K900



KIA

The Power to Surprise

2019 OWNER'S MANUAL

WARNING – California Proposition 65

“Operating, servicing and maintaining a passenger vehicle or off-road vehicle can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle. For more information go to www.P65Warnings.ca.gov/passenger-vehicle.”

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 trims of this vehicle and includes images, descriptions, and explanations of optional as well as standard equipment. As a result, some material in this manual may not be applicable to your specific Kia vehicle. Some images are shown for illustration only and may show features that differ from those on your vehicle.

Drive safely and enjoy your Kia!

Thank you for choosing a Kia vehicle.

When you require service, remember that your K900 Kia dealer knows your vehicle best. Your K900 Kia 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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Printed in Korea

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Introduction

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HOW TO USE THIS MANUAL

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

Illustrations complement the words in this manual to best explain how to enjoy your vehicle. By reading your manual, you 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 information in your manual.

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

You will find various WARNINGs, CAUTIONs, and NOTICEs in this manual. These WARNINGs were prepared to enhance your personal safety. You should carefully read and follow ALL procedures and recommendations provided in these WARNINGs, CAUTIONs and NOTICEs.

⚠ WARNING

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

⚠ CAUTION

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

✻ NOTICE

A NOTICE indicates interesting or helpful information is being provided.

FUEL REQUIREMENTS

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

Using Unleaded gasoline with an octane rating lower than RON 95 could result in loss of engine power and increase in fuel consumption.

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 K900 Kia dealer for details.)

- Tighten the cap until it clicks one time, otherwise the Check Engine light will illuminate.

⚠ 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.**

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 15 percent 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 any kind if drivability problems occur.

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

1. Gasoline or gasohol containing methanol.
2. Leaded fuel or leaded gasohol.
3. Gasohol containing more than 15 percent ethanol.

"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 15 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.

✻ NOTICE

Never use any fuel containing methanol. Discontinue use of any methanol containing product which may inhibit proper drivability.

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 help 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 can be purchased separately may be added to the gasoline.

If TOP TIER Detergent Gasoline is not available, one bottle of additive should be added to the fuel tank at every 7,500miles or every engine oil change is recommended. Additives are available from your authorized K900 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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❊ The actual shape may differ from the illustration.

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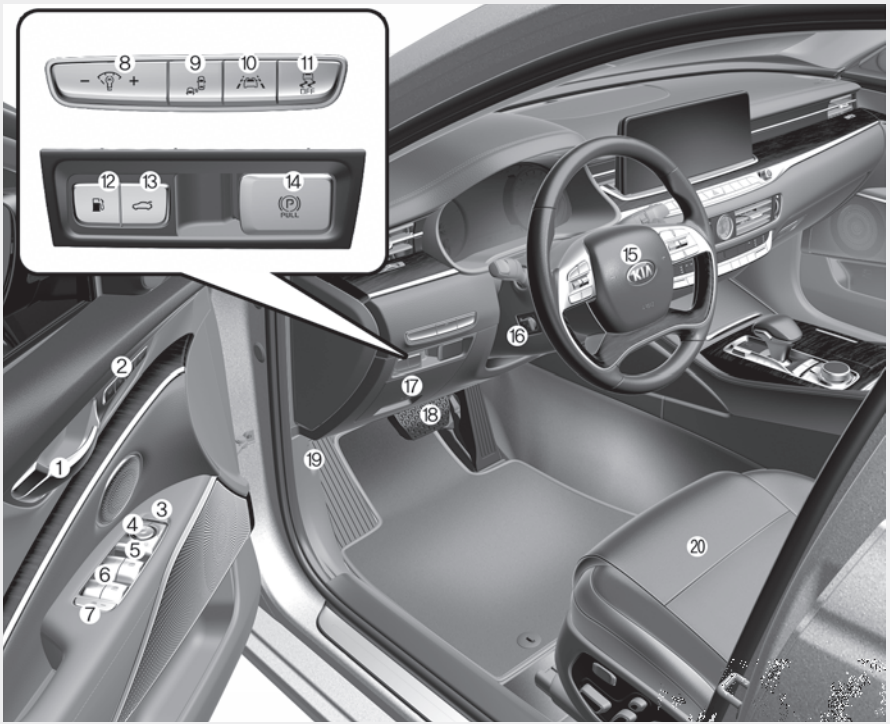


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❈ The actual shape may differ from the illustration.

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INTERIOR OVERVIEW



❉ The actual shape may differ from the illustration.

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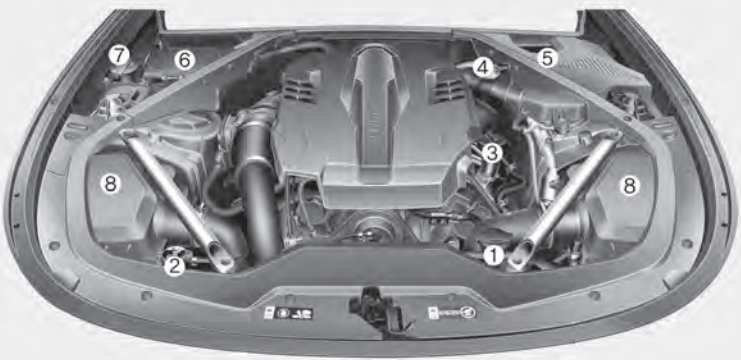
❈ The actual shape may differ from the illustration.

