Heating and air conditioning



OVG043126

1. Start the engine.
2. Set the mode to the desired position.

   For improving the effectiveness of heating and cooling;

   - Heating:
   - Cooling:
3. Set the temperature control to the desired position.
4. Set the air intake control to the outside (fresh) air position.
5. Set the fan speed control to the desired speed.
6. If air conditioning is desired, turn the air conditioning system on.

Automatic heating and air conditioning



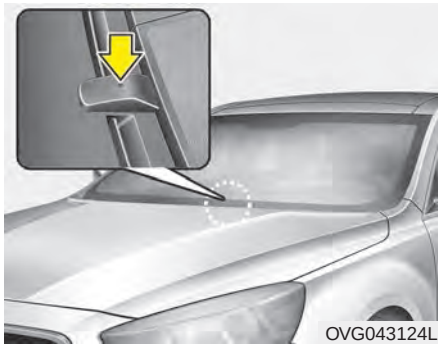
OVG043122L

1. Push the AUTO button. The modes, fan speeds, air intake and air-conditioning will be controlled automatically by temperature setting.
2. Set the temperature control button to set the desired temperature.

✻ NOTICE

- **To turn the automatic operation off, select any button of the following:**
  - **Mode selection button**
  - **Air conditioning button**
  - **Front windshield defroster button (Press the button one more time to deselect the front windshield defroster function. The 'AUTO' sign will illuminate on the information display once again.)**
  - **Air intake control button**
  - **Fan speed control button**

  The selected function will be controlled manually while other functions operate automatically.
- **For your convenience and to improve the effectiveness of the climate control, use the AUTO button and set the temperature to 73°F (23°C).**


OVG043124L

✻ NOTICE

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

Manual heating and air conditioning

The heating and cooling system can be controlled manually by 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 the AUTO button while using automatic operation, the functions not selected will be controlled automatically.

1. Start the engine.
2. Set the mode to the desired position.

   To improve the effectiveness of heating and cooling:

   - Heating:
   - Cooling:
3. Set the temperature control to the desired position.
4. Set the air intake control to the outside (fresh) air position.
5. Set the fan speed control to the desired speed.
6. If air conditioning is desired, turn the air conditioning system on.

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

Mode selection



OVG043125N

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

The air flow outlet port is converted as follows:



Face-Level (B, C, D, E, F)

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

Bi-Level (B, C, D, E, F)

Air flow is directed towards the face and the floor.

Floor-Level (A, C, D, E)

Most of the air flow is directed to the floor, with a small amount of the air being directed to the windshield and side window defrosters.

Floor & Defrost (A, C, D, E)

Most of the air flow is directed to the floor and the windshield with a small amount directed to the side window defrosters.



OVG043127L

Defrost-Level

Most of the air flow is directed to the windshield with a small amount of air directed to the side window defrosters.

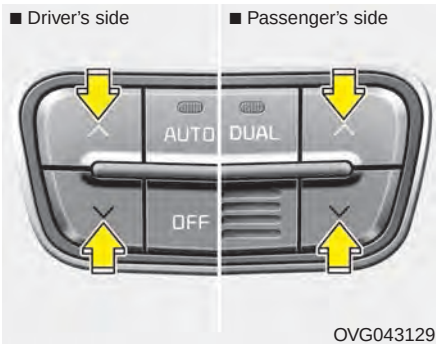

OVG043128

Instrument panel vents

The outlet vents can be opened or closed separately using the horizontal thumbwheel.

Also, you can adjust the direction of air delivery from these vents using the vent control lever as shown.

Temperature control

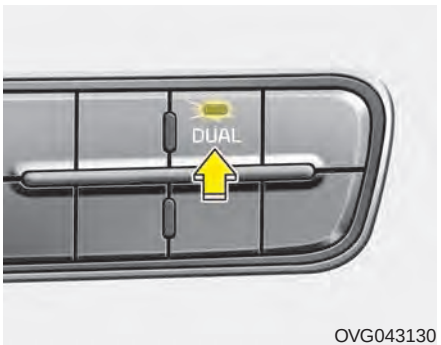


OVG043129

The temperature will increase to the maximum by pushing the up (∧) button.

The temperature will decrease to the minimum by pushing the down (∨) button.

When pushing the button, the temperature will increase or decrease by 1°F / 0.5°C. When set to the lowest temperature setting, the air conditioning will operate continuously.



OVG043130

Adjusting the driver and passenger side temperature individually

1. Press the DUAL button to operate the driver and passenger side temperature individually. Pressing the right temperature control button will automatically switch to the DUAL mode as well.
2. Operate the left temperature control to adjust the driver side temperature. Operate 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 passenger side temperature will be set to the same temperature as the driver side temperature.
2. Operate the driver side temperature control button. The driver and passenger side temperature will be adjusted equally.

Temperature conversion

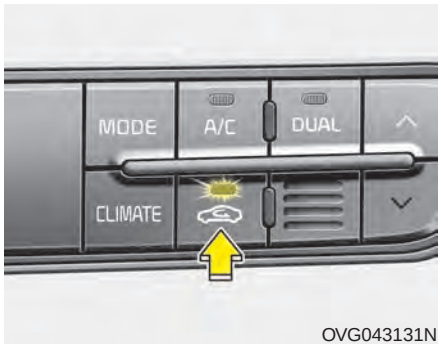
You can switch the temperature mode between Centigrade and Fahrenheit as follows:

While pressing the OFF button, press the AUTO button for 3 seconds or more.

The display will change from Centigrade to Fahrenheit, or from Fahrenheit to Centigrade.

If the battery has been discharged or disconnected, the temperature mode display will reset to Fahrenheit.

Air intake control



OVG043131N

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

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

Recirculated air position



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

Outside (fresh) air position



With the outside (fresh) air position selected, air enters the vehicle from outside and is heated or cooled according to the function selected.

✻ NOTICE

Prolonged operation of the heater in the recirculated air position (without air conditioning selected) may cause fogging of the windshield and side windows and the air within the passenger compartment may become stale.

In addition, prolonged use of the air conditioning with the recirculated air position selected will result in excessively dry air in the passenger compartment.

⚠ WARNING - Reduced Visibility

Continuous use of the climate control system in the recirculated air position may allow humidity to increase inside the vehicle which may fog the glass and obscure visibility.

⚠ WARNING - Sleeping with AC on

Do not sleep in a vehicle with the air conditioning or heating system on as this may cause serious harm or death due to a drop in the oxygen level and/or body temperature.

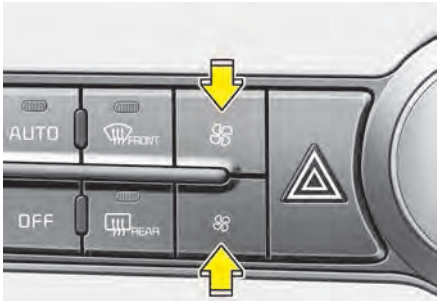
⚠ WARNING - Recirculated Air

Continue using the climate control system in the recirculated air position can cause drowsiness or sleepiness, and loss of vehicle control. Set the air intake control to the outside (fresh) air position as much as possible while driving.

✻ NOTICE

Driving on high speed with the recirculation air position mode, fresh air may enter the vehicle to ventilate the inside air.

Fan speed control



OVG043132L

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

To change the fan speed, press the upper button (✤) for higher speed, or press the lower button (✤) for lower speed.

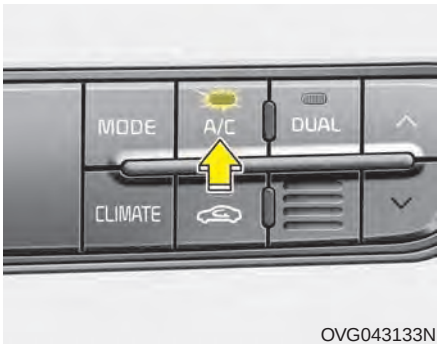
Pressing the OFF button turns off the fan.

✻ NOTICE

For better sound quality, fan speed may automatically slow down, when you activate Voice recognition or Hands free.

- This function will be deactivated in a few minutes.

Air conditioning



OVG043133N

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

Press the button again to turn the air conditioning system off.

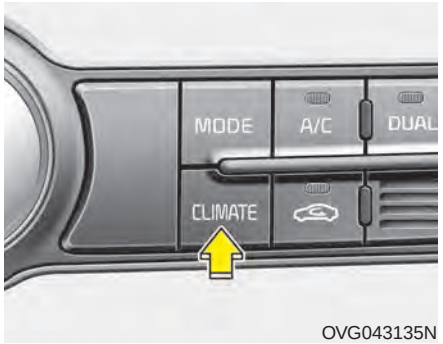
OFF mode



OVG043134L

Press the OFF button to turn off the air climate control system. However, you can still operate the mode and air intake buttons as long as the ignition switch is in the ON position.

Climate information screen selection (if equipped)



OVG043135N

Press the climate information screen selection button to display climate information on the screen.

System operation

Ventilation

1. Set the mode to the position.
2. Set the air intake control to the outside (fresh) air position.
3. Set the temperature control to the desired position.
4. Set the fan speed control to the desired speed.

Heating

1. Set the mode to the position.
2. Set the air intake control to the outside (fresh) air position.
3. Set the temperature control to the desired position.
4. Set the fan speed control to the desired speed.
5. If dehumidified heating is desired, turn the air conditioning system (if equipped) on.

- If the windshield fogs up, set the mode to the or position.

Operation Tips

- To keep dust or unpleasant fumes from entering the vehicle through the ventilation system, temporarily set the air intake control to the recirculated air position. Be sure to return the control to the fresh air position when the irritation has passed to keep fresh air in the vehicle. This will help keep the driver alert and comfortable.
- Air for the heating/cooling system is drawn in through the grilles just ahead of the windshield. Care should be taken that these are not blocked by leaves, snow, ice or other obstructions.
- To prevent interior fog on the windshield, set the air intake control to the fresh air position and fan speed to the desired position, turn on the air conditioning system, and adjust the temperature control to desired temperature.

Air conditioning

Kia Air Conditioning Systems are filled with environmentally friendly R-134a refrigerant.

1. Start the engine. Press the air conditioning button.
2. Set the mode to the position.
3. Set the air intake control to the outside air or recirculated air position.
4. Adjust the fan speed control and temperature control to maintain maximum comfort.

⚠ CAUTION - A/C Use

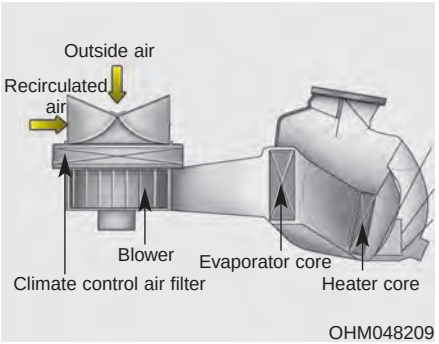
- ***When using the air conditioning system, monitor the temperature gauge closely while driving up hills or in heavy traffic when outside temperatures are high. Air conditioning system operation may cause engine overheating. Continue to use the blower fan but turn the air conditioning system off if the temperature gauge indicates engine overheating.***
- ***When opening the windows in humid weather air conditioning may create water droplets inside the vehicle. Since excessive water droplets may cause damage to electrical equipment, air conditioning should only be used with the windows closed.***

Air conditioning system operation tips

- If the vehicle has been parked in direct sunlight during hot weather, open the windows for a short time to let the hot air inside the vehicle escape.
- To help reduce moisture inside of the windows on rainy or 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 as the air conditioning compressor cycles. This is a normal system operation characteristic.
- Use the air conditioning system every month only for a few minutes to ensure maximum system performance.

- When using the air conditioning system, you may notice clear water dripping (or even puddling) on the ground under the passenger side of the vehicle. This is a normal system operation characteristic.
- Operating the air conditioning system in the recirculated air position provides maximum cooling, however, continual operation in this mode may cause the air inside the vehicle to become stale.
- During cooling operation, you may occasionally notice a misty air flow because of rapid cooling and humid air intake. This is a normal system operation characteristic.
- If you operate air conditioner excessively, the difference between the temperature of the outside air and that of the windshield could cause the outer surface of the windshield to fog up, causing loss of visibility. In this case, set the mode selection knob or button to the position and fan speed control to the lower speed.

Climate control air filter



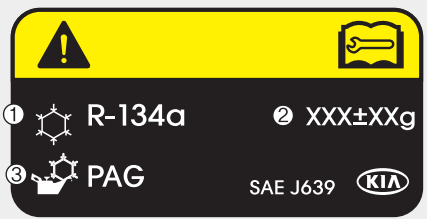
The climate control air filter installed behind the glove box filters the dust or other pollutants that come into the vehicle from the outside through the heating and air conditioning system. If dust or other pollutants accumulate in the filter over a period of time, the air flow from the air vents may decrease, resulting in moisture accumulation on the inside of the windshield even when the outside (fresh) air position is selected. If this happens, we recommend that the climate control air filter replaced by an authorized Kia dealer.

✻ NOTICE

- **Replace the filter according to the Maintenance Schedule.**
  If the vehicle is being driven in severe conditions such as dusty or rough roads, more frequent air conditioner filter inspections and changes are required.
- **When the air flow rate suddenly decreases, have the system should be checked by an authorized Kia dealer.**

Air Conditioning refrigerant label

■ Example



OXM063009

❉ The actual Air Conditioning refrigerant label in the vehicle may differ from the illustration.

Each symbols and specification on air conditioning refrigerant label means as below ;

1. Classification of refrigerant
2. Amount of refrigerant
3. Classification of Compressor lubricant

You can find out which air conditioning refrigerant is applied your vehicle at the label inside of the engine room.

Refer to section 8 for more detail location of air conditioning refrigerant label.

⚠ CAUTION - Proper Oil & Refrigerant

It is important that the correct type and amount of oil and refrigerant is used, otherwise damage to the vehicle may occur. To prevent damage, the air conditioning system in your vehicle should only be serviced by trained and certified technicians.

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 negative impact on the air conditioning system. Therefore, if abnormal operation is found, have the system inspected by an authorized Kia dealer.

❉ NOTICE

It is important that the correct type and amount of oil and refrigerant is used. Otherwise, damage to the compressor and abnormal system operation may occur.

⚠ WARNING

The oil and refrigerant in your vehicle's air conditioning system is under very high pressure. If proper service procedures are not followed an explosion may result. To reduce the risk of serious injury or death, the air conditioning system in your vehicle should only be serviced by trained and certified technicians.

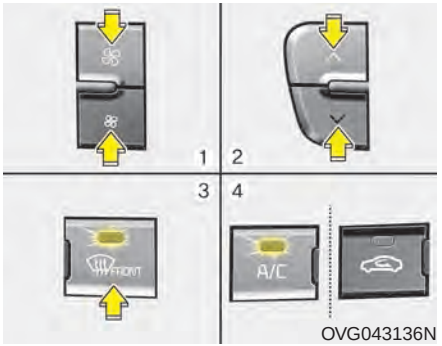
WINDSHIELD DEFROSTING AND DEFOGGING

⚠ WARNING - Windshield heating

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

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

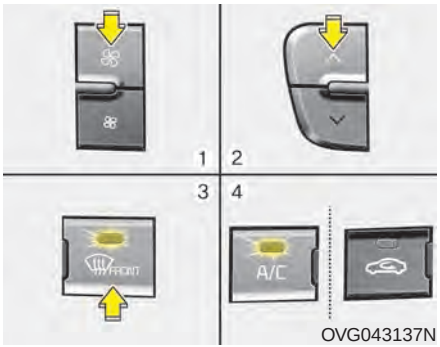
To defog inside windshield



1. Set the fan speed to the desired position.
2. Select desired temperature.
3. Press the defrost button ( ).
4. The air conditioning will be turned on according to the detected ambient temperature and outside (fresh) air position will be selected automatically.

If the air conditioning and outside (fresh) air position are not selected automatically, adjust the corresponding button manually. If the position is selected, lower fan speed is adjusted to a higher fan speed.

To defrost outside windshield

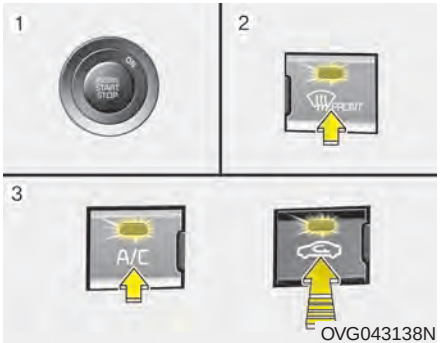


1. Set the fan speed to the highest position.
2. Set the temperature to the extreme hot (HI) position.
3. Press the defrost button ( ).
4. The air conditioning will be turned on according to the detected ambient temperature and outside (fresh) air position will be selected automatically.

If the position is selected, lower fan speed is adjusted to a higher fan speed.

Defogging logic

To reduce the probability of fogging up the inside of the windshield, the air intake or air conditioning are controlled automatically according to certain conditions such as or position. To cancel or return the defogging logic, do the following.

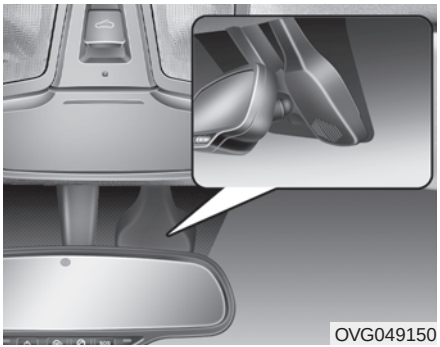


1. Turn the ignition switch to the ON position.
2. Press the defroster button ( ).
3. While pressing the air conditioning button (A/C), press the air intake control button at least 5 times within 3 seconds.

The indicator on the air intake button blinks 3 times with 0.5 seconds of interval. It indicates that the defogging logic is canceled or returned to the programmed status.

If the battery has been discharged or disconnected, it resets to the defog logic status.

Auto defogging system (if equipped)



Auto defogging reduces the probability of fogging up the inside of the windshield by automatically sensing the moisture of inside the windshield.

The auto defogging system operates when the heater or air conditioning is on.



This indicator illuminates when the auto defogging system senses the moisture of inside the windshield and operates.

If more moisture is in the vehicle, higher steps operate as follow. For example if auto defogging does not defog inside the windshield at step 1 Outside air position, it tries to defog again at step 2 Blowing air toward the windshield.

Step 1 : Outside air position

Step 2 : Blowing air toward the windshield

Step 3 : Increasing air flow toward the windshield

Step 4 : Operating the air conditioning

Step 5 : Maximizing the air conditioning

✻ NOTICE

If the A/C off or recirculated air position is manually selected while the auto defogging system is on, the auto defogging indicator will blink 3 times to give notice that manual operation is canceled.

⚠ CAUTION

Do not remove the sensor cover located on the upper end of the passenger side windshield glass. Damage to the system parts could occur and may not be covered by your vehicle warranty.

STORAGE COMPARTMENTS

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

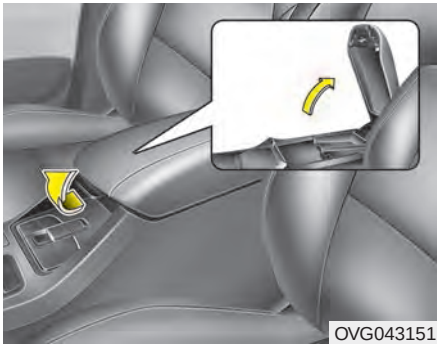
✻ NOTICE

- **To avoid possible theft, do not leave valuables in the storage compartments.**
- **Always keep the storage compartment covers closed while driving. Do not attempt to place so many items in the storage compartment that the storage compartment cover cannot close securely.**

⚠ WARNING - Flammable materials

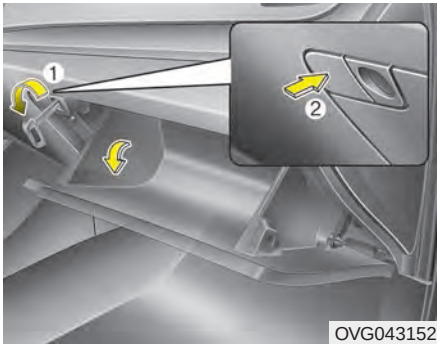
Do not store cigarette lighters, propane cylinders, or other flammable/explosive materials in the vehicle. These items may catch fire and/or explode if the vehicle is exposed to hot temperatures for extended periods.

Center console storage


OVG043151

To open the center console storage, pull up the lever.

Glove box



OVG043152

The glove box can be locked and unlocked with a master key (or mechanical key of smart key) (1).

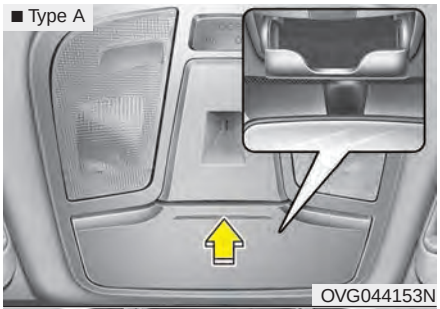
To open the glove box, press the button (2) and the glove box will automatically open. Close the glove box after use.

⚠ WARNING - Glove box door

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

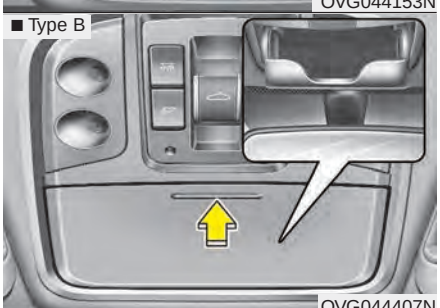
Sunglass holder

■ Type A



OVG044153N

■ Type B



OVG044407N

To open the sunglass holder, press the cover and the holder will slowly open. Place your sunglasses with the lenses facing out.

To close the sunglass holder push it up.

⚠ WARNING - Sunglass holder

Do not keep objects except sunglasses inside the sunglass holder. Heavier objects can be thrown from the holder in the event of a sudden stop or an accident, possibly injuring the passengers.

INTERIOR FEATURES

Cup holder

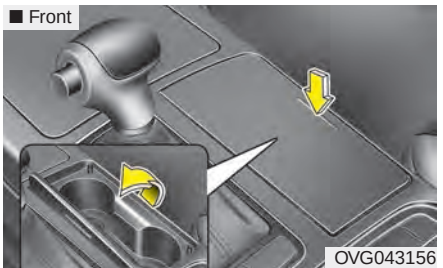
⚠ WARNING - Hot liquids

Do not place uncovered cups of hot liquid in the cup holder while the vehicle is in motion. If the hot liquid spills, you could be burned. Such a burn to the driver could lead to loss of control of the vehicle.

✻ NOTICE

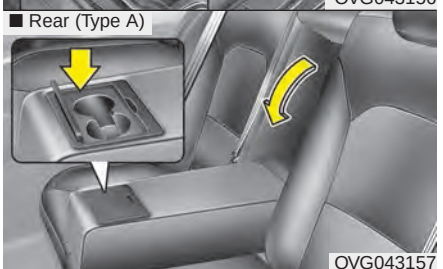
When cleaning spilled liquids, do not dry the cup holder at high temperature. This may damage the cup holder.

■ Front



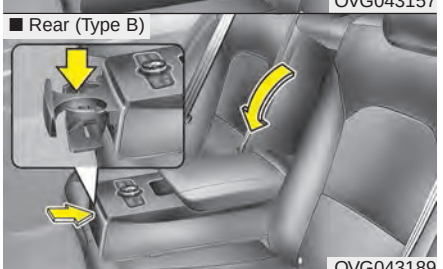
OVG043156

■ Rear (Type A)



OVG043157

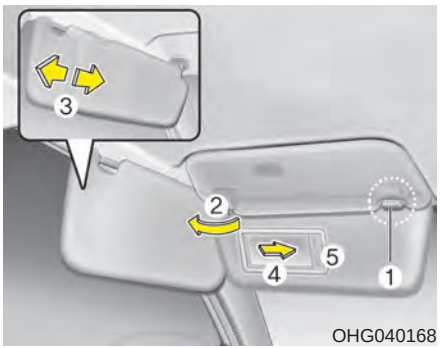
■ Rear (Type B)



OVG043189

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

Sunvisor



OHG040168

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

To use the sunvisor, pull it downward.

To use the sunvisor for the side window, pull it downward, unsnap it from the bracket (1) and swing it to the side (2).

Adjust the sunvisor extension forward or backward (3).

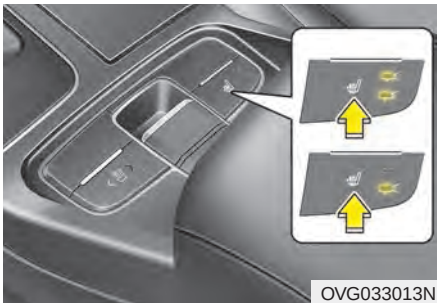
To use the vanity mirror, pull down the visor and slide the mirror cover (4).

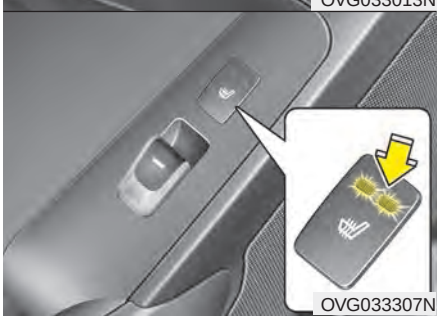
The ticket holder (5) is provided for holding a tollgate ticket. (if equipped)

⚠ CAUTION - Vanity mirror lamp

If you use the vanity mirror lamp, turn off the lamp before returning the sunvisor to its original position. It could result in battery discharge and possible sunvisor damage.

Seat warmer (if equipped)


OVG033013N


OVG033307N

The seat warmer is provided to warm the front seats during cold weather. With the ignition switch in the ON position, push either of the switches to warm the driver's seat or the front passenger's seat.

During mild weather or under conditions where the operation of the seat warmer is not needed, keep the switches in the "OFF" position.

- Each time you press the button, the temperature setting of the seat will change as follows :

- Front seat

OFF → HIGH( ) → LOW( )

- Rear seat

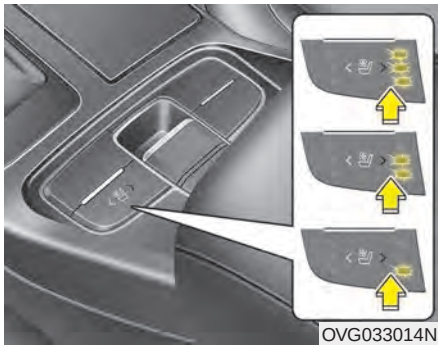
OFF → HIGH( ) → LOW( )

- The seat warmer defaults to the OFF position whenever the ignition switch is turned on.

✻ NOTICE

With the seat warmer switch in the ON position, the heating system in the seat turns off or on automatically depending on the seat temperature.

Seat warmer with air ventilation (if equipped)


OVG033014N

The temperature setting of the seat changes according to the switch position.

- If you want to warm your seat cushion, press the right side of the switch (red color).
- If you want to cool your seat cushion, press the left side of the switch (blue color).
- Each time you press the button, the airflow will change as follows:

OFF→HIGH( )→MIDDLE( )→LOW( )

- The seat warmer (with air ventilation) defaults to the OFF position whenever the ignition switch is turned on.

✻ NOTICE

With the seat warmer switch in the ON position, the heating system in the seat turns off or on automatically depending on the seat temperature.

⚠ CAUTION - Seat damage

- ***When cleaning the seats, do not use an organic solvent such as paint thinner, benzene, alcohol and gasoline. Doing so may damage the surface of the heater or seats.***
- ***To prevent overheating the seat warmer, do not place anything on the seats that insulates against heat, such as blankets, cushions or seat covers while the seat warmer is in operation.***
- ***Do not place heavy or sharp objects on seats equipped with seat warmers. Damage to the seat warming components could occur.***

✻ NOTICE

Be careful not to spill liquid such as water or beverages on the seat. If you spill some liquid, wipe the seat with a dry towel. Before using the seat warmer, dry the seat completely.

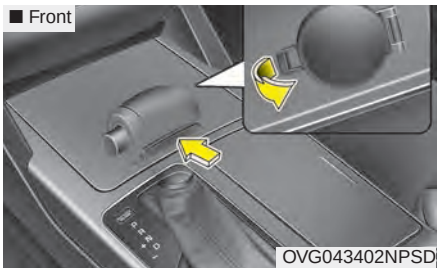
⚠ WARNING - Seat warmer burns

The seat warmer may cause burns, even at low temperatures, if used over a long period of time. Never allow passengers who may not be able to take care of themselves to be exposed to the risk of seat heater burns. These include:

1. **Infants, children, elderly or disabled 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.)**

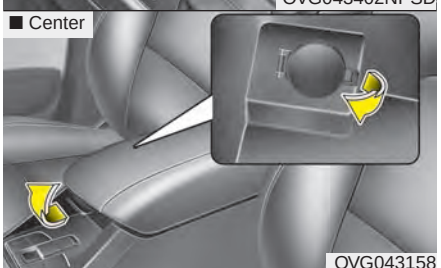
Power outlet

■ Front



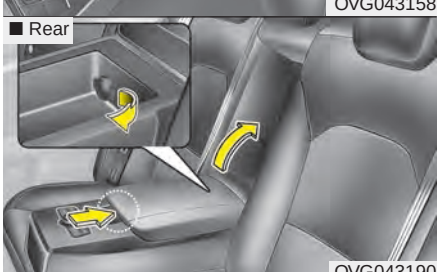
OVG043402NPSD

■ Center



OVG043158

■ Rear



OVG043190

The power outlet is designed to provide power for mobile telephones or other devices designed to operate with vehicle electrical systems. The devices should draw less than 10 amps with the engine running.

- Use the power outlet only when the engine is running and remove the accessory plug after use. Using the accessory plug for prolonged periods of time with the engine off could cause the battery to discharge.
- Only use 12V electric accessories which are less than 10A in electric capacity.
- Adjust the air-conditioner or heater to the lowest operating level when using the power outlet.
- Close the cover when not in use.
- Some electronic devices can cause electronic interference when plugged into a vehicle's power outlet. These devices may cause excessive audio static and malfunctions in other electronic systems or devices used in your vehicle.

⚠ WARNING - Electric shock

Do not put a finger or a foreign element (pin, etc.) into a power outlet and do not touch with a wet hand. You may get an electric shock.

USB charger (if equipped)


OVG044404N

The USB charger is designed to recharge batteries of small size electrical devices using a USB cable. The electrical devices should be recharged with the engine running.

The battery charging state may be monitored on the electrical device.

Disconnect the USB cable from the USB port after use.

- Some devices are not supported for fast charging but will be charged with normal speed.
- Use the USB charger only when the engine is running.
- Only devices that fits the USB port can be used.
- The USB charger can be used only for battery charging purposes.
- Battery chargers cannot be charged.

Clock

Whenever the battery terminals or related fuses are disconnected, you must reset the time.

■ Type A



OVG043161N

■ Type B



OVG044161N

You can set the clock by using the AVN (Audio or Navigation)

For the details, refer to the AVN manual.

⚠ WARNING - Clock Setting Distraction

Do not adjust the clock while driving. Such adjustments may distract you for too long from the roadway and lead to a collision.

Clothes hanger (if equipped)

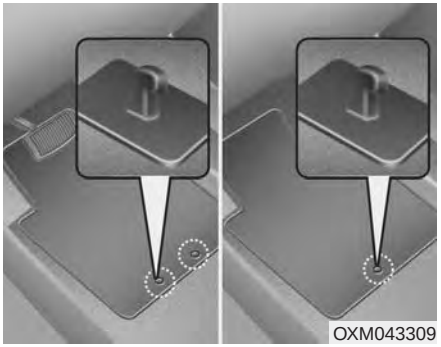


To use the hanger, pull down the upper portion of hanger.

⚠ CAUTION

Do not hang heavy clothes, since those may damage the hook.

Floor mat anchor(s) (if equipped)



When using a floor mat on the front floor carpet, make sure it attaches to the floor mat anchor(s) in your vehicle. This keeps the floor mat from sliding forward.

⚠ WARNING - Secured Floor Mats

The floor mat must be properly anchored so that it will not interfere with the operation of the accelerator pedal. Any interference with the accelerator pedal could cause the accelerator pedal to be unable to return to the idle position. A pedal that cannot return to the idle position could lead to an accident which may result in severe personal injury or death.

The following must be observed when installing ANY floor mat to the vehicle.

- Ensure that the floor mats are securely attached to the vehicle's floor mat anchor(s) before driving the vehicle.
- Do not use ANY floor mat that cannot be firmly attached to the vehicle's floor mat anchors.
- Do not stack floor mats on top of one another (e.g. all-weather rubber mat on top of a carpeted floor mat). Only a single floor mat should be installed in each position.

IMPORTANT - Your vehicle was manufactured with driver's side floor mat anchors that are designed to securely hold the floor mat in place. To avoid any interference with pedal operation, we recommend that the Kia floor mat designed for use in your vehicle be installed.

Luggage net (holder) (if equipped)


OBH048125

To keep items from shifting in the cargo area, you can use the holders located in the cargo area to attach the luggage net.

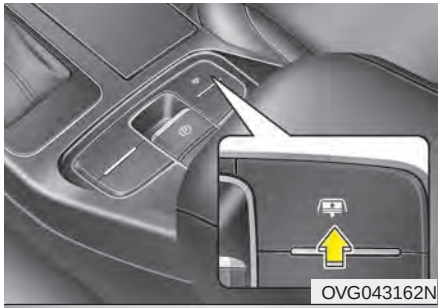
⚠ CAUTION

To prevent damage to the vehicle, care should be taken when carrying fragile or bulky objects in the luggage compartment.

⚠ WARNING

To avoid eye injury, DO NOT overstretch the luggage net. ALWAYS keep your face and body out of the luggage net's recoil path. DO NOT use the luggage net when the strap has visible signs of wear or damage.

Rear curtain (if equipped)


OVG043162N


OVG043186

To fold the rear curtain, press the button. To unfold the rear curtain, press the button again.

The rear curtain will fold automatically when you shift the shift lever into R (Reverse) and unfold automatically when you shift the shift lever from R (Reverse) into P (Park).

After the rear curtain is folded by shifting the shift lever into R (Reverse) and drive more than 12 mi/h with the shift lever in D (Drive), the rear curtain will unfold automatically.

⚠ CAUTION

Do not pull or fold the rear curtain by hand. It could cause motor failure.

Navigation system

The navigation system ascertains the present position of your vehicle by using information from satellites and guides you to the place you assign as the destination.

Detailed information for the navigation system is described in a separately supplied manual.

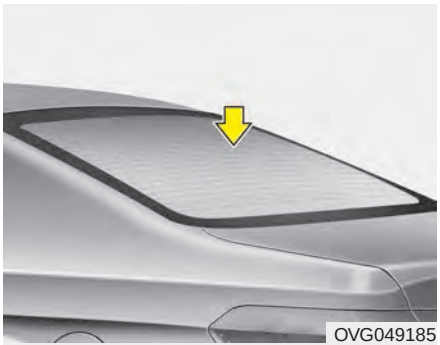
AUDIO SYSTEM

✻ NOTICE

If you install an after market HID head lamp, your vehicle's audio and electronic device may malfunction.

✻ If your vehicle is equipped with AVN(Audio, Video and Navigation) system, refer to a separately supplied manual for detailed information.

Antenna

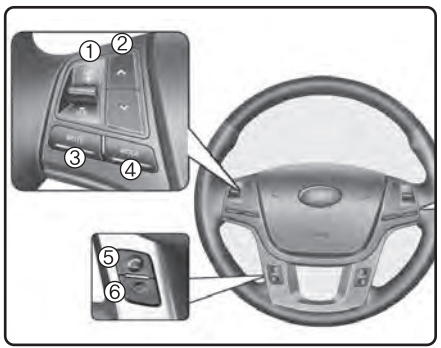


When the radio power switch is turned on while the ignition switch is in either the "ON" or "ACC" position, your car will receive both AM and FM broadcast signals through the antenna in the rear window glass.

⚠ CAUTION

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

Steering wheel remote controller



(1) VOLUME

Used to control volume.

(2) SEEK

When pressed shortly (less than 1 second).

- FM, AM mode : searches broadcast frequencies saved to presets.
- CD, USB, iPod®, My Music, BT Audio mode : changes the track, file.

When pressed and held (more than 1 second).

- FM, AM mode : automatically searches broadcast frequencies and channels.
- CD, USB, iPod®, My Music mode : rewinds or fast forwards the track or file.

(3) MUTE

Mutes audio volume.

(4) MODE

Each time this key is pressed, the mode is changed in order of FM1, FM2, AM, CD, USB(iPod®), AUX, My Music, BT Audio.

If the media is not connected or a disc is not inserted, corresponding modes will be disabled.

Press and hold the key (more than 1 second) to turn the audio system on/off.

When power is off, press the key to turn power back on.

(5)

When pressed shortly.

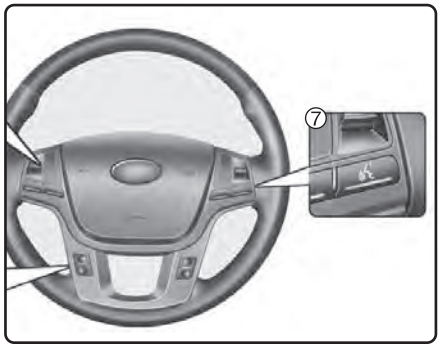
- When pressed in the phone screen, displays call history screen.
- When pressed in the dial screen, makes a call.
- When pressed in the incoming call screen, answers the call.
- When pressed during call waiting, switches to waiting call (Call Waiting).

When pressed and held (more than 1 second).

- When pressed in the *Bluetooth®* Wireless Technology Handsfree wait mode, redials the last call.
- When pressed during a *Bluetooth®* Wireless Technology Handsfree call, switches call back to mobile phone (Private).
- When pressed while calling on the mobile phone, switches call back to *Bluetooth®* Wireless Technology Handsfree (Operates only when *Bluetooth®* Wireless Technology Handsfree is connected).

(6)

Ends phone call.



(7)

When pressed shortly.

- Starts voice recognition.
- When selecting during a voice prompt, stops the prompt and converts to voice command waiting state.