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ENGINE COMPARTMENT

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❈ The actual engine compartment in the vehicle may differ from the illustration.
❈ The battery is in the luggage room.

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IMPORTANT SAFETY PRECAUTIONS

You will find many safety precautions and recommendations throughout this section, and throughout this manual. The safety precautions in this section are among the most important.

Always wear your seat belt

A seat belt is your best protection in all types of accidents. Air bags are designed to supplement seat belts, not replace them. So even though your vehicle is equipped with air bags, ALWAYS make sure you and your passengers wear your seat belts, and wear them properly.

Restrain all children

All children under age 13 should ride in your vehicle properly restrained in a rear seat, not the front seat. Infants and small children should be restrained in an appropriate child restraint. Larger children should use a booster seat with the lap/shoulder belt until they can use the seat belt properly without a booster seat.

Air bag hazards

While air bags can save lives, they can also cause serious or fatal injuries to occupants who sit too close to them, or who are not properly restrained. Infants, young children, and shorter adults are at the greatest risk of being injured by an inflating air bag. Follow all instructions and warnings in this manual.

Driver distraction

Driver distraction presents a serious and potentially deadly danger, especially for inexperienced drivers. Safety should be the first concern when behind the wheel and drivers need to be aware of the wide array of potential distractions, such as drowsiness, reaching for objects, eating, personal grooming, other passengers, and using cellular phones.

Drivers can become distracted when they take their eyes and attention off the road or their hands off the wheel to focus on activities other than driving. To reduce your risk of distraction or getting into an accident:

- ALWAYS set up your mobile devices (i.e., MP3 players, phones, navigation units, etc.) when your vehicle is parked or safely stopped.

- ONLY use your mobile device when allowed by laws and when conditions permit safe use. NEVER text or email while driving. Most states have laws prohibiting drivers from texting. Some states and cities also prohibit drivers from using handheld phones.
- NEVER let the use of a mobile device distract you from driving. You have a responsibility to your passengers and others on the road to always drive safely, with your hands on the wheel as well as your eyes and attention on the road.

Control your speed

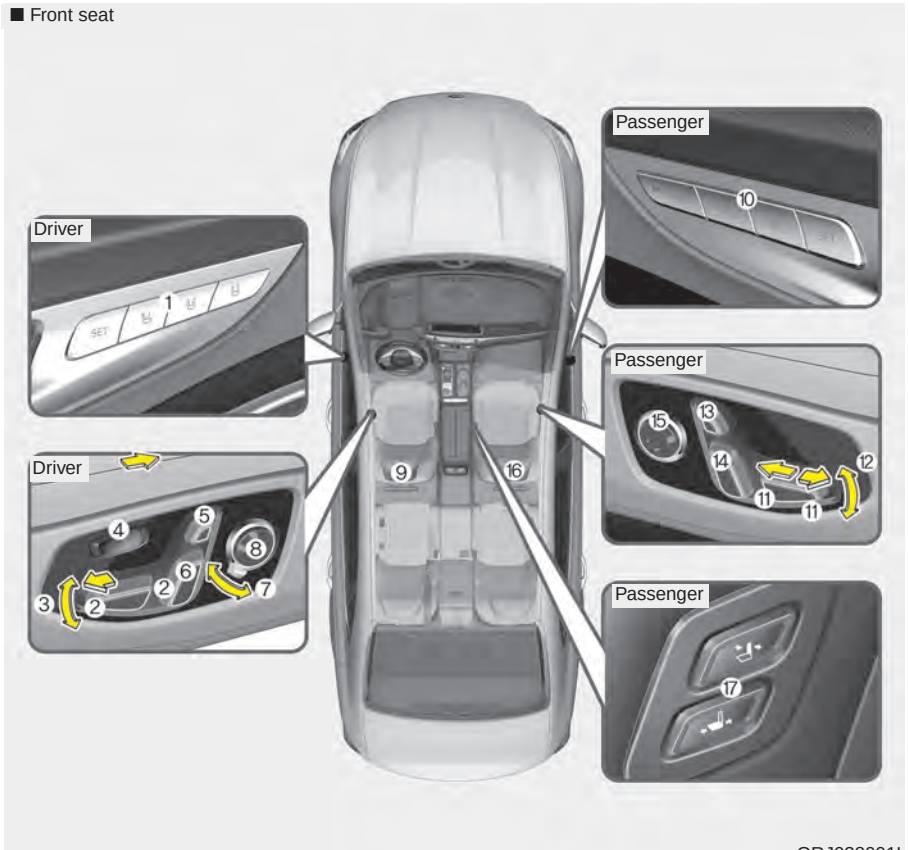
Excessive speed is a major factor in crash injuries and deaths. Generally, the higher the speed, the greater the risk, but serious injuries can also occur at lower speeds. Never drive faster than is safe for current conditions, regardless of the maximum speed posted.

Keep your vehicle in safe condition

Having a tire blowout or a mechanical failure can be extremely hazardous. To reduce the possibility of such problems, check your tire pressures and condition frequently, and perform all regularly scheduled maintenance.

SEAT

■ Front seat



Driver's seat

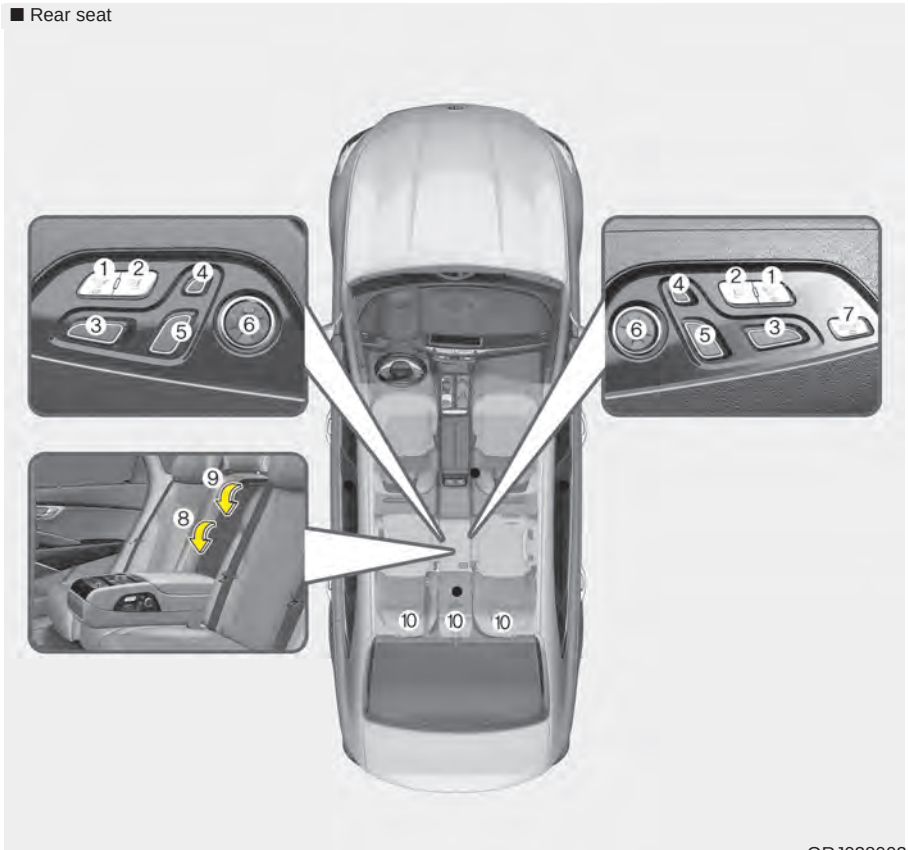
(1) Driver position memory system*
(2) Forward and backward
(3) Seat cushion height
(4) Cushion extension*
(5) Headrest(power)*
(6) Seatback angle
(7) Seat back bolster control *
(8) Lumbar support
(9) Headrest(manual)

Front passenger's seat

(10) Passenger position memory system*
(11) Forward and backward
(12) Seat cushion height
(13) Headrest(power)*
(14) Seatback angle
(15) Lumbar support
(16) Headrest(manual)
(17) Walk-in seat switch*

* : if equipped

■ Rear seat



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Rear seat

(1) Relax mode control button*
(2) Relax mode return button*
(3) Forward and backward*
(4) Headrest
(power,Left and Right side)*
(5) Seatback angle*
(6) Lumbar support*
(7) Front passenger position control*
(8) Armrest
(9) Ski through
(10) Headrest(manual)

* : 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 - Driver responsibility for passengers



The driver must advise the passengers 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 - 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'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 the your vehicle. A distance of at least 10" from your chest to the steering wheel is recommended. Failure to do so can result in air bag inflation injuries to the driver.

⚠ WARNING - Rear seatbacks

Always lock the rear seatback before driving. Failure to do so could result in passengers or objects being thrown forward injuring vehicle occupants.

⚠ WARNING - Luggage and Cargo

Do not stack pile or stack luggage or cargo higher than the seatback in the cargo area. In an accident the cargo could strike and injury a passenger. If objects are large, heavy or must be piled, they must be secured in the cargo area.

⚠ WARNING - Cargo Area

Do not allow passengers to ride in the cargo area under any circumstance. The cargo area is solely for the purpose of transporting luggage or cargo.

⚠ 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.

Feature of Leather in vehicle

- Leather is made from the outer skin of an animal, which goes through a special process to be available for use. Since it is a natural substance, each part differs in thickness or density.

  Wrinkles may appear as a natural result of stretching and shrinking depending on the temperature and humidity.
- The seat is made of stretchable fabric to improve comfort.
- The parts contacting the body are curved and the side supporting area is high which provides driving comfort and stability.
- Wrinkles and changes of gloss /feel may appear naturally from usage. It is not a fault of the product.

⚠ CAUTION

- ***Ring,belts with metallic accessories, zippers or keys inside your back pants pocket may damage the seat fabric.***
- ***Make sure not to wet the seat. It may change the nature of natural leather.***
- ***Jeans or clothes which contain bleach may contaminate the surface of the seat covering fabric and cause damage or discoloration.***

- Make sure not to use sharp tools, such as knives and spikes, to remove the protective covering the steering wheel.
- Do not install auxiliary handles at steering wheel. Leather may leave marks or cause permanent deformation.