When pressed and held (more than 1 second).

- Ends voice recognition.

❊ The *Bluetooth®* word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Kia is under license. Other trademarks and trade names are those of their respective owners. A compatible *Bluetooth®* enabled cell phone is required to use *Bluetooth®* wireless technology.

Aux, USB port



If your vehicle has an aux and/or USB(universal serial bus) port, you can use an aux port to connect audio devices and an USB and also an iPod®.

✻ NOTICE

When using a portable audio device connected to the power outlet, noise may occur during playback. If this happens, use the power source of the portable audio device.

* iPod® is a Registered trademark of Apple Inc. iPod® mobile digital device sold separately. Connectivity may require use of the Kia accessory cable.

⚠ WARNING - Distracted driving

Driving while distracted can result in a loss of vehicle control that may lead to an accident, severe personal injury, and death. The driver's primary responsibility is in the safe and legal operation of a vehicle, and use of any handheld devices, other equipment, or vehicle systems which take the driver's eyes, attention and focus away from the safe operation of a vehicle or which are not permissible by law should never be used during operation of the vehicle.

Driving your vehicle

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Be sure the exhaust system does not leak.

The exhaust system should be checked whenever the vehicle is raised to change the oil or for any other purpose. If you hear a change in the sound of the exhaust or if you drive over something that strikes the underneath side of the vehicle, have the exhaust system checked as soon as possible by an authorized Kia dealer.

⚠ WARNING - Engine exhaust

Do not inhale exhaust fumes or leave your engine running in an enclosed area for a prolonged time.

Exhaust fumes contain carbon monoxide, a colorless, odorless gas that can cause unconsciousness and death by asphyxiation.

⚠ WARNING - Open trunk

Do not drive with the trunk open.

Poisonous exhaust gases can enter the passenger compartment. If you must drive with the trunk open proceed as follows:

1.Close all windows.

2.Open side vents.

3.Set the air intake control at "Fresh", the air flow control at "Floor" or "Face" and the fan at the highest speed.

⚠ WARNING - California proposition 65

Engine exhaust and a wide variety of automobile components and parts, including components found in the interior furnishings in a vehicle, contain or emit chemicals known to the State of California to cause cancer and birth defects and reproductive harm. In addition, certain fluids contained in vehicles and certain products of component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

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”.

⚠ WARNING - Distracted driving

Focus on the road while driving.

The driver's primary responsibility is in the safe and legal operation of the vehicle. Use of any hand held devices, other equipment or vehicle systems that distract the driver should not be used during vehicle operation.

Before starting

- Close and lock all doors.
- Position the seat so that all controls are easily reached.
- Buckle your seat belt.
- 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 off.

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

⚠ WARNING - Check surrounding

Always check the surrounding areas near your vehicle for people, especially children, before putting a vehicle into D (Drive) or R (Reverse).

⚠ WARNING - Driving while intoxicated

Do not drive while intoxicated. Drinking and driving is dangerous. Even a small amount of alcohol will affect your reflexes, perceptions and judgment. Driving while under the influence of drugs is as dangerous as or more dangerous than driving drunk.

⚠ WARNING - Loose object

Securely store items in your vehicle. When you make a sudden stop or turn the steering wheel rapidly, loose objects may drop on the floor and it could interfere with the operation of the foot pedals, possibly causing an accident.

⚠ WARNING - Fire risk

When you intend to park or stop the vehicle with the engine on, be careful not to depress the accelerator pedal for a long period of time. It may overheat the engine or exhaust system and cause a fire.

ENGINE START/STOP BUTTON

Illuminated ENGINE START/STOP button



Whenever the front door is opened, the ENGINE START/STOP button will illuminate for your convenience. The light will go off after about 30 seconds after the door is closed.

ENGINE START/STOP button position

OFF



White

To turn off the engine (START/STOP position) or vehicle power (ON position), press the ENGINE START/STOP button with the shift lever in the P (Park) position. When you press the ENGINE START/STOP button without the shift lever in the P (Park) position, the ENGINE START/STOP button will not change to the OFF position but to the ACC position.

In an emergency situation while the vehicle is in motion, you are able to turn the engine off and to the ACC position by pressing the ENGINE START/STOP button for more than 2 seconds or 3 times successively within 3 seconds. If the vehicle is still moving, you can restart the engine without depressing the brake pedal by pressing the ENGINE START/STOP button with the shift lever in the N (Neutral) position.

ACC(Accessory)



Orange

Press the ENGINE START/STOP button while it is in the OFF position without depressing the brake pedal.

The steering wheel unlocks and electrical accessories are operational.

If the ENGINE START/STOP button is in the ACC position for more than 1 hour, the button is turned off automatically to prevent battery discharge.

ON



Red

Press the ENGINE START/STOP button while it is in the ACC position without depressing the brake pedal.

The warning lights can be checked before the engine is started. Do not leave the ENGINE START/STOP button in the ON position for a long time. The battery may discharge, because the engine is not running.

START/RUN



Not illuminated

To start the engine, depress the brake pedal and press the ENGINE START/STOP button with the shift lever in the P (Park) or the N (Nuetral) position. For your safety, start the engine with the shift lever in the P (Park) position.

If you press the ENGINE START/STOP button without depressing the brake pedal, the engine will not start and the button will change as follows:

OFF ➔ ACC ➔ ON ➔ OFF

If you leave the ENGINE START/STOP button in the ACC or ON position for a long time, the battery will discharge.

⚠ WARNING - Starting vehicle

Never press the ENGINE START/STOP button while the vehicle is in motion except in an emergency. This would result in loss of directional control and braking function, which could cause an accident.

⚠ WARNING - Leaving the Vehicle

To avoid unexpected or sudden vehicle movement, never leave your vehicle if the transmission is not locked in the P (Park) position and the parking brake is fully engaged. 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.

STARTING THE ENGINE

⚠ WARNING - Proper footwear

Always wear appropriate shoes when operating your vehicle. Unsuitable shoes (high heels, ski boots, sandals, etc.) may interfere with your ability to use the brake and accelerator pedals.

⚠ CAUTION - Starter

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

Starting the engine with a smart key

1. Carry the smart key or leave it inside the vehicle.
2. Make sure the parking brake is firmly applied
3. Place the transaxle shift lever in P (Park).
4. Press the ENGINE START/STOP button while depressing the brake pedal.
5. Do not wait for the engine to warm up while the vehicle remains stationary.

   Start driving at moderate engine speeds. (Steep accelerating and decelerating should be avoided.)

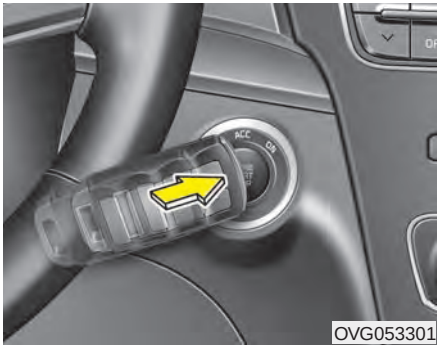
It should be started without depressing the accelerator.

- Even if the smart key is in the vehicle, but is far away from you, the engine may not start.
- When the ENGINE START/STOP button is in the ACC position or above, if any door is opened, the system checks for the smart key. If the smart key is not in the vehicle,the "  " indicator will blink or the warning "Key not in vehicle" will illuminate on the LCD display. And if all doors are closed, the chime will sound for 5 seconds. The indicator or warning will turn off while the vehicle is moving. Always have the smart key with you.

The engine will start only when the smart key is in the vehicle.

⚠ WARNING - Unintended vehicle movement

Never leave the smart key in the vehicle with children or vehicle occupants who are unfamiliar with the vehicle operation. Pushing the ENGINE START/STOP button while the smart key is in the vehicle may result in unintended engine activation and/or unintended vehicle movement.



- If the battery is weak or the smart key does not work correctly, you can start the engine by pressing the engine start/stop button with the smart key.

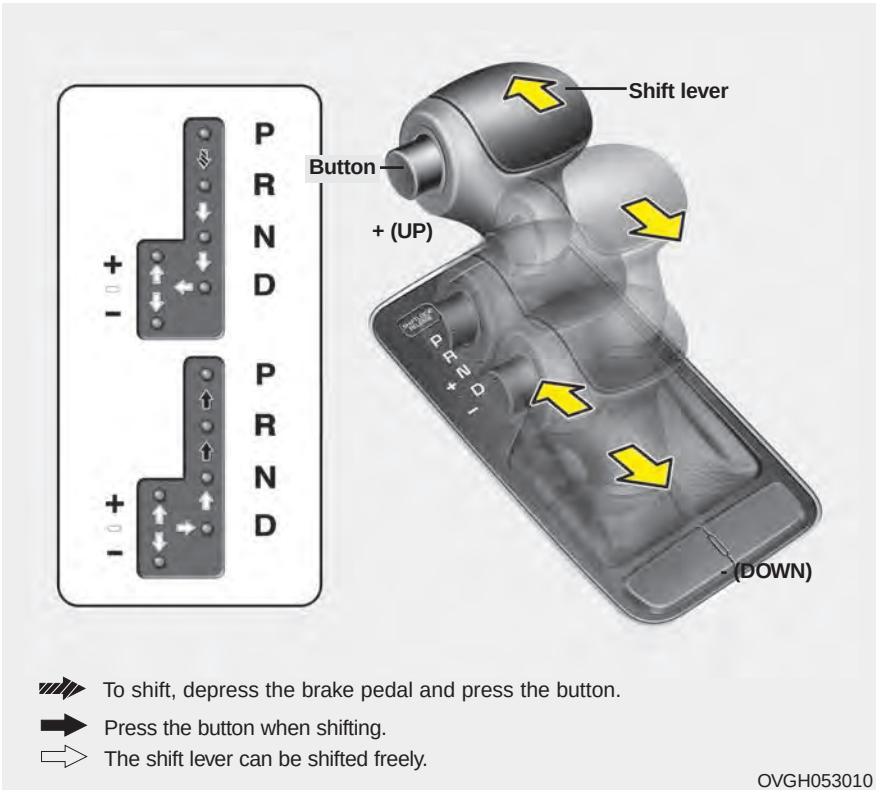
  The side with the lock button should contact the engine start/stop button directly.

  When you press the engine start/stop button directly with the smart key, the smart key should contact the button at a right angle.

- When the stop lamp fuse is blown, you can't start the engine normally. Replace the fuse with a new one. If it is not possible, you can start the engine by pressing the ENGINE START/STOP button for 10 seconds while it is in the ACC position. The engine can start without depressing the brake pedal. But for your safety always depress the brake pedal before starting the engine.

Do not press the ENGINE START/STOP button for more than 10 seconds except when the stop lamp fuse is blown.

AUTOMATIC TRANSAXLE



To shift, depress the brake pedal and press the button.

Press the button when shifting.

The shift lever can be shifted freely.

OVGH053010

Automatic transaxle operation

The automatic transaxle has 6 forward speeds and one reverse speed. The individual speeds are selected automatically, depending on the position of the shift lever.

✻ NOTICE

The first few shifts on a new vehicle, if the battery has been disconnected, may be somewhat abrupt. This is a normal condition, and the shifting sequence will adjust after shifts are cycled a few times by the TCM (Transaxle Control Module) or PCM (Powertrain Control Module).

⚠ WARNING - Leaving the Vehicle

To avoid unexpected or sudden vehicle movement, never leave your vehicle if the transmission is not locked in the P (Park) position and the parking brake is fully engaged. 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.

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

⚠ CAUTION - Transaxle

To avoid damage to your transaxle, do not accelerate the engine in R (Reverse) or any forward gear position with the brakes on. The transaxle may be damaged if you shift into P (Park) while the vehicle is in motion.

When stopped on an upgrade, do not hold the vehicle with engine power. Use the service brake or the parking brake.

Transaxle ranges

The indicator light in the instrument cluster displays the shift lever position when the ignition switch is in the ON position.

P (Park)

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

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.

R (Reverse)

Use this position to drive the vehicle backward.

⚠ CAUTION - Shifting

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

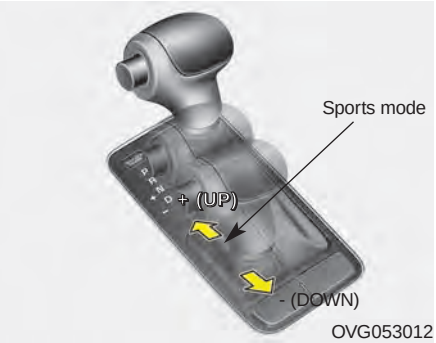
N (Neutral)

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

D (Drive)

This is the normal forward driving position. The transaxle will automatically shift through a 6-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 stopped or in motion, sports mode is selected by pushing the shift lever from the D (Drive) position into the manual gate. To return to D (Drive) range operation, push the shift lever back into the main gate.

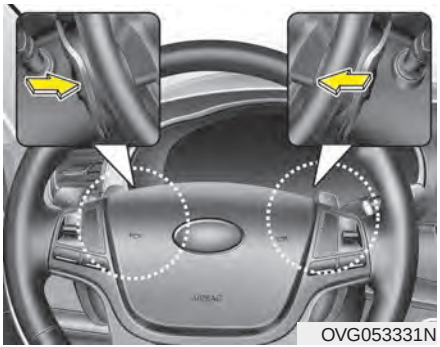
In sports mode, moving the shift lever backwards and forwards will allow you to make gearshifts rapidly. In contrast to a manual transaxle, the sports mode allows gearshifts with the accelerator pedal depressed.

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

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

- 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 6 forward gears can be selected. To reverse or park the vehicle, move the shift lever to the R (Reverse) or P (Park) position as required.
- In sports mode, downshifts are made automatically when the vehicle slows down. When the vehicle stops, 1st gear is automatically selected.
- 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.

Paddle shifter (if equipped)



The paddle shifter is available when the shift lever is in the D position or the sport mode.

With the shift lever in the D position

The paddle shifter can operate when the vehicle speed is more than 6.2 mph.

Pull the [+] or [-] paddle shifter once to shift up or down one gear and the system changes from automatic mode to manual mode.

If the vehicle speed is lower than 10km/h, if you depress the accelerator pedal for more than 7 seconds or if you shift the shift lever from D to sports mode and shift it from sports mode to D again, the system change from manual mode to automatic mode.

With the shift lever in the sports mode

Pull the [+] or [-] paddle shifter once to shift up or down one gear.

If you pull the [+] and [-] paddle shifters at the same time, you can't shift the gear.

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.

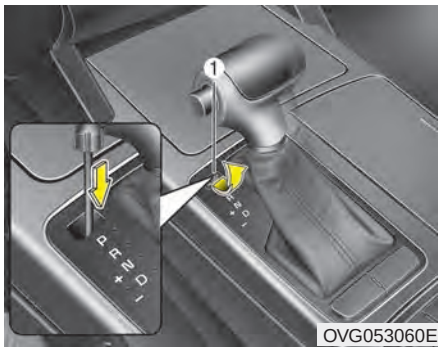
To shift the transaxle from P (Park) into R (Reverse):

1. Depress and hold the brake pedal.
2. Start the engine or turn the ignition switch to the ON position.
3. Move the shift lever.

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

⚠ WARNING - Shifting from park

Always fully depress the brake pedal before and while shifting out of the P (Park) position into another position to avoid inadvertent motion of the vehicle.



Shift-lock override

If the shift lever cannot be moved from the P (Park) or N (Neutral) position into the R (Reverse) position with the brake pedal depressed, continue depressing the brake, then do the following:

1. Carefully remove the cap covering the shift-lock access hole (1).
2. Insert a screwdriver into the access hole and press down on the screwdriver.
3. Move the shift lever.
4. Have your vehicle inspected by an authorized Kia dealer immediately.

Good driving practices

- Never move the shift lever from P (Park) or N (Neutral) to any other position with the accelerator pedal depressed.
- Never move the shift lever into P (Park) when the vehicle is in motion.
- Slow down before shifting to a lower gear. Otherwise, the lower gear may not be engaged.
- Always use the parking brake. Do not depend on placing the transaxle in P (Park) to keep the vehicle from moving.
- Optimum vehicle performance and economy is obtained by smoothly depressing and releasing the accelerator pedal.

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.

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.

⚠ CAUTION - Brake pedal

Do not drive with your foot resting on the brake pedal. This will create abnormally high brake temperatures which can cause excessive brake lining and pad wear.

⚠ WARNING - Steep hill braking

Avoid continuous application of the brakes when descending a long or steep hill by shifting to a lower gear. Continuous brake application will cause the brakes to overheat and could result in a temporary loss of braking performance.

Wet brakes may impair the vehicle's ability to safely slow down; the vehicle may also pull to one side when the brakes are applied. Applying the brakes lightly will indicate whether they have been affected in this way.

To dry the brakes, apply them lightly while maintaining a safe forward speed until brake performance returns to normal.

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

Avoid applying the parking brake to stop the vehicle while it is moving except in an emergency situation. Applying the parking brake while the vehicle is moving at normal speeds can cause a sudden loss of control of the vehicle. If you must use the parking brake to stop the vehicle, use great caution in applying the brake.

Disc brakes wear indicator

When your brake pads are worn and new pads are required, you will hear a high-pitched warning sound from your front brakes or rear brakes (if equipped). You may hear this sound come and go or it may occur whenever you depress the brake pedal.

Please remember that some driving conditions or climates may cause a brake squeal when you first apply (or lightly apply) the brakes. This is normal and does not indicate a problem with your brakes.

⚠ CAUTION - Replace brake pads

Do not continue to drive with worn brake pads. Continuing to drive with worn brake pads can damage the braking system and result in costly brake repairs.

Always replace the front or rear brake pads as pairs.

⚠ WARNING - Brake wear

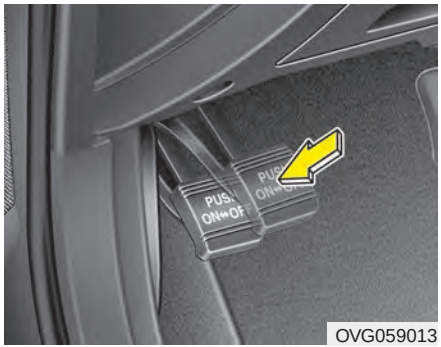
Do not ignore high pitched wear sounds from your brakes. If you ignore this audible warning, you will eventually lose braking performance, which could lead to a serious accident.

⚠ CAUTION - Parking brake

Driving with the parking brake applied will cause excessive brake pad (or lining) and brake rotor wear.

Parking brake (Foot type)

Applying the parking brake



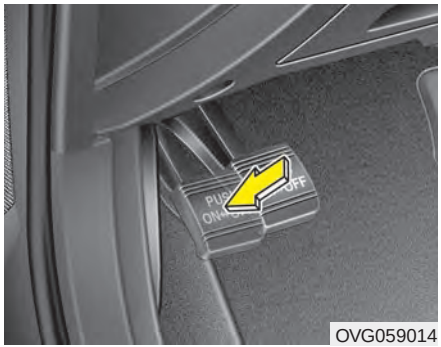
OVG059013

To engage the parking brake, first apply the foot brake and then depress the parking brake pedal down as far as possible.

⚠ CAUTION - Parking brake

Driving with the parking brake applied will cause excessive brake pad (or lining) and brake rotor wear.

Releasing the parking brake



OVG059014

To release the parking brake, depress the parking brake pedal a second time while applying the foot brake. The pedal will automatically extend to the fully released position.

⚠ WARNING - Parking Brake Use

- **Never allow a passenger to touch the parking brake. If the parking brake is released unintentionally, serious injury may occur.**
- **All vehicles should always have the parking brake fully engaged when parked to avoid inadvertent movement of the car which can injure occupants or pedestrians.**



W-75

Check the brake warning light by turning the ignition switch ON (do not start the engine). This light will illuminate when the parking brake is applied with the ignition switch in the START or ON position.

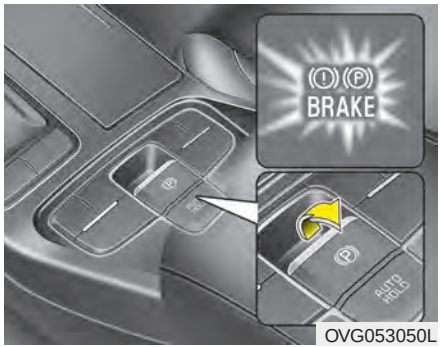
Before driving, be sure the parking brake is fully released and the brake warning light is off.

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

If at all possible, stop 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.

Electric parking brake (EPB) (if equipped)

Applying the parking brake



OVG053050L

To apply the EPB (electric parking brake):

1.Depress the brake pedal.

2.Pull up the EPB switch.

Make sure the warning light comes on.

Also, the EPB is applied automatically if the Auto Hold button is on when the engine is turned off. However, if you press the EPB switch after the engine is turned off, the EPB will not be applied.

✻ NOTICE

On a steep incline or when pulling a trailer if the vehicle does not stand still, do as follows:

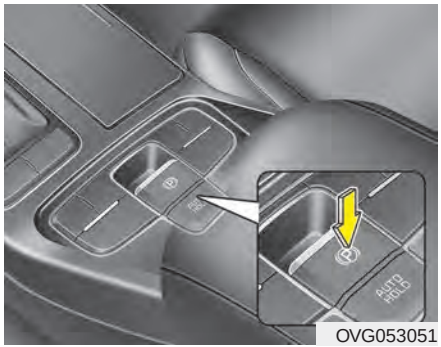
1. Apply the EPB.

2. Pull up the EPB switch for more than 3 seconds.

✻ NOTICE

A click or electric brake motor whine sound may be heard while operating or releasing the EPB, but these conditions are normal and indicate that the EPB is functioning properly.

Releasing the parking brake



OVG053051

To release the EPB (electric parking brake), press the EPB switch in the following condition:

- Have the ignition switch or engine start/stop button in the ON position.
- Depress the brake pedal.

Make sure the brake warning light goes off.

To release EPB (electric parking brake) automatically:

- Shift lever in P (Park)

  With the engine running depress the brake pedal and shift out of P (Park) to R (Rear) or D (Drive).
- Shift lever in N (Neutral)

  With the engine running depress the brake pedal and shift out of N (Neutral) to R (Rear) or D (Drive).
- Automatic transaxle vehicle

  1. Start the engine.
  2. Fasten the driver's seat belt.
  3. Close the driver's door, engine hood and trunk.
  4. Depress the accelerator pedal while the shift lever is in R (Rear), D (Drive) or Sports mode.

Make sure the brake warning light goes off.

✻ NOTICE

- **For your safety, you can engage the EPB even though the ignition switch or engine stop/start button is in the OFF position, but you cannot release it.**
- **For your safety, depress the brake pedal and release the parking brake manually with the EPB switch when you drive downhill or when backing up the vehicle. Do not follow the above procedure when driving on a flat level ground. The vehicle may suddenly move forward.**

EPB (electric parking brake) may be automatically applied when:

- Requested by other systems

✻ NOTICE

If the driver turns the engine off by mistake while Auto Hold is operating, EPB will be automatically applied. (Vehicles equipped with Auto Hold)

- If the driver's seat belt is not fastened and the engine hood or trunk is opened, a warning will sound and a message will appear.
- If there is a problem with the vehicle, a warning may sound and a message may appear.

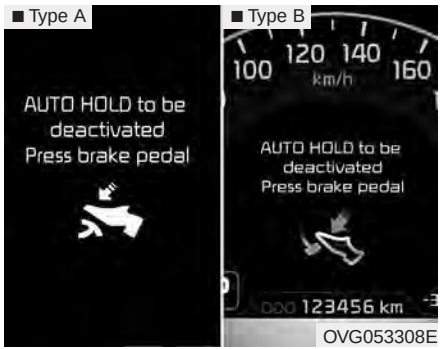
If the above situation occurs, depress the brake pedal and release EPB by pressing the EPB switch.

⚠ WARNING - Parking Brake Use

- **Never allow a passenger to touch the parking brake. If the parking brake is released unintentionally, serious injury may occur.**
- **All vehicles should always have the parking brake fully engaged when parked to avoid inadvertent movement of the car which can injure occupants or pedestrians.**

✻ NOTICE

- **A click sound may be heard while operating or releasing the EPB, but these conditions are normal and indicate that the EPB is functioning properly.**
- **When leaving your keys with a parking lot attendant or valet, make sure to inform him/her how to operate the EPB.**
- **The EPB may malfunction if you drive with the EPB applied.**
- **When you automatically release EPB by depressing the accelerator pedal, depress it slowly.**



When the conversion from Auto Hold to EPB is not working properly a warning will sound and a message will appear.

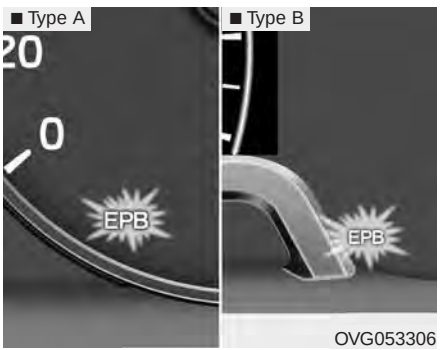
⚠ CAUTION

Depress the brake pedal when the above message appears for the Auto Hold and EPB may not activate.



If the EPB is applied while Auto Hold is activated because of ESC(Electronic Stability Control) signal, a warning will sound and a message will appear.

EPB malfunction indicator (if equipped)



This warning light illuminates if the engine start/stop button is changed to the ON position and goes off in approximately 3 seconds if the system is operation normally.

If the EPB malfunction indicator remains on, comes on while driving, or does not come on when the ignition switch or the engine start/stop button is changed to the ON position, this indicates that the EPB may have malfunctioned.

If this occurs, have your vehicle checked by an authorized Kia dealer as soon as possible.

The EPB malfunction indicator may illuminate when the ESC indicator comes on to indicate that the ESC is not working properly, but it does not indicate a malfunction of the EPB.

- The EPB warning light may illuminate if the EPB switch operates abnormally. Shut the engine off and turn it on again after a few minutes. The warning light will go off and the EPB switch will operate normally. However, if the EPB warning light is still on, have the system checked by an authorized Kia dealer.
- If the parking brake warning light does not illuminate or blinks even though the EPB switch was pulled up, the EPB is not applied.
- If the parking brake warning light blinks when the EPB warning light is on, press the switch, then pull it up. Once more press it back to its original position and pull it back up. If the EPB warning does not go off, have the system checked by an authorized Kia dealer.

Emergency braking

If there is a problem with the brake pedal while driving, emergency braking is possible by pulling up and holding the EPB switch. Braking is possible only while you are holding the EPB switch.

⚠ WARNING - Electric Parking Brake

Do not operate the electric parking brake while the vehicle is moving except in an emergency situation. Applying the electric 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 electric parking brake to stop the vehicle, use great caution in applying the brake.

✻ NOTICE

During emergency braking by the EPB, the parking brake warning light will illuminate to indicate that the system is operating.

If you notice a continuous noise or burning smell when the EPB is used for emergency braking, have your vehicle checked by an authorized Kia dealer.

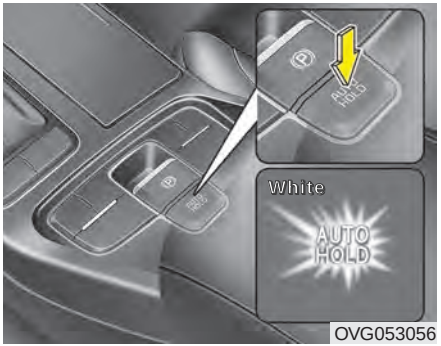
When the EPB (electric parking brake) is not released

If the EPB does not release normally, take your vehicle to an authorized Kia dealer by loading the vehicle on a flatbed tow truck and have the system checked.

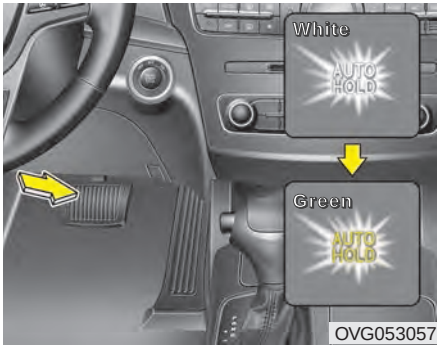
AUTO HOLD (if equipped)

The Auto Hold maintains the vehicle in a standstill even though the brake pedal is not depressed after the driver brings the vehicle to a complete stop by depressing the brake pedal.

Set up



1. Depress the brake pedal and then press the Auto Hold button. The white AUTO HOLD indicator will come on and the system will be in the standby position. The driver's door, engine hood and trunk closed and the driver's seat belt must be fastened before EPB will work.



2. When you stop the vehicle completely by depressing the brake pedal, the AUTO HOLD indicator changes from white to green.
3. The vehicle will remain stationary even if you release the brake pedal.
4. If EPB is applied, Auto Hold will be released.

Leaving

If you press the accelerator pedal with the shift lever in R (Reverse), D (Drive) or sports mode, the Auto Hold will be released automatically and the vehicle will start to move. The indicator changes from green to white.

When driving off from Auto Hold by depressing the accelerator pedal, always check the surrounding area near your vehicle.

Slowly depress the accelerator pedal for a smooth launch.

Cancel

To cancel the Auto Hold operation, press the Auto Hold switch. The AUTO HOLD indicator will go out.

To cancel the Auto Hold operation when the vehicle is at a standstill, press the Auto Hold switch while depressing the brake pedal.

✻ NOTICE

- **The Auto Hold does not operate when:**
  - **The driver's seat belt is unfastened and driver's door is opened**
  - **The engine hood is opened**
  - **The trunk is opened**
  - **The shift lever is in P (Park)**
  - **The EPB is applied**
- **For your safety, the Auto Hold automatically switches to EPB in such cases:**
  - **The driver's seat belt is unfastened and driver's door is opened**
  - **The engine hood is opened**
  - **The trunk is opened**
  - **The vehicle is in a standstill for more than 10 minutes**
  - **The vehicle is standing on a steep slope**
  - **The vehicle moved several times**

(Continued)

(Continued)

In these cases, the brake warning light comes on, the AUTO HOLD indicator changes from green to white, and a warning sounds and a message will appear to inform you that EPB has been automatically engaged. Before driving off again, press foot brake pedal, check the surrounding area near your vehicle and release parking brake manually with the EPB switch.

- **If the AUTO HOLD indicator lights up yellow, the Auto Hold is not working properly. Take your vehicle to an authorized Kia dealer and have the system checked.**
- **While operating Auto Hold, you may hear mechanical noise. However, it is normal operating noise.**

⚠ WARNING

To reduce the risk of an accident, do not activate Auto Hold while driving downhill, backing up or parking your vehicle.

If there is a malfunction with the driver's door, engine hood or trunk open detection system, the Auto Hold may not work properly.

Take your vehicle to an authorized Kia dealer and have the system checked.

Anti-lock brake system (ABS)

ABS (or ESC) will not prevent accidents due to improper or dangerous driving maneuvers. Even though vehicle control is improved during emergency braking, always maintain a safe distance between you and objects ahead. Vehicle speeds should always be reduced during extreme road conditions.

The vehicle should be driven at reduced speeds in the following circumstances:

- When driving on rough, gravel or snow-covered roads
- When driving with tire chains installed
- When driving on roads where the road surface is pitted or has different surface heights.

Driving in these conditions increases the stopping distance for your vehicle.

The ABS continuously senses the speed of the wheels. If the wheels are going to lock, the ABS system repeatedly modulates the hydraulic brake pressure to the wheels.

When you apply your brakes under conditions which may lock the wheels, you may hear a “tik-tik” sound from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your ABS is active.

In order to obtain the maximum benefit from your ABS in an emergency situation, do not attempt to modulate your brake pressure and do not try to pump your brakes. Press your brake pedal as hard as possible or as hard as the situation allows the ABS to control the force being delivered to the brakes.

✻ NOTICE

A click sound may be heard in the engine compartment when the vehicle begins to move after the engine is started. These conditions are normal and indicate that the anti-lock brake system is functioning properly.

- Even with the anti-lock brake system, your vehicle still requires sufficient stopping distance. Always maintain a safe distance from the vehicle in front of you.
- Always slow down when cornering. The anti-lock brake system cannot prevent accidents resulting from excessive speeds.
- On loose or uneven road surfaces, operation of the anti-lock brake system may result in a longer stopping distance than for vehicles equipped with a conventional brake system.



W-78

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 but your regular brakes will work normally. Contact an authorized Kia dealer as soon as possible.

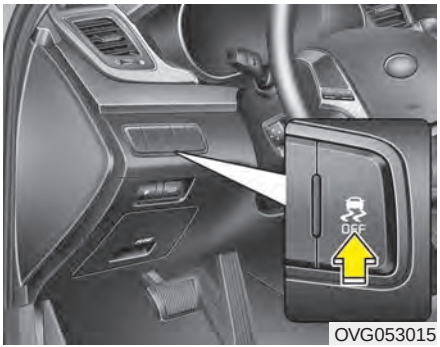
- When you drive on a road with poor traction, such as an icy road, and operated your brakes continuously, the ABS will be active continuously and the ABS warning light may illuminate. Pull your vehicle over to a safe place and stop the engine.
- Restart the engine. If the ABS warning light is off, then your ABS 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 turn on at the same time. This happens because of the low battery voltage. It does not mean your ABS has malfunctioned.

- **Do not pump your brakes!**
- **Have the battery recharged before driving the vehicle.**

Electronic stability control (ESC)



OVG053015

The Electronic Stability control (ESC) system is designed to stabilize the vehicle during cornering maneuvers. ESC checks where you are steering and where the vehicle is actually going. ESC applies the brakes on individual wheels and intervenes with the engine management system to stabilize the vehicle.

Electronic stability control (ESC) will not prevent accidents. Excessive speed in turns, abrupt maneuvers and hydroplaning on wet surfaces can still result in serious accidents. Only a safe and attentive driver can prevent accidents by avoiding maneuvers that cause the vehicle to lose traction. Even with ESC installed, always follow all the normal precautions for driving - including driving at safe speeds for the conditions.

The Electronic Stability Control (ESC) system is an electronic system designed to help the driver maintain vehicle control under adverse conditions. It is not a substitute for safe driving practices. Factors including speed, road conditions and driver steering input can all affect whether ESC will be effective in preventing a loss of control. It is still your responsibility to drive and corner at reasonable speeds and to leave a sufficient margin of safety.

When you apply your brakes under conditions which may lock the wheels, you may hear a “tik-tik” sound from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your ESC is active.

✻ NOTICE

For maximum protection, always wear your seat belt. No system, no matter how advanced, can compensate for all driver error and/or driving conditions. Always drive responsibly

ESC operation

ESC ON condition

-

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

When operating

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

- When the Electronic Stability Control is operating properly, you can feel a slight pulsation in the vehicle. This is only the effect of brake control and indicates nothing unusual.
- When moving out of the mud or slippery road, pressing the accelerator pedal may not cause the engine rpm (revolutions per minute) to increase.

ESC operation off

ESC OFF state

OFF

This car has 2 kinds of ESC off states.

If the engine stops when ESC is off, ESC remains off. Upon restarting the engine, the ESC will automatically turn on again.



• ESC off state 1

To cancel ESC operation, press the ESC OFF button (ESC OFF) shortly (ESC OFF indicator light (ESC OFF) illuminates). At this state, the engine control function does not operate. It means the traction control function does not operate. Brake control function only operates.



• ESC off state 2

To cancel ESC operation, press the ESC OFF button (ESC OFF) for more than 3 seconds. ESC OFF indicator light (ESC OFF) illuminates and ESC OFF warning chime will sound. At this state, the engine control function and brake control function do not operate. It means the car stability control function does not operate any more.

Indicator light

■ ESC indicator light



■ ESC OFF indicator light



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

The ESC indicator light blinks whenever ESC is operating or illuminates when ESC fails to operate.

The ESC OFF indicator light comes on when the ESC is turned off with the button.

Driving with varying tire or wheel sizes may cause the ESC system to malfunction. When replacing tires, make sure they are the same size as your original tires.

⚠ WARNING - Electronic stability control

Drive carefully even though your vehicle has Electronic Stability Control. It can only assist you in maintaining control under certain circumstances.

ESC OFF usage

When driving

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

Never press the ESC OFF button while ESC is operating (ESC indicator light blinks).

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

⚠ WARNING - Operating ESC

Never press the ESC OFF button while ESC is operating.

If the ESC is turned off while ESC is operating, the vehicle may go out of control.

Hill-start assist control (HAC)

Hill start Assist Control is a comfort function. The main intent is to prevent the vehicle from rolling backwards while driving uphill on an inclined surface. HAC holds the braking pressure builtup by driver during stopping procedure for 2 seconds after releasing brake pedal.

During the pressure-hold period, the driver has enough time to press the accelerator pedal to drive off.

The braking pressure is reduced as soon as the system detects the driver's intention to drive off.

⚠ WARNING - Maintaining Brake Pressure on Incline

HAC does not replace the need to apply brakes while stopped on an incline. While stopped, make sure you maintain brake pressure sufficient to prevent your vehicle from rolling backward and causing an accident. Don't release the brake pedal until you are ready to accelerate forward.

- The HAC does not operate when the transaxle shift lever is in the P (Park) or N (Neutral) position.
- The HAC activates even though the ESC is off but it does not activate when the ESC has malfunctioned.

Vehicle stability management (VSM)

This system provides further enhancements to vehicle stability and steering responses when a vehicle is driving on a slippery road or a vehicle detected changes in coefficient of friction between right wheels and left wheels when braking.

⚠ WARNING

For maximum protection, always wear your seat belt. No system, no matter how advanced, can compensate for all driver error and/or driving conditions. Always drive responsibly

VSM operation

When the VSM is in operation, ESC indicator light ( ) blinks.

When the vehicle stability management is operating properly, you can feel a slight pulsation in the vehicle. This is only the effect of brake control and indicates nothing unusual.

The VSM does not operate when:

- Driving on bank road such as gradient or incline
- Driving rearward
- ESC OFF indicator light ( ) remains on the instrument cluster
- ESC indicator light remains on the instrument cluster

VSM operation off

If you press the ESC OFF button to turn off the ESC, the VSM will also cancel and the ESC OFF indicator light ( ) illuminates.

To turn on the VSM, press the button again. The ESC OFF indicator light goes out.