✻ NOTICE

Wrinkles or abrasions which appear naturally from usage are not covered by warranty.

Front seat adjustment - power

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

⚠ WARNING - Unattended children

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

⚠ CAUTION - Power seat adjustments

The power seating controls function by electronic motor.

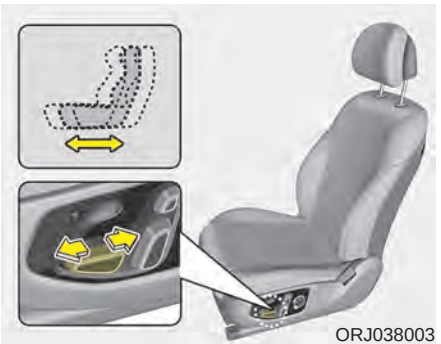
Excessive operation may cause damage to the electrical equipment.

⚠ 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.

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

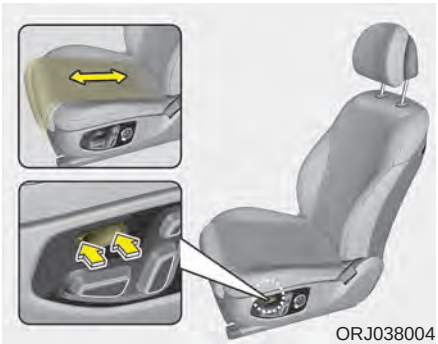
Forward and backward



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.

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


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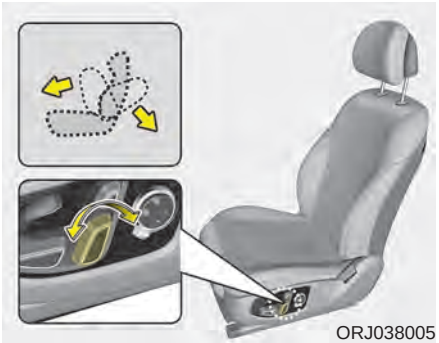
To move the front part of cushion forward:

1. Push the front part of control switch to move the seat cushion to the desired length.
2. Release the switch once the seat cushion reaches the desired length.

To move the front part of cushion rearward:

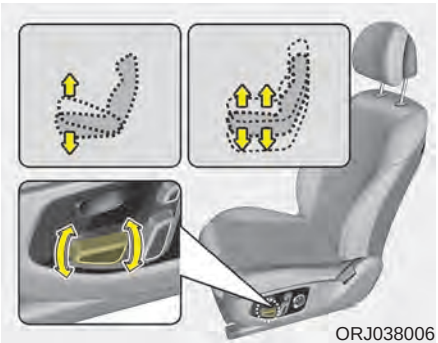
1. Push the front part of control switch to move the seat cushion to the desired length.
2. Release the switch once the seat cushion reaches the desired length.

Seatback angle


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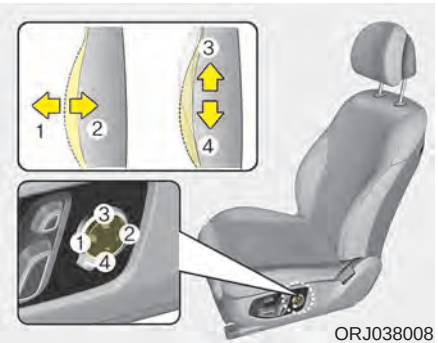
Push the control switch forward or backward to move the seatback to the desired angle. Release the switch once the seat reaches the desired position.

Seat height



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

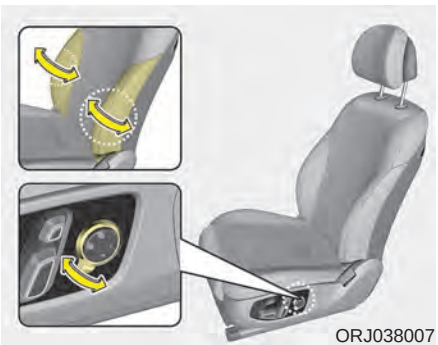
Lumbar support



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

1. Press the front portion (1) of the switch to increase support, or the rear portion (2) of the switch to decrease support.
2. Release the switch once it reaches the desired position.
3. Press the upper portion (3) of the switch to move the support position up, or press the lower portion (4) of the switch to move the support position down.
4. Release the switch once it reaches the desired position.

Seat back bolster control (For driver seat, if equipped)


ORJ038007

1. Turn the adjustment switch clockwise, the right/left seatback bolsters will be adjusted inward. Turn the switch counterclockwise, the seatback bolster will be adjusted outward.
2. To adjust the bolster height to its maximum in the default state, operate the switch for 8 seconds. After that, release the switch because there is no change in height even if you continue to operate the switch.
3. Once adjustment is done, leave the switch in place.

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



OUM036096L

The adjustment switches are located on the left side of the front passenger's seatback.