Malfunction indicator

The VSM can be deactivated even if you don't cancel the VSM operation by pressing the ESC OFF button. It indicates that a malfunction has been detected somewhere in the Electric Power Steering system or VSM system. If the ESC indicator light ( ) or ESC warning light remains on, take your vehicle to an authorized Kia dealer and have the system checked.

- The VSM is designed to function above approximately 9 mph (15 km/h) on curves.

- The VSM is designed to function above approximately 18 mph (30 km/h) when a vehicle is braking on a split-mu road. The split-mu road is made of surfaces which have different friction forces.
- The Vehicle Stability Management system is not a substitute for safe driving practices but a supplementary function only. It is the responsibility of the driver to always check the speed and the distance to the vehicle ahead. Always hold the steering wheel firmly while driving.
- Your vehicle is designed to activate according to the driver's intention, even with installed VSM. Always follow all the normal precautions for driving at safe speeds for the conditions – including driving in inclement weather and on a slippery road.

✻ NOTICE

When replacing tires and wheels, make sure they are the same size as the original tires and wheels installed. Driving with varying tire or wheel sizes may diminish any supplemental safety benefits of the VSM system.

Good braking practices

- Check to be sure the parking brake is not engaged and that the parking brake indicator light is out before driving away.
- Driving through water may get the brakes wet. They can also get wet when the vehicle is washed. Wet brakes can be dangerous! Your vehicle will not stop as quickly if the brakes are wet. Wet brakes may cause the vehicle to pull to one side.

  To dry the brakes, apply the brakes lightly until the braking action returns to normal, taking care to keep the vehicle under control at all times. If the braking action does not return to normal, stop as soon as it is safe to do so and call an authorized Kia dealer for assistance.

- Don't coast down hills with the vehicle out of gear. This is extremely hazardous. Keep the vehicle in gear at all times, use the brakes to slow down, then shift to a lower gear so that engine braking will help you maintain a safe speed.
- Don't "ride" the brake pedal. Resting your foot on the brake pedal while driving can be dangerous because the brakes might overheat and lose their effectiveness. It also increases the wear of the brake components.
- If a tire goes flat while you are driving, apply the brakes gently and keep the vehicle pointed straight ahead while you slow down. When you are moving slowly enough for it to be safe to do so, pull off the road and stop in a safe place.
- If your vehicle is equipped with an automatic transaxle, don't let your vehicle creep forward. To avoid creeping forward, keep your foot firmly on the brake pedal when the vehicle is stopped.
- Be cautious when parking on a hill. Firmly engage the parking brake and place the shift lever in P (automatic transaxle) or in first or reverse gear (manual transaxle). If your vehicle is facing downhill, turn the front wheels into the curb to help keep the vehicle from rolling. If your vehicle is facing uphill, turn the front wheels away from the curb to help keep the vehicle from rolling. If there is no curb or if it is required by other conditions to keep the vehicle from rolling, block the wheels.
- Under some conditions your parking brake can freeze in the engaged position. This is most likely to happen when there is an accumulation of snow or ice around or near the rear brakes or if the brakes are wet. If there is a risk that the parking brake may freeze, apply it only temporarily while you put the shift lever in P (automatic transaxle) or in first or reverse gear (manual transaxle) and block the rear wheels so the vehicle cannot roll. Then release the parking brake.
- Do not hold the vehicle on the upgrade with the accelerator pedal. This can cause the transaxle to overheat. Always use the brake pedal or parking brake.

CRUISE CONTROL SYSTEM

The cruise control system allows you to program the vehicle to maintain a constant speed without depressing the accelerator pedal.

This system is designed to function above approximately 25 mph (40 km/h).

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 the cruise control is not in use, to avoid inadvertently setting a speed.

Use the cruise control system only when traveling on open highways in good weather.

Do not use the cruise control when driving in heavy or varying traffic, or on slippery (rainy, icy or snow-covered) or winding roads or over 6% up-hill or down-hill roads.

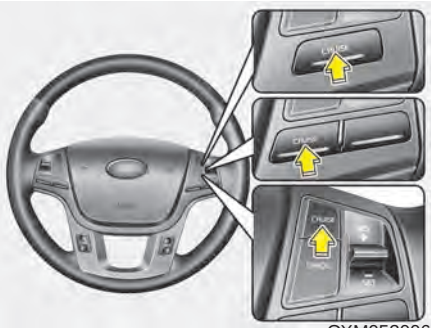
✻ NOTICE

- **During normal cruise control operation, when the SET switch is activated or reactivated after applying the brakes, the cruise control will energize after approximately 3 seconds. This delay is normal.**
- **To activate cruise control, depress the brake pedal at least once after turning the ignition switch to the ON position or starting the engine. This is to check if the brake switch which is important part to cancel cruise control is in normal condition.**

⚠ WARNING - Misuse of Cruise Control

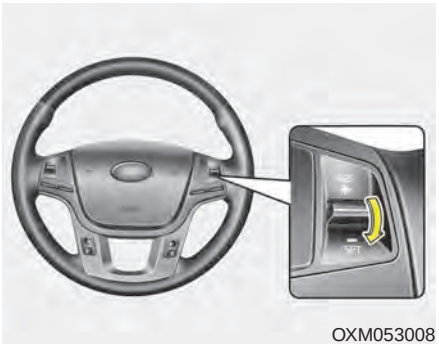
Do not use cruise control if the traffic situation does not allow you to drive safely at a constant speed and with sufficient distance to the vehicle in front.

To set cruise control speed:



OXM053006

1. Press the CRUISE 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 25 mph (40 km/h).

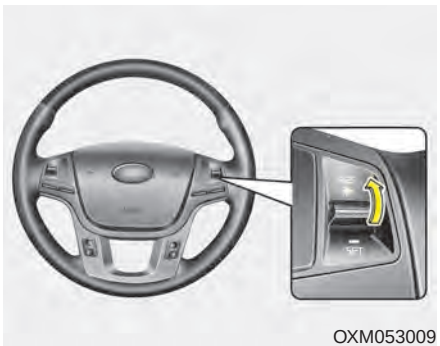


OXM053008

3. Lever must be moved down (to SET-) prior to setting any desired speed. The SET indicator light in the instrument cluster will illuminate. Release the accelerator at the same time. The desired speed will automatically be maintained.

On a steep grade, the vehicle may slow down or speed up slightly while going downhill.

To increase cruise control set speed:

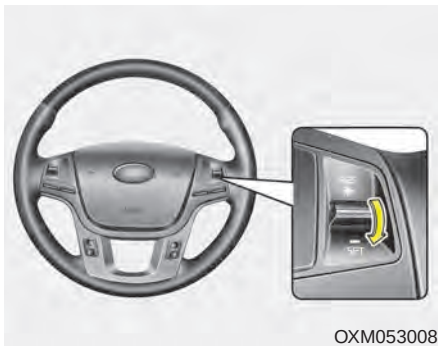


OXM053009

Follow either of these procedures:

- Move the lever up (to RES+) and hold it. Your vehicle will accelerate. Release the lever at the speed you want.
- Move the lever up (to RES+) and release it immediately. The cruising speed will increase by 1.0 mph (1.6 km/h) each time the lever is operated in this manner.

To decrease the cruising speed:



OXM053008

Follow either of these procedures:

- Move the lever down (to SET-) and hold it. Your vehicle will gradually slow down. Release the lever at the speed you want to maintain.
- Move the lever down (to SET-) and release it immediately. The cruising speed will decrease by 1.0 mph (1.6 km/h) each time the lever is operated in this manner.

To temporarily accelerate with the cruise control on:

If you want to speed up temporarily when the cruise control is on, depress the accelerator pedal. Increased speed will not interfere with the cruise control operation or change the set speed.

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

To cancel cruise control, do one of the following:

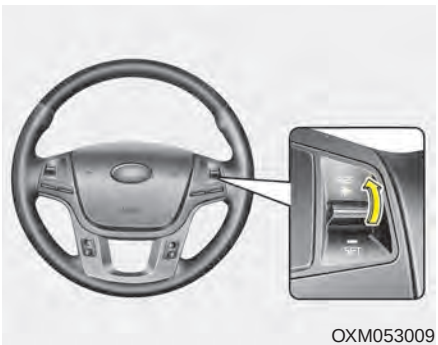


OXM053010

- Depress the brake pedal.
- Shift into N (Neutral) with an automatic transaxle.
- Press the CANCEL button.
- Decrease the vehicle speed lower than the memory speed by 12 mph (20 km/h).
- Decrease the vehicle speed to less than approximately 25 mph (40 km/h).

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, move the lever up (to RES+). You will return to your previously preset speed.

To resume cruising speed at more than approximately 25 mph (40 km/h):



OXM053009

If any method other than the CRUISE button was used to cancel cruising speed and the system is still activated, the most recent set speed will automatically resume when you move the lever up.

It will not resume, however, if the vehicle speed has dropped below approximately 25 mph (40 km/h).

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

- Press the CRUISE button (the CRUISE indicator light in the instrument cluster will go off).
- Turn the ignition off.

Both of these actions will cancel the cruise control operation. If you want to resume the cruise control operation, repeat the steps provided in "To set cruise control speed" on the previous page.

ADVANCED SMART CRUISE CONTROL (ASCC) SYSTEM (IF EQUIPPED)



① CRUISE indicator
② SET indicator
③ Set speed
④ Vehicle-to-vehicle distance

The Advanced smart cruise control system (ASCC) allows you to program the vehicle to maintain a set speed so long as it is not limited by traffic. When traffic is encountered the vehicle will be slowed to maintain a set distance behind traffic without depressing the accelerator or brake pedal.

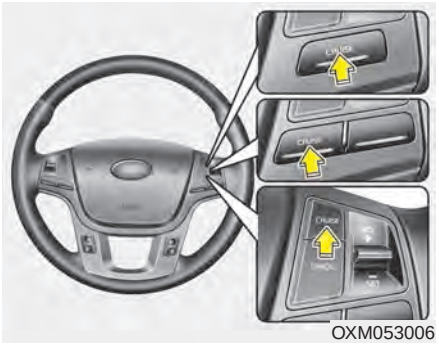
⚠ WARNING - ASCC Inadvertent Activation

If the advanced smart cruise control is left on (CRUISE indicator light in the instrument cluster illuminated), it can be activated inadvertently. Keep the ASCC off (CRUISE indicator light OFF) when the ASCC is not in use to avoid setting a speed which the driver is not aware of.

⚠ WARNING - Advanced Smart Cruise Control Limitations

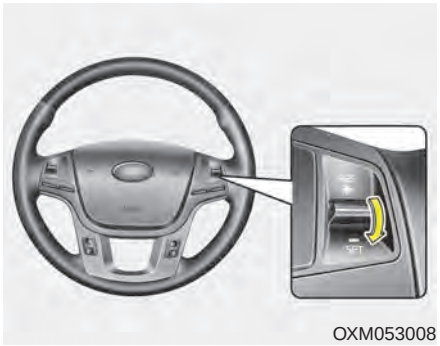
- **The advanced smart cruise control is a supplemental system and is not a substitute for safe driving practices. It is the responsibility of the driver to always check the speed and distance to the vehicle ahead.**
- **Do not use the advanced smart cruise control when it may not be safe to keep the car at a constant speed, for instance, driving in heavy or varying traffic, or on slippery (rainy, icy, or snow-covered) or winding roads or over 6% uphill or down-hill roads.**

To set cruise control speed:



OXM053006

1. Push the CRUISE 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.
   - min. 19 mph (30 km/h): when there is no vehicle in front
   - min. 0 mph (0 km/h): when there is a vehicle in front



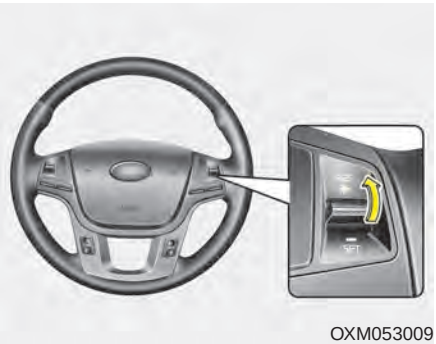
OXM053008

3. Lever must be moved down (to SET-) prior to setting any desired speed. The SET indicator light in the instrument cluster will illuminate. Release the accelerator at the same time. The desired speed will automatically be maintained.

If there is a vehicle in front of you, the speed may decrease to maintain the distance to the vehicle ahead.

On a steep grade, the vehicle may slow down or speed up slightly while going uphill or downhill.

To increase cruise control set speed:



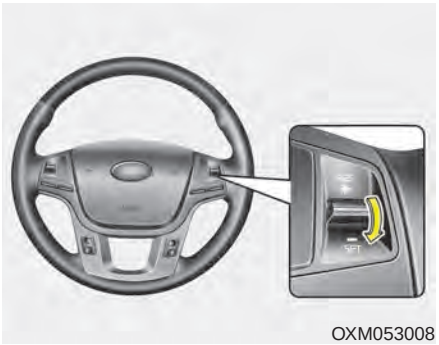
OXM053009

Follow either of these procedures:

- Move the lever up (to RES+) and hold it. Your vehicle will accelerate. Release the lever at the speed you want.
- Move the lever up (to RES+) and release it immediately.

  The cruising speed will increase by 1 mph (or 1.6 km/h) each time you move the lever up (to RES+) in this manner.
- You can set the speed to 113 mph (180 km/h).

To decrease the cruising speed:



OXM053008

Follow either of these procedures:

- Move the lever down (to SET-) and hold it. Your vehicle will gradually slow down. Release the lever at the speed you want to maintain.
- Move the lever down (to SET-) and release it immediately.

  The cruising speed will decrease by 1 mph (1.6 km/h) each time you move the lever down (to SET-) in this manner.
- You can set the cruise control to any speed above 19 mph (30 km/h).

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.

If you move the lever down (to SET-) at increased speed, the cruising speed will be set again.

✻ NOTICE

Your ASCC will not slow or stop your vehicle if you apply the throttle, since the system is designed to allow you to override and retain control of your vehicle at all times, whether braking or accelerating.

ASCC will be temporarily canceled when:



OXM053010

Cancelled manually

- When the vehicle is stopped.
  - Press the CANCEL switch located on the steering wheel while depress the brake pedal
- When the vehicle is moving
  - Depress the brake pedal or press the CANCEL switch located on the steering wheel.

The ASCC turns off temporarily when the indicator on the LCD display turns off.

The CRUISE indicator is illuminated continuously.

Cancelled automatically

- The driver's door is opened.
- The shift lever is shifted to N (Neutral), R (Reverse) or D (Drive).
- The EPB (electronic parking brake) is applied.
- The vehicle speed is over 113mph (180km/h)
- The vehicle stops on a steep incline.
- The ESC or ABS is operating.
- The ESC is turned off.
- The sensor or the cover is dirty or blocked with foreign matter.
- When the vehicle is stopped for over 5 minutes.
- The vehicle stops and go repeatedly for a long period of time.
- The driver starts driving by depressing the accelerator pedal or move the lever (to RES+ or SET-).
- The vehicle stops far away from another vehicle.
- The accelerator pedal is continuously depressed for more than 1 minute.

Each of these actions will cancel the ASCC operation. (the SET indicator, set speed and vehicle to vehicle distance on the LCD display will go off.)

In a condition where the ASCC is cancelled automatically, the ASCC will not resume even though the RES+ or SET- lever is moved. Also, the EPB (electronic parking brake) will be applied when the vehicle is stopped.



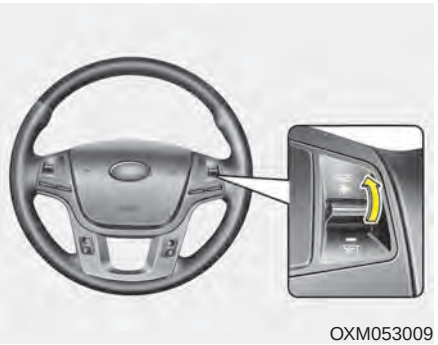
OVG053313E

If the system is cancelled, the warning chime will sound and a message will appear for a few seconds.

You must adjust the vehicle speed by depressing the accelerator or brake pedal according to the road condition ahead and driving condition.

Always check the road conditions. Do not rely on the warning chime.

To resume cruise control set speed:



OXM053009

If any method other than the CRUISE button was used to cancel cruising speed and the system is still activated, the cruising speed will automatically resume when you move the lever up (to RES+).

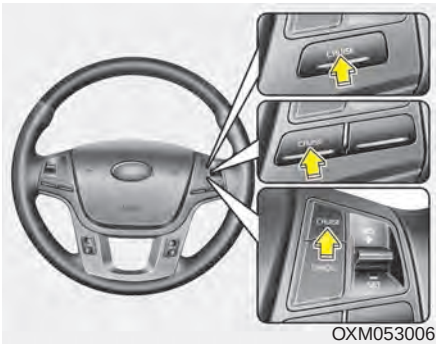
If you move the lever up (to RES+), the speed will resume to the recently set speed. It will not resume if the vehicle speed has dropped below approximately 25 mph (40 km/h).

⚠ WARNING - Following Distance

To avoid collisions, always be aware of the selected speed and vehicle to vehicle distance settings when activating your smart cruise control system.

- **Always maintain sufficient braking distance and decelerate your vehicle by applying the brakes if necessary.**

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


OXM053006

- Push the CRUISE button (the CRUISE indicator light in the instrument cluster will go off).
- Turn the engine off when the vehicle is stopped and shifted into Park.

Both of these actions cancel ASCC operation. If you want to resume ASCC operation, repeat the steps provided in "To set cruise control speed" on the previous page.

To set vehicle to vehicle distance:

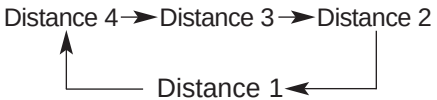

OVG053330

This system allows you to set and maintain the distance from the vehicle ahead of you without pressing the accelerator or brake pedal.

The vehicle to vehicle distance will automatically activate when the ASCC is on.

Select the appropriate distance according to road conditions and vehicle speed.

Each time the button is pressed, the vehicle to vehicle distance changes as follows;



For example, if you drive at 56 mph (90 km/h), the distance is maintained as follows;

Distance 4 - approximately 172 feet (52.5 m)

Distance 3 - approximately 130 feet (40 m)

Distance 2 - approximately 98 feet (30 m)

Distance 1 - approximately 82 feet (25 m)

✻ NOTICE

The 'Distance 4' is always set when the system is used for the first time after starting the engine.



OVG053315N/OVG053316N

- The vehicle will maintain the set speed, when the lane ahead is clear.
- The vehicle will slow down or speed up within selected speed to maintain the selected distance, when there is a vehicle ahead of you in the lane. (A vehicle will appear in front of your vehicle in the LCD display only when there is an actual vehicle in front of you)
- If the vehicle ahead speeds up, your vehicle will travel at a steady cruising speed after accelerating to the selected speed.
- The warning chime sounds and malfunction indicator blinks if it is hard to maintain the selected distance to the vehicle ahead.
- If the warning chime sounds, actively adjust the vehicle speed by depressing the brake pedal according to the road condition ahead and driving condition.
- Even if the warning chime is not activated, always pay attention to the driving conditions to prevent dangerous situations from occurring.



OVG053317E

If the vehicle ahead moves to the next lane, the warning chime will sound and a message will appear to provide a supplemental alert to help you avoid that risk.

In traffic situation



OVG053318E

In traffic, your vehicle will stop if the vehicle ahead of you stops. Also, if the vehicle ahead of you starts moving, your vehicle will start as well. However, if the vehicle stops for more than 3 seconds, you must depress the accelerator pedal or move the lever (to RES+ or SET-) to start driving.

Sensor to detect distance to the vehicle ahead



OVG053319

The sensor detects distance to the vehicle ahead.

If the sensor is covered with dirt or other foreign matter, the vehicle to vehicle distance control may not operate correctly.

Always keep the sensor and bumper clean.

Use only a genuine Kia sensor cover for your vehicle.

Sensor malfunction indicator



If the sensor or cover is dirty or obscured with foreign matter such as snow, the indicator will illuminate. Clean the sensor by using a soft cloth.

ASCC malfunction indicator



The warning light illuminates when the vehicle to vehicle distance control system is not functioning normally.

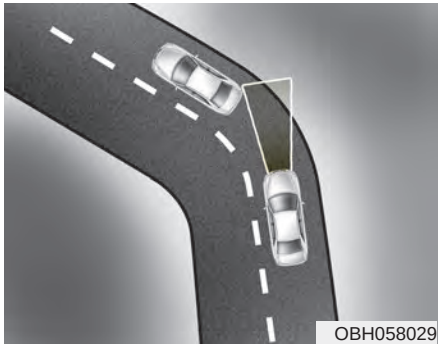
Take your vehicle to an authorized Kia dealer and have the system checked.

⚠ CAUTION

- ***Do not install accessories around the sensor and do not replace the bumper by yourself. It may interfere with the sensor performance.***
- ***To prevent sensor cover damage from occurring, wash the car with a soft cloth.***
- ***Do not damage the sensor or sensor area by a strong impact. If the sensor moves slightly off position, the ASCC will not operate correctly.***

  If this occurs, have your vehicle checked by an authorized Kia dealer as soon as possible.

Limitations of the system



The ASCC may have limits to its ability to detect distance to the vehicle ahead due to road and traffic conditions.

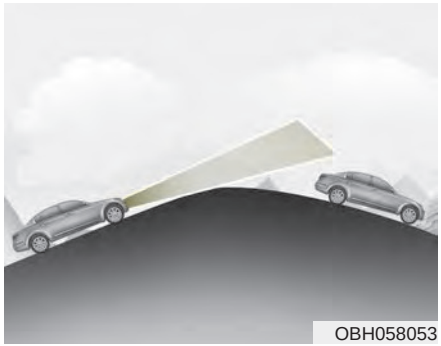
On curves

- On curves, the ASCC may not detect a moving vehicle in your lane, and then your vehicle could accelerate to the set speed. Also, the vehicle speed will slow down when the vehicle ahead is recognized suddenly.
- Select the appropriate set speed on curves and apply the brakes or accelerator pedal if necessary.



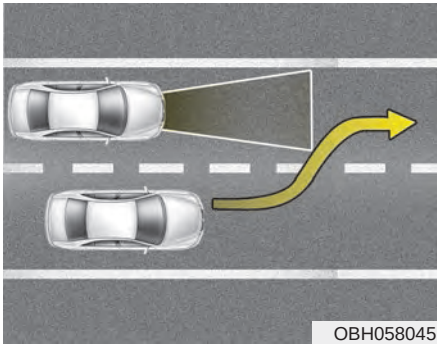
- Your vehicle speed can be reduced due to a vehicle in the adjacent lane. Apply the accelerator pedal and select the appropriate set speed. Check to be sure that the road conditions permit safe operation of the ASCC.

On inclines


OBH058053

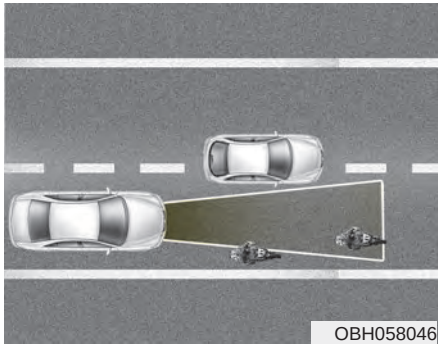
- During uphill or downhill driving, the ASCC may not detect a moving vehicle in your lane, and cause your vehicle to accelerate to the set speed. Also, the vehicle speed will slow down when the vehicle ahead is recognized suddenly.
- Select the appropriate set speed on inclines and apply the brakes or accelerator pedal if necessary.

Lane changing


OBH058045

- A vehicle which moves into your lane from an adjacent lane cannot be recognized by the sensor until it is in the sensor's detection range.
- The sensor may not detect immediately when a vehicle cuts in suddenly. Always pay attention to the traffic, road and driving conditions.
- If a vehicle which moves into your lane is slower than your vehicle, your speed may decrease to maintain the distance to the vehicle ahead.
- If a vehicle which moves into your lane is faster than your vehicle, your vehicle will accelerate to the selected speed.

Vehicle recognition



Some vehicles ahead in your lane cannot be recognized by the sensor as follows:

- Narrow vehicles such as motorcycles or bicycles
- Vehicles offset to one side
- Slow-moving vehicles or sudden-decelerating vehicles
- Stopped vehicles
- Vehicles with small rear profile such as trailers with no loads

A vehicle ahead cannot be recognized correctly by the sensor if any of following occurs:

- When the vehicle is pointing upwards due to overloading in the trunk
- When operating the steering wheel
- When driving to one side of the lane
- When driving on narrow lanes or on curves

Apply the brakes or accelerator pedal if necessary.

⚠ WARNING - ASCC Following Distance

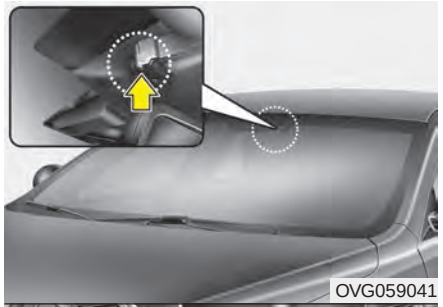
- **To avoid collisions, always be aware of the selected speed and vehicle to vehicle distance settings when activating your smart cruise control system.**
- **Always maintain sufficient braking distance and decelerate your vehicle by applying the brakes if necessary.**

A vehicle moving in front of you with a quick lane change may close distance on your vehicle so suddenly as to exceed the ASCC reaction ability. Always be prepared to provide direct control of your vehicle in the event of such unexpected and sudden situations.

✻ NOTICE

The ASCC may not operate temporarily due to electrical interference.

LANE DEPARTURE WARNING SYSTEM (LDWS) (IF EQUIPPED)


OVG059041


OVG053314

This system detects the lane with the sensor at the front windshield and warns you when your vehicle leaves the lane.

⚠ WARNING

The Lane Departure Warning System is not a substitute for proper and safe driving. Always drive safely and use caution. The Lane Departure Warning System may not detect every object in the vehicle's blindspot or direction of travel.

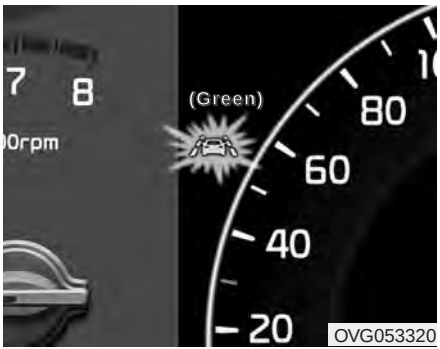
⚠ WARNING - LDWS Alert

The LDWS is only intended to provide you with information regarding your vehicle's position on the roadway. Upon receiving an LDWS alert, you must take the necessary steps to maintain control of your vehicle. The LDWS does not provide any steering inputs into the vehicle for you. it can be dangerous to make a large sudden steering input in response to an alert, since that could result in loss of control.

- The LDWS does not make the vehicle change lanes. It is the driver's responsibility to always check the road conditions.
- If the sensor cannot detect the lane or if the vehicle speed does not exceed 43 mph (70km/h), the LDWS won't warn you even though the vehicle leaves the lane.
- If your vehicle has window tint or other types of coating on the front windshield, the LDWS may not work properly.
- Prevent damage to the LDWS sensor from water or any liquid.
- Do not remove the LDWS parts and do not damage the sensor by a strong impact.
- Do not put objects that reflect light on the dash board.
- Always check the road conditions for you may not hear the warning chime because of audio, or external noise.

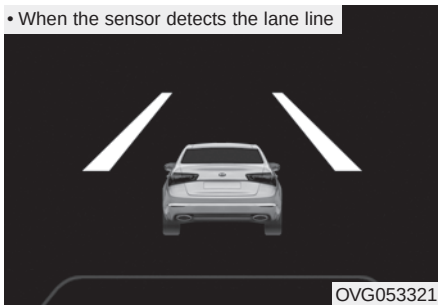
⚠ WARNING - Sudden steering input

Do not turn the steering wheel suddenly, when the LDWS warns that your vehicle is leaving the lane. Suddenly turning your steering wheel could result in loss of control and lead to an accident.

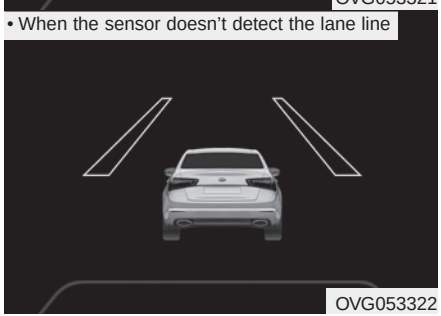


The Lane Departure Warning System is not a substitute for proper and safe driving. Always drive safely and use caution. The Lane Departure Warning System may not detect every object in the vehicle's blindspot or direction of travel.

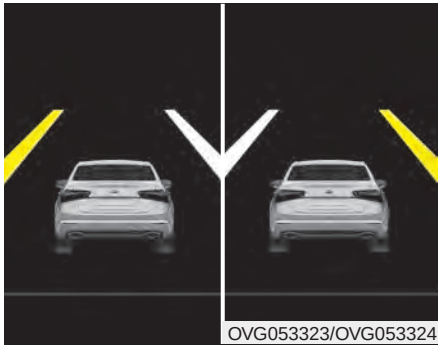
• When the sensor detects the lane line



• When the sensor doesn't detect the lane line



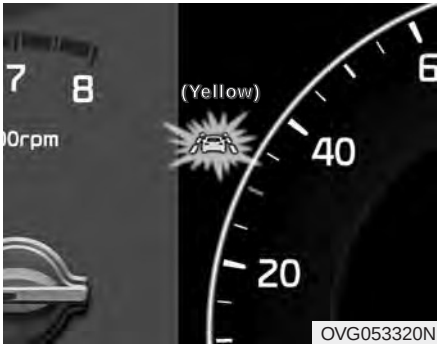
To operate the LDWS, press the switch with the engine start/stop button in the ON position. The indicator illuminates on the cluster. To cancel the LDWS, press the switch again.



OVG053323/OVG053324

If your vehicle leaves the lane when the LDWS is operating and vehicle speed exceeds 43 mph (70km/h), the warning operates as follows:

Warning indicator



OVG053320N

If the LDWS fails, the warning indicator comes on indicating the LDWS is not working properly. Take your vehicle to an authorized Kia dealer and have the system checked.

The LDWS does not operate when:

- The driver turns on the turn signal to change lanes.
  (When the hazard warning flasher is operated, the LDWS operates normally.)
- Driving on the lane line.

✻ NOTICE

To change lanes, operate the turn signal switch then change the lane.

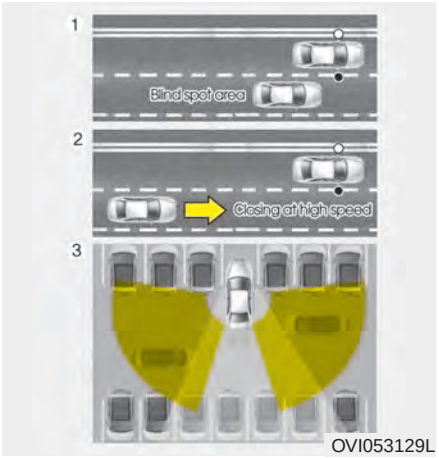
⚠ WARNING - LDWS Limitations

The lane departure warning system is a supplemental system. Do not solely rely on the system but always pay attention and drive safely.

The LDWS may not warn you even if the vehicle leaves the lane, or may warn you even if the vehicle does not leave the lane when;

- The lane can't be visible due to snow, rain, stain, a puddle or many other things.
- The brightness outside changes suddenly.
- The headlights are off at night or in a tunnel.
- The color of the lane marking from the road is difficult to distinguish.
- Driving on a steep grade or a curve.
- Light reflects from the water on the road.
- The lens or windshield is stained with foreign matter.
- The sensor can't detect the lane because of fog, heavy rain or heavy snow.
- The surrounding of the inside rear view mirror temperature is high due to a direct sun light.
- The lane is very wide or narrow.
- The lane line is damaged or indistinct.
- A shadow is on the lane line by a median strip.
- There is a mark that looks like a lane line.
- There is a boundary structure.
- The distance from vehicle ahead is very short or the vehicle ahead drives hiding the lane line.
- The vehicle shakes heavily.
- The lane number increases or decreases or the lane lines are crossing.
- Putting something on the dashboard.
- Driving with the sun in front of you.
- Driving in areas under construction.
- The lane line is more than two.

BLIND SPOT DETECTION SYSTEM (BSD) (IF EQUIPPED)



The Blind Spot Detection System (BSD) uses a radar sensor to alert the driver.

It senses the rear side territory of the vehicle and provides and indication to the driver.

(1) BSD (Blind Spot Detection)

The warning range depends on your vehicle speed. However, if your vehicle is about 6 mph (10 km/h) faster than the other vehicle, the system will not warn you.

(2) LCA (Lane Change Assist)

When a vehicle approaches you at high speed, the system will warn you.

(3) RCTA (Rear Cross Traffic Alert)

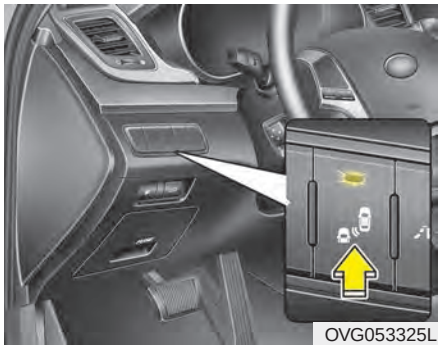
When your vehicle moves rearward, the sensor detects the approaching vehicle in the left and right side, the system will warn you.

⚠ WARNING - BSD Limitations

- **The Blind Spot Detection System (BSD) is a supplemental system. Do not solely rely on the system but always pay attention to drive safely.**
- **The Blind Spot Detection System may not detect every object alongside the vehicle and is not a substitute for proper and safe lane changing procedures. Always drive safely and use caution when changing lanes.**

BSD (Blind Spot Detection) / LCA (Lane Change Assist)

Operating conditions


OVG053325L

The indicator on the switch will illuminate when the Blind Spot Detection System (BSD) switch is pressed with the Engine Start/Stop Button ON.

If vehicle speed exceeds 9.3 mph (15 km/h), the system will activate.

If you press the switch again, the switch indicator and system will be turned off.

If the ignition switch is turned OFF and ON the system returns to the previous state.

When the system is not used turn the system off by turning off the switch.

When the system is turned on the warning light will illuminate for 3 seconds on the outside rearview mirror.

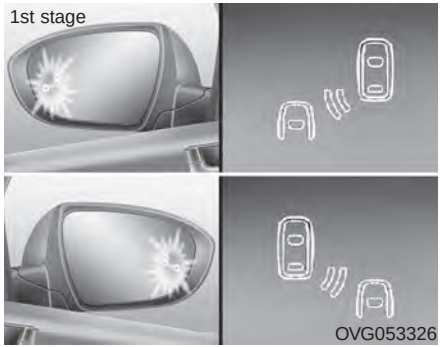
Warning type

The system will activate when:

1. The system is on.
2. Vehicle speed is above 9.3 mph (15 km/h).
3. Other vehicles are detected in the rear side.

⚠ WARNING

The Blind Spot Detection System with Lane Change Assist and Rear Cross Traffic Alert is not a substitute for proper and safe lane changing procedures. Always drive safely and use caution when changing lanes. The Blind Spot Detection System may not detect every object alongside the vehicle.



If a vehicle is detected within the boundary of the system, a warning light will illuminate on the outside rearview mirror.

If the detected vehicle is not in detecting range, the warning will turn off according to driving conditions.



The second stage alarm will activate when:

1. The first stage alert is on
2. The turn signal is on to change a lane

When the second stage alert is activated, a warning light will blink on the outside rearview mirror and a alarm will sound.

If you move the turn signal switch to the original position, the second stage alert will be deactivated.

Detecting sensor



OVG053327

The sensors are located inside of the rear bumper.

Always keep the rear bumper clean for the system to work properly.

Warning message



OVG054338

The message will appear to notify the driver if there are foreign substances on the rear bumper or excessive heat near the rear bumper. The light on the switch and the system will turn off automatically.

Remove the foreign matter on the rear bumper.

If the system does not work normally even though the foreign matter is removed, take your vehicle to an authorized Kia dealer and have the system checked.

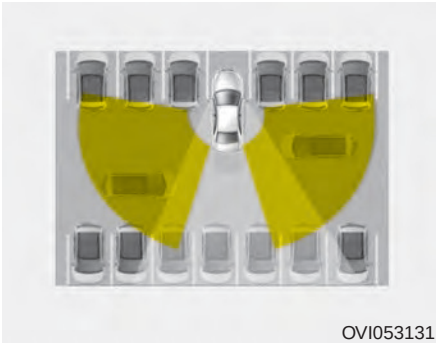


OVG054340

If the system does not work properly, a warning message will appear and the light on the switch will turn off. The system will turn off automatically.

Have your vehicle inspected by an authorized Kia dealer.

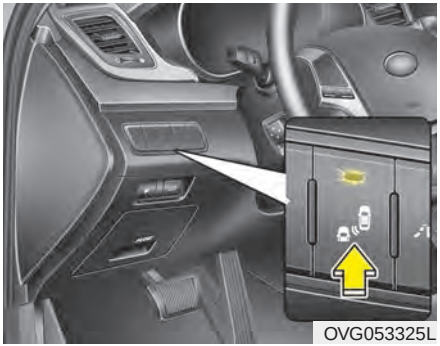
RCTA (Rear Cross Traffic Alert)



OVI053131

When your vehicle moves backwards from a parking position, the sensor detects approaching vehicles to the left or right side direction and gives information to the driver.

Operating conditions



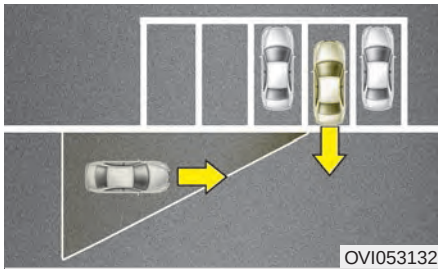
OVG053325L

- The indicator on the switch will illuminate when the Blind Spot Detection System (BSD) switch is pressed with the Engine Start/Stop Button ON.

  The system will turn on and stand-by to activate.