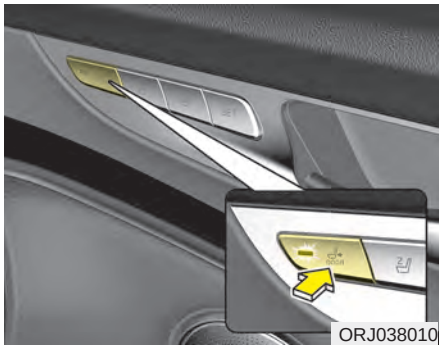
To adjust the position of front passenger's seat :

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

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

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

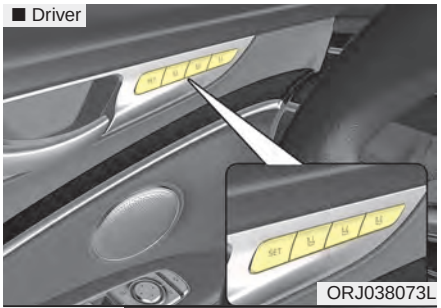
Seat easy access selection (for front passenger, if equipped)



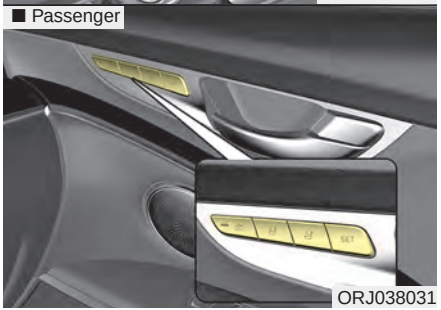
If you open the door with the DOOR switch on, the seat will be moved backwards. (However, this function does not work if the seat is already at its farthest rear position.) When the door is closed, the seat will move forward. The switch can be turned on and off.

Front seat position memory system

■ Driver



■ Passenger



- For Driver seat

This system enables driver's seat, steering wheel, exterior mirrors, cluster and head-up display (HUD) to be controlled with a simple button operation, which allows the system to recall memorized driving positions and automatically control them. Driver's seat/ Steering Wheel/ Exterior mirrors: location Cluster: Brightness of lighting

Head up Display (HUD): height, rotation and brightness.

- For Front passenger seat

This system stores and recalls the front passenger seat position with a simple button operation.

⚠ WARNING

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

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

Storing positions into memory using the buttons on the door

Storing the seat positions

1. Place the shift lever in P (Park) with the ignition ON.
2. Adjust driver seat, outside rearview mirror, head up display comfortable for the driver and adjust front passenger seat.
3. Press SET button on the control panel. The system will beep once. Press one of the memory buttons (1 ,2 or 3) within 4 seconds after pressing the SET button. The system will beep twice when memory has been successfully stored.
4. The message "Driver 1 ,2 or 3 settings saved" is displayed on the instrument cluster display.

The number of settings that can be saved in the system is up to 3. To set and save the driving position setting, press the 1 ,2 or 3 button within 4 seconds after the SET button is pressed.

Recalling positions from memory

1. Place the shift lever in P (Park) with the ignition ON.
2. To recall the position in the memory, press the desired memory button (1 ,2 or 3). The system will beep once, then the driver's seat will automatically adjust to the stored position.
3. The message "Driver 1 ,2 or 3 settings applied" is displayed on the instrument cluster display.

If you press the SET button or number 1 button with the number 1 setting in operation, the setting will temporarily deactivate. If you press the number 2 button, the number 2 setting will activate.

If you press the number 2 button or SET button with the number 2 button in operation, the number 2 setting will temporarily deactivate. Press the number 1 button, the number 1 setting will activate.

If you operate the adjustment switch of seats or exterior mirrors with the position memory system activated, the pre-set settings will become ineffective.

⚠ WARNING

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

Easy access function (if equipped)

To provide easier entry to or exit from the vehicle for a driver, the driver's seat will be adjusted backwards as far as the distance set by Vehicle setting on the Navigation touch screen in instrument panel. This occurs when the Engine start/stop button is off with the shift lever in the P position. If, however, the distance between the front seat and back seats are too close, the driver's seat could fail to adjust itself backwards.

The steering wheel regularly checks and fine-tunes itself to find the right location (the original location) by going up as high as possible and moving as close as possible to a driver.

The driver's seat and steering wheel will move back to its original position when a driver closes a driver's door with a smart key in his pocket and the engine start/stop button is in ON or in ACC.

You can activate or deactivate this feature. Refer to "Set Up" in Navigation touch screen in instrument panel.

Front seat position memory system initialization

If the function does not operate normally, initialize as follows.

▶Initialization method

1. When the vehicle is stopped and the engine start/stop button is ON, place the automatic transmission lever to P and then open the driver's door.

2. Pull the seat forward as far as possible using the position and angle adjustment driver`s switch.

3. Press the SET button and the driver's seat forward movement switch simultaneously for about 2 seconds.

▶Initialization process

1.The alarm sounds and the initialization process starts.

2.The seat and backrest automatically move backwards. With the seat and backrest moving, the alarm continues to sound.

3.The seat and backrest will move to the center again and the alarm sounds. This signals the initialization is completed.

But the initialization and the alarming sound will come to a stop in following cases.

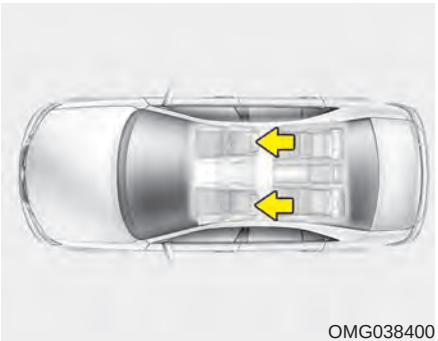
When the driving position memory system button is pressed.

- When the driver seat position switch is pressed.
- When the shift lever is displaced from P (Park) to another position.
- When a driving speed is 3km/h or faster
- When the driver door is closed.

⚠ CAUTION

- ***If the operation of the driver seat and the alarm sound stops during the initialization, restart the initialization.***
- ***Before proceeding with the initialization, make sure that that there are no obstacles around the driver seat.***
- ***Once initialization is completed, adjust the position of the driver seat to one that is comfortable and the save the customized seat position.***

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 rear 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.

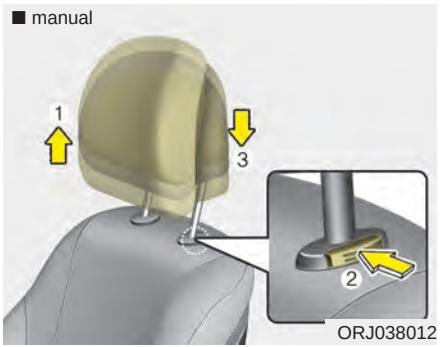
⚠ WARNING - Headrest removal/adjustment

- **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.**

⚠ CAUTION

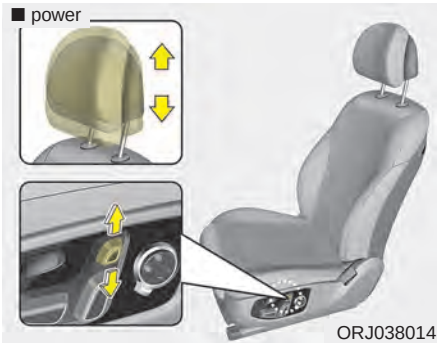
Excessive pulling or pushing may damage the headrest.

Adjusting the height up and down



- Manual

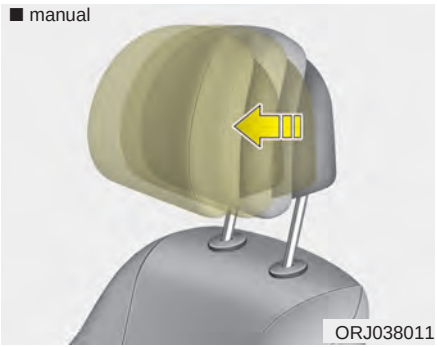
To raise the headrest, pull it up to the desired position (1). To lower the headrest, push and hold the release button (2) on the headrest support and lower the headrest to the desired position (3).



- Power (if equipped)

To raise the headrest, move the switch up to raise it and down to lower it.

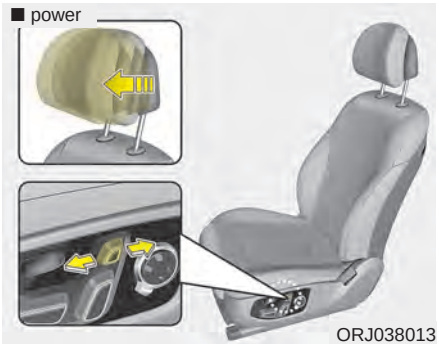
Forward and backward adjustment



- Manual

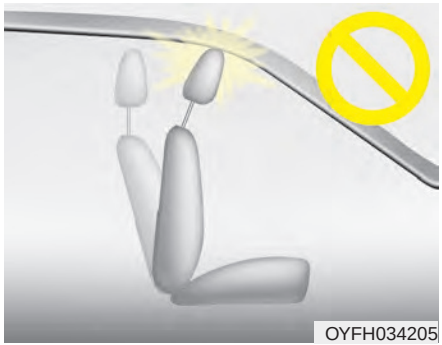
The headrest may be adjusted forward to 4 different positions by pulling the headrest forward to the desired detent.

To adjust the headrest to it's furthest backwards position, pull the headrest fully forward to the farthest position and release it. Adjust the headrest so that it properly supports the head and neck.



- Power (if equipped)

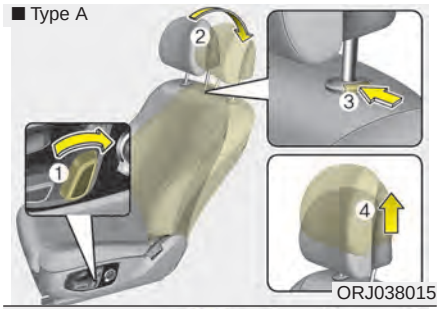
Use the switch to adjust the front and rear position of the headrest. When the switch is pulled forward, the headrest moves in the front direction. When it is pulled back, it moves in the backward direction.

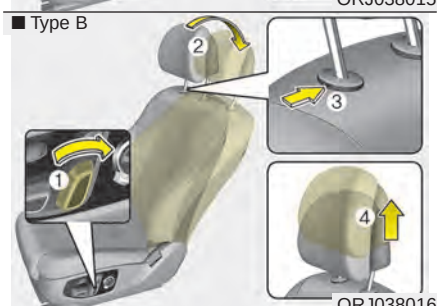


✻ NOTICE

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.