- The system operates when the vehicle speed is below 6 mph (10 km/h) with the shift lever in R (Reverse).
- The RCTA (Rear Cross Traffic Alert) detecting range is 0.5m ~ 20m based on the side direction. If the approaching vehicle speed is 2.5 mph (4 km/h) ~ 22 mph (36 km/h) within sensing range, it is detected. However, the system sensing range is different base on conditions. Always pay attention to the surrounding.

Warning type


OVI053132

■ Type A



OVG054334

■ Type B



OVG054336

- If the vehicle detected by the sensors approaches your vehicle, the warning chime will sound, the warning light on the outside rearview mirror will blink and a message will appear on the LCD display.
- If the detected vehicle is out of the sensing range of your vehicle, move the vehicle away from the detected object slowly; the warning will be cancelled.
- The system may not operate properly due to other factors or circumstances. Always pay attention to your surrounding.

❈ If your vehicle's left or right side bumper is blinded by barrier or vehicles, the system sensing ability may be deteriorated.

⚠ WARNING

The Blind Spot Detection System with Lane Change Assist and Rear Cross Traffic Alert is not a substitute for proper and safe lane changing procedures. Always drive safely and use caution when changing lanes. The Blind Spot Detection System may not detect every object alongside the vehicle.

✻ NOTICE

- **The system may not work properly if the bumper has been replaced or if a repair work has been done near the sensor.**
- **The detection area differs according to the roads width. If the road is narrow the system may detect other vehicles in the next lane.**
- **On the contrary, if the road is very wide the system may not detect other vehicles.**
- **The system may turn off due to strong electromagnetic waves.**

Non-operating condition

Driver's Attention

The driver must be cautious in the below situations for the system may not assist the driver and may not work properly.

- Curved roads, tollgates, etc.
- The surrounding of the sensor is polluted with rain, snow, mud, etc
- The rear bumper near the sensor is covered or hidden with a foreign matter such as a sticker, bumper guard, bicycle stand etc.
- The rear bumper is damaged or the sensor is out of place.
- The height of the vehicle shows much change such as when the trunk is loaded with heavy objects, abnormal tire pressure etc.
- Due to bad weather such as heavy rain or snow.
- A fixed object is near such as a guardrail, etc.
- A lot of amount of metal substances are near the vehicles such as a construction area.
- A big vehicle is near such as a bus or truck.
- A motorcycle or bicycle is near.
- A flat trailer like vehicle is near.
- If the vehicle has started at the same time as the vehicle next to it and has accelerated.
- When the other vehicle passes by very fast.
- When changing lanes.
- When going down or up a steep road where the height of the lane is different.
- When the other vehicle drives at the rear very nearby or drives very close.
- When a trailer or carrier is installed.

- When the temperature of rear bumper is high.
- When the sensors are covered by the vehicle, wall and pillar of parking lot.
- When your vehicle moves back, if the detected vehicle also moves back.
- If there is small things like shopping cart and baby carriage.
- If there is a vehicle with decreased ride height (lowered).
- When the vehicle is close to another vehicle.
- When your vehicle moves back in indoor parking lot or steel structures area.

Outside rearview mirror may not alert the driver when:

- The outside rearview mirror housing is severely polluted
- The window is severely polluted
- The windows are severely tinted.

Pursuant to Code of Federal Regulations, Title 47, Part 15 ("FCC Rules")

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

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 miles (kilometers) you can get from a gallon (liter) of fuel. To operate your vehicle as economically as possible, use the following driving suggestions to help save money in both fuel and repairs:

- Drive smoothly. Accelerate at a moderate rate. Don't make "jackrabbit" starts or full-throttle shifts and maintain a steady cruising speed. Don't race between stoplights. Try to adjust your speed to the traffic so you don't have to change speeds unnecessarily. Avoid heavy traffic whenever possible. Always maintain a safe distance from other vehicles so you can avoid unnecessary braking. This also reduces brake wear.
- Drive at a moderate speed. The faster you drive, the more fuel your vehicle uses. Driving at a moderate speed, especially on the highway, is one of the most effective ways to reduce fuel consumption.
- Don't "ride" the brake pedal. This can increase fuel consumption and also increase wear on these components. In addition, driving with your foot resting on the brake pedal may cause the brakes to overheat, which reduces their effectiveness and may lead to more serious consequences.
- Take care of your tires. Keep them inflated to the recommended pressure. Incorrect inflation, either too much or too little, results in unnecessary tire wear. Check the tire pressures at least once a month.
- Be sure that the wheels are aligned correctly. Improper alignment can result from hitting curbs or driving too fast over irregular surfaces. Poor alignment causes faster tire wear and may also result in other problems as well as greater fuel consumption.
- Keep your vehicle in good condition. For better fuel economy and reduced maintenance costs, maintain your vehicle in accordance with the maintenance schedule in section 7. If you drive your vehicle in severe conditions, more frequent maintenance is required (see section 7 for details).
- Keep your vehicle clean. For maximum service, your vehicle should be kept clean and free of corrosive materials. It is especially important that mud, dirt, ice, etc. not be allowed to accumulate on the underside of the vehicle. This extra weight can result in increased fuel consumption and also contribute to corrosion.
- Travel lightly. Don't carry unnecessary weight in your vehicle. Weight reduces fuel economy.
- Don't let the engine idle longer than necessary. If you are waiting (and not in traffic), turn off your engine and restart only when you're ready to go.

- Remember, your vehicle does not require extended warm-up. After the engine has started, allow the engine to run for 10 to 20 seconds prior to placing the vehicle in gear. In very cold weather, however, give your engine a slightly longer warm-up period.
- Don't "lug" or "over-rev" the engine. Lugging is driving too slowly in a very high gear resulting in engine bucking. If this happens, shift to a lower gear. Over-revving is racing the engine beyond its safe limit. This can be avoided by shifting at the recommended speed.
- Use your air conditioning sparingly. The air conditioning system is operated by engine power so your fuel economy is reduced when you use it.
- Open windows at high speeds can reduce fuel economy.
- Fuel economy is reduced by cross-winds and headwinds. To help off-set 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 properly without the engine running. In addition, turning off the ignition while driving could engage the steering wheel lock resulting in loss of vehicle steering. Keep the engine on and 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 braking or steering.
- When braking with non-ABS brakes pump the brake pedal with a light up-and-down motion until the vehicle is stopped.

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

Do not downshift with an automatic transaxle while driving on slippery surfaces. The sudden change in tire speed could cause the tires to skid and result in an accident.

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.

The ESC system should be turned OFF prior to rocking the vehicle.

⚠ CAUTION - Vehicle rocking

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

⚠ CAUTION - Spinning tires

Do not spin the wheels, especially at speeds more than 35 mph (56 km/h). Spinning the wheels at high speeds when the vehicle is stationary could cause a tire to overheat which could result in tire damage.

⚠ WARNING - Sudden vehicle movement

Do not attempt to rock the vehicle if people or objects are nearby. The vehicle may suddenly move forward or backwards as it becomes unstuck.

Smooth cornering


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Avoid braking or gear changing in corners, especially when roads are wet. Ideally, corners should always be taken under gentle acceleration. If you follow these suggestions, tire wear will be held to a minimum.

Driving at night


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

- Slow down and keep more distance between you and other vehicles, as it may be more difficult to see at night, especially in areas where there may not be any street lights.

- Adjust your mirrors to reduce the glare from other driver's headlights.
- Keep your headlights clean and properly aimed on vehicles not equipped with the automatic headlight aiming feature. Dirty or improperly aimed headlights will make it much more difficult to see at night.
- Avoid staring directly at the headlights of oncoming vehicles. You could be temporarily blinded, and it will take several seconds for your eyes to readjust to the darkness.

Driving in the rain



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

- A heavy rainfall will make it harder to see and will increase the distance needed to stop your vehicle, so slow down.
- Keep your windshield wiping equipment in good shape. Replace your windshield wiper blades when they show signs of streaking or missing areas on the windshield.
- If your tires are not in good condition, making a quick stop on wet pavement can cause a skid and possibly lead to an accident. Be sure your tires are in good shape.
- Turn on your headlights to make it easier for others to see you.
- Driving too fast through large puddles can affect your brakes. If you must go through puddles, try to drive through them slowly.
- If you believe you may have gotten your brakes wet, apply them lightly while driving until normal braking operation returns.

Driving in flooded areas

Avoid driving through flooded areas unless you are sure the water is no higher than the bottom of the wheel hub. Drive through any water slowly. Allow adequate stopping distance because brake performance may be affected.

After driving through water, dry the brakes by gently applying them several times while the vehicle is moving slowly.

Driving off-road

Drive carefully off-road because your vehicle may be damaged by rocks or roots of trees. Become familiar with the off-road conditions where you are going to drive before you begin driving.

Highway driving

Tires

Adjust the tire inflation pressures to specification. Low tire inflation pressures will result in overheating and possible failure of the tires.

Avoid using worn or damaged tires which may result in reduced traction or tire failure.

Never exceed the maximum tire inflation pressure shown on the tires.

⚠ WARNING - Tire tread

Always check the tire tread before driving your vehicle. Worn-out tires can result in loss of vehicle control. Worn-out tires should be replaced as soon as possible. For further information and tread limits, refer to "Tires and wheels" in section 7.

⚠ WARNING - Under/Over Inflated Tires

Always check the tires for proper inflation before driving.

Underinflated or overinflated tires can cause poor handling, loss of vehicle control, and sudden tire failure leading to accidents, injuries, and even death.

Fuel, engine coolant and engine oil

High speed travel consumes more fuel than urban motoring. Do not forget to check both the engine coolant and engine oil.

Drive belt

A loose or damaged drive belt may overheat the engine.

WINTER DRIVING



Severe weather conditions in the winter result in greater wear and other problems. To minimize the problems of winter driving, you should follow these suggestions:

Snowy or Icy conditions

To drive your vehicle in deep snow, it may be necessary to use snow tires or to install tire chains on your tires. If snow tires are needed, it is necessary to select tires equivalent in size and type of the original equipment tires. Failure to do so may adversely affect the safety and handling of your car. Furthermore, speeding, rapid acceleration, sudden brake applications, and sharp turns are potentially very hazardous practices.

During deceleration, use engine braking to the fullest extent. Sudden brake applications on snowy or icy roads may cause skids. You need to keep sufficient distance between the vehicle in operation in front and your vehicle. Also, apply the brake gently. It should be noted that installing tire chains on the tire will provide greater driving force, but will not prevent side skids.

Tire chains are not legal in all states. Check state laws before installing tire chains.

Snow tires

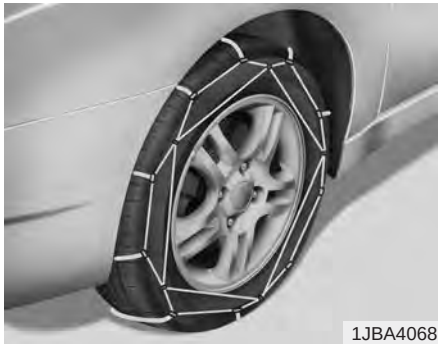
If you mount snow tires on your vehicle, make sure they are radial tires of the same size and load range as the original tires. Mount snow tires on all four wheels to balance your vehicle's handling in all weather conditions. Keep in mind that the traction provided by snow tires on dry roads may not be as high as your vehicle's original equipment tires. You should drive cautiously even when the roads are clear. Check with the tire dealer for maximum speed recommendations.

Do not install studded tires without first checking local, state and municipal regulations for possible restrictions against their use.

⚠ 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.

Tire chains


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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 0.47 in (12 mm). Damage to your vehicle caused by improper snow chain use is not covered by your vehicle manufacturers warranty.

Install tire chains only on the front tires.

⚠ CAUTION - Snow chains

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's warranty.

The snow chain connecting hooks may be damaged from contacting vehicle components causing the snow chains to come loose from the tire. Make sure the snow chains are SAE class “S” certified.

Always check chain installation for proper mounting after driving approximately 0.3 to 0.6 miles (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.

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.

- The use of chains may adversely affect vehicle handling.
- Do not exceed 20 mph (30 km/h) or the chain manufacturer's recommended speed limit, whichever is lower.
- Drive carefully and avoid bumps, holes, sharp turns, and other road hazards, which may cause the vehicle to bounce.
- Avoid sharp turns or locked-wheel braking.

⚠ CAUTION - Snow chains

- ***Chains that are the wrong size or improperly installed can damage your vehicle's brake lines, suspension, body and wheels.***
- ***Stop driving and retighten the chains any time you hear them hitting the vehicle.***

Use high quality ethylene glycol coolant

Your vehicle is delivered with high quality ethylene glycol coolant in the cooling system. It is the only type of coolant that should be used because it helps prevent corrosion in the cooling system, lubricates the water pump and prevents freezing. Be sure to replace or replenish your coolant in accordance with the maintenance schedule in section 7. Before winter, have your coolant tested to assure that its freezing point is sufficient for the temperatures anticipated during the winter.

Check battery and cables

Winter puts additional burdens on the battery system. Visually inspect the battery and cables as described in section 7. The level of charge in your battery can be checked by an authorized Kia dealer or a service station.

Change to "winter weight" oil if necessary

In some climates it is recommended that a lower viscosity "winter weight" oil be used during cold weather. See section 8 for recommendations. If you aren't sure what weight oil you should use, consult an authorized Kia dealer.

Check spark plugs and ignition system

Inspect your spark plugs as described in section 7 and replace them if necessary. Also check all ignition wiring and components to be sure they are not cracked, worn or damaged in any way.

To keep locks from freezing

To keep the locks from freezing, squirt an approved de-icer fluid or glycerine into the key opening. If a lock is covered with ice, squirt it with an approved de-icing fluid to remove the ice. If the lock is frozen internally, you may be able to thaw it out by using a heated key. Handle the heated key with care to avoid injury.

Use approved window washer anti-freeze in system

To keep the water in the window washer system from freezing, add an approved window washer anti-freeze solution in accordance with instructions on the container. Window washer anti-freeze is available from an authorized Kia dealer and most auto parts outlets. Do not use engine coolant or other types of anti-freeze as these may damage the paint finish.

Don't let your parking brake freeze

Under some conditions your parking brake can freeze in the engaged position. This is most likely to happen when there is an accumulation of snow or ice around or near the rear brakes or if the brakes are wet. If there is a risk the parking brake may freeze, apply it only temporarily while you put the shift lever in P (automatic transaxle) or in first or reverse gear (manual transaxle) and block the rear wheels so the vehicle cannot roll. Then release the parking brake.

Don't let ice and snow accumulate underneath

Under some conditions, snow and ice can build up under the fenders and interfere with the steering. When driving in severe winter conditions where this may happen, you should periodically check underneath the car to be sure the movement of the front wheels and the steering components is not obstructed.

Carry emergency equipment

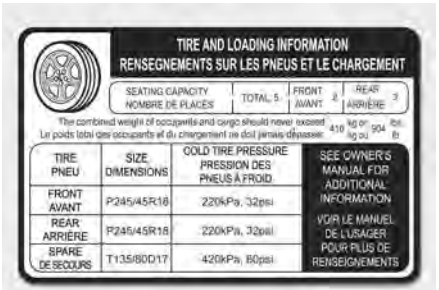
Depending on the severity of the weather you should carry appropriate emergency equipment. Some of the items you may want to carry include tire chains, tow straps or chains, flashlight, emergency flares, sand, a shovel, jumper cables, a window scraper, gloves, ground cloth, coveralls, a blanket, etc.

TRAILER TOWING

We do not recommend using this vehicle for trailer towing.

VEHICLE LOAD LIMIT

Tire and loading information label





OHG051083A/OHG051084A

The label located on the driver's door sill gives the original tire size, cold tire pressures recommended for your vehicle, the number of people that can be in your vehicle and vehicle capacity weight.

Vehicle capacity weight:

904 lbs. (410 kg)

Vehicle capacity weight is the maximum combined weight of occupants and cargo. If your vehicle is equipped with a trailer, the combined weight includes the tongue load.

Seating capacity:

Total : 5 persons
(Front seat : 2 persons,
Rear seat : 3 persons)

Seating capacity is the maximum number of occupants including a driver, your vehicle may carry.

However, the seating capacity may be reduced based upon the weight of all of the occupants, and the weight of the cargo being carried or towed.

Do not overload the vehicle as there is a limit to the total weight, or load limit including occupants and cargo, the vehicle can carry.

Towing capacity:

We do not recommend using this vehicle for trailer towing.

Cargo capacity:

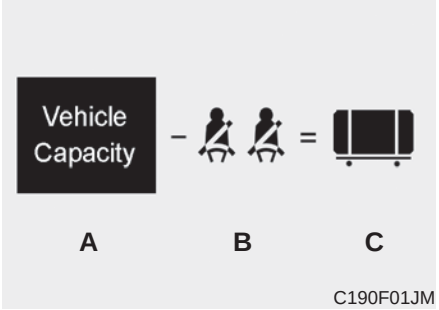
The cargo capacity of your vehicle will increase or decrease depending on the weight and the number of occupants and the tongue load, if your vehicle is equipped with a trailer.

Steps For Determining Correct Load Limit -

1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle's placard.
2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
3. Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.
4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals 1400 lbs. and there will be five 150 lbs. passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs.

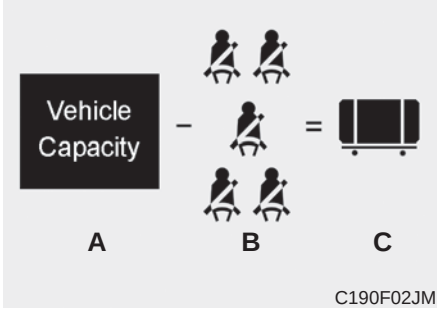
   (1400-750 (5 x 150) = 650 lbs.)
5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.
6. If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

Example 1



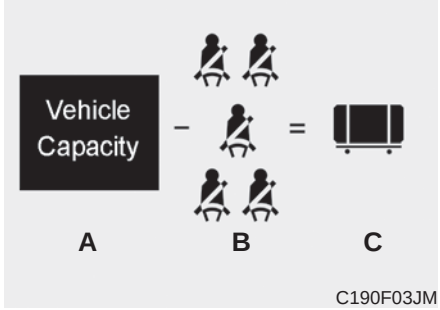
Item	Description	Total
A	Vehicle Capacity Weight	849 lbs (385 kg)
B	Subtract Occupant Weight 150 lbs (68 kg) × 2	300 lbs (136 kg)
C	Available Cargo and Luggage weight	549 lbs (249 kg)

Example 2



Item	Description	Total
A	Vehicle Capacity Weight	849 lbs (385 kg)
B	Subtract Occupant Weight 150 lbs (68 kg) × 5	750 lbs (340 kg)
C	Available Cargo and Luggage weight	99 lbs (45 kg)

Example 3



Item	Description	Total
A	Vehicle Capacity Weight	849 lbs (385 kg)
B	Subtract Occupant Weight 161 lbs (73 kg) × 5	805 lbs (365 kg)
C	Available Cargo and Luggage weight	44 lbs (20 kg)

Refer to your vehicle’s tire and loading information label for specific information about your vehicle's capacity weight and seating positions. The combined weight of the driver, passengers and cargo should never exceed your vehicle's capacity weight.

Certification label



OEN056020

The certification label is located on the driver's door sill at the center pillar.

This label shows the maximum allowable weight of the fully loaded vehicle. This is called the GVWR (Gross Vehicle Weight Rating). The GVWR includes the weight of the vehicle, all occupants, fuel and cargo.

This label also tells you the maximum weight that can be supported by the front and rear axles, called Gross Axle Weight Rating (GAWR).

To find out the actual loads on your front and rear axles, you need to go to a weigh station and weigh your vehicle. Your dealer can help you with this. Be sure to spread out your load equally on both sides of the centerline.

⚠ WARNING - Over loading

Never exceed the GVWR for your vehicle, the GAWR for either the front or rear axle and vehicle capacity weight. Exceeding these ratings can affect your vehicle's handling and braking ability.

The label will help you decide how much cargo and installed equipment your vehicle can carry.

If you carry items inside your vehicle - like suitcases, tools, packages, or anything else - they are moving as fast as the vehicle. If you have to stop or turn quickly, or if there is a crash, the items will keep going and can cause an injury if they strike the driver or a passenger.

⚠ WARNING - Over loading

Do not overload your vehicle. Overloading your vehicle can cause heat buildup in your vehicle's tires and possible tire failure, increased stopping distances and poor vehicle handling--all of which may result in a crash.

✻ NOTICE

Overloading your vehicle may cause damage. Repairs would not be covered by your warranty. Do not overload your vehicle.

⚠ WARNING - Loose cargo

Do not travel with unsecured blunt objects in the passenger compartment of your vehicle (e.g. suit cases or unsecured child seats). These items may strike occupant during a sudden stop or crash.

VEHICLE WEIGHT

This section will guide you in the proper loading of your vehicle and/or trailer, to keep your loaded vehicle weight within its design rating capability, with or without a trailer. Properly loading your vehicle will provide maximum return of the vehicle design performance. Before loading your vehicle, familiarize yourself with the following terms for determining your vehicle's weight ratings, with or without a trailer, from the vehicle's specifications and the compliance label:

Base curb weight

This is the weight of the vehicle including a full tank of fuel and all standard equipment. It does not include passengers, cargo, or optional equipment.

Vehicle curb weight

This is the weight of your new vehicle when you picked it up from your dealer plus any aftermarket equipment.

Cargo weight

This figure includes all weight added to the Base Curb Weight, including cargo and optional equipment.

GAW (Gross axle weight)

This is the total weight placed on each axle (front and rear) - including vehicle curb weight and all payload.

GAWR (Gross axle weight rating)

This is the maximum allowable weight that can be carried by a single axle (front or rear). These numbers are shown on the compliance label.

The total load on each axle must never exceed its GAWR.

GVW (Gross vehicle weight)

This is the Base Curb Weight plus actual Cargo Weight plus passengers.

GVWR (Gross vehicle weight rating)

This is the maximum allowable weight of the fully loaded vehicle (including all options, equipment, passengers and cargo). The GVWR is shown on the certification label located on the driver's door sill.

What to do in an emergency

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- **Hazard warning flasher 6-2**

In case of an emergency while driving 6-3
- **If the engine stalls at a crossroad or crossing 6-3**
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ROAD WARNING

Hazard warning flasher


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The hazard warning flasher serves as a warning to other drivers to exercise extreme caution when approaching, overtaking, or passing your vehicle.

It should be used whenever emergency repairs are being made or when the vehicle is stopped near the edge of a roadway.

Depress the flasher switch with the ignition switch in any position. The flasher switch is located in the center console switch panel. All turn signal lights will flash simultaneously.

- The hazard warning flasher operates whether your vehicle is running or not.
- The turn signals do not work when the hazard flasher is on.
- Care must be taken when using the hazard warning flasher while the vehicle is being towed.

IN CASE OF AN EMERGENCY WHILE DRIVING

If the engine stalls at a crossroad or crossing

If the engine stalls at a crossroad or crossing, set the shift lever in the N (Neutral) position and then push the vehicle to a safe place.

If you have a flat tire while driving

If a tire goes flat while you are driving:

1. Take your foot off the accelerator pedal and let the vehicle slow down while driving straight ahead. Do not apply the brakes immediately or attempt to pull off the road as this may cause a loss of control. When the vehicle has slowed down to such a speed that it is safe to do so, brake carefully and pull off the road. Drive off the road as far as possible and park on a firm level ground. If you are on a divided highway, do not park in the median area between the two traffic lanes.
2. When the vehicle is stopped, turn on your emergency hazard flashers, set the parking brake and put the transaxle in P (automatic transaxle).
3. Have all passengers get out of the vehicle. Be sure they all get out on the side of the vehicle that is away from traffic.
4. When changing a flat tire, follow the instruction provided later in this section.

If engine stalls while driving

1. Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place.
2. Turn on your emergency flashers.
3. Try to start the engine again. If your vehicle will not start, contact an authorized Kia dealer or seek other qualified assistance.

IF THE ENGINE WILL NOT START

If the engine doesn't turn over or turns over slowly

1. If your vehicle has an automatic transaxle, be sure the shift lever is in N (Neutral) or P (Park) and the emergency brake is set.
2. Check the battery connections to be sure they are clean and tight.
3. Turn on the interior light. If the light dims or goes out when you operate the starter, the battery is discharged.
4. Check the starter connections to be sure they are securely tightened.
5. Do not push or pull the vehicle to start it. See instructions for "Jump starting".

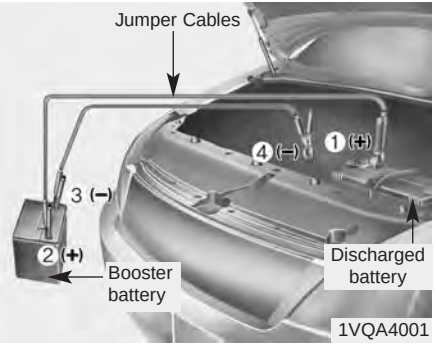
⚠ WARNING - Push/ pull start

Do not push or pull the vehicle to start it. Push or pull starting may cause the catalytic converter to overload and create a fire hazard.

If engine turns over normally but does not start

1. Check fuel level.
2. With the ignition switch in the LOCK position, check all connectors at the ignition coil and spark plugs. Reconnect any that may be disconnected or loose.
3. Check the fuel line in the engine compartment.
4. If the engine still does not start, call an authorized Kia dealer or seek other qualified assistance.

EMERGENCY STARTING



Connect cables in numerical order and disconnect in reverse order.

Jump starting

Jump starting can be dangerous if done incorrectly. Therefore, to avoid harm to yourself or damage to your vehicle or battery, follow these jump starting procedures. If in doubt, we strongly recommend that you have a competent technician or towing service jump start your vehicle.

⚠ CAUTION - 12 Volt Battery Push/Pull Start

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 - Frozen batteries

Do not attempt to jump start the vehicle if the discharged battery is frozen or if the electrolyte level is low as the battery may rupture or explode.

⚠ WARNING - Battery

Keep all flames or sparks away from the battery. The battery produces hydrogen gas which will explode if exposed to flame or sparks.

⚠ WARNING - Sulfuric acid risk

When jump starting your vehicle be careful not to get acid on yourself, your clothing or on the vehicle. Automobile batteries contain sulfuric acid. This is poisonous and highly corrosive.

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 come in contact.
3. Turn off all unnecessary electrical loads.
4. Connect the jumper cables in the exact sequence shown in the illustration. First connect one end of a jumper cable to the positive terminal of the discharged battery (1), then connect the other end to the positive terminal of the booster battery (2).

   Proceed to connect one end of the other jumper cable to the negative terminal of the booster battery (3), then the other end to a solid, stationary, metallic point (for example, the engine lifting bracket) away from the battery (4). Do not connect it to or near any part that moves when the engine is cranked.

   Do not allow the jumper cables to contact anything except the correct battery terminals or the correct ground. Do not lean over the battery when making connections.

⚠ WARNING - Battery cables

Do not connect the jumper cable from the negative terminal of the booster battery to the negative terminal of the discharged battery. This can cause the discharged battery to overheat and crack, releasing battery acid.

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 lock system cannot be push-started.

Follow the directions in this section for jump-starting.

⚠ WARNING - Tow starting vehicle

Never tow a vehicle to start it because the sudden surge forward when the engine starts could cause a collision with the tow vehicle.

IF THE ENGINE OVERHEATS

If your temperature gauge indicates overheating, you experience a loss of power, or hear loud pinging or knocking, the engine will probably be too hot. If this happens, you should:

1. Pull off the road and stop as soon as it is safe to do so.
2. Place the shift lever in P (Park, automatic transaxle) and set the parking brake. If the air conditioning is on, turn it off.
3. If engine coolant is running out under the vehicle or steam is coming out from underneath the hood, stop the engine. Do not open the hood until the coolant has stopped running or the steaming has stopped. If there is no visible loss of engine coolant and no steam, leave the engine running and check to be sure the engine cooling fan is operating. If the fan is not running, turn the engine off.
4. Check to see if the water pump drive belt is missing. If it is not missing, check to see that it is tight. If the drive belt seems to be satisfactory, check for coolant leaking from the radiator, hoses or under the vehicle. (If the air conditioning had been in use, it is normal for cold water to be draining from it when you stop).

⚠ WARNING - Under the hood

While the engine is running, keep hair, hands and clothing away from moving parts such as the fan and drive belts to prevent injury.

5. If the water pump drive belt is broken or engine coolant is leaking out, stop the engine immediately and call the nearest authorized Kia dealer for assistance.

⚠ WARNING - Radiator Cap

Do not remove the radiator cap when the engine is hot. This may result in coolant being blown out of the opening and cause serious burns.

6. If you cannot find the cause of the overheating, wait until the engine temperature has returned to normal. Then, if coolant has been lost, carefully add coolant to the reservoir to bring the fluid level in the reservoir up to the halfway mark.
7. Proceed with caution, keeping alert for further signs of overheating. If overheating happens again, call an authorized Kia dealer for assistance.

Serious loss of coolant indicates there is a leak in the cooling system and this should be checked as soon as possible by an authorized Kia dealer.

TIRE PRESSURE MONITORING SYSTEM (TPMS)



(1) Low tire pressure telltale / TPMS malfunction indicator

(2) Low tire pressure position telltale. (shown on the LCD display)

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a tire pressure monitoring system (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

✻ NOTICE

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale.

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale. When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists. When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended. TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly. Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.

✻ NOTICE

If any of the below happens, have the system be checked by an authorized Kia dealer.

1. **The low tire pressure telltale/ TPMS malfunction indicator do not illuminate for 3 seconds when the ignition switch is turned to the ON or engine is running.**
2. **The TPMS malfunction indicator remains illuminated after blinking for approximately 1 minute.**
3. **The Low tire pressure position telltale remains illuminated.**

Low tire pressure telltale

Low tire pressure position telltale



OVG043307N

When the tire pressure monitoring system warning indicators are illuminated and warning massage displayed on the cluster LCD display, one or more of your tires is significantly under-inflated. The low tire pressure position telltale light will indicate which tire is significantly under-inflated by illuminating the corresponding position light.

If the telltale illuminates, immediately reduce your speed, avoid hard cornering and anticipate increased stopping distances. You should stop and check your tires as soon as possible. Inflate the tires to the proper pressure as indicated on the vehicle's placard or tire inflation pressure label located on the driver's side center pillar outer panel. If you cannot reach a service station or if the tire cannot hold the newly added air, replace the low pressure tire with the spare tire.

Then the Low Tire Pressure telltale may flash for approximately one minute and then remain continuously illuminated after restarting and about 20 minutes of continuous driving before you have the low pressure tire repaired and replaced on the vehicle.

✻ NOTICE

The spare tire is not equipped with a tire pressure sensor.

In winter or cold weather, the low tire pressure telltale may be illuminated if the tire pressure was adjusted to the recommended tire inflation pressure in warm weather. It does not mean your TPMS is malfunctioning because the decreased temperature leads to a proportional lowering of tire pressure.

When you drive your vehicle from a warm area to a cold area or from a cold area to a warm area, or the outside temperature is greatly higher or lower, you should check the tire inflation pressure and adjust the tires to the recommended tire inflation pressure.

⚠ WARNING - Low pressure damage

Do not drive on low pressure tires. Significantly low tire pressure can cause the tires to overheat and fail making the vehicle unstable resulting in increased braking distances and a loss of vehicle control.



TPMS (Tire Pressure Monitoring System) malfunction indicator

The TPMS malfunction indicator will illuminate after it blinks for approximately one minute when there is a problem with the Tire Pressure Monitoring System. Have the system checked by an authorized Kia dealer as soon as possible to determine the cause of the problem.

✻ NOTICE

If there is a malfunction with the TPMS, the low tire pressure position telltale will not be displayed even though the vehicle has an underinflated tire.

The TPMS malfunction indicator may be illuminated if the vehicle is moving around electric power supply cables or radios transmitter such as at police stations, government and public offices, broadcasting stations, military installations, airports, or transmitting towers, etc. This can interfere with normal operation of the Tire Pressure Monitoring System (TPMS).

The TPMS malfunction indicator may illuminate if snow chains or some separately purchased devices such as notebook computers, mobile charger, remote starter, navigation etc. are used in the vehicle. This can interfere with normal operation of the Tire Pressure Monitoring System (TPMS).

Changing a tire with TPMS

If you have a flat tire, the Low Tire Pressure will come on. Have the flat tire repaired by an authorized Kia dealer as soon as possible or replace the flat tire with the spare tire.

⚠ CAUTION - Repair Agents

Never use a puncture-repairing agent not approved by Kia to repair and/or inflate a low pressure tire. The tire sealant not approved by Kia may damage the tire pressure sensor.

Each wheel is equipped with a tire pressure sensor mounted inside the tire behind the valve stem. You must use TPMS specific wheels. It is recommended that you always have your tires serviced by an authorized Kia dealer.

Even if you replace the low pressure tire with the spare tire, the Low Tire Pressure telltale will blink or remain on until the low pressure tire is repaired and placed on the vehicle. After you replace the low pressure tire with the TPMS spare tire, the Low Tire Pressure telltale may blink or illuminate after a few minutes because the TPMS sensor mounted on the spare wheel is not initiated.

Once the low pressure tire is reinflated to the recommended pressure and installed on the vehicle or the TPMS sensor mounted on the replaced spare wheel is initiated by an authorized Kia dealer, the TPMS malfunction indicator and the low tire pressure telltale will extinguish within a few minutes of driving.

If the indicator is not extinguished after a few minutes of driving, please visit an authorized Kia dealer.

If an original mounted tire is replaced with the spare tire, the TPMS sensor on the replaced spare wheel should be initiated and the TPMS sensor on the original mounted wheel should be deactivated. If the TPMS sensor on the original mounted wheel located in the spare tire carrier still activates, the tire pressure monitoring system may not operate properly. Have the tire with TPMS serviced or replaced by an authorized Kia dealer.

You may not be able to identify a low tire by simply looking at it. Always use a good quality tire pressure gauge to measure the tire's inflation pressure. Please note that a tire that is hot (from being driven) will have a higher pressure measurement than a tire that is cold (from sitting stationary for at least 3 hours and driven less than 1 mile (1.6 km) during that 3 hour period).

Allow the tire to cool before measuring the inflation pressure. Always be sure the tire is cold before inflating to the recommended pressure.

A cold tire means the vehicle has been sitting for 3 hours and driven for less than 1 mile (1.6 km) in that 3 hour period.

⚠ WARNING - TPMS WARNING Limitations

- **The TPMS cannot alert you to severe and sudden tire damage caused by external factors such as nails or road debris.**
- **If you feel any vehicle instability, immediately take your foot off the accelerator, apply the brakes gradually and with light force, and slowly move to a safe position off the road.**

✻ NOTICE - Protecting TPMS

Tampering with, modifying, or disabling the Tire Pressure Monitoring System (TPMS) components may interfere with the system's ability to warn the driver of low tire pressure conditions and/or TPMS malfunctions. Tampering with, modifying, or disabling the Tire Pressure Monitoring System (TPMS) components may void the warranty for that portion of the vehicle.

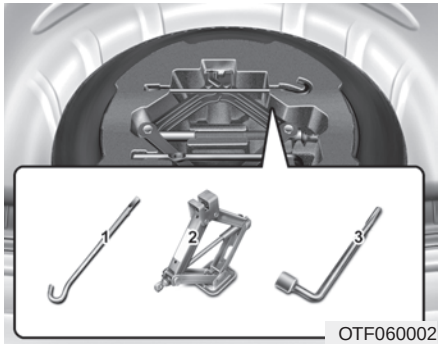
This device complies with Part 15 of the FCC rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

IF YOU HAVE A FLAT TIRE

Jack and tools



The jack, jack handle, wheel lug nut wrench are stored in the luggage compartment.

Pull up the luggage box cover to reach this equipment.

(1) Jack handle

(2) Jack

(3) Wheel lug nut wrench

Jacking instructions

The jack is provided for emergency tire changing only.

To prevent the jack from “rattling” while the vehicle is in motion, store it properly.

Follow jacking instructions to reduce the possibility of personal injury.

⚠ WARNING - Changing tires

Never attempt vehicle repairs in the traffic lanes of a public road or highway.

Always move the vehicle completely off the road and onto the shoulder before trying to change a tire. The jack should be used on firm level ground. If you cannot find a firm level place off the road, call a towing service company for assistance.

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.

⚠ WARNING - Tire Jack

Do not place any portion of your body under a vehicle that is only supported by a jack since the vehicle can easily roll off the jack. Use vehicle support stands.

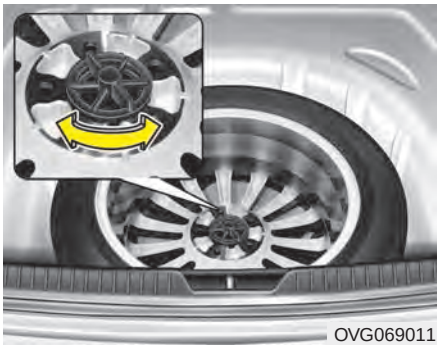
Do not allow anyone to remain in the vehicle while it is on the jack.

Make sure any children present are in a secure place away from the road and from the vehicle to be raised with the jack.

⚠ WARNING - Running vehicle on jack

Do not start or run the engine of the vehicle while the vehicle is on the jack as this may cause the vehicle to fall off the jack.

Removing and storing the spare tire


OVG069011

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


OBH068002L

1. Park on a level surface and apply the parking brake firmly.
2. Place the shift lever into P (Park).
3. Activate the hazard warning flashers.



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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 from the jack position.

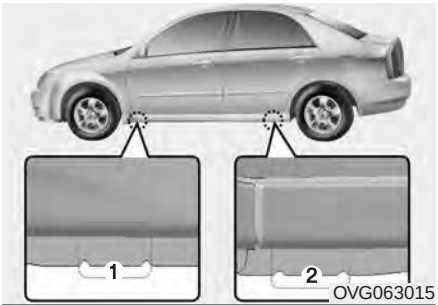
⚠ WARNING - Changing a tire

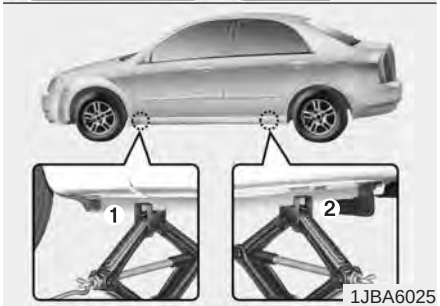
- **To prevent vehicle movement while changing a tire, always set the parking brake fully, and always block the wheel diagonally opposite the wheel being changed.**
- **We recommend that the wheels of the vehicle be blocked, and that no person remain in a vehicle that is being jacked.**



OBK069003

6. Loosen the wheel lug nuts counter-clockwise one turn each, but do not remove any nut until the tire has been raised off the ground.





7. Place the jack at the front (1) or rear (2) jacking position closest to the tire you are changing. Place the jack at the designated locations under the frame.

⚠ WARNING - Jack location

To reduce the possibility of injury, be sure to use only the jack provided with the vehicle and in the correct jack position; never use any other part of the vehicle for jack support.



8. Insert the jack handle into the jack and turn it clockwise, raising the vehicle until the tire just clears the ground. This measurement is approximately 1 in. (30 mm).

   Before removing the wheel lug nuts, make sure the vehicle is stable and that there is no chance for movement or slippage.

9. Loosen the wheel nuts and remove them with your fingers. Slide the wheel off the studs and lay it flat so it cannot roll away. To put the wheel on the hub, pick up the spare tire, line up the holes with the studs and slide the wheel onto them. If this is difficult, tip the wheel slightly and get the top hole in the wheel lined up with the top stud. Then jiggle the wheel back and forth until the wheel can slide over the other studs.

   Wheels may have sharp edges. Handle them carefully to avoid possible severe injury. Before putting the wheel into place, be sure that there is nothing on the hub or wheel (such as mud, tar, gravel, etc.) that prevents the wheel from fitting solidly against the hub.

⚠ WARNING - Installing a wheel

Make sure the wheel makes good contact with the hub when installed. If the contact of the mounting surface between the wheel and hub is not good, the wheel nuts could come loose and cause the loss of a wheel. Loss of a wheel may result in loss of control of the vehicle.

10. To install the wheel, hold it on the studs, put the wheel nuts on the studs and tighten them finger tight. Jiggle the tire to be sure it is completely seated, then tighten the nuts as much as possible with your fingers again.
11. Insert the wrench into the jack and lower the vehicle to the ground by turning the wheel nut wrench counterclockwise.



OBK069016

Then position the wrench as shown in the drawing and tighten the wheel nuts. Be sure the socket is seated completely over the nut. Do not stand on the wrench handle or use an extension pipe over the wrench handle. Go around the wheel tightening every nut following the numerical sequence shown in the image until they are all tight. Then double-check each nut for tightness. After changing wheels, have an authorized Kia dealer tighten the wheel nuts to their proper torque as soon as possible.

Wheel nut tightening torque:
65~79 lb·ft (9~11 kg·m)

If you have a tire gauge, remove the valve cap and check the air pressure. If the pressure is lower than recommended, drive slowly to the nearest service station and inflate to the correct pressure. If it is too high, adjust it until it is correct. Always reinstall the valve cap after checking or adjusting the tire pressure. If the cap is not replaced, dust and dirt may get into the tire valve and air may leak from the tire. If you lose a valve cap, buy another and install it as soon as possible.

After you have changed the wheels, always secure the flat tire in its place and return the jack and tools to their proper storage locations.

⚠ CAUTION - Reusing lug nuts

Make certain during wheel removal that the same nuts that were removed are reinstalled - or, if replaced, that nuts with metric threads and the same chamfer configuration are used. Your vehicle has metric threads on the wheel studs and nuts. Installation of a non-metric thread nut on a metric stud 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

Do not drive your vehicle with damaged 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.

Check the inflation pressures as soon as possible after installing the spare tire. Adjust it to the specified pressure, if necessary. Refer to “Tires and wheels” in section 8.

Important - use of compact spare tire

Your vehicle is equipped with a compact spare tire. This compact spare tire takes up less space than a regular-size tire. This tire is smaller than a conventional tire and is designed for temporary use only.

You should drive carefully when the compact spare is in use. The compact spare should be replaced by the proper conventional tire and rim at the first opportunity.

The operation of this vehicle is not recommended with more than one compact spare tire in use at the same time.

⚠ WARNING - Spare tire

The compact spare tire is for emergency use only. Do not operate your vehicle on this compact spare at speeds over 50 mph (80 km/h). The original tire should be repaired or replaced as soon as possible to avoid failure of the spare possibly leading to personal injury or death.

The compact spare should be inflated to 60 psi (420 kPa).

✻ NOTICE

Check the inflation pressure after installing the spare tire. Adjust it to the specified pressure, as necessary.

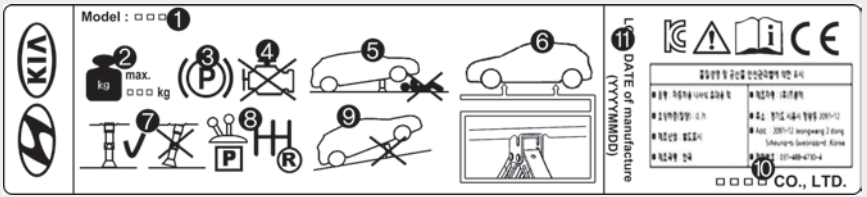
When using a compact spare tire, observe the following precautions:

- Under no circumstances should you exceed 50 mph (80 km/h); a higher speed could damage the tire.
- Ensure that you drive slowly enough for the road conditions to avoid all hazards. Any road hazard, such as a pothole or debris, could seriously damage the compact spare.
- Any continuous road use of this tire could result in tire failure, loss of vehicle control, and possible personal injury.
- Do not exceed the vehicle's maximum load rating or the load-carrying capacity shown on the sidewall of the compact spare tire.
- Avoid driving over obstacles. The compact spare tire diameter is smaller than the diameter of a conventional tire and reduces the ground clearance approximately 1 inch (25 mm), which could result in damage to the vehicle.
- Do not take this vehicle through an automatic vehicle wash while the compact spare tire is installed.
- Do not use tire chains on the compact spare tire. Because of the smaller size, a tire chain will not fit properly. This could damage the vehicle and result in loss of the chain.
- Do not use the compact spare tire on any other vehicle because this tire has been designed especially for your vehicle.
- The compact spare tire's tread life is shorter than a regular tire. Inspect your compact spare tire regularly and replace worn compact spare tires with the same size and design, mounted on the same wheel.
- The compact spare tire should not be used on any other wheels, nor should standard tires, snow tires, wheel covers or trim rings be used with the compact spare wheel. If such use is attempted, damage to these items or other vehicle components may occur.
- Do not use more than one compact spare tire at a time.
- Do not tow a trailer while the compact spare tire is installed.

Jack label

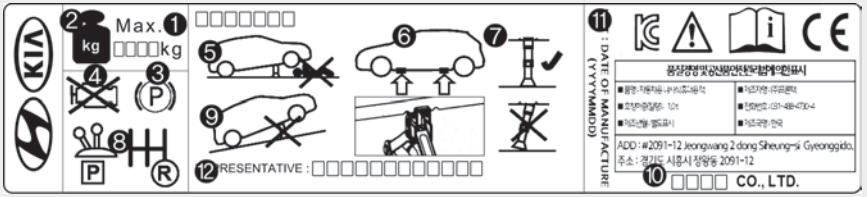
■ Exemple

• Type A



OHYK064001

• Type B



OHYK064005

• Type C



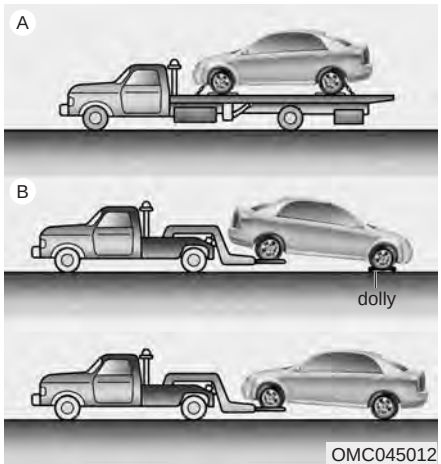
OHYK064002

❉ The actual Jack label in the vehicle may differ from the illustration. For more detailed specifications, refer to the label attached to the jack.

1. Model Name
2. Maximum allowable load
3. When using the jack, set your parking brake.
4. When using the jack, stop the engine.
5. Do not get under a vehicle that is supported by a jack.
6. The designated locations under the frame
7. When supporting the vehicle, the base plate of jack must be vertical under the lifting point.
8. Shift into Reverse gear on vehicles with manual transmission or move the shift lever to the P position on vehicles with automatic transmission.
9. The jack should be used on firm level ground.
10. Jack manufacturer
11. Production date
12. Representative company and address

TOWING

Towing service



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 or flatbed is recommended.

For trailer towing guidelines information, refer to "Trailer towing" in section 5.

It is acceptable to tow the vehicle with the rear wheels on the ground (without dollies) and the front wheels off the ground.

If any of the loaded wheels or suspension components are damaged or the vehicle is being towed with the front wheels on the ground, use a towing dolly under the front wheels.

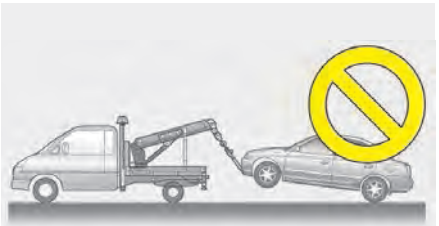
When being towed by a commercial tow truck and wheel dollies are not used, the front of the vehicle should always be lifted, not the rear.

✻ NOTICE

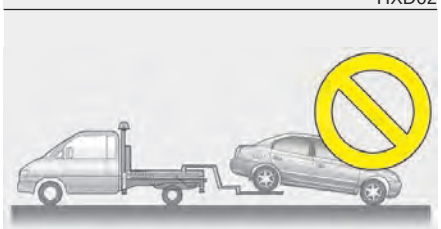
If the EPB does not release normally, take your vehicle to an authorized Kia dealer by loading the vehicle on a flatbed tow truck and have the system checked.

⚠ WARNING - Side and curtain air bag

If your vehicle is equipped with side and curtain air bag, set the ignition switch to LOCK or ACC position when the vehicle is being towed. The side and curtain air bag may deploy when the ignition is ON, and the rollover sensor detects the situation as a rollover.



HXD02



HXD03

⚠ CAUTION

- ***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.***

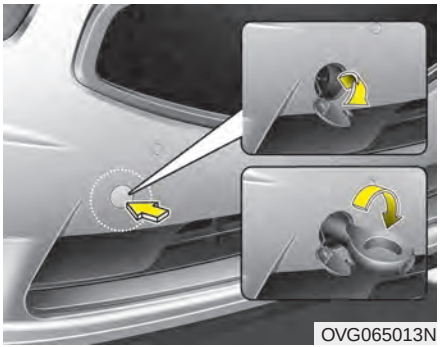
When towing your vehicle in an emergency without wheel dollies :

1. Set the ignition switch in the ACC position.
2. Place the shift lever in N (Neutral).
3. Release the parking brake.

⚠ CAUTION

Failure to place the shift lever in N (Neutral) may cause internal damage to the transaxle.

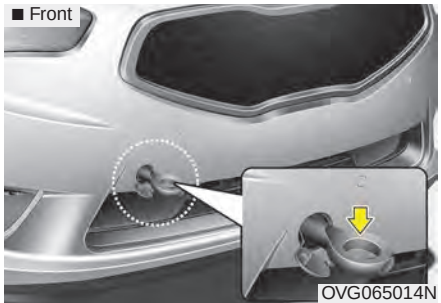
Removable towing hook (if equipped)

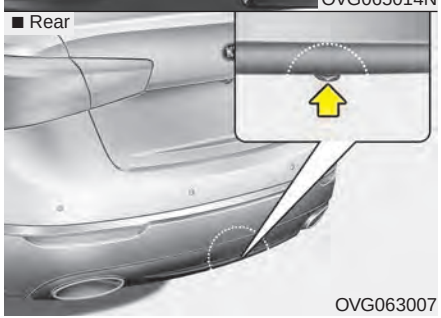


OVG065013N

1. Open the trunk, and remove the towing hook from the tool case.
2. Remove the hole cover pressing the lower part of the cover on the bumper.
3. Install the towing hook by turning it clockwise into the hole until it is fully secured.
4. Remove the towing hook and install the cover after use.

Emergency towing





If towing is necessary, 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 rear of the vehicle. Use extreme caution when towing the vehicle. A driver must be in the vehicle to steer it and operate the brakes.

Towing in this manner may be done only on hard-surfaced roads for a short distance and at low speeds. Also, the wheels, axles, power train, steering and brakes must all be in good condition.

- Do not use the tow hooks to pull a vehicle out of mud, sand or other conditions from which the vehicle cannot be driven out under its own power.
- Avoid towing a vehicle heavier than the vehicle doing the towing.
- The drivers of both vehicles should communicate with each other frequently.

⚠ CAUTION

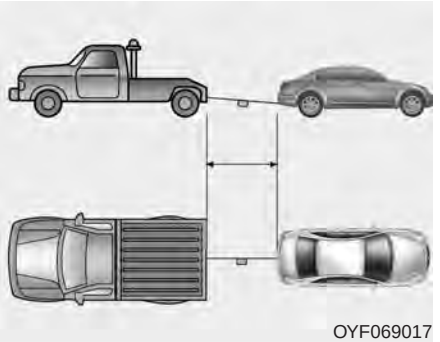
- ***Attach a towing strap to the tow hook.***
- ***Using a portion of the vehicle other than the tow hooks for towing may damage the body of your vehicle.***
- ***Use only a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing hook provided.***

- Before emergency towing, check 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.
- If the disabled vehicle is unable to be moved, 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.

⚠ WARNING

Use extreme caution when towing the vehicle.

Avoid sudden starts or erratic driving maneuvers which would place excessive stress on the emergency towing hook and towing cable or chain. The hook and towing cable or chain may break and cause serious injury or damage.



OYF069017

- Use a towing strap less than 16 feet (5 m) long. Attach a white or red cloth (about 12 inches (30 cm) wide) in the middle of the strap for easy visibility.
- Drive carefully so that the towing strap is not loosened during towing.

Emergency towing precautions

- Place the ignition switch in ACC so the steering wheel isn't locked.
- Place the transaxle shift lever in N (Neutral).
- Release the parking bake.
- 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.
- If the car is being towed with all four wheels on the ground, it can be towed only from the front. Be sure that the transaxle is in neutral. Be sure the steering is unlocked by placing the ignition switch in the ACC position. A driver must be in the towed vehicle to operate the steering and brakes.

⚠ **CAUTION - Automatic transaxle**

- ***To avoid serious damage to the automatic transaxle, limit the vehicle speed to 10 mph (15 km/h) and drive less than 1 mile (1.5 km) when towing.***
- ***Before towing, check the automatic transaxle for fluid leaks under your vehicle. If the automatic transaxle fluid is leaking, a flatbed equipment or towing dolly must be used.***

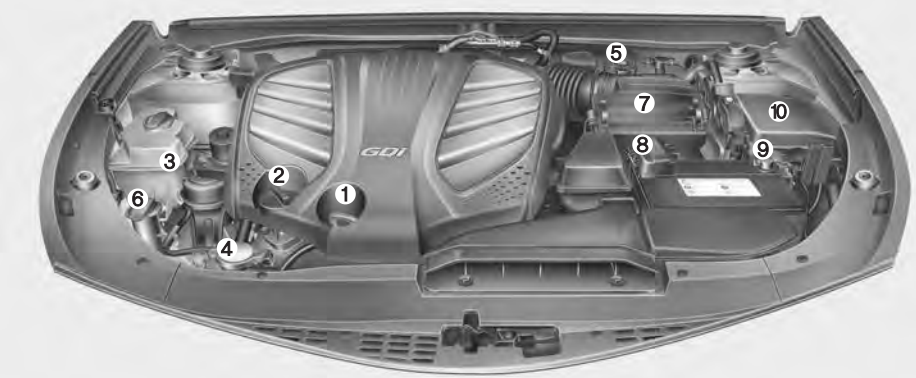
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ENGINE COMPARTMENT

■ **3.3L Engine**



1. Engine oil dipstick
2. Engine oil filler cap
3. Engine coolant reservoir
4. Radiator cap
5. Brake fluid reservoir
6. Windshield washer fluid reservoir
7. Air cleaner
8. Positive battery terminal
9. Negative battery terminal
10. Fuse box

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

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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 vehicle warranties.
Detailed warranty information is provided in your Warranty & Consumer Information manual.

Repairs and adjustments required as a result of improper maintenance or a lack of required maintenance are not covered.

We recommend you have your vehicle maintained and repaired by an authorized Kia dealer. An authorized Kia dealer meets Kia's high service quality standards and receives technical support from Kia in order to provide you with a high level of service satisfaction.

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 an authorized Kia dealer with special tools.

✻ NOTICE

Improper owner maintenance during the warranty period may affect warranty coverage. For details, read the separate Warranty & Consumer Information manual 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

Do not wear jewelry or loose clothing while working under the hood of your vehicle with the engine running. These can become entangled in moving parts, 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.

OWNER MAINTENANCE

The following lists are vehicle checks and inspections that should be performed by the owner or an authorized Kia dealer 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 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.

Owner maintenance schedule

When you stop for fuel:

- Check the engine oil level.
- Check the coolant level in coolant reservoir.
- Check the windshield washer fluid level.
- Look for low or under-inflated tires.
- Check the radiator and condenser.

  Check if the front of the radiator and condenser are clean and not blocked with leaves, dirt or insects etc. If any of the above parts are extremely dirty or you are not sure of their condition, take your vehicle to an authorized Kia dealer.

⚠ WARNING - Hot coolant

Be careful when checking your engine coolant level when the engine is hot. Scalding hot coolant and steam may blow out under pressure.

While operating your vehicle:

- Note any changes in the sound of the exhaust or any smell of exhaust fumes in the vehicle.
- Check for vibrations in the steering wheel. Notice any increased steering effort or looseness in the steering wheel, or change in its straight-ahead position.
- Notice if your vehicle constantly turns slightly or “pulls” to one side when traveling on smooth, level road.
- When stopping, listen and check for unusual sounds, pulling to one side, increased brake pedal travel or “hard-to-push” brake pedal.
- If any slipping or changes in the operation of your transaxle occurs, check the transaxle fluid level.
- Check the automatic transaxle P (Park) function.
- Check the parking brake.
- Check for fluid leaks under your vehicle (water dripping from the air conditioning system during or after use is normal).

At least monthly:

- Check the coolant level in the engine coolant reservoir.
- Check the operation of all exterior lights, including the stoplights, turn signals and hazard warning flashers.
- Check the inflation pressures of all tires including the spare.

At least twice a year (i.e., every Spring and Fall) :

- Check the radiator, heater and air conditioning hoses for leaks or damage.
- Check the windshield washer spray and wiper operation. Clean the wiper blades with clean cloth dampened with washer fluid.
- Check the headlight alignment.
- Check the muffler, exhaust pipes, shields and clamps.
- Check the lap/shoulder belts for wear and function.
- Check for worn tires and loose wheel lug nuts.

At least once a year :

- Clean the body and door drain holes.
- Lubricate the door hinges and check the hood hinges.
- Lubricate the door and hood locks and latches.
- Lubricate the door rubber weatherstrips.
- Check the air conditioning system.
- Check the power steering fluid level.
- Inspect and lubricate automatic transaxle linkage and controls.
- Clean the battery and terminals.
- Check the brake/clutch fluid level.

SCHEDULED MAINTENANCE SERVICE

Follow the Normal Maintenance Schedule if the vehicle is usually operated where none of the following conditions apply. If any of the following conditions apply, follow the Maintenance Under Severe Usage Conditions.

- Repeated short distance driving.
- Driving in dusty conditions or sandy areas.
- Extensive use of brakes.
- Driving in areas where salt or other corrosive materials are being used.
- Driving on rough or muddy roads.
- Driving in mountainous areas.
- Extended periods of idling or low speed operation.
- Driving for a prolonged period in cold temperatures and/or extremely humid climates.
- More than 50% driving in heavy city traffic during hot weather above 90°F (32°C).

If your vehicle is operated under the above conditions, you should inspect, replace or refill more frequently than the following Normal Maintenance Schedule. After 120 months or 150,000 miles continue to follow the prescribed maintenance intervals.

NORMAL MAINTENANCE SCHEDULE

The following maintenance services must be performed to ensure good emission control and performance. Keep receipts for all vehicle emission services to protect your warranty. Where both mileage and time are shown, the frequency of service is determined by whichever occurs first.

*1 : If TOP TIER Detergent Gasoline is not available, one bottle of additive is recommended. Additives are available from your authorized Kia dealer along with information on how to use them. Do not mix other additives.

*2 : Fuel filter & Fuel tank air filter are considered to be maintenance free but periodic inspection is recommended for this maintenance schedule depends on fuel quality. If there are some important safety matters like fuel flow restriction, surging, loss of power, hard starting problem etc, replace the fuel filter immediately regardless of maintenance schedule and consult an authorized Kia dealer for details.

*3 : The drive belt should be replaced when cracks occur or tension is reduced excessively.

*4 : Inspect for excessive tappet noise and/or engine vibration and adjust if necessary.

NORMAL MAINTENANCE SCHEDULE

7,500 miles (12,000 km) or 6 months

- ❑ Rotate tire
- ❑ Inspect battery condition
- ❑ Inspect air cleaner filter
- ❑ Inspect vacuum hose
- ❑ Replace engine oil and filter
  (7,500 miles (12,000 km) or 12 months)
- ❑ Add fuel additive *1
  (7,500 miles (12,000 km) or 12 months)

❉ Inspect : Inspect and if necessary, adjust, correct, clean or replace.

15,000 miles (24,000 km) or 12 months

- ❑ Rotate tire
- ❑ Inspect battery condition
- ❑ Inspect air cleaner filter
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shafts and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect front brake disc/pads, calipers
- ❑ Inspect rear brake disc/pads
- ❑ Inspect steering gear box, linkage & boots/ lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Replace climate control air filter
  (for evaporator and blower unit)
- ❑ Replace engine oil and filter
  (15,000 miles (24,000 km) or 24 months)
- ❑ Add fuel additive *1
  (15,000 miles (24,000 km) or 24 months)

❉ Inspect : Inspect and if necessary, adjust, correct, clean or replace.

NORMAL MAINTENANCE SCHEDULE

22,500 miles (36,000 km) or 18 months

- ❑ Rotate tire
- ❑ Inspect battery condition
- ❑ Inspect air cleaner filter
- ❑ Inspect vacuum hose
- ❑ Replace engine oil and filter
  (22,500 miles (36,000 km) or 36 months)
- ❑ Add fuel additive *1
  (22,500 miles (36,000 km) or 36 months)

❉ Inspect : Inspect and if necessary, adjust, correct, clean or replace.

30,000 miles (48,000 km) or 24 months

- ❑ Rotate tire
- ❑ Inspect battery condition
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shats and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect front brake disc/pads, calipers
- ❑ Inspect rear brake disc/pads
- ❑ Inspect steering gear box, linkage & boots/ lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Inspect brake fluid
- ❑ Inspect fuel filter *2
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect fuel tank air filter *2
- ❑ Inspect parking brake
- ❑ Inspect vapor hose and fuel filler cap
- ❑ Replace climate control air filter (for evaporator and blower unit)
- ❑ Replace air cleaner filter

(Continued)

NORMAL MAINTENANCE SCHEDULE

(Continued)

❑ Replace engine oil and filter
(30,000 miles (48,000 km) or 48 months)
❑ Add fuel additive *1
(30,000 miles (48,000 km) or 48 months)

❉ Inspect : Inspect and if necessary, adjust, correct, clean or replace.

37,500 miles (60,000 km) or 30 months

❑ Rotate tire
❑ Inspect battery condition
❑ Inspect air cleaner filter
❑ Inspect vacuum hose
❑ Replace engine oil and filter
(37,500 miles (60,000 km) or 60 months)
❑ Add fuel additive *1
(37,500 miles (60,000 km) or 60 months)

❉ Inspect : Inspect and if necessary, adjust, correct, clean or replace.

NORMAL MAINTENANCE SCHEDULE

45,000 miles (72,000 km) or 36 months

- ❑ Rotate tire
- ❑ Inspect battery condition
- ❑ Inspect air cleaner filter
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shafts and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect front brake disc/pads, calipers
- ❑ Inspect rear brake disc/pads
- ❑ Inspect steering gear box, linkage & boots/ lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Replace climate control air filter (for evaporator and blower unit)
- ❑ Replace engine oil and filter (45,000 miles (72,000 km) or 72 months)
- ❑ Add fuel additive *1 (45,000 miles (72,000 km) or 72 months)

❉ Inspect : Inspect and if necessary, adjust, correct, clean or replace.

52,500 miles (84,000 km) or 42 months

- ❑ Rotate tire
- ❑ Inspect battery condition
- ❑ Inspect air cleaner filter
- ❑ Inspect vacuum hose
- ❑ Replace engine oil and filter (52,500 miles (84,000 km) or 84 months)
- ❑ Add fuel additive *1 (52,500 miles (84,000 km) or 84 months)

❉ Inspect : Inspect and if necessary, adjust, correct, clean or replace.

NORMAL MAINTENANCE SCHEDULE

60,000 miles (96,000 km) or 48 months

- ❑ Rotate tire
- ❑ Inspect battery condition
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shafts and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect front brake disc/pads, calipers
- ❑ Inspect rear brake disc/pads
- ❑ Inspect steering gear box, linkage & boots/ lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Inspect brake fluid
- ❑ Inspect fuel filter *2
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect fuel tank air filter (if equipped) *2
- ❑ Inspect parking brake
- ❑ Inspect valve clearance *3
- ❑ Inspect vapor hose and fuel filler cap
- ❑ Inspect drive belts *3
  (First, 60,000 miles (96,000 km) or 72 months after that, every 15,000 miles (24,000 km) or 24 months)

(Continued)

(Continued)

- ❑ Replace climate control air filter (for evaporator and blower unit)
- ❑ Replace air cleaner filter
- ❑ Replace engine oil and filter (60,000 miles (96,000 km) or 96 months)
- ❑ Add fuel additive *1 (60,000 miles (96,000 km) or 96 months)

❉ Inspect : Inspect and if necessary, adjust, correct, clean or replace.

NORMAL MAINTENANCE SCHEDULE

67,500 miles (108,000 km) or 54 months

- ❑ Rotate tire
- ❑ Inspect battery condition
- ❑ Inspect air cleaner filter
- ❑ Inspect vacuum hose
- ❑ Replace engine oil and filter
  (67,500 miles (108,000 km) or 108 months)
- ❑ Add fuel additive *1
  (67,500 miles (108,000 km) or 108 months)

❉ Inspect : Inspect and if necessary, adjust, correct, clean or replace.

75,000 miles (120,000 km) or 60 months

- ❑ Rotate tire
- ❑ Inspect battery condition
- ❑ Inspect air cleaner filter
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shafts and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect front brake disc/pads, calipers
- ❑ Inspect rear brake disc/pads
- ❑ Inspect steering gear box, linkage & boots/
  lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Inspect drive belts *3
  (First, 60,000 miles (96,000 km) or 72 months after that,
  every 15,000 miles (24,000 km) or 24 months)
- ❑ Replace climate control air filter
  (for evaporator and blower unit)
- ❑ Replace engine oil and filter
  (75,000 miles (120,000 km) or 120 months)
- ❑ Add fuel additive *1
  (75,000 miles (120,000 km) or 120 months)

❉ Inspect : Inspect and if necessary, adjust, correct, clean or replace.

NORMAL MAINTENANCE SCHEDULE

82,500 miles (132,000 km) or 66 months

- ❑ Rotate tire
- ❑ Inspect battery condition
- ❑ Inspect air cleaner filter
- ❑ Inspect vacuum hose
- ❑ Replace engine oil and filter
  (82,500 miles (132,000 km) or 132 months)
- ❑ Add fuel additive *1
  (82,500 miles (132,000 km) or 132 months)

❉ Inspect : Inspect and if necessary, adjust, correct, clean or replace.

90,000 miles (144,000 km) or 72 months

- ❑ Rotate tire
- ❑ Inspect battery condition
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shafts and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect front brake disc/pads, calipers
- ❑ Inspect rear brake disc/pads
- ❑ Inspect steering gear box, linkage & boots/ lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Inspect brake fluid
- ❑ Inspect fuel filter *2
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect fuel tank air filter *2
- ❑ Inspect parking brake
- ❑ Inspect vapor hose and fuel filler cap
- ❑ Inspect drive belts *3
  (First, 60,000 miles (96,000 km) or 72 months after that, every 15,000 miles (24,000 km) or 24 months)

(Continued)

NORMAL MAINTENANCE SCHEDULE

(Continued)

❑ Replace climate control air filter
(for evaporator and blower unit)
❑ Replace air cleaner filter
❑ Replace engine oil and filter
(90,000 miles (144,000 km) or 144 months)
❑ Add fuel additive *1
(90,000 miles (144,000 km) or 144 months)

❉ Inspect : Inspect and if necessary, adjust, correct, clean or replace.

97,500 miles (156,000 km) or 78 months

❑ Rotate tire
❑ Inspect battery condition
❑ Inspect air cleaner filter
❑ Inspect vacuum hose
❑ Replace engine oil and filter
(97,500 miles (156,000 km) or 156 months)
❑ Add fuel additive *1
(97,500 miles (156,000 km) or 156 months)

❉ Inspect : Inspect and if necessary, adjust, correct, clean or replace.

NORMAL MAINTENANCE SCHEDULE

105,000 miles (168,000 km) or 84 months

- ❑ Rotate tire
- ❑ Inspect battery condition
- ❑ Inspect air cleaner filter
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shafts and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect front brake disc/pads, calipers
- ❑ Inspect rear brake disc/pads
- ❑ Inspect steering gear box, linkage & boots/ lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Inspect drive belts *3
  (First, 60,000 miles (96,000 km) or 72 months after that, every 15,000 miles (24,000 km) or 24 months)
- ❑ Replace climate control air filter (for evaporator and blower unit)
- ❑ Replace spark plugs (iridium coated)
- ❑ Replace engine oil and filter
  (105,000 miles (168,000 km) or 168 months)

(Continued)

(Continued)

- ❑ Add fuel additive *1
  (105,000 miles (168,000 km) or 168 months)

❉ Inspect : Inspect and if necessary, adjust, correct, clean or replace.

NORMAL MAINTENANCE SCHEDULE

112,500 miles (180,000 km) or 90 months

- ❑ Rotate tire
- ❑ Inspect battery condition
- ❑ Inspect air cleaner filter
- ❑ Inspect vacuum hose
- ❑ Replace engine oil and filter
  (112,500 miles (180,000 km) or 180 months)
- ❑ Add fuel additive *1
  (112,500 miles (180,000 km) or 180 months)

❉ Inspect : Inspect and if necessary, adjust, correct, clean or replace.

120,000 miles (192,000 km) or 96 months

- ❑ Rotate tire
- ❑ Inspect battery condition
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shafts and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect front brake disc/pads, calipers
- ❑ Inspect rear brake disc/pads
- ❑ Inspect steering gear box, linkage & boots/
  lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Inspect brake fluid
- ❑ Inspect fuel filter *2
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect fuel tank air filter *2
- ❑ Inspect parking brake
- ❑ Inspect valve clearance *3
- ❑ Inspect vapor hose and fuel filler cap
- ❑ Inspect drive belts *3
  (First, 60,000 miles (96,000 km) or 72 months after that,
  every 15,000 miles (24,000 km) or 24 months)

(Continued)

NORMAL MAINTENANCE SCHEDULE

(Continued)

❑ Replace climate control air filter
(for evaporator and blower unit)
❑ Replace air cleaner filter
❑ Replace engine oil and filter
(120,000 miles (192,000 km) or 192 months)
❑ Replace coolant
(First, 120,000 miles (192,000 km) or 120 months after that, every 30,000 miles (48,000 km) or 24 months)
❑ Add fuel additive *1
(120,000 miles (192,000 km) or 192 months)

❉ Inspect : Inspect and if necessary, adjust, correct, clean or replace.

127,500 miles (204,000 km) or 102 months

❑ Rotate tire
❑ Inspect battery condition
❑ Inspect air cleaner filter
❑ Inspect vacuum hose
❑ Replace engine oil and filter
(127,500 miles (204,000 km) or 204 months)
❑ Add fuel additive *1
(127,500 miles (204,000 km) or 204 months)

❉ Inspect : Inspect and if necessary, adjust, correct, clean or replace.

NORMAL MAINTENANCE SCHEDULE

135,000 miles (216,000 km) or 108 months

- ❑ Rotate tire
- ❑ Inspect battery condition
- ❑ Inspect air cleaner filter
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shafts and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect front brake disc/pads, calipers
- ❑ Inspect rear brake disc/pads
- ❑ Inspect steering gear box, linkage & boots/lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Inspect drive belts *3
  (First, 60,000 miles (96,000 km) or 72 months after that, every 15,000 miles (24,000 km) or 24 months)
- ❑ Replace climate control air filter
  (for evaporator and blower unit)
- ❑ Replace engine oil and filter
  (135,000 miles (216,000 km) or 216 months)
- ❑ Add fuel additive *1
  (135,000 miles (216,000 km) or 216 months)

142,500 miles (228,000 km) or 114 months

- ❑ Rotate tire
- ❑ Inspect battery condition
- ❑ Inspect air cleaner filter
- ❑ Inspect vacuum hose
- ❑ Replace engine oil and filter
  (142,500 miles (228,000 km) or 228 months)
- ❑ Add fuel additive *1
  (142,500 miles (228,000 km) or 228 months)

❉ Inspect : Inspect and if necessary, adjust, correct, clean or replace.

NORMAL MAINTENANCE SCHEDULE

150,000 miles (240,000 km) or 120 months

- ❑ Rotate tire
- ❑ Inspect battery condition
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shafts and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect front brake disc/pads, calipers
- ❑ Inspect rear brake disc/pads
- ❑ Inspect steering gear box, linkage & boots/ lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Inspect brake fluid
- ❑ Inspect fuel filter *2
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect fuel tank air filter *2
- ❑ Inspect parking brake
- ❑ Inspect vapor hose and fuel filler cap
- ❑ Inspect drive belts *3
  (First, 60,000 miles (96,000 km) or 72 months after that, every 15,000 miles (24,000 km) or 24 months)

(Continued)

(Continued)

- ❑ Replace climate control air filter (for evaporator and blower unit)
- ❑ Replace air cleaner filter
- ❑ Replace engine oil and filter (150,000 miles (240,000 km) or 240 months)
- ❑ Replace coolant (First, 120,000 miles (192,000 km) or 120 months after that, every 30,000 miles (48,000 km) or 24 months)
- ❑ Add fuel additive *1 (150,000 miles (240,000 km) or 240 months)

❉ Inspect : Inspect and if necessary, adjust, correct, clean or replace.

No check, No service required

- ❑ Automatic transaxle fluid

MAINTENANCE UNDER SEVERE USAGE CONDITIONS

The following items must be serviced more frequently on cars normally used under severe driving conditions. Refer to the chart below for the appropriate maintenance intervals.

R : Replace I : Inspect and, after inspection, clean, adjust, repair or replace if necessary

MAINTENANCE ITEM	MAINTENANCE OPERATION	MAINTENANCE INTERVALS	DRIVING CONDITION
ENGINE OIL AND FILTER	R	EVERY 3,750 MILES (6,000 KM) OR 6 MONTHS	A, B, C, D, E, F, G, H, I, J, K
AIR CLEANER FILTER	R	MORE FREQUENTLY	C, E
SPARK PLUGS	R	MORE FREQUENTLY	A, B, H, I, K
AUTOMATIC TRANSAXLE FLUID	R	EVERY 60,000 MILES (96,000 KM)	A, C, E, F, G, I
FRONT BRAKE DISC/PADS AND CALIPERS	I	MORE FREQUENTLY	C, D, G, H

MAINTENANCE ITEM	MAINTENANCE OPERATION	MAINTENANCE INTERVALS	DRIVING CONDITION
REAR BRAKE DISC/PADS	I	MORE FREQUENTLY	C, D, G, F
PARKING BRAKE	I	MORE FREQUENTLY	C, D, G, H
STEERING GEAR BOX, LINKAGE & BOOTS/LOWER ARM BALL JOINT AND UPPER ARM BALL JOINT	I	MORE FREQUENTLY	C, D, E, F, G, H, I
DRIVE SHAFTS AND BOOTS	I	EVERY 7,500 MILES (12,000 KM) OR 6 MONTHS	C, D, E, F, G, H, I
CLIMATE CONTROL AIR FILTER (FOR EVAPORATOR AND BLOWER UNIT)	R	MORE FREQUENTLY	C, E

SEVERE DRIVING CONDITIONS

A - Repeatedly driving short distance of less than 5 miles (8 km) in normal temperature or less than 10 miles (16 km) in freezing temperature

B - Extensive engine idling or low speed driving for long distances

C - Driving on rough, dusty, muddy, unpaved, graveled or salt- spread roads

D - Driving in areas using salt or other corrosive materials or in very cold weather

E - Driving in sandy areas

F - Driving in heavy traffic area over 90°F (32°C)

G - Driving on uphill, downhill, or mountain road

H - Towing a Trailer, or using a camper, or roof rack

I - Driving as a patrol car, taxi, other commercial use or vehicle towing

J - Driving over 106 mph (170 km/h)

K - Frequently driving in stop-and-go conditions

EXPLANATION OF SCHEDULED MAINTENANCE ITEMS

Engine oil and filter

The engine oil and filter should be changed at the intervals specified in the maintenance schedule. If the car is being driven in severe conditions, more frequent oil and filter changes are required.

Drive belts

Inspect all drive belts for evidence of cuts, cracks, excessive wear or oil saturation and replace if necessary.

Fuel filter

A clogged filter can limit the speed at which the vehicle may be driven, damage the emission system and cause multiple issues such as hard starting. If an excessive amount of foreign matter accumulates in the fuel tank, the filter may require replacement more frequently.