Removal and reinstallation





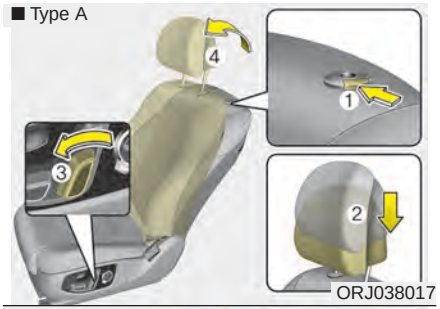
To remove the headrest:

1. Recline the seatback (2) with the recline lever or switch (1).
2. Type A (manual): Raise the headrest as far as it can go. Then Press the headrest release button (3) while pulling the headrest up (4). Type B (power, if equipped) : Raise the headrest to the end with the headrest height adjustment switch, then insert a pointed tool into the headrest adjustment hole (3). After inserting the tool, remove the headrest by pulling it all the way up (4).

⚠ WARNING - Headrest Removal

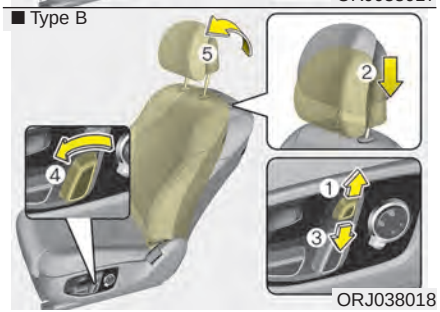
NEVER allow anyone to ride in a seat with the headrest removed. Headrests can provide critical neck and head support in a crash.

■ Type A



ORJ038017

■ Type B



ORJ038018

To reinstall the headrest:

- Type A (manual)

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

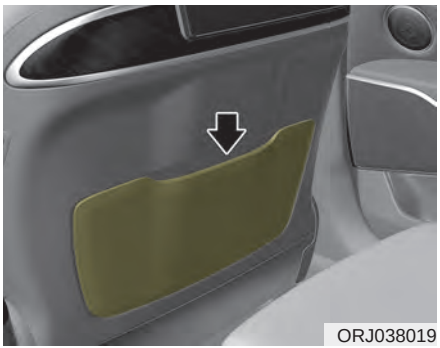
- Type B (power, if equipped)

1. After raising the headrest height adjustment switch until the end (1) then, attach the headrest pole to the seat back hole (2). Lower the headrest to the lowest position with the height adjustment switch (3).
2. Operate the headrest adjustment switch up and down three times to make sure that the headrest is securely fastened.
3. Set the seat back straight up with the seat back angle adjustment switch (4).
4. Adjust the headrest to an appropriate height (5).

⚠ WARNING - Headrest Reinstallation

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

Seatback pocket



ORJ038019

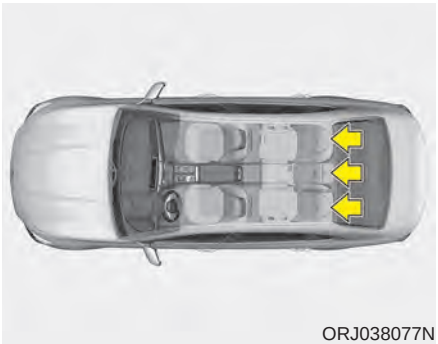
The seatback pocket is provided on the back of the front passenger's and driver's seatbacks.

⚠ WARNING - Seatback pockets

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

Rear seat adjustment

Headrest



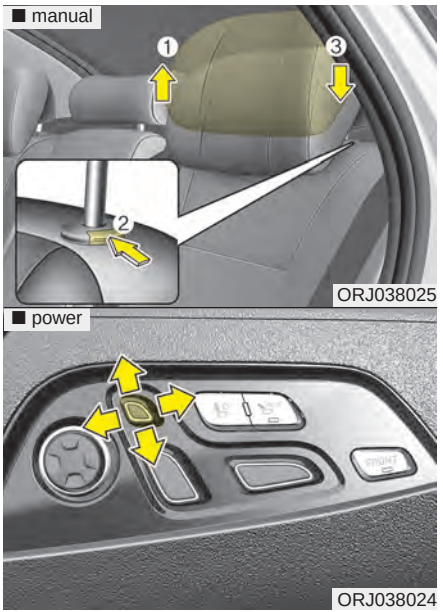
ORJ038077N

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 heads 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.



Adjustment for rear head rest

- For manual type :

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

- For power type (if equipped) :

Use the switch to adjust the height of the headrest. Lift up the switch and lower it down.

The forward and backward position of the headrest can be adjusted by using the switch. Pull the switch forward to move the headrest forward, and backward to move it backward.

The headrest of the center seat is a manual type.