After installing a new filter, run the engine for several minutes, and check for leaks at the connections. Fuel filters should be installed by an authorized Kia dealer.

Fuel lines, fuel hoses and connections

Check the fuel lines, fuel hoses and connections for leakage and damage. Have an authorized Kia dealer replace any damaged or leaking parts immediately.

Vapor hose and fuel filler cap

The vapor hose and fuel filler cap should be inspected at those intervals specified in the maintenance schedule. Make sure that a new vapor hose or fuel filler cap is correctly replaced.

Vacuum crankcase ventilation hoses

Inspect the surface of hoses for evidence of heat and/or mechanical damage. Hard and brittle rubber, cracking, tears, cuts, abrasions, and excessive swelling indicate deterioration. Particular attention should be paid to examine those hose surfaces nearest to high heat sources, such as the exhaust manifold.

Inspect the hose routing to assure that the hoses do not come in contact with any heat source, sharp edges or moving component which might cause heat damage or mechanical wear. Inspect all hose connections, such as clamps and couplings, to make sure they are secure, and that no leaks are present. Hoses should be replaced immediately if there is any evidence of deterioration or damage.

Air cleaner filter

A Genuine Kia air cleaner filter is recommended when the filter is replaced.

Spark plugs

Make sure to install new spark plugs of the correct heat range.

Valve clearance

Inspect excessive valve noise and/or engine vibration and adjust if necessary. An authorized Kia dealer should perform the operation.

Cooling system

Check cooling system components, such as radiator, coolant reservoir, hoses and connections for leakage and damage. Replace any damaged parts.

Coolant

The coolant should be changed at the intervals specified in the maintenance schedule.

Automatic transaxle fluid

Automatic transaxle fluid does not need to be checked under normal usage conditions.

But in severe conditions, the fluid should be changed at an authorized Kia dealer in accordance to the scheduled maintenance at the beginning of this chapter.

✻ NOTICE

Automatic transaxle fluid color is basically red.
As the vehicle is driven, the automatic transaxle fluid will begin to look darker.
This a normal condition and you should not judge the need to replace the fluid based upon the changed color.

The use of a non-specified fluid could result in transaxle malfunction and failure.
Use only specified automatic transaxle fluid. (Refer to “Recommended lubricants and capacities” in section 8.)

Brake hoses and lines

Visually check for proper installation, chafing, cracks, deterioration and any leakage. Replace any deteriorated or damaged parts immediately.

Brake fluid

Check brake fluid level in the brake fluid reservoir. The level should be between “MIN” and “MAX” marks on the side of the reservoir. Use only hydraulic brake fluid conforming to DOT 3 or DOT 4 specification.

Parking brake

Inspect the parking brake system including the parking brake pedal or lever and cables.

Brake discs, pads, calipers and rotors

Check the pads for excessive wear, discs for run out and wear, and calipers for fluid leakage.

Suspension mounting bolts

Check the suspension connections for looseness or damage. Retighten to the specified torque.

Steering gear box, linkage & boots/lower arm ball joint

With the vehicle stopped and engine off, check for excessive free-play in the steering wheel.

Check the linkage for bends or damage. Check the dust boots and ball joints for deterioration, cracks, or damage. Replace any damaged parts.

Exhaust pipe and muffler

Visually inspect the exhaust pipes, muffler and hangers for cracks, deterioration, or damage. Start the engine and listen carefully for any exhaust gas leakage. Tighten connections or replace parts as necessary.

Drive shafts and boots

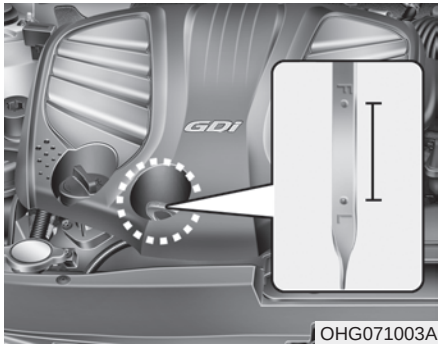
Check the drive shafts, boots and clamps for cracks, deterioration, or damage. Replace any damaged parts and, if necessary, repack the grease.

Air conditioning refrigerant

Check the air conditioning lines and connections for leakage and damage.

ENGINE OIL

Checking the engine oil level



OHG071003A

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 reinsert it fully.

⚠ WARNING - Radiator hose

Be very careful not to touch the radiator hose when checking or adding the engine oil as it may be hot enough to burn you.

5. Pull the dipstick out again and check the level. The level should be between F and L.

⚠ CAUTION - Replace engine oil

Do not overfill with engine oil. Engine damage may result.



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If it is near or at L, add enough oil to bring the level to F. **Do not overfill.**

Use a funnel to help prevent oil from being spilled on engine components.

Use only the specified engine oil. (Refer to "Recommended lubricants and capacities" in section 8.)

Changing the engine oil and filter

Have engine oil and filter changed by an authorized Kia dealer according to the Maintenance Schedule at the beginning of this section.

⚠ WARNING - California proposition 65

Engine oil contains chemicals known to the State of California to cause cancer, birth defects and reproductive harm. Used engine oil may cause irritation or cancer of the skin if left in contact with the skin for prolonged periods of time. Always protect your skin by washing your hands thoroughly with soap and warm water as soon as possible after handling used oil.

ENGINE COOLANT

The high-pressure cooling system has a reservoir filled with year-round antifreeze coolant. The reservoir is filled at the factory.

Check the antifreeze protection and coolant level at least once a year, at the beginning of the winter season, and before traveling to a colder climate.

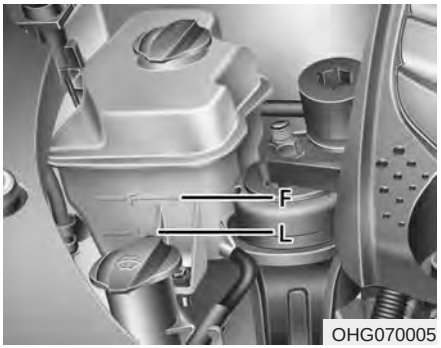
⚠ WARNING - Cooling fan



Use caution when working near the blade of the cooling fan. The electric motor (cooling fan) is controlled by engine coolant temperature, refrigerant pressure and vehicle speed. It may sometimes operate even when the engine is not running.

Your vehicle equipped with GDI, the electric motor (cooling fan) may operate until you disconnect the negative battery cable. Not heeding these warnings could result in serious injuries.

Checking the coolant level



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 (MAX) and L (MIN) marks on the side of the coolant reservoir when the engine is cool.

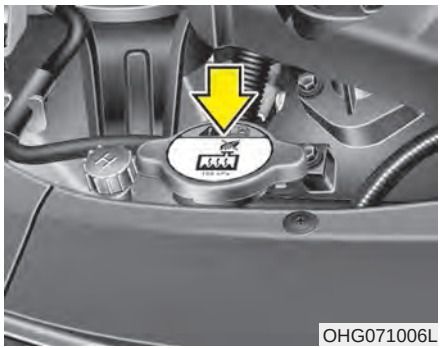
If the coolant level is low, add enough distilled (deionized) water. Bring the level to F (MAX), but do not overfill. If frequent coolant addition is required, see an authorized Kia dealer for a cooling system inspection.

Recommended engine coolant

- When adding coolant, use only deionized water or soft water for your vehicle and never mix hard water in the coolant filled at the factory. An improper coolant mixture can result in serious malfunction or engine damage.
- The engine in your vehicle has aluminum engine parts and must be protected by an ethylene-glycol-based coolant to prevent corrosion and freezing.
- DO NOT USE alcohol or methanol coolant or mix them with the specified coolant.
- Do not use a solution that contains more than 60% antifreeze or less than 35% antifreeze, which would reduce the effectiveness of the solution.

For mixture percentage, refer to the following table.

Ambient Temperature	Mixture Percentage (volume)	
	Antifreeze	Water
5°F (-15°C)	35	65
-13°F (-25°C)	40	60
-31°F (-35°C)	50	50
-49°F (-45°C)	60	40



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⚠ WARNING



Radiator cap

Do not remove the radiator cap when the engine and radiator are hot. Scalding hot coolant and steam may blow out under pressure.

⚠ CAUTION - 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.

Turn the engine off and wait until it cools down. Use 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.

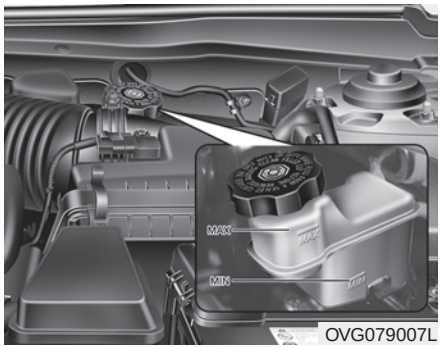
Changing the coolant

Have the coolant changed by an authorized Kia dealer according to the Maintenance Schedule at the beginning of this section.

Put a thick cloth or fabric around the radiator cap before refilling the coolant in order to prevent the coolant from overflowing into engine parts such as the alternator.

BRAKE FLUID

Checking the brake fluid level



Check the fluid level in the reservoir periodically. The fluid level should be between MAX (Maximum) and MIN (Minimum) 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.

⚠ CAUTION - Proper fluid

Only use brake fluid in brake system. Small amounts of improper fluids (such as engine oil) can cause damage to the brake system.

If the level is low, add fluid to the MAX (Maximum) level. The level will fall with accumulated mileage. This is a normal condition associated with the wear of 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 or capacities" in section 8.)

Never mix different types of fluid.

In the event the brake system requires frequent additions of fluid, the vehicle should be inspected by an authorized Kia dealer.

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.

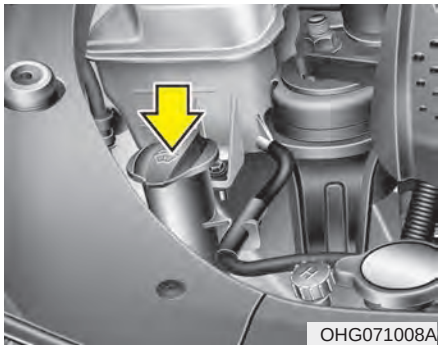
⚠ CAUTION - Brake fluid

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 disposed of properly.

WASHER FLUID

Checking the washer fluid level



Check the fluid level in the washer fluid reservoir and add fluid if necessary. Plain water may be used if washer fluid is not available. However, use washer solvent with antifreeze characteristics in cold climates to prevent freezing.

⚠ WARNING - Windshield fluid

Do not drink the windshield washer fluid. The windshield washer fluid is poisonous to humans and animals.

⚠ WARNING - Flammable fluid

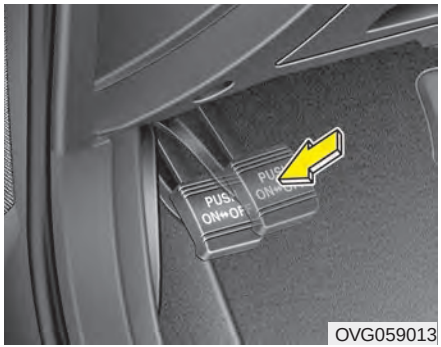
Do not allow the washer fluid to come in contact with open flames or sparks. The windshield washer fluid reservoir is flammable under certain circumstances. This can result in a fire.

⚠ WARNING - Coolant

- **Do not use radiator coolant or antifreeze in the washer fluid reservoir.**
- **Radiator coolant can severely obscure visibility when sprayed on the windshield and may cause loss of vehicle control.**

PARKING BRAKE

Checking the parking brake

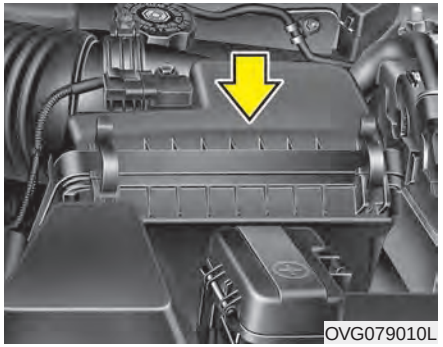


Check whether the stroke is within specification when the parking brake pedal is depressed with 44 lb (20 kg, 196 N) of force. Also, the parking brake alone should securely hold the vehicle on a fairly steep grade.

Stroke : 4~5 notch

AIR CLEANER

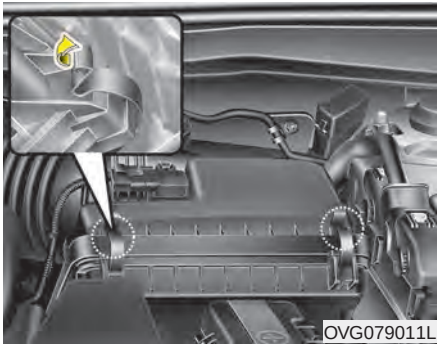
Filter replacement


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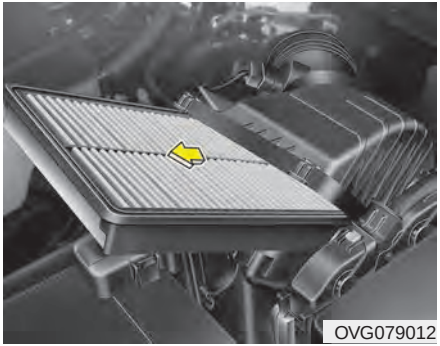
It must be replaced when necessary, and should not be washed.

You can clean the filter when inspecting the air cleaner element.

Clean the filter by using compressed air.


OVG079011L

1. Loosen the air cleaner cover attaching clips and open the cover.


OVG079012

2. Wipe the inside of the air cleaner.
3. Replace the air cleaner filter.
4. Lock the cover with the cover attaching clips.

Replace the filter according to the Maintenance Schedule.

If the vehicle is operated in extremely dusty or sandy areas, replace the element more often than the usual recommended intervals. (Refer to "Maintenance under severe usage conditions" in this section.)

⚠ CAUTION - Air filter maintenance

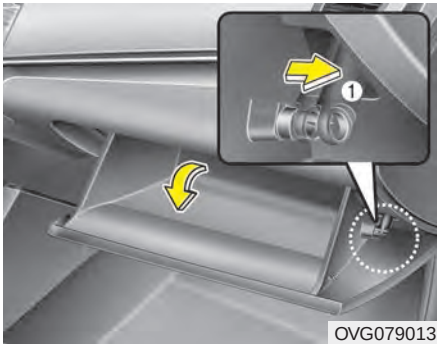
- ***Do not drive with the air cleaner removed; this will result in excessive engine wear.***
- ***When removing the air cleaner filter, be careful that dust or dirt does not enter the air intake, or damage may result.***
- ***Use a Kia genuine part. Use of nongenuine part could damage the air flow sensor.***

CLIMATE CONTROL AIR FILTER (IF EQUIPPED)

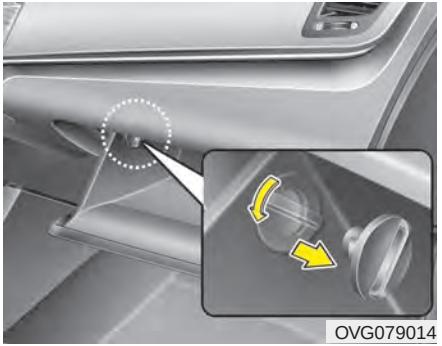
Filter inspection

The climate control air filter should be replaced according to the Maintenance Schedule. If the vehicle is operated in severely air-polluted cities or on dusty rough roads for a long period, it should be inspected more frequently and replaced earlier. When you replace the climate control air filter, replace it performing the following procedure, and be careful to avoid damaging other components.

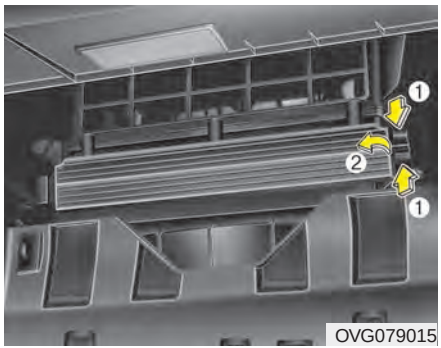
Filter replacement



1. Open the glove box.



2. Remove the climate control air filter cover while pressing the lock on the right side of the cover.



OVG079015

3. Push the right side of the climate control air filter and pull the climate control air filter out.


OVG079016

4. Replace the climate control air filter.
5. Reassemble in the reverse order of disassembly.

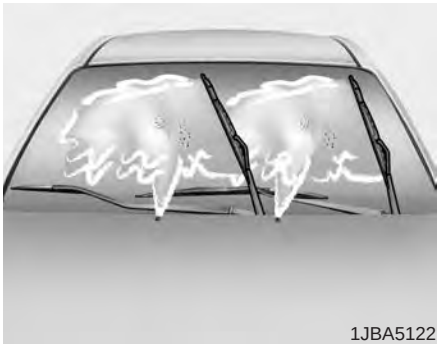
When replacing the climate control air filter install it properly. Otherwise, the system may produce noise and the effectiveness of the filter may be reduced.

✻ NOTICE

When replacing the climate control air filter install it properly. Otherwise, the system may produce noise and the effectiveness of the filter may be reduced.

WIPER BLADES

Blade inspection


1JBA5122

Commercial hot waxes applied by automatic car washes have been known to make the windshield difficult to clean.

Contamination of either the windshield or the wiper blades with foreign matter can reduce the effectiveness of the windshield wipers. Common sources of contamination are insects, tree sap, and hot wax treatments used by some commercial car washes. If the blades are not wiping properly, clean both the window and the blades with a good cleaner or mild detergent, and rinse thoroughly with clean water.

⚠ CAUTION - Wiper blades

To prevent damage to the wiper blades, do not use gasoline, kerosene, paint thinner, or other solvents on or near them.

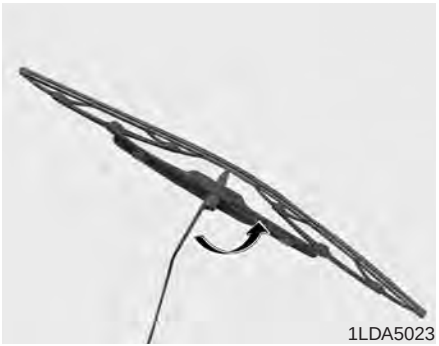
Blade replacement

When the wipers no longer clean adequately, the blades may be worn or cracked, and require replacement.

To prevent damage to the wiper arms or other components, do not attempt to move the wipers manually.

The use of a non-specified wiper blade could result in wiper malfunction and failure.

Front windshield wiper blade

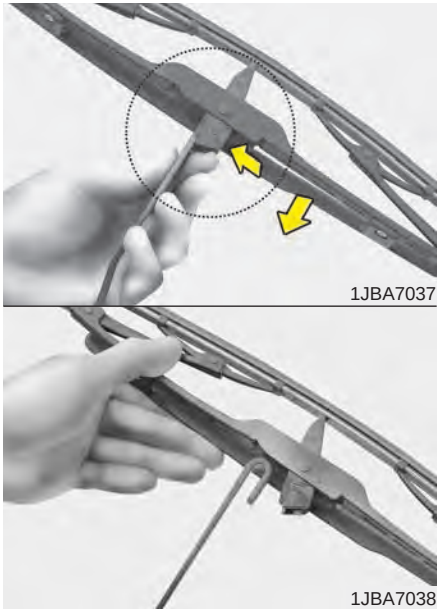


Type A

⚠ CAUTION - Wiper arms

Do not allow the wiper arm to fall against the windshield, since it may chip or crack the windshield.

1. Raise the wiper arm and turn the wiper blade assembly to expose the plastic locking clip.



2. Compress the clip and slide the blade assembly downward.
3. Lift it off the arm.
4. Install the blade assembly in the reverse order of removal.

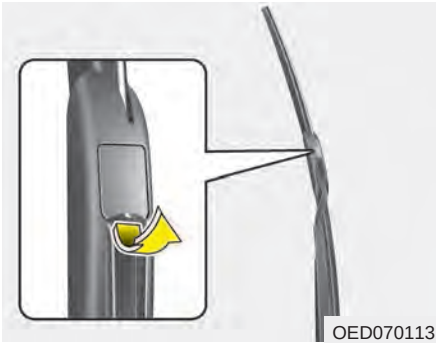


Type B

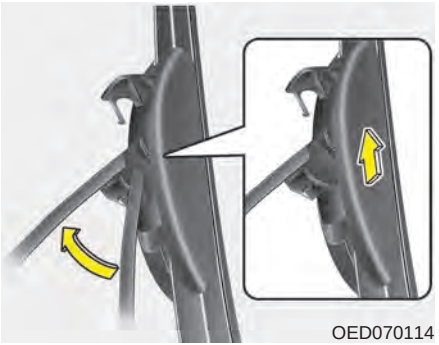
1. Raise the wiper arm and turn the wiper blade assembly to expose the plastic locking clip.

✻ NOTICE

Do not allow the wiper arm to fall against the windshield


OED070113

2. Open the cover of the blade.
3. Compress the clip behind the wiper arm and lift it off the arm.


OED070114

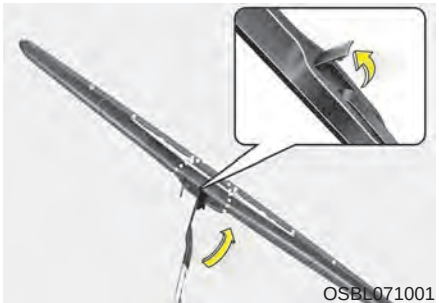
4. Install the blade assembly until it clicks into place
5. Close the cover of blade.
6. Return the wiper arm to the proper position.

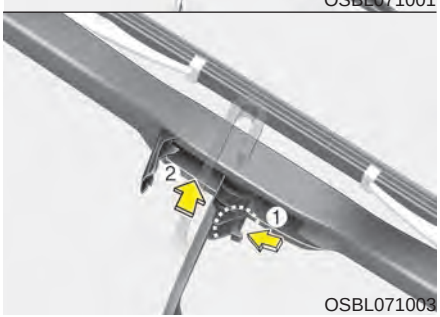

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Type C

1. Raise the wiper arm.

> ⚠ **CAUTION - Wiper arms**
>
> ***Do not allow the wiper arm to fall against the windshield, since it may chip or crack the windscreen.***


OSBL071001



OSBL071003

2. Turn the wiper blade clip. Then lift up the blade clip.
3. Push the clip (1) and push up the wiper arm (2).



OSBL071002

4. Push down the wiper arm (3) and install the new blade assembly in the reverse order of removal.
5. Return the wiper arm on the windshield.

BATTERY

For best battery service


OVG079017L

- 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.

⚠ WARNING - Risk of explosion

Keep lit cigarettes and all other flames or sparks away from the battery.

The battery contains hydrogen -- a highly combustible gas which will explode if it comes in contact with a flame or spark.

⚠ WARNING - Sulfuric acid in batteries

Keep batteries out of the reach of children because batteries contain highly corrosive SULFURIC ACID and electrolytes. Do not allow battery acid to contact your skin, eyes, clothing or paint finish.

Wear eye protection when charging or working near a battery. Always provide ventilation when working in an enclosed space.



Always read the following instructions carefully when handling a battery.



If any electrolyte gets into your eyes, flush your eyes with clean water for at least 15 minutes and get immediate medical attention.

If electrolyte gets on your skin, thoroughly wash the contacted area. If you feel pain or burning sensation, get medical attention immediately.



An inappropriately disposed battery can be harmful to the environment and human health. Dispose the battery according to your local law(s) or regulation.



The battery contains lead. Do not dispose of it after use. Please return the battery to an authorized Kia dealer to be recycled.

⚠ WARNING - Recharging battery

Never attempt to recharge the battery when the battery cables are connected.

When the vehicle remains unused for a long time while tempertures are low, disconnect the battery and keep it indasrs.

⚠ WARNING - California proposition 65

Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer, birth defects and reproductive harm.

Batteries also contain other chemicals known to the State of California to cause cancer.

Wash hands after handling.

⚠ WARNING - Risk of electrocution

Never touch the electrical ignition system while the vehicle is running. This system works with high voltage which can "zap" you.

If you connect unauthorized electronic devices to the battery, the battery may be discharged. Never use unauthorized devices.

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.

When recharging the battery, observe the following precautions:

- The battery must be removed from the vehicle and placed in an area with good ventilation.
- Watch the battery during charging, and stop or reduce the charging rate if the battery cells begin gassing (boiling) violently or if the temperature of the electrolyte of any cell exceeds 120°F (49°C).
- Wear eye protection when checking the battery during charging.
- Disconnect the battery charger in the following order.
  1. Turn off the battery charger main switch.
  2. Unhook the negative clamp from the negative battery terminal.
  3. Unhook the positive clamp from the positive battery terminal.
- Before performing maintenance or recharging the battery, turn off all accessories and stop the engine.
- The negative battery cable must be removed first and installed last when the battery is disconnected.

Reset items

Items should be reset after the battery has been discharged or the battery has been disconnected.

- Auto up/down window (See section 4)
- Sunroof (See section 4)
- Trip computer (See section 4)
- Climate control system (See section 4)
- Clock (See section 4)
- Audio (See section 4)

TIRES AND WHEELS

Tire care

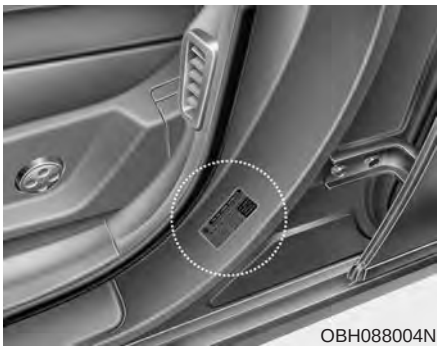
For proper maintenance, safety, and maximum fuel economy, you must always maintain recommended tire inflation pressures and stay within the load limits and weight distribution recommended for your vehicle.

Recommended cold tire inflation pressures

All tire pressures (including the spare) should be checked when the tires are cold. “Cold Tires” means the vehicle has not been driven for at least three hours or driven less than one mile (1.6 km).

Recommended pressures must be maintained for the best ride, vehicle handling, and minimum tire wear.

For recommended inflation pressure, refer to “Tire and wheels” in section 8.



OBH088004N

All specifications (sizes and pressures) can be found on a label attached to the driver’s side center pillar.

⚠ WARNING - Tire underinflation

Inflate your tires consistent with the instructions provided in this manual. Severe underinflation (10 psi (70 kPa) or more) can lead to severe heat build-up, causing blowouts, tread separation and other tire failures that can result in the loss of vehicle control. This risk is much higher on hot days and when driving for long periods at high speeds.

- Underinflation also results in excessive wear, poor handling and reduced fuel economy. Wheel deformation also is possible. Keep your tire pressures at the proper levels. If a tire frequently needs refilling, have it checked by an authorized Kia dealer.

- Overinflation produces a harsh ride, excessive wear at the center of the tire tread, and a greater possibility of damage from road hazards.
- Warm tires normally exceed recommended cold tire pressures by 4 to 6 psi (28 to 41 kPa). Do not release air from warm tires to adjust the pressure or the tires will be underinflated.
- Be sure to reinstall the tire inflation valve caps. Without the valve cap, dirt or moisture could get into the valve core and cause air leakage. If a valve cap is missing, install a new one as soon as possible.

⚠ WARNING - Tire Inflation

Overinflation or underinflation can reduce tire life, adversely affect vehicle handling, and lead to sudden tire failure. This could result in loss of vehicle control and potential injury.

Always observe the following:

- Check tire pressure when the tires are cold. (After vehicle has been parked for at least three hours or hasn't been driven more than one mile (1.6 km) since startup.)
- Check the pressure of your spare tire each time you check the pressure of other tires.
- Never overload your vehicle. Be careful not to overload a vehicle luggage rack if your vehicle is equipped with one.
- Worn, old tires can cause accidents. If your tread is badly worn, or if your tires have been damaged, replace them.

Checking tire inflation pressure

Check your tires once a month or more.

Also, check the tire pressure of the spare tire.

How to check

Use a good quality gauge to check tire pressure. You cannot tell if your tires are properly inflated simply by looking at them. Radial tires may look properly inflated even when they're underinflated.

Check the tire's inflation pressure when the tires are cold. - "Cold" means your vehicle has been sitting for at least three hours or driven no more than 1 mile (1.6 km).

Remove the valve cap from the tire valve stem. Press the tire gauge firmly onto the valve to get a pressure measurement. If the cold tire inflation pressure matches the recommended pressure on the tire and loading information label, no further adjustment is necessary. If the pressure is low, add air until you reach the recommended amount.

If you overfill the tire, release air by pushing on the metal stem in the center of the tire valve. Recheck the tire pressure with the tire gauge. Be sure to put the valve caps back on the valve stems. They help prevent leaks by keeping out dirt and moisture.

- Inspect your tires frequently for proper inflation as well as wear and damage. Always use a tire pressure gauge.
- Tires with too much or too little pressure wear unevenly causing poor handling, loss of vehicle control, and sudden tire failure leading to accidents, injuries, and even death. The recommended cold tire pressure for your vehicle can be found in this manual and on the tire label located on the driver's side center pillar.
- Remember to check the pressure of your spare tire. Kia recommends that you check the spare every time you check the pressure of the other tires on your vehicle.

Tire rotation

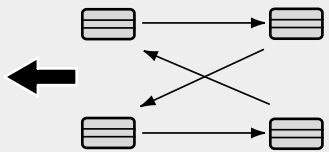
To equalize tread wear, it is recommended that the tires be rotated every 7,500 miles (12,000 km) or sooner if irregular wear develops.

During rotation, check the tires for correct balance.

When rotating tires, check for uneven wear and damage. Abnormal wear is usually caused by incorrect tire pressure, improper wheel alignment, out-of-balance wheels, severe braking or severe cornering. Look for bumps or bulges in the tread or side of tire. Replace the tire if you find either of these conditions. Replace the tire if fabric or cord is visible. After rotation, be sure to bring the front and rear tire pressures to specification and check lug nut tightness.

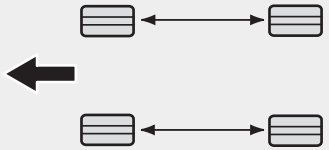
Refer to “Tire and wheels” in section 8.

Without a spare tire



S2BLA790A

Directional tires (if equipped)



CBGQ0707A

Disc brake pads should be inspected for wear whenever tires are rotated.

✻ NOTICE

Rotate radial tires that have an asymmetric tread pattern only from front to rear and not from right to left.

⚠ WARNING - Mixing tire types

Do not mix bias ply and radial ply tires under any circumstances. This may cause unusual handling characteristics.

Wheel alignment and tire balance

The wheels on your vehicle were aligned and balanced carefully at the factory to give you the longest tire life and best overall performance.

In most cases, you will not need to have your wheels aligned again. However, if you notice unusual tire wear or your vehicle pulling one way or the other, the alignment may need to be reset.

If you notice your vehicle vibrating when driving on a smooth road, your wheels may need to be rebalanced.

⚠ CAUTION - Wheel weight

Improper wheel weights can damage your vehicle's aluminum wheels. Use only approved wheel weights.

Tire replacement



If the tire is worn evenly, a tread wear indicator will appear as a solid band across the tread. This shows there is less than 1/16 inch (1.6 mm) 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.

The ABS works by comparing the speed of the wheels. The tire size affects wheel speed. When replacing tires, all 4 tires must use the same size originally supplied with the vehicle. Using tires of a different size can cause the ABS (Anti-lock Brake System) and ESC (Electronic Stability Control) to work irregularly.

✻ NOTICE

We recommend that when replacing tires, use the same originally supplied with the vehicles. If not, that affects driving performance.

Compact spare tire replacement

A compact spare tire has a shorter tread life than a regular size tire. Replace it when you can see the tread wear indicator bars on the tire. The replacement compact spare tire should be the same size and design tire as the one provided with your new vehicle and should be mounted on the same compact spare tire wheel. The compact spare tire is not designed to be mounted on a regular size wheel, and the compact spare tire wheel is not designed for mounting a regular size tire.

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.

A wheel that is not the correct size may adversely affect wheel and bearing life, braking and stopping abilities, handling characteristics, ground clearance, body-to-tire clearance, snow chain clearance, speedometer and odometer calibration, headlight aim and bumper height.

⚠ CAUTION - Wheel

Wheels that do not meet Kia's specifications may fit poorly and result in damage to the vehicle or unusual handling and poor vehicle control.

Tire traction

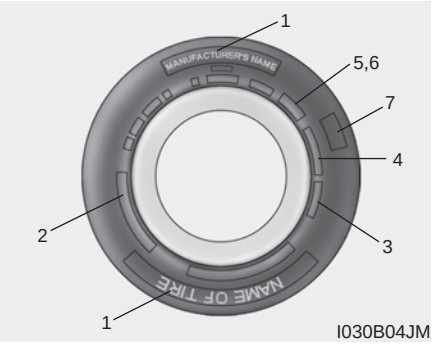
Tire traction can be reduced if you drive on worn tires, tires that are improperly inflated or on slippery road surfaces. Tires should be replaced when tread wear indicators appear. Slow down whenever there is rain, snow or ice on the road to reduce the possibility of losing control of the vehicle.

Tire maintenance

In addition to proper inflation, correct wheel alignment helps to decrease tire wear. If you find a tire is worn unevenly, have your dealer check the wheel alignment.

When you have new tires installed, make sure they are balanced. This will increase vehicle ride comfort and tire life. Additionally, a tire should always be rebalanced if it is removed from the wheel.

Tire sidewall labeling



This information identifies and describes the fundamental characteristics of the tire and also provides the tire identification number (TIN) for safety standard certification. The TIN can be used to identify the tire in case of a recall.

1. Manufacturer or brand name

Manufacturer or Brand name is shown.

2. Tire size designation

A tire's sidewall is marked with a tire size designation. You will need this information when selecting replacement tires for your vehicle. The following explains what the letters and numbers in the tire size designation mean.

Example tire size designation:

(These numbers are provided as an example only; your tire size designator could vary depending on your vehicle.)

P235/65R17 108T

P - Applicable vehicle type (tires marked with the prefix "P" are intended for use on passenger vehicles or light trucks; however, not all tires have this marking).

235 - Tire width in millimeters.

65 - Aspect ratio. The tire's section height as a percentage of its width.

R - Tire construction code (Radial).

17 - Rim diameter in inches.

108 - Load Index, a numerical code associated with the maximum load the tire can carry.

T - Speed Rating Symbol. See the speed rating chart in this section for additional information.

Wheel size designation

Wheels are also marked with important information that you need if you ever have to replace one. The following explains what the letters and numbers in the wheel size designation mean.

Example wheel size designation:

7.0JX17

7.0 - Rim width in inches.

J - Rim contour designation.

17 - Rim diameter in inches.

Tire speed ratings

The chart below lists many of the different speed ratings currently being used for passenger vehicle tires. The speed rating is part of the tire size designation on the sidewall of the tire. This symbol corresponds to that tire's designed maximum safe operating speed.

Speed Rating Symbol	Maximum Speed
S	112 mph (180 km/h)
T	118 mph (190 km/h)
H	130 mph (210 km/h)
V	149 mph (240 km/h)
Z	Above 149 mph (240 km/h)

3. Checking tire life (TIN : Tire Identification Number)

Any tires that are over 6 years old, based on the manufacturing date, (including the spare tire) should be replaced by new ones. You can find the manufacturing date on the tire sidewall (possibly on the inside of the wheel), displaying the DOT Code. The DOT Code is a series of numbers on a tire consisting of numbers and English letters. The manufacturing date is designated by the last four digits (characters) of the DOT code.

DOT : XXXX XXXX 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 1615 represents that the tire was produced in the 16th week of 2015.

⚠ WARNING - Tire age

Replace tires within the recommended time frame. Failure to replace tires as recommended can result in sudden tire failure, which could lead to a loss of control and an accident.

4. Tire ply composition and material

The number of layers or plies of rubber-coated fabric in the tire. Tire manufacturers also must indicate the materials in the tire, which include steel, nylon, polyester, and others. The letter "R" means radial ply construction; the letter "D" means diagonal or bias ply construction; and the letter "B" means belted-bias ply construction.

5. Maximum permissible inflation pressure

This number is the greatest amount of air pressure that should be put in the tire. Do not exceed the maximum permissible inflation pressure. Refer to the Tire and Loading Information label for recommended inflation pressure.

6. Maximum load rating

This number indicates the maximum load in kilograms and pounds that can be carried by the tire. When replacing the tires on the vehicle, always use a tire that has the same load rating as the factory installed tire.

7. Uniform tire quality grading

Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width.

For example:

TREADWEAR 200

TRACTION AA

TEMPERATURE A

Tread wear

The tread wear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one-and-a-half times (1½) as well on the government course as a tire graded 100.

The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

Regardless of the remaining tread, we recommend that tires be replaced after approximately six (6) years of normal service. Heat caused by hot climates or frequent high loading conditions can accelerate the aging process.

These grades are molded on the side-walls of passenger vehicle tires. The tires available as standard or optional equipment on your vehicles may vary with respect to grade.

Traction - AA, A, B & C

The traction grades, from highest to lowest, are AA, A, B and C. Those grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance. The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning, or peak traction characteristics.

Temperature -A, B & C

The temperature grades are A (the highest), B and C representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger vehicle tires must meet under the Federal Motor Vehicle Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

Tire terminology and definitions

Air Pressure: The amount of air inside the tire pressing outward on the tire. Air pressure is expressed in pounds per square inch (psi) or kilopascal (kPa).

Accessory Weight: This means the combined weight of optional accessories. Some examples of optional accessories are, automatic transaxle, power seats, and air conditioning.

Aspect Ratio: The relationship of a tire's height to its width.

Belt: A rubber coated layer of cords that is located between the plies and the tread. Cords may be made from steel or other reinforcing materials.

Bead: The tire bead contains steel wires wrapped by steel cords that hold the tire onto the rim.

Bias Ply Tire: A pneumatic tire in which the plies are laid at alternate angles less than 90 degrees to the centerline of the tread.

Cold Tire Pressure: The amount of air pressure in a tire, measured in pounds per square inch (psi) or kilopascals (kPa) before a tire has built up heat from driving.

Curb Weight: This means the weight of a motor vehicle with standard and optional equipment including the maximum capacity of fuel, oil and coolant, but without passengers and cargo.

DOT Markings: A code molded into the sidewall of a tire signifying that the tire is in compliance with the U.S. Department of Transportation motor vehicle safety standards. The DOT code includes the Tire Identification Number (TIN), an alphanumeric designator which can also identify the tire manufacturer, production plant, brand and date of production.

GVWR: Gross Vehicle Weight Rating

GAWR FRT: Gross Axle Weight Rating for the Front Axle.

GAWR RR: Gross Axle Weight Rating for the Rear axle.

Intended Outboard Sidewall: The side of an asymmetrical tire, that must always face outward when mounted on a vehicle.

Kilopascal (kPa): The metric unit for air pressure.

Light truck (LT) tire: A tire designated by its manufacturer as primarily intended for use on lightweight trucks or multipurpose passenger vehicles.

Load ratings: The maximum load that a tire is rated to carry for a given inflation pressure.

Load Index: An assigned number ranging from 1 to 279 that corresponds to the load carrying capacity of a tire.

Maximum Inflation Pressure: The maximum air pressure to which a cold tire may be inflated. The maximum air pressure is molded onto the sidewall.

Maximum Load Rating: The load rating for a tire at the maximum permissible inflation pressure for that tire.

Maximum Loaded Vehicle Weight: The sum of curb weight; accessory weight; vehicle capacity weight; and production options weight.

Normal Occupant Weight: The number of occupants a vehicle is designed to seat multiplied by 150 pounds (68 kg).

Occupant Distribution: Designated seating positions.

Outward Facing Sidewall: The side of a asymmetrical tire that has a particular side that faces outward when mounted on a vehicle. The outward facing sidewall bears white lettering or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same moldings on the inner facing sidewall.

Passenger (P-Metric) Tire: A tire used on passenger cars and some light duty trucks and multipurpose vehicles.

Ply: A layer of rubber-coated parallel cords.

Pneumatic tire: A mechanical device made of rubber, chemicals, fabric and steel or other materials, that, when mounted on an automotive wheel, provides the traction and contains the gas or fluid that sustains the load.

Production options weight: The combined weight of installed regular production options weighing over 5 lb.(2.3 kg) in excess of the standard items which they replace, not previously considered in curb weight or accessory weight, including heavy duty brakes, ride levelers, roof rack, heavy duty battery, and special trim.

Recommended Inflation Pressure: Vehicle manufacturer's recommended tire inflation pressure and shown on the tire placard.

Radial Ply Tire: A pneumatic tire in which the ply cords that extend to the beads are laid at 90 degrees to the centerline of the tread.

Rim: A metal support for a tire and upon which the tire beads are seated.

Sidewall: The portion of a tire between the tread and the bead.

Speed Rating: An alphanumeric code assigned to a tire indicating the maximum speed at which a tire can operate.

Traction: The friction between the tire and the road surface. The amount of grip provided.

Tread: The portion of a tire that comes into contact with the road.

Treadwear Indicators: Narrow bands, sometimes called "wear bars," that show across the tread of a tire when only 2/32 inch of tread remains.

UTQGS: Uniform Tire Quality Grading Standards, a tire information system that provides consumers with ratings for a tire's traction, temperature and treadwear. Ratings are determined by tire manufacturers using government testing procedures. The ratings are molded into the sidewall of the tire.

Vehicle Capacity Weight: The number of designated seating positions multiplied by 150 lbs. (68 kg) plus the rated cargo and luggage load.

Vehicle Maximum Load on the Tire: Load on an individual tire due to curb and accessory weight plus maximum occupant and cargo weight.

Vehicle Normal Load on the Tire: Load on an individual tire that is determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight and driving by 2.

Vehicle Placard: A label permanently attached to a vehicle showing the original equipment tire size and recommended inflation pressure.

All season tires

Kia specifies all season tires on some models to provide good performance for use all year round, including snowy and icy road conditions. All season tires are identified by ALL SEASON and/or M+S (Mud and Snow) on the tire sidewall. Snow tires have better snow traction than all season tires and may be more appropriate in some areas.

Summer tires

Kia specifies summer tires on some models to provide superior performance on dry roads. Summer tire performance is substantially reduced in snow and ice. Summer tires do not have the tire traction rating M+S (Mud and Snow) on the tire side wall. if you plan to operate your vehicle in snowy or icy conditions, Kia recommends the use of snow tires or all season tires on all four wheels.

Snow tires

If you equip your vehicle with snow tires, they should be the same size and have the same load capacity as the original tires. Snow tires should be installed on all four wheels; otherwise, poor handling may result.

Snow tires should carry 4 psi (28 kPa) more air pressure than the pressure recommended for the standard tires on the tire label on the driver's side of the center pillar, or up to the maximum pressure shown on the tire sidewall, whichever is less.

Do not drive faster than 75 mph (120 km/h) when your vehicle is equipped with snow tires.

Tire chains

Tire chains, if necessary, should be installed on the front wheels.

Be sure that the chains are installed in accordance with the manufacturer's instructions.

To minimize tire and chain wear, do not continue to use tire chains when they are no longer needed.

- When driving on roads covered with snow or ice, drive at less than 20 mph (30 km/h).
- Use the SAE “S” class or wire chains.
- If you hear noise caused by chains contacting the body, retighten the chain to avoid contact with the vehicle body.
- To prevent body damage, retighten the chains after driving 0.3~0.6 miles (0.5~1.0 km).
- Do not use tire chains on vehicles equipped with aluminum wheels. In unavoidable circumstance, use a wire type chain.
- Use wire chains less than 0.59 inches (15 mm) to prevent damage to the chain’s connection.

Radial-ply tires

Radial-ply tires provide improved tread life, road hazard resistance and smoother high speed ride. The radial-ply tires used on this vehicle are of belted construction, and are selected to complement the ride and handling characteristics of your vehicle. Radial-ply tires have the same load carrying capacity, as bias-ply or bias belted tires of the same size, and use the same recommended inflation pressure. Mixing of radial-ply tires with bias-ply or bias belted tires is not recommended. Any combinations of radial-ply and bias-ply or bias belted tires when used on the same vehicle will seriously deteriorate vehicle handling. The best rule to follow is: Identical radial-ply tires should always be used as a set of four.

Longer wearing tires can be more susceptible to irregular tread wear. It is very important to follow the tire rotation interval shown in this section to achieve the tread life potential of these tires. Cuts and punctures in radial-ply tires are repairable only in the tread area, because of sidewall flexing. Consult your tire dealer for radial-ply tire repairs.

Low aspect ratio tire (if equipped)

Low aspect ratio tires, whose aspect ratio is lower than 50, are provided for sporty looks.

Because the low aspect ratio tires are optimized for handling and braking, it may be more uncomfortable to ride in and there is more noise compare with normal tires.

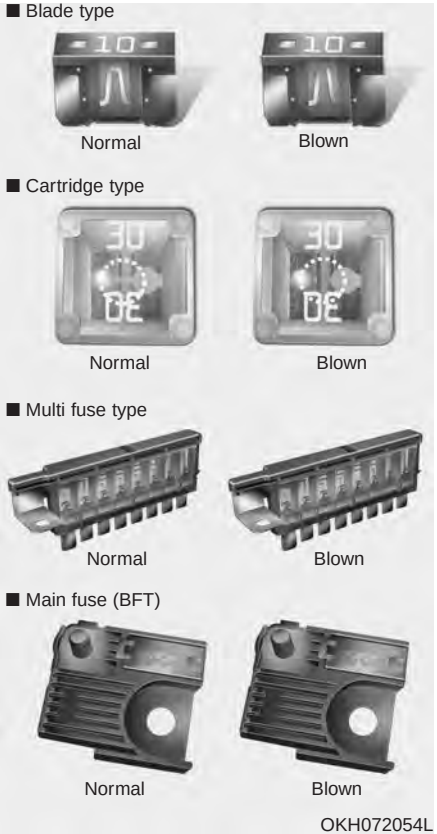
⚠ CAUTION

Because the sidewall of the low aspect ratio tire is shorter than the normal, the wheel and tire of the low aspect ratio tire is easier to be damaged. So, follow the instructions below.

- ***When driving on a rough road or off road, drive cautiously because tires and wheels may be damaged. And after driving, inspect tires and wheels.***
- ***When passing over a pothole, speed bump, manhole, or curb stone, drive slowly so that the tires and wheels are not damaged.***
- ***If the tire is impacted, we recommend that you inspect the tire condition or contact an authorized Kia dealer.***
- ***To prevent damage to the tire, inspect the tire condition and pressure every 3,000km.***

- It is not easy to recognize the tire damage with your own eyes. But if there is the slightest hint of tire damage, even though you cannot see the tire damage with your own eyes, have the tire checked or replaced because the tire damage may cause air leakage from the tire.
- If the tire is damaged by driving on a rough road, off road, pothole, manhole, or curb stone, it will not be covered by the warranty.
- You can find out the tire information on the tire sidewall.

FUSES



A vehicle's electrical system is protected from electrical overload damage by fuses.

This vehicle has 2 fuse panels, one located in the driver's side panel bolster, 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 melt.

If the electrical system does not work, first check the driver's side fuse panel.

Before replacing a blown fuse, disconnect the negative battery cable.

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.

Three kinds of fuses are used: blade type for lower amperage rating, cartridge type, and multi fuse for higher amperage ratings.

⚠ WARNING - Fuse replacement

- **Never replace a fuse with anything but another fuse of the same rating.**
- **A higher capacity fuse could cause damage and possibly a fire.**
- **Never install a wire or aluminum foil instead of the proper fuse - even as a temporary repair. It may cause extensive wiring damage and a possible fire.**

- Do not arbitrarily modify or add-on electric wiring to the vehicle.

⚠ CAUTION

Do not use a screwdriver or any other metal object to remove fuses because it may cause a short circuit and damage the system.

✻ NOTICE

The actual fuse/relay panel label may differ depending on equipment/options.

⚠ WARNING - Electrical Fire

Always ensure replacement fuses and relays are securely fastened when installed. Failure to do so can result in a vehicle fire.

⚠ CAUTION

- ***When replacing a blown fuse or relay, make sure the new fuse or relay fits tightly into the clips. Failure to tightly install the fuse or relay may cause damage to the wiring and electric systems.***
- ***Do not remove fuses, relays and terminals fastened with bolts or nuts. The fuses, relays and terminals may not be fastened correctly which may cause vehicle damage.***

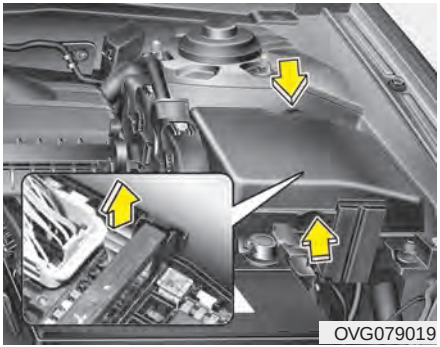
⚠ CAUTION - Fuse Replacement

Do not input any other objects except fuses or relays into fuse/relay terminals such as a driver or wiring. It may cause contact failure and system malfunction.

Instrument panel fuse replacement



1. Turn the ignition switch and all other switches off.
2. Open the fuse panel cover.



3. Pull the suspected fuse straight out. Use the fuse puller provided in the engine compartment fuse panel.
4. Check the removed fuse; replace it if it is blown.
5. 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 cigarette lighter fuse.

If the headlights or other electrical components do not work and the fuses are OK, check the fuse panel in the engine compartment. If a fuse is blown, it must be replaced.

Fuse switch



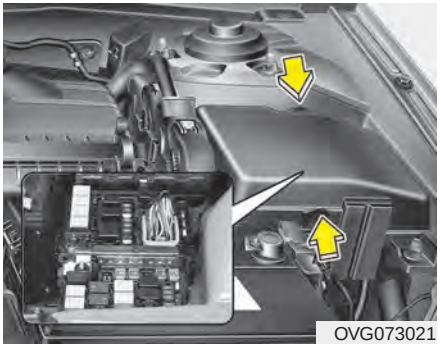
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Always, put the fuse switch at the ON position.

If you move the switch to the OFF position, some items such as audio and digital clock must be reset and transmitter (or smart key) may not work properly.

Always place the fuse switch in the ON position while driving the vehicle.

Engine compartment fuse replacement

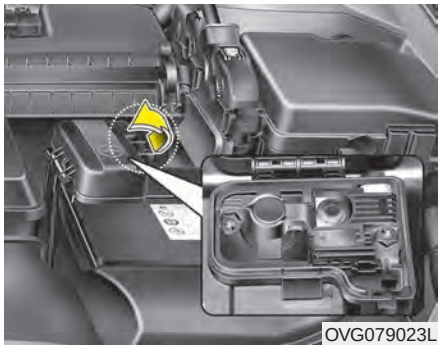

OVG073021

1. Turn the ignition switch and all other switches off.
2. Remove the fuse panel cover by pressing the tab and pulling the cover up. When the blade type fuse is disconnected, remove it by using the clip designed for changing fuses located in the engine room fuse box. Upon removal, securely insert reserve fuse of equal quantity.
3. Check the removed fuse; replace it if it is blown. To remove or insert the fuse, use the fuse puller in the engine compartment fuse panel.
4. Push in a new fuse of the same rating, and make sure it fits tightly in the clips. If it fits loosely, consult an authorized Kia dealer.

⚠ CAUTION - Fuse panel cover

After checking the fuse panel in the engine compartment, securely install the fuse panel cover. If not, electrical failures may occur from water contact.

Main fuse


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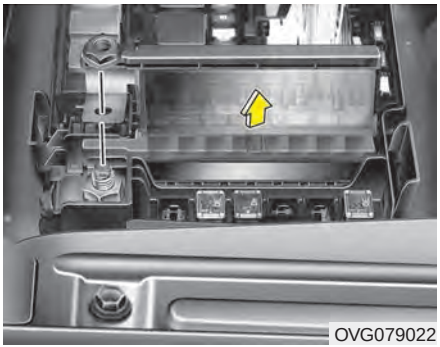
If the main fuse is blown, it must be removed as follows:

1. Turn off the engine.
2. Disconnect the negative battery cable.
3. Remove the nuts shown in the picture above.
4. Replace the fuse with a new one of the same rating.
5. Reinstall in the reverse order of removal.

⚠ CAUTION

Visually inspect the battery cap to ensure it is securely closed. If the battery cap is not securely closed, moisture may enter the system and damage the electrical components.

Multi fuse


OVG079022

If the multi fuse is blown, it must be removed as follows:

1. Remove the fuse panel in the engine compartment.
2. Remove the nuts 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.

✻ NOTICE

If the multi fuse is blown, consult an authorized Kia dealer.

Fuse/relay panel description

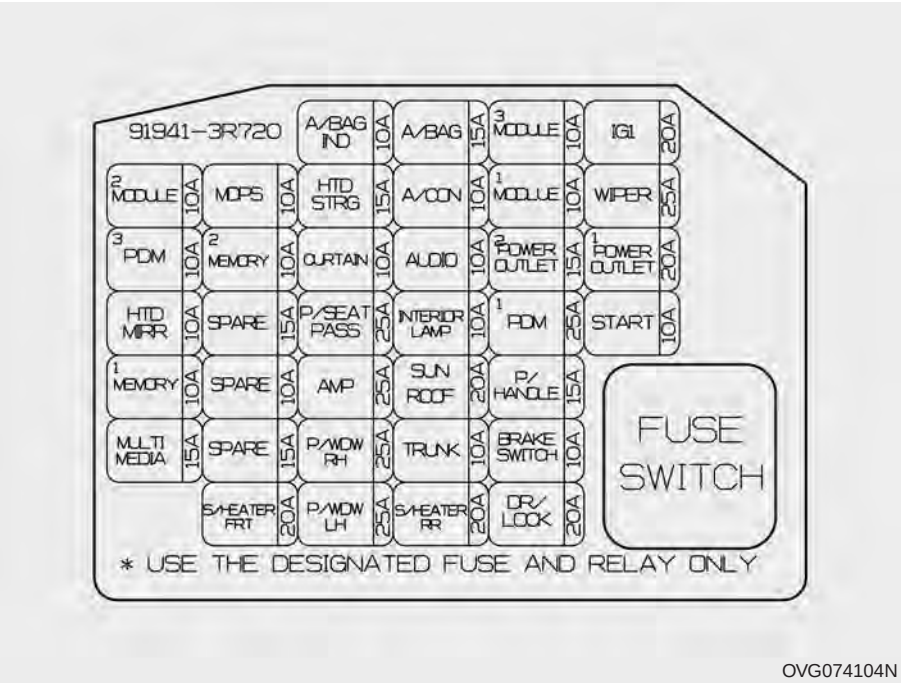
Inside the fuse/relay panel covers, you can find the fuse/relay label describing fuse/relay name and capacity.

Instrument fuse panel

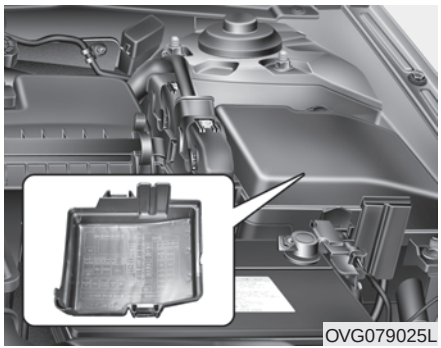

OVG073024

✻ NOTICE

Not all fuse panel descriptions in this manual may be applicable to your vehicle. It is accurate at the time of printing. When you inspect the fuse panel in your vehicle, refer to the fuse panel label.



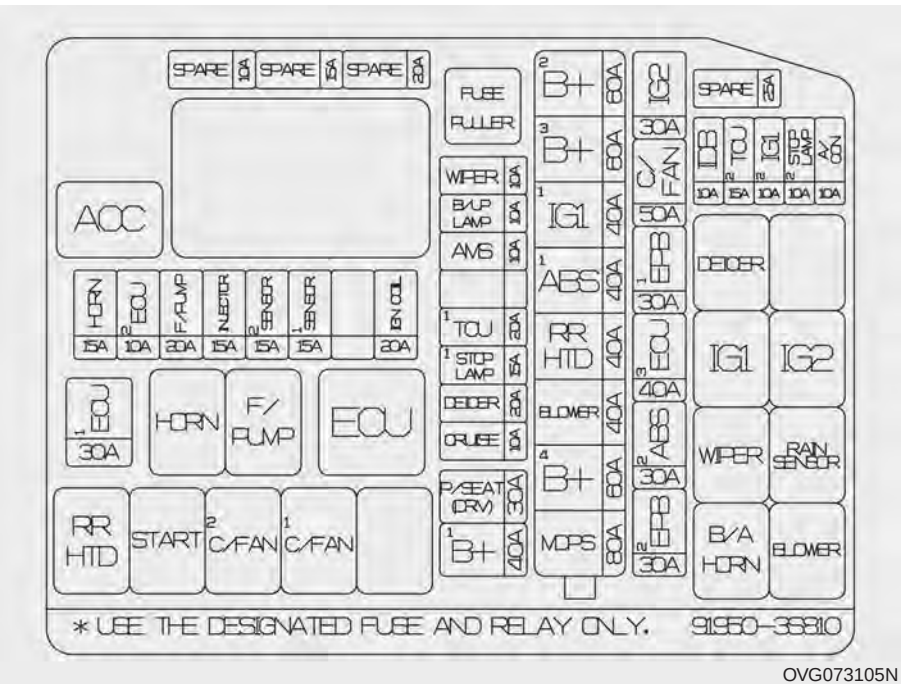
OVG074104N



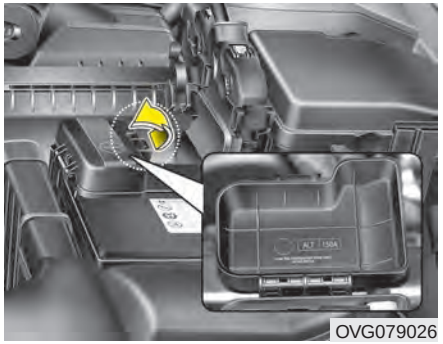
Engine compartment fuse panel

✻ NOTICE

Not all fuse panel descriptions in this manual may be applicable to your vehicle. It is accurate at the time of printing. When you inspect the fuse panel in your vehicle, refer to the fuse panel label.



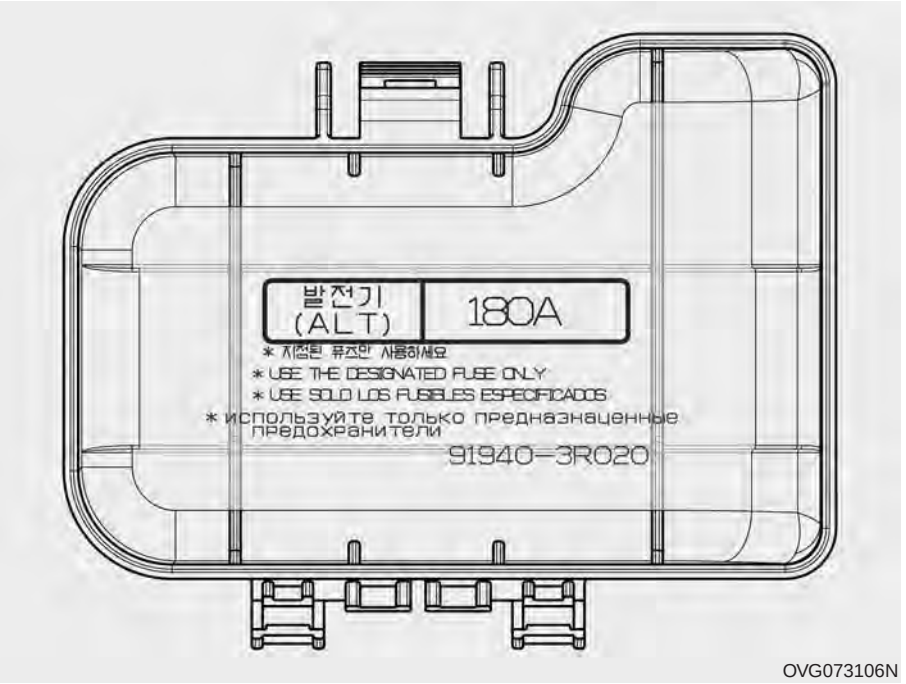
OVG073105N


OVG079026

Engine room
(Battery terminal cover)

✻ NOTICE

Not all fuse panel descriptions in this manual may be applicable to your vehicle. It is accurate at the time of printing. When you inspect the fuse panel in your vehicle, refer to the fuse panel label.



OVG073106N

Instrument panel (Driver's side fuse panel)

NO.	Fuse rating	Description	Protected component
MF1	10A	MODULE 2	Tilt & Telescopic Module, Instrument cluster, Driver/Passenger Seat Warmer Module, Rear Seat Warmer Module LH/RH, IMS Control Module, Rear Parking Assist Sensor LH/RH, Rear Parking Assist Sensor LH/RH(Center), Driver/Passenger Door Module, LDWS Camera Module, Electro Chromic Mirror, Room Lamp, MTS Module, Driver/Passenger CCS Control Module, Head Lamp Leveling Device Switch, Auto Head Lamp Leveling Device Module, Front Parking Assist Sensor LH/RH, Head Lamp Leveling Device Actuator LH/RH, Console SW, BSD (Blind Spot Detection) Unit LH/RH Rear P/WDW HEATED Module
MF2	10A	PDM 3	PDM, Smart Key Control Module
MF3	10A	HTD MRR	Driver Power Outside Mirror, Passenger Power Outside Mirror, A/C Control Module
MF4	10A	MEMORY 1	Auto Light & Photo Sensor, Data Link Connector, Driver/Passenger Foot Lamp, Instrument Cluster, Digital Clock, Rear Curtain Module, A/C Control Module, Room Lamp, Driver/Passenger Door Module
MF5	15A	MULTI MEDIA	MTS Module, Audio, A/V & Navigation Head Unit, Audio Monitor
MF6	10A	MDPS	MDPS_SIG
MF7	10A	MEMORY 2	RF Receiver
MF8	15A	SPARE	SPARE
MF9	10A	SPARE	SPARE
MF10	15A	SPARE	SPARE

NO.	Fuse rating	Description	Protected component
MF11	20A	S/HEATER FRT	Driver/Passenger Seat Warmer Module, Driver/Passenger CCS Control Module
MF12	10A	A/BAG IND	Instrument Cluster
MF13	15A	HTD STRG	Steering Wheel Heater
MF14	10A	CURTAIN	Rear Curtain Module, Driver/Passenger Door Module
MF15	25A	P/SEAT PASS	Passenger Manual Switch
MF16	25A	AMP	AMP
MF17	25A	P/WDW RH	Passenger Door Module, Rear Power Window Switch RH
MF18	25A	P/WDW LH	Driver Safety Power Window Switch, Rear Power Window Switch LH
MF19	15A	A/BAG	SRS Control Module
MF20	10A	A/CON	Ionizer, Ionizer (IND.), A/C Control Module, E/R Fuse & Relay Box (RLY. 14)
MF21	10A	AUDIO	Smart Key Control Module, Rear Audio Switch, Amp, Audio Monitor, Overhead Console Lamp Switch, PDM, MTS Module, Audio, A/V & Navigation Head Unit, digital clock
MF22	10A	INTERIOR LAMP	Garnish Lamp LH/RH/Conter, Room Lamp, Driver/Passenger Vanity Lamp Switch, Overhead Console Lamp Switch, Rear Door Mood Lamp LH/RH, Driver/Passenger Door Mood Lamp, Driver/Passenger Door Scuff Lamp, Driver/Passenger Door Lamp, Trunk Room Lamp
MF23	20A	SUNROOF	Panorama Sunroof

NO.	Fuse rating	Description	Protected component
MF24	10A	TRUNK	Fuel Filler Door Switch, Trunk Lid Relay
MF25	20A	S/HEATER RR	Rear Seat Warmer Module LH/RH
MF26	10A	MODULE 3	ESP Control Module, ABS Control Module, Electric Parking Brake Module, Steering Angle Sensor, ESP Off Switch, Console Switch
MF27	10A	MODULE 1	PDM, ICM Relay Box (Head Lamp Washer Relay), Panorama Sunroof, Rear Curtain Module, Driver Active Seat Module, Rain Sensor
MF28	15A	POWER OUTLET	Console Power Outlet
MF29	25A	PDM	Smart Key Control Module, Fob Holder
MF30	15A	P/HANDLE	Key Solenoid, Tilt & Telescopic Module, Sport Mode Switch
MF31	10A	BRAKE SWITCH	PDM, Start Stop Button Switch
MF32	20A	DR/LOCK	Driver Door Module
MF33	20A	IG1	E/R Fuse & Relay Box (F12 15A, F11 10A, F10 10A)
MF34	25A	WIPER	E/R Fuse & Relay Box (RLY. 11, RLY.12), Front Wiper Motor, Multifunction Switch
MF35	20A	C/Lighter	Front Cigarette Lighter
MF36	10A	START	Transaxle Range Switch, PCM

Engine compartment main fuse panel

	NO.	Fuse rating	Description	Protected component
MULTI FUSE	F1	60A	[2]B+	IPM (F7, F8, F9, F10, F11, IPS1, IPS2, IPS3, IPS5, IPS7)
	F2	60A	[3]B+	IPM (F14, F15, F17, F18, F25)
	F3	40A	IG1	W/O Smart Key : Ignition Switch With Smart Key : E/R Fuse & Relay Box (RLY. 1, RLY. 9)
	F4	40A	[1]ABS	ABS Control,ESP Control
	F5	40A	RR HTD	E/R Fuse & Relay Box (RLY. 2)
	F6	40A	BLOWER	E/R Fuse & Relay Box (RLY. 14)
	F7	60A	[4]B+	IPM (F4, F5, IPS 0, IPS 4, IPS 6)
	F8	80A	MDPS	MDPS_PWR
FUSE (E/R Fuse & Relay Box)	F9	10A	A/CON	A/C Control Module
	F10	10A	STOP LAMP	E/R Fuse & Relay Box (RLY. 8), Stop Lamp Switch, Multipurpose Check Connector
	F11	10A	IG1	Alternator, PCM
	F12	15A	[T2]TCU	Transaxle Range Switch
	F13	10A	IDB	IDB_LAG

	NO.	Fuse rating	Description	Protected component
FUSE (E/R Fuse & Relay Box)	F14	30A	IG2	W/O Smart Key : E/R Fuse & Relay Box (RLY. 3), Ignition Switch With Smart Key : E/R Fuse & Relay Box (RLY. 3, RLY. 10)
	F15	50A	C/FAN	E/R Fuse & Relay Box (RLY. 4, RLY. 5)
	F16	30A	[1]EPB	Electric Parking Brake Module
	F17	40A	[3]ECU	EMS Box (F35, F36, F37, F38)
	F18	30A	[2]ABS	ABS Control, ESP Control
	F19	30A	[2]EPB	Electric Parking Brake Module
	F20	10A	WIPER	IPM (IPS Control Module)
	F21	10A	B/UP LAMP	MTS Module, A/V & Navigation Head Unit, Rear Curtain Module, Electro Chromic Mirror, Rear Combination Lamp(In) LH/RH
	F22	10A	AMS	Not Used
	F23	20A	-	ICM Relay Box (Head Lamp Washer Realy)
	F24	20A	[1]TCU	PCM
	F25	15A	[1]STOP LAMP	E/R Fuse & Relay Box (RLY. 12), Stop Lamp Switch, Stop Lamp Signal Relay
	F26	20A	DEICER	E/R Fuse & Relay Box (RLY. 7)

	NO.	Fuse rating	Description	Protected component
FUSE (E/R Fuse & Relay Box)	F27	10A	CRUISE	ASCC (Advanced Smart Cruise Control) Radar
	F28	30A	P/SEAT (DRV)	IMS Control Module, Driver Lumbar Support Switch, Driver Cushion Extension Switch, Driver Manual Switch
	F29	40A	[1]B+	IPM (F29, F30, F31, F32, IPS 11, Leak Current Autocut Device)
FUSE (EMS Box)	F30	20A	IGN COIL	G4KE : Ignition Coil #1, #2, #3, #4, Condenser G6DC : Ignition Coil #1, #2, #3, #4, #5, #6, Condenser #1, #2
	F31	15A	[1]SENSOR	G4KE : Immobilizer Module, Camshaft Position Sensor #1, #2, Variable Intake Manifold Valve, Crankshaft Position Sensor, Oil Control Valve #1, #2, Canister Purge Control Solenoid Valve
				G6DC : PCM, Immobilizer Module, Oxygen Sensor #1, #2, #3, #4
	F32	15A	[2]SENSOR	G4KE : E/R Fuse & Relay Box (RLY. 5),Oxygen Sensor (Up, Down)
				G6DC : Variable Intake Manifold Valve #1, #2, PCM, E/R Fuse & Relay Box (RLY. 5), Oil Control Valve #1, #2,#3, #4, Canister Purge Control Solenoid Valve,
	F33	15A	INJECTOR	G4KE : Injector #1, #2, #3, #4 G6DC : Injector #1, #2, #3, #4, #5, #6, PCM
	F34	20A	F/FUMP	E/R Fuse & Relay Box (RLY. 16)
	F35	10A	[2]ECU	PCM
	F36	15A	HORN	E/R Fuse & Relay Box (RLY. 13), EMS Box (RLY. 15)
	F37	30A	[1]ECU	EMS Box (RLY. 17)

LIGHT BULBS

⚠ WARNING - Working on the lights

Prior to working on the light, firmly apply the parking brake, ensure that the ignition switch is turned to the LOCK position and turn off the lights to avoid sudden movement of the vehicle and burning your fingers or receiving an electric shock.

Use only the bulbs of the specified wattage.

⚠ CAUTION - Light replacement

Be sure to replace the burned-out bulb with one of the same wattage rating. Otherwise, it may cause damage to the fuse or electric wiring system.

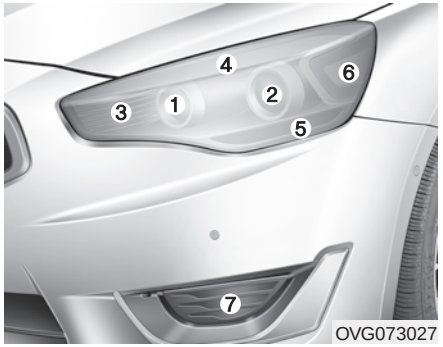
If you don't have necessary tools, the correct bulbs and the expertise, consult an authorized Kia dealer. In many cases, it is difficult to replace vehicle light bulbs because other parts of the vehicle must be removed before you can get to the bulb. This is especially true if you have to remove the headlight assembly to get to the bulb(s).

Removing/installing the headlight assembly can result in damage to the vehicle.

✻ NOTICE

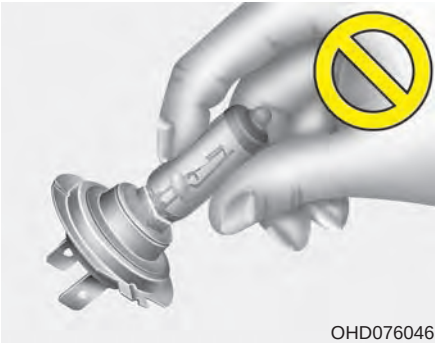
After driving in heavy rain or washing, headlight and taillight lenses could appear frosty. This condition is caused by the temperature difference between the lamp inside and outside. This is similar to the condensation on your windows inside your vehicle during rain and doesn't indicate a problem with your vehicle. If the water leaks into the lamp bulb circuitry, have the vehicle checked by an authorized Kia dealer.

Headlight, position light, turn signal light, front fog light bulb replacement



OVG073027

(1) Headlight (High)
(2) Headlight (Low)
(3) Front turn signal light
(4) Position light
(5) Daytime running light (LED) (if equipped)
(6) Side marker
(7) Front fog light


OHD076046

⚠ WARNING - Halogen bulbs

Handle halogen bulbs with care. 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.

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.

⚠ 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.

Headlight (HID type)

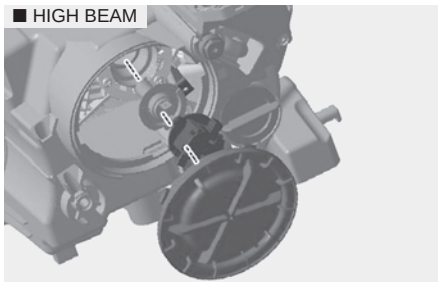
If the light bulb does not operate, have the vehicle checked by an authorized Kia dealer.

✻ NOTICE

HID lamps have superior performance vs. halogen bulbs. HID lamps are estimated by the manufacturer to last twice as long or longer than halogen bulbs depending on their frequency of use. They will probably require replacement at some point in the life of the vehicle. Cycling the headlamps on and off more than typical use will shorten HID lamps life. HID lamps do not fail in the same manner as halogen incandescent lamps. If a headlamp goes out after a period of operation but will immediately relight when the headlamp switch is cycled it is likely the HID lamp needs to be replaced. HID lighting components are more complex than conventional halogen bulbs thus have higher replacement cost.

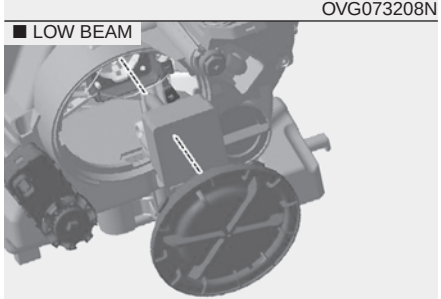
Headlamp (bulb type) -high/low

■ HIGH BEAM



OVG073208N

■ LOW BEAM



OVG073209N

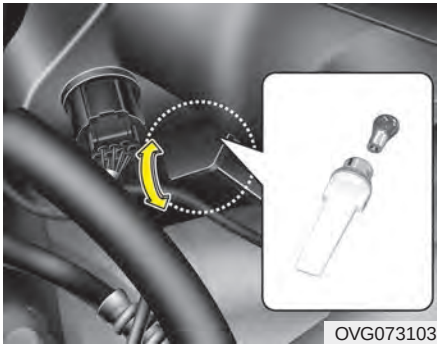
1. Open the hood.
2. Remove the headlamp bulb cover by turning it counterclockwise.
3. Disconnect the headlamp bulb socket-connector.

4. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
5. Remove the bulb by pulling it out.
6. Inset a new bulb by inserting it into the socket.
7. Install the socket in the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.
8. Install the headlamp bulb cover by turning it clockwise.

✻ NOTICE

If the headlight aiming adjustment is necessary after the headlight assembly is reinstalled, consult an authorized Kia dealer.

Turn signal light



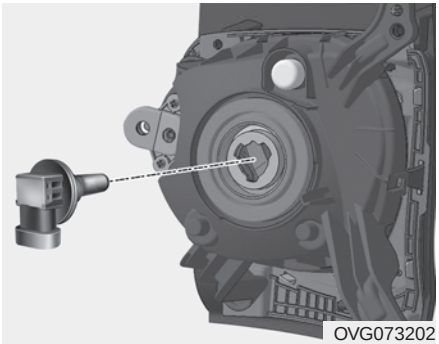
1. Turn off the engine.
2. Open the hood.
3. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
4. Remove the bulb from the socket by pressing it in and rotating it counterclockwise until the tabs on the bulb align with the slots in the socket. Pull the bulb out of the socket

5. Insert a new bulb by inserting it into the socket and rotating it until it locks into place.
6. Install the socket in the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.

Front fog light
(Bulb type, if equipped)


OJD072050

1. Pull the wheel guard down by rotating the screws.
2. Reach your hand into the back of the front bumper.
3. Disconnect the power connector from the socket.


OVG073202

4. Remove the bulb-socket from the housing by turning the socket counter clockwise until the tabs on the socket align with the slots on the housing.
5. Install the new bulb-socket into the housing by aligning the tabs on the socket with the slots in the housing. Push the socket into the housing and turn the socket clockwise.
6. Connect the power connector to the socket.

Position and front fog light (LED type)

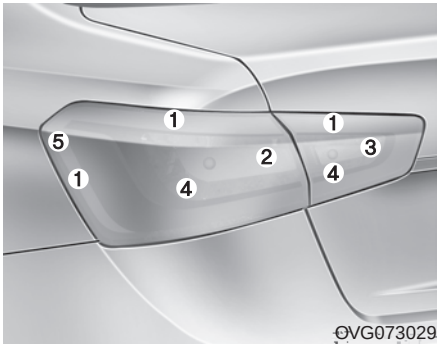
If the light bulb does not operate, have the vehicle checked by an authorized Kia dealer.