⚠ CAUTION

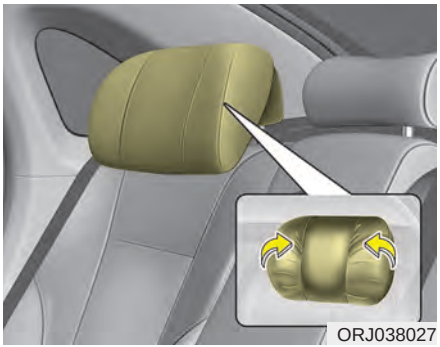
When there is no occupant in the rear seats, adjust the height of the headrest to the lowest position. The rear seat headrest can reduce the visibility of the rear area.

Armrest



To use the armrest, pull it (1) forward from the seatback. Cup holders are in the arm rest.

Wing out head rest (if equipped)



When you hold both sides of the headrest and try to bend it (pull it forward), you can adjust it as you want. It is a convenience device for supporting the head of the passenger.

If you are not using the part you have bent, turn it to the original position.

Forward/Backward adjustment and seatback angle adjustment (if equipped)



The control switch (1) works in conjunction with the control switch (2). Also, the seat backangle adjustment and the forward/backward adjustment are made at the same time.

- If the vehicle is equipped with shoulder adjuster function, the shoulder adjuster can be adjusted by pressing button (2).

⚠ CAUTION

- ***The electrical seat adjustment system also can work even with the system OFF. An unexpected accident or a following injury can be caused if the child is left alone inside.***
- ***Never keep pushing the switch after the seat is moved to the far end (both forward/backward) as parts can be damaged.***
- ***Forward/backward position adjustment is available with the ignition off, but we recommend you to adjust the system with the ignition on to prevent the battery from being drained.***

Lumbar support (if equipped)



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

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

3. Press the upper portion (3) of the switch to move the support position up, or press the lower portion (4) of the switch, to move the support position down.
4. Release the switch once it reaches the desired position.

Rear Relaxation Seat system(for rear right passenger's seat)



- Press Front button (Switch ON) to adjust the seat position. You can adjust the forward/backward movement (1) of the front passenger seat, its angle (2), and the height of the headrest (3). If you press the button again to switch off, you can adjust the rear right passenger seat.



- For the convenience of the passenger sitting in the rear right passenger`s seat, the seat allows a person to adjust both the rear right passenger`s seat and the front passenger seat by operating the rear right passenger`s seat switches. But the rear relaxation seat system doesn't work if a person is sitting in the front passenger seat or the door of front passenger seat is opened.

• Relax mode

While pressing the switch (1), then the front passenger seat will move as follows, and the rear seat will move, too.

The front passenger seat :

1. The seat and the seatback will move forward. The headrest will move downward.
2. Seat cushion will move downward.
3. The height of the seat will move downward. Once the adjustment is completed, the signaling sound will beep once.

The rear right passenger seat :

1. The head rest will move downward.
2. The seat will move forward, the seat cushion will move upward, the bottom part of lumbar support will come out.

Once the operation is completed, the signaling sound will beep once.

⚠ CAUTION

The rear relaxation seat system switches won't work in the following cases.

- ***When there is a person sitting in the passenger seat***
- ***When there are heavy objects placed on the passenger seat***
- ***When the door of the passenger seat is opened***
- ***When the seat belt of the passenger seat is fastened***

⚠ CAUTION

Relax mode buttons won't work in the following cases:

- ***When there is a person sitting in the front passenger seat***
- ***When there are heavy objects placed on the passenger seat***
- ***When the door of the front passenger seat is opened***
- ***When the seat belt of the passenger seat is fastened***
- ***If the Relax mode button is pressed again during the Relax mode in operation, the seat will stop moving.***
- ***If you operate the seat control button manually while Relax mode is in operation, the automatic movement of the seat will stop and be adjusted manually.***

(Continued)

(Continued)

- ***When using the relax mode, do not place any object on the front passenger's seat cushion, as the seat seat back will be folded and objects placed on the front passenger seat may be damaged.***

• Relax mode return

Press switch (2), then the rear seats will move as follows and the passenger seat will move.

Rear right passenger seat :

1. The seat will move back to the far end.
2. The seat cushion will move down to the far end, and the lumbar support will move backward.
3. The headrest will move downward.

The front passenger seat :

1. The seat will move backward, and the seat back will move backward, and the seat cushion will move downward.
2. The headrest will move down to the far end, and the seat height will move upward.

⚠ CAUTION

Return Mode Button will not work in the following cases.

- ***When there is a person sitting in the passenger seat***
- ***When there are heavy objects placed on the passenger seat***
- ***When the door of the passenger seat is opened***
- ***When the seat belt of the passenger seat is fastened***

⚠ CAUTION

- ***If you press the return mode button again while the return mode is in process, the seat movement will stop.***
- ***If you manually operate the seat adjustment button while the return mode is in process, the automatic seat move will stop and be adjusted manually.***

SEAT BELTS

Seat belt restraint system

- 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 - 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 - 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.

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.

- No modifications or additions should be made by the user which would either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.

- When you fasten the seat belt, be careful not to latch the seat belt in buckles of other seats. It's very dangerous and you may not be protected by the seat belt properly.
- Do not unfasten the seat belt and do not fasten and unfasten the seat belt repeatedly while driving. This could result in loss of control, and an accident causing death, serious injury, or property damage.
- When fastening the seat belt, make sure that the seat belt does not pass over objects