Side repeater light bulb replacement



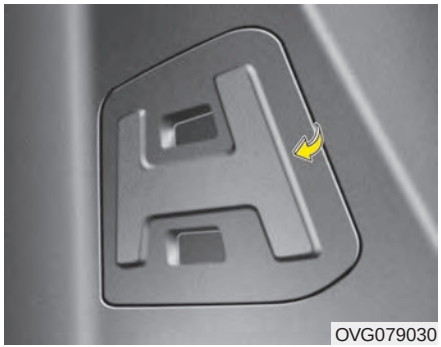
If the light bulb does not operate, have the vehicle checked by an authorized Kia dealer.

Rear combination light bulb replacement



(1) Stop and tail light (LED type)
(2) Rear turn signal light
(3) Back-up light
(4) Stop light (LED type)
(5) Side marker

Rear turn signal light

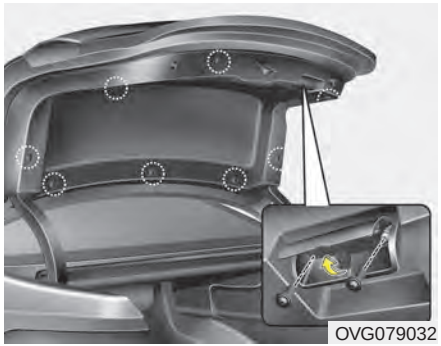


1. Open the trunk lid.
2. Open the service cover.

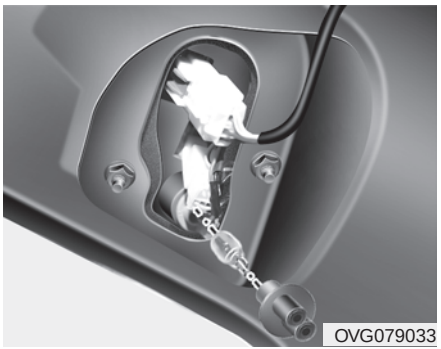


3. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
4. Remove the bulb from the socket by pressing it in and rotating it counterclockwise until the tabs on the bulb align with the slots in the socket. Pull the bulb out of the socket.
5. Insert a new bulb by inserting it into the socket and rotating it until it locks into place.
6. Install the socket in the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.
7. Install the service cover by putting it into the service hole.

Backup light



1. Open the trunk.
2. Loosen the retaining screw of the trunk lid cover and then remove the cover.
3. Remove the socket from the assembly by turning the socket counter clockwise until the tabs on the socket align with the slots on the assembly.

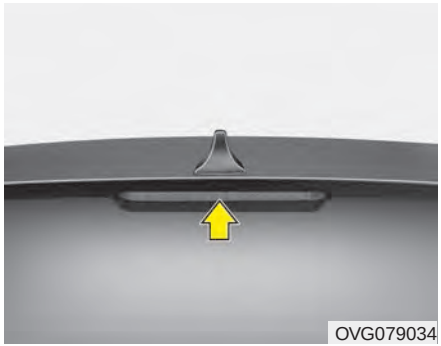


4. Remove the bulb by pulling it straight out.
5. Insert a new bulb by inserting it into the socket and rotating it until it locks into place.
6. Install the socket into the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.
7. Reinstall the trunk lid cover by pushing in the screw.

Rear fog light, Stop and tail light (LED type)

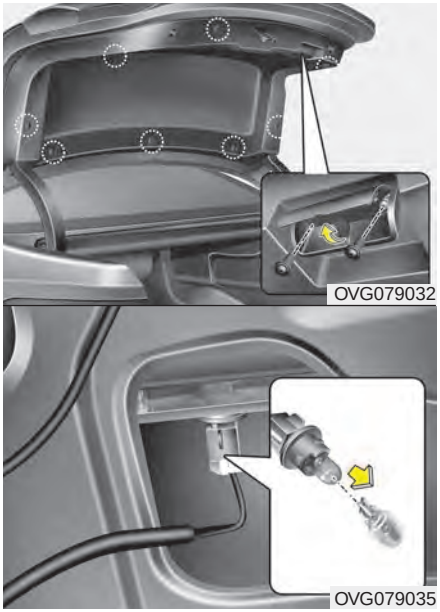
If the light bulb does not operate, have the vehicle checked by an authorized Kia dealer.

High mounted stop light replacement



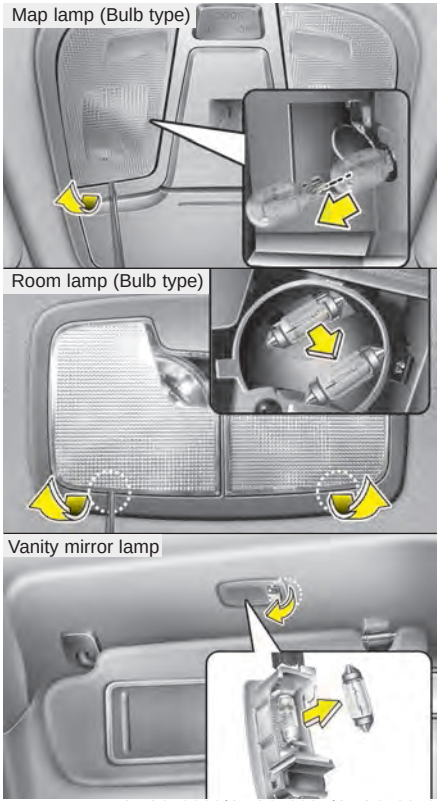
If the light bulb does not operate, have the vehicle checked by an authorized Kia dealer. A skilled technician should check or repair the high mounted stop light, for it may affect the performance of the curtain airbags or damage related interior parts of the vehicle.

License plate light bulb replacement

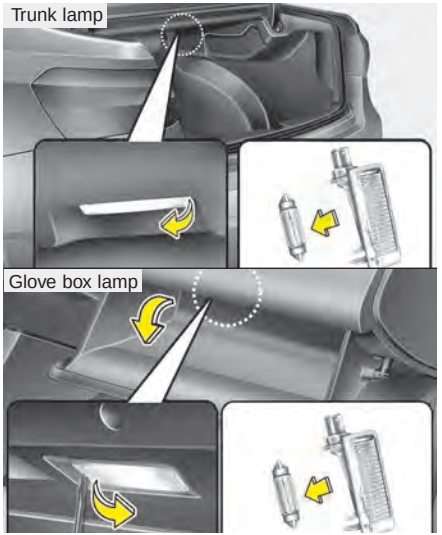


1. Open the trunk.
2. Loosen the retaining screws of the trunk lid cover and then remove the cover.
3. Remove the bulb by pulling it straight out.
4. Install a new bulb.
5. Reinstall the trunk lid cover by pushing in the screw.

Interior light bulb replacement



OVG079036/OVG079037/OVG079040



OVG079038/OVG079039

Map lamp (Bulb type), Room lamp (Bulb type), Vanity mirror lamp, Trunk lamp and Glove box lamp

1. Using a flat-blade screwdriver, gently pry the lens from the interior light housing.
2. Remove the bulb by pulling it straight out.

⚠ WARNING - Interior lights

Prior to working on the Interior Lights, ensure that the "OFF" button is depressed to avoid burning your fingers or receiving an electric shock.

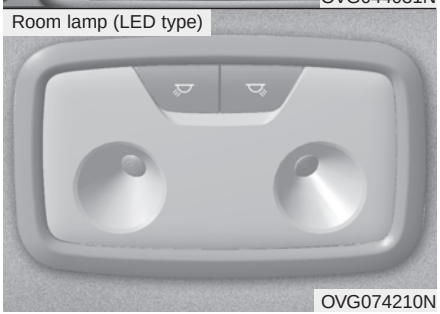
3. Install a new bulb in the socket.
4. Align the lens tabs with the interior light housing notches and snap the lens into place.
5. If the map lamp and room lamp does not operate, have you checked by an authorized Kia dealer.

⚠ CAUTION

Use care not to dirty or damage lens, lens tab, and plastic housings.

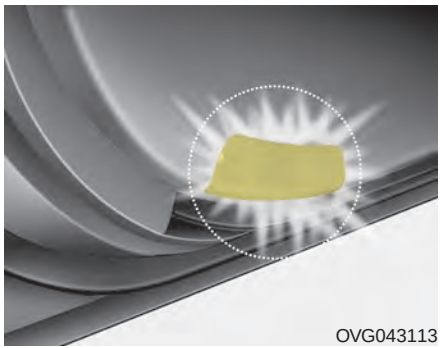
Map lamp and Room lamp (LED type)





If the light bulb does not operate, have the vehicle checked by an authorized Kia dealer.

Door courtesy lamp bulb replacement



If the light bulb does not operate, have the vehicle checked by an authorized Kia dealer.

APPEARANCE CARE

Exterior care

Exterior general caution

It is very important to follow the label directions when using any chemical cleaner or polish. Read all warning and caution statements that appear on the label.

Finish maintenance

Washing

To help protect your vehicle's finish from rust and deterioration, wash it thoroughly and frequently at least once a month with lukewarm or cold water.

If you use your vehicle for off-road driving, you should wash it after each off-road trip. Pay special attention to the removal of any accumulation of salt, dirt, mud, and other foreign materials. Make sure the drain holes in the lower edges of the doors and rocker panels are kept clear and clean.

Insects, tar, tree sap, bird droppings, industrial pollution and similar deposits can damage your vehicle's finish if not removed immediately.

Even prompt washing with plain water may not completely remove all these deposits. A mild soap, safe for use on painted surfaces, may be used.

After washing, rinse the vehicle thoroughly with lukewarm or cold water. Do not allow soap to dry on the finish.

⚠ CAUTION

- ***Do not use strong soap, chemical detergents or hot water, and do not wash the vehicle in direct sunlight or when the body of the vehicle is warm.***
- ***Be careful when washing the side windows of your vehicle. Especailly, with high-pressure water. Water may leak through the windows and wet the interior.***
- ***To prevent damage to the plastic parts and lamps, do not clean with chemical solvents or strong detergents.***

High-pressure washing

- When using high-pressure washers, make sure to maintain sufficient distance from the vehicle.

  Insufficient clearance or excessive pressure can lead to component damage or water penetration.
- Do not spray the camera, sensors or its surrounding area directly with a high pressure washer. Shock applied from high pressure water may cause the device to not operate normally.
- Do not bring the nozzle tip close to boots (rubber or plastic covers) or connectors as they may be damaged if they come into contact with high pressure water.


OJB037800

⚠ CAUTION - Wetting engine

- ***Water washing in the engine compartment including high pressure water washing may cause the failure of electrical circuits located in the engine compartment.***
- ***Never allow water or other liquids to come in contact with electrical/electronic components inside the vehicle as this may damage them.***

Waxing

Wax the vehicle when water will no longer bead on the paint.

Always wash and dry the vehicle before waxing. Use a good quality liquid or paste wax, and follow the manufacturer's instructions. Wax all metal trim to protect it and to maintain its luster.

Removing oil, tar, and similar materials with a spot remover will usually strip the wax from the finish. Be sure to re-wax these areas even if the rest of the vehicle does not yet need waxing.

⚠ CAUTION - Drying vehicle

- ***Wiping dust or dirt off the body with a dry cloth will scratch the finish.***
- ***Do not use steel wool, abrasive cleaners, acid detergents or strong detergents containing high alkaline or caustic agents on chrome-plated or anodized aluminum parts. This may result in damage to the protective coating and cause discoloration or paint deterioration.***

Finish damage repair

Deep scratches or stone chips in the painted surface must be repaired promptly. Exposed metal will quickly rust and may develop into a major repair expense.

✻ NOTICE

If your vehicle is damaged and requires any metal repair or replacement, be sure the body shop applies anti-corrosion materials to the parts repaired or replaced.

Bright-metal maintenance

- To remove road tar and insects, use a tar remover, not a scraper or other sharp object.
- To protect the surfaces of bright-metal parts from corrosion, apply a coating of wax or chrome preservative and rub to a high luster.
- During winter weather or in coastal areas, cover the bright metal parts with a heavier coating of wax or preservative. If necessary, coat the parts with non-corrosive petroleum jelly or other protective compound.

Underbody maintenance

Corrosive materials used for ice and snow removal and dust control may collect on the underbody. If these materials are not removed, accelerated rusting can occur on underbody parts such as the fuel lines, frame, floor pan and exhaust system, even though they have been treated with rust protection.

Thoroughly flush the vehicle underbody and wheel openings with lukewarm or cold water once a month, after off-road driving and at the end of each winter. Pay special attention to these areas because it is difficult to see all the mud and dirt. It will do more harm than good to wet down the road grime without removing it. The lower edges of the doors, rocker panels, and frame members have drain holes that should not 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.
- Clean the wheel when it has cooled.
- Use only a mild soap or neutral detergent, and rinse thoroughly with water. Also, be sure to clean the wheels after driving on salted roads. This helps prevent corrosion.
- Avoid washing the wheels with highspeed vehicle wash brushes.
- Do not use any alkaline or acid detergents It may damage and corrode the aluminum wheels coated with a clear protective finish.

Corrosion protection

Protecting your vehicle from corrosion

By using the most advanced design and construction practices to combat corrosion, we produce vehicles of the highest quality. However, this is only part of the job. To achieve the long-term corrosion resistance your vehicle can deliver, the owner's cooperation and assistance is also required.

Common causes of corrosion

The most common causes of corrosion on your vehicle are:

- Road salt, dirt and moisture that is allowed to accumulate underneath the vehicle.
- Removal of paint or protective coatings by stones, gravel, abrasion or minor scrapes and dents which leave unprotected metal exposed to corrosion.

High-corrosion areas

If you live in an area where your vehicle is regularly exposed to corrosive materials, corrosion protection is particularly important. Some of the common causes of accelerated corrosion are road salts, dust control chemicals, ocean air and industrial pollution.

Moisture breeds corrosion

Moisture creates the conditions in which corrosion is most likely to occur. For example, corrosion is accelerated by high humidity, particularly when temperatures are just above freezing. In such conditions, the corrosive material is kept in contact with the vehicle's surface by moisture that evaporates slowly.

Mud is particularly corrosive because it dries slowly and holds moisture in contact with the vehicle. Although the mud appears to be dry, it can still retain the moisture and promote corrosion.

High temperatures can also accelerate corrosion of parts that are not properly ventilated so the moisture can be dispersed. For all these reasons, it is particularly important to keep your vehicle clean and free of mud or accumulations of other materials. This applies not only to the visible surfaces but particularly to the underside of the vehicle.

To help prevent corrosion

You can help prevent corrosion from beginning by observing the following:

Keep your vehicle clean

The best way to prevent corrosion is to keep your vehicle clean and free of corrosive materials. Attention to the underside of the vehicle is particularly important.

- If you live in a high-corrosion area where road salts are used, near the ocean, areas with industrial pollution, acid rain, etc., you should take extra care to prevent corrosion. In winter, hose off the underside of your vehicle at least once a month and be sure to clean the underside thoroughly when winter is over.
- When cleaning underneath the vehicle, give particular attention to the components under the fenders and other areas that are hidden from view. Do a thorough job; just dampening the accumulated mud rather than washing it away will accelerate corrosion rather than prevent it. Water under high pressure and steam are particularly effective in removing accumulated mud and corrosive materials.

- When cleaning lower door panels, rocker panels and frame members, be sure that drain holes are kept open so that moisture can escape and not be trapped inside to accelerate corrosion.

Keep your garage dry

Don't park your vehicle in a damp, poorly ventilated garage. This creates a favorable environment for corrosion. This is particularly true if you wash your vehicle in the garage or drive it into the garage when it is still wet or covered with snow, ice or mud. Even a heated garage can contribute to corrosion unless it is well ventilated so moisture is dispersed.

Keep paint and trim in good condition

Scratches or chips in the finish should be covered with "touch-up" paint as soon as possible to reduce the possibility of corrosion. If bare metal is showing through, the attention of a qualified body and paint shop is recommended.

Bird droppings : Bird droppings are highly corrosive and may damage painted surfaces in just a few hours. Always remove bird droppings as soon as possible.

Don't neglect the interior

Moisture can collect under the floor mats and carpeting and cause corrosion. Check under the mats periodically to be sure the carpeting is dry. Use particular care if you carry fertilizers, cleaning materials or chemicals in the vehicle.

These should be carried only in proper containers and any spills or leaks should be cleaned up, flushed with clean water and thoroughly dried.

Interior care

Interior general precautions

Prevent chemicals such as perfume, cosmetic oil, sun cream, hand cleaner, and air freshener from contacting the interior parts because they may cause damage or discoloration. If they do contact the interior parts, wipe them off immediately. If necessary, use a vinyl cleaner, see product instructions for correct usage.

⚠ CAUTION - Electrical components

Never allow water or other liquids to come in contact with electrical/ electronic components inside the vehicle as this may damage them.

⚠ CAUTION - Leather

When cleaning leather products (steering wheel, seats etc.), use neutral detergents or low alcohol content solutions. If you use high alcohol content solutions or acid/alkaline detergents, the color of the leather may fade or the surface may get stripped off.

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.

Using anything but recommended cleaners and procedures may affect the fabric's appearance and fire-resistant properties.

Cleaning the lap/shoulder belt webbing

Clean the belt webbing with any mild soap solution recommended for cleaning upholstery or carpet. Follow the instructions provided with the soap. Do not bleach or re-dye the webbing because this may weaken it.

Cleaning the interior window glass

If the interior glass surfaces of the vehicle become fogged (that is, covered with an oily, greasy or waxy film), they should be cleaned with a glass cleaner. Follow the directions on the glass cleaner container.

⚠ CAUTION - Rear window

Do not scrape or scratch the inside of the rear window. This may result in damage of the rear window defroster grid.

EMISSION CONTROL SYSTEM

The emission control system of your vehicle is covered by a written limited warranty. Please see the warranty information contained in the Warranty & Maintenance booklet in your vehicle.

Your vehicle is equipped with an emission control system to meet all applicable emission regulations.

There are three emission control systems, as follows.

(1) Crankcase emission control system
(2) Evaporative emission control system
(3) Exhaust emission control system

In order to assure the proper function of the emission control systems, it is recommended that you have your vehicle inspected and maintained by an authorized Kia dealer in accordance with the maintenance schedule in this manual.

Caution for the Inspection and Maintenance Test (With Electronic Stability Control (ESC) system)

- **To prevent the vehicle from misfiring during dynamometer testing, turn the Electronic Stability Control (ESC) system off by pressing the ESC switch.**
- **After dynamometer testing is completed, turn the ESC system back on by pressing the ESC switch again.**

1. Crankcase emission control system

The positive crankcase ventilation system is employed to prevent air pollution caused by blow-by gases being emitted from the crankcase. This system supplies fresh filtered air to the crankcase through the air intake hose. Inside the crankcase, the fresh air mixes with blow-by gases, which then pass through the PCV valve into the induction system.

2. Evaporative emission control (including ORVR: Onboard Refueling Vapor Recovery) system

The Evaporative Emission Control System is designed to prevent fuel vapors from escaping into the atmosphere.

(The ORVR system is designed to allow the vapors from the fuel tank to be loaded into a canister while refueling at the gas station, preventing the escape of fuel vapors into the atmosphere.)

Canister

Fuel vapors generated inside the fuel tank are absorbed and stored in the onboard canister. When the engine is running, the fuel vapors absorbed in the canister are drawn into the surge tank through the purge control solenoid valve.

Purge Control Solenoid Valve (PCSV)

The purge control solenoid valve is controlled by the Engine Control Module (ECM); when the engine coolant temperature is low during idling, the PCSV closes so that evaporated fuel is not taken into the engine. After the engine warms up during ordinary driving, the PCSV opens to introduce evaporated fuel to the engine.

3. Exhaust emission control system

The Exhaust Emission Control System is a highly effective system which controls exhaust emissions while maintaining good vehicle performance.

Vehicle modifications

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

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

- If you use unauthorized electronic devices, it may cause the vehicle to operate abnormally, wire damage, battery discharge and fire. For your safety, do not use unauthorized electronic devices.

Engine exhaust gas precautions (carbon monoxide)

- Carbon monoxide can be present with other exhaust fumes. Therefore, if you smell exhaust fumes of any kind inside your vehicle, have it inspected and repaired immediately. If you ever suspect exhaust fumes are coming into your vehicle, drive it only with all the windows fully open. Have your vehicle checked and repaired immediately.

⚠ WARNING - Exhaust

Engine exhaust gases contain carbon monoxide (CO). Though colorless and odorless, it is dangerous and could be lethal if inhaled. Follow the instructions on this page to avoid CO poisoning.

⚠ CALIFORNIA PROPOSITION 65 WARNING

Engine exhaust and a wide variety of automobile components and parts, including components found in the interior furnishings in a vehicle, contain or emit chemicals known to the State of California to cause cancer and birth defects and reproductive harm. In addition, certain fluids contained in vehicles and certain products of component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- Do not operate the engine in confined or closed areas (such as garages) any more than what is necessary to move the vehicle in or out of the area.
- When the vehicle is stopped in an open area for more than a short time with the engine running, adjust the ventilation system (as needed) to draw outside air into the vehicle.
- Never sit in a parked or stopped vehicle for any extended time with the engine running.
- When the engine stalls or fails to start, excessive attempts to restart the engine may cause damage to the emission control system.

Operating precautions for catalytic converters (if equipped)

⚠ WARNING - Catalytic converter

Keep away from the catalytic converter and exhaust system while the vehicle is running or immediately thereafter. The exhaust and catalytic systems are very hot and may burn you.

⚠ WARNING - Fire

- **Do not park, idle or drive the vehicle over or near flammable objects, such as grass, vegetation, paper, leaves, etc. A hot exhaust system can ignite flammable items under your vehicle.**
- **Also, do not remove the heat sink around the exhaust system, do not seal the bottom of the vehicle or do not coat the vehicle for corrosion control. It may present a fire risk under certain conditions.**

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

Therefore, the following precautions must be observed:

- Use only UNLEADED FUEL for gasoline engines.
- Do not operate the vehicle when there are signs of engine malfunction, such as misfire or a noticeable loss of performance.
- Do not misuse or abuse the engine. Examples of misuse are coasting with the ignition off and descending steep grades in gear with the ignition off.
- Do not operate the engine at high idle speed for extended periods (5 minutes or more).
- Do not modify or tamper with any part of the engine or emission control system. All inspections and adjustments must be made by an authorized Kia dealer.
- Avoid driving with a extremely low fuel level. Running out of fuel could cause the engine to misfire, damaging the catalytic converter.

Failure to observe these precautions could result in damage to the catalytic converter and to your vehicle. Additionally, such actions could void your warranties.

CALIFORNIA PERCHLORATE NOTICE

Perchlorate Material-special handling may apply, See www.dtsc.ca.gov/hazardouswaste/ perchlorate.

Notice to California Vehicle Dismantlers:

Perchlorate containing materials, such as air bag inflators, seatbelt pretensioners and keyless remote entry batteries, must be disposed of according to Title 22 California Code of Regulations Section 67384.10 (a).

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DIMENSIONS

Item	in (mm)
Overall length	195.7 (4970)
Overall width	72.8 (1850)
Overall height	58.1 (1475)
Front tread	63.0 (1601)
Rear tread	62.9 (1600)
Wheelbase	112.0 (2845)

TIRES AND WHEELS

Item	Tire size	Wheel size	Inflation pressure psi (kPa)				Wheel lug nut torque kg•m (lb•ft, N•m)
			Normal load *1		Maximum load		
			Front	Rear	Front	Rear	
Full size tire	P245/45R18	7.5Jx18	32 (220)	32 (220)	32 (220)	32 (220)	9~11 (65~79, 88~107)
	P245/40R19	8.0Jx19	32 (220)	32 (220)	32 (220)	32 (220)	
Compact spare tire	T135/80D17	4.0Tx17	60 (420)	60 (420)	60 (420)	60 (420)	

*1: Normal load : Up to 3 persons

⚠ CAUTION

When replacing tires, use the same size originally supplied with the vehicle. Using tires of a different size can damage the related parts or make it work irregularly.

✻ NOTICE

We recommend that when replacing tires, use the same originally supplied with the vehicles. If not, that affects driving performance.

ENGINE

Item	Gasoline Lambda II 3.3L
Displacement cu. in (cc)	203.9 (3342)
Bore x Stroke in (mm)	3.62 x 3.30 (92 x 83.8)
Firing order	1-2-3-4-5-6
No. of cylinders	V-type

AIR CONDITIONING SYSTEM

Item	Weight or Volume	Classification
Refrigerant	22.93±0.88oz (650±25g)	R-134a
Compressor lubricant	100±10cc	PAG

WEIGHT/VOLUME

Item	Gasoline Lambda II 3.3L
Gross vehicle weight lbs. (kg)	4,696 (2,130)
Luggage volume cu ft (*l*)	15.9 (451)

BULB WATTAGE

Light Bulb			Wattage	Bulb type
Front	Headlights (High)		65	H9
	Headlights (Low)		55 or 35 (HID)	H7 or D1S (HID)
	Front turn signal lights		28W	PY28/8
	Position lights		LED	LED
	Side repeater lights (Outside mirror)*		LED	LED
	Front fog lights	Halogen	35	H8
		LED	LED	LED
	Daytime running lights*		LED	LED
Rear	Stop and tail lights		LED	LED
	Rear turn signal lights		27W	PY27
	Back-up lights		16	W16W
	Rear fog lights*		LED	LED
	High mounted stop light		LED	LED
	License plate lights		5W	W5W
Interior	Map lamps	Bulb	10W	W10W
		LED	LED	LED
	Room lamps	Bulb	10W	W10W
		LED	LED	LED
	Mood lamp		LED	LED
	Trunk lamp		5	FESTOON
	Glove box lamp		5	FESTOON
	Vanity mirror lamps		5	FESTOON
	Foot lamp		5	FESTOON

* : If equipped

RECOMMENDED LUBRICANTS AND CAPACITIES

To help achieve proper engine and powertrain performance and durability, use only lubricants of the proper quality. The correct lubricants also help promote engine efficiency that results in improved fuel economy.
These lubricants and fluids are recommended for use in your vehicle.

Lubricant	Volume	Classification
Engine oil *1 *2 (drain and refill) Recommends TOTAL	6.02 US qt. (5.7 *l*)	API Service SM, ILSAC GF-4 or above
Automatic transaxle fluid	8.24 US qt. (7.8 *l*)	MICHANG ATF SP-4, SK ATF SP-4 NOCA ATF SP-4, Kia genuine ATF & SP-4 or other brands meeting the above specification approved by Kia Motor Co.
Coolant	8.88 US qt. (8.4 *l*)	Mixture of antifreeze and water (Ethylene glycol base coolant for aluminum radiator)
Brake fluid	0.7~0.8 US qt. (0.7~0.8 *l*)	FMVSS116 DOT-3 or DOT-4
Fuel	18.49 US gal. (70 *l*)	Unleaded gasoline

*1 Refer to the recommended SAE viscosity numbers on the next page.

*2 Engine oils labeled Energy Conserving Oil are now available. Along with other additional benefits, they contribute to fuel economy by reducing the amount of fuel necessary to overcome engine friction. Often, these improvements are difficult to measure in everyday driving, but in a year's time, they can offer significant cost and energy savings.

*3 If the API service SM or ACEA A5 engine oil is not available in your country, you are able to use API service SL or ACEA A3.

Recommended SAE viscosity number

Always be sure to clean the area around any filler plug, drain plug, or dipstick before checking or draining any lubricant. This is especially important in dusty or sandy areas and when the vehicle is used on unpaved roads. Cleaning the plug and dipstick areas will prevent dirt and grit from entering the engine and other mechanisms that could be damaged.

Engine oil viscosity (thickness) has an effect on fuel economy and cold weather operating (engine start and engine oil flowability). Lower viscosity engine oils can provide better fuel economy and cold weather performance, however, higher viscosity engine oils are required for satisfactory lubrication in hot weather. Using oils of any viscosity other than those recommended could result in engine damage.

When choosing an oil, consider the range of temperature your vehicle will be operated in before the next oil change. Proceed to select the recommended oil viscosity from the chart.

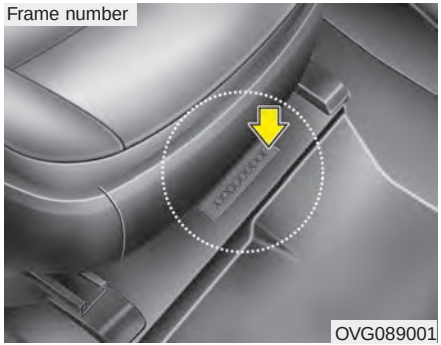
Temperature Range for SAE Viscosity Numbers

Temperature	°C	-30	-20	-10	0	10	20	30	40	50
	(°F)	-10	0	20	40	60	80	100	120	
Gasoline Engine Oil *1					10W-30					
					5W-30, 5W-40					

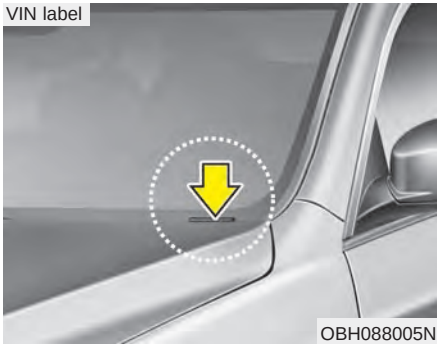
*1. For better fuel economy, it is recommended to use the engine oil of a viscosity grade SAE 5W-30 (API Service SM / ILSAC GF-4 / ACEA A5). However, if the engine oil is not available in your country, select the proper engine oil using the engine oil viscosity chart.



VEHICLE IDENTIFICATION NUMBER (VIN)

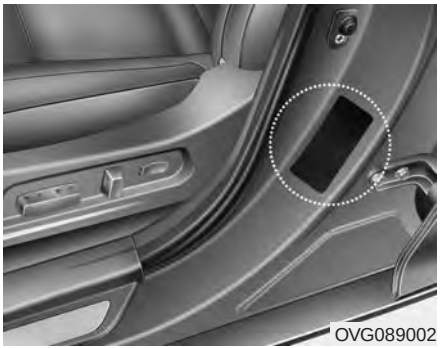


The vehicle identification number (VIN) is the number used in registering your car and in all legal matters pertaining to its ownership, etc.



The VIN is also on a plate attached to the top of the dashboard. The number on the plate can easily be seen through the windshield from outside.

VEHICLE CERTIFICATION LABEL



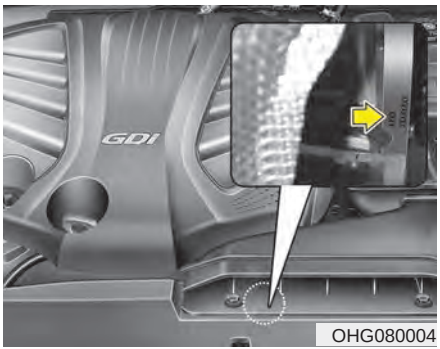
The vehicle certification label attached on the driver's (or front passenger's) side center pillar gives the vehicle identification number (VIN).

TIRE SPECIFICATION AND PRESSURE LABEL


OHG050081L

The tires supplied on your new vehicle are chosen to provide the best performance for normal driving.
The tire label located on the driver's side center pillar gives the tire pressures recommended for your car.

ENGINE NUMBER



OHG080004

The engine number is stamped on the engine block as shown in the drawing.

REFRIGERANT LABEL


OVG083001N

The refrigerant label is located on the underside of the hood.

The label contains the following information :

- Type of refrigerant
- Amount of refrigerant

CONSUMER ASSISTANCE (U.S. ONLY)

Roadside Assistance is provided on all new current model year Kia Vehicles from the date the vehicle is delivered to the first retail buyer or otherwise put into use (in-service date), whichever is earlier, for a period of 60 months or 60,000 miles, whichever is earlier, subject to the terms, conditions and exclusions set forth in the Kia Warranty and Consumer Information Manual applicable to your model year vehicle.
KMA reserves the right to limit or deny services or other benefits to any owner or driver when, in KMA's judgment, the claims and/or service requests are excessive in frequency or type of occurrence.

Toll free consumer assistance

Kia's toll-free Consumer Assistance hot line is staffed from 5:00 AM to 6:00 PM PST, Monday through Friday and is accessible by dialing 1-800-333-4Kia (4542).
For more information regarding assistance available, please refer to your Kia Warranty & Consumer Information Manual.

Emergency roadside assistance

Kia's toll free Roadside Assistance hot line is staffed 24 hours a day, 365 days a year and is accessible by dialing 1-800-333-4Kia (4542).
Please note that you must provide your Vehicle Identification Number (VIN) to verify coverage at the time of your call. The VIN can be found on the dash of your vehicle on the driver's side, on the door jamb of the driver's door, your vehicle's registration or proof of insurance card.
Kia utilizes a network of over 17,000 roadside assistance providers. Should you accidentally run out of fuel, require a battery jump, or need help changing a tire, a Kia Roadside Assistance Representative will dispatch someone to deliver a small quantity of gas, change a flat tire with your inflated spare, or arrange a battery jump to allow you to proceed to your destination. We have access to a network of over 10,000 locksmiths to help you should you become locked out of your Kia.
In the event that mechanical difficulty renders your vehicle undriveable due to a warranty-related concern, Kia's Roadside Assistance Representative will arrange to transport your vehicle to the nearest Kia dealer or to an alternative service location.

Your vehicle must be accessible to our dispatch transport vehicle, as determined by our driver, to receive this service. In the event that Kia does not have a dealer or an alternative service location available in a particular location, Kia will work with a reputable local service facility to ensure that you receive prompt service. Warranty repairs are performed at no cost.

✻ NOTICE

Roadside Assistance benefits are not available for any Kia vehicle that has ever been or should be issued a "salvage" title or similar "branded" title under any state's law or has been declared a "total loss" or equivalent by a financial institution or insurance company.

Trip interruption

Trip interruption expense benefits are provided in the event that a warranty-related disablement occurs more than 150 miles from your home, and the repairs require more than 24 hours to complete. Reasonable reimbursement is included for meals, lodging, or rental vehicle expenses. Trip interruption coverage is limited to $100 per day subject to a three day maximum limit per incident. You must contact the Kia Roadside Assistance Center to obtain pre-authorization of expenses. Once the Kia Roadside Assistance Center gives authorization for trip interruption benefits, they will assist you in making the necessary arrangements. Insurance deductibles, expenses, and claims paid by your insurance company or other providers are not eligible for reimbursement.

Fleet vehicles are excluded from reimbursement under Kia's Trip Interruption Policy.

Registering your vehicle in a foreign country

If you plan to register your vehicle in a foreign country, you should confirm that it conforms to the regulations in that country. Even if you successfully register the vehicle in a foreign country, you may experience the following problems and should therefore consider the possibility of having to deal with them:

1. The fuel specified for your vehicle may be unavailable. If other than the specified fuel is used, it could cause damage to the engine, the fuel injection system, and other fuel-related parts which may not be covered under your New Vehicle Emissions Limited Warranty.
2. We must, therefore, clearly state that when you leave the country in which you purchased your Kia new and register it in another country, problems arising from the use of fuel other than the specified fuel are not subject to manufacturer's warranty. Because vehicles like yours may not be marketed in the new country of registration, parts, servicing techniques and tools necessary to maintain and repair your vehicle may be unavailable.

   Even if vehicles like yours are sold there, mechanical specifications required by the government may vary enough from the country of purchase to cause additional problems.
3. There may not be an Authorized Kia Dealer in the area in which you plan to register your vehicle. You may additionally experience difficulty in obtaining services in a foreign country for any number of reasons.

Further, we cannot assume any responsibility for problems that result from unsatisfactory service or lack of service outside of the United States.

ELECTRICAL EQUIPMENT (U.S. ONLY)

The electrical system of your vehicle is designed to perform under all reasonably expected operating conditions. However, before any additional electrical equipment is installed in your vehicle, consult an Authorized Kia Dealer, in order to ensure that you do not void your warranty.

Certain electrical equipment, or the way in which it is installed, may adversely affect the operation of your vehicle, including such systems as the engine control system, the audio system and the electrical charging system and thus potentially void all or part of your warranty.

We assume no responsibility for any expense you may incur or for any malfunction of your vehicle or any of its components or systems that may result from the installation of additional electrical equipment that is not supplied, or recommended for installation by, Kia.

Installation of a mobile two-way radio system

If a mobile two-way radio system is installed improperly, or if an excessively powerful type of system is used, other electronic systems may be adversely affected. To avoid damage to your vehicle, consult an Authorized Kia Dealer concerning the proper equipment and installation.

Kia motor vehicles are designed and manufactured to meet or exceed all applicable safety standards.

For your safety, however, we strongly urge you to read and follow all directions in this Owner's Manual, particularly the information under the headings "NOTICE", "CAUTION" and "WARNING".

If, after reading this manual, you have any questions regarding the operation of your vehicle, safety issues and defects please contact your Kia's toll-free Consumer Assistance hot line as below:

National Consumer Affairs Manager
Kia Motors America, Inc.
P.O. Box 52410
Irvine, CA 92619-2410
1-800-333-4Kia (4542)

REPORTING SAFETY DEFECTS (U.S. ONLY)

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Kia Motors America, Inc.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Kia Motors America, Inc.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to http://www.safercar.gov; or write to: Administrator, NHTSA, 1200 New Jersey Ave., SE., West Building, Washington, DC 20590. You can also obtain other information about motor vehicle safety from http://www.safercar.gov.

ONLINE FACTORY AUTHORIZED MANUALS (U.S. ONLY)

The following publications are available on www.KiaTechinfo.com at no charge.

Service manual:

This manual covers maintenance and recommended procedures for repair to engine and chassis components. It is written for the Journeyman mechanic, but is simple enough for most mechanically inclined owners to understand.

Electrical troubleshooting manual:

This manual complements the Service Manual by providing indepth troubleshooting information for each electrical circuit in your vehicle.

Owner's manual:

This manual describes the overall features and operating procedures for the vehicle.

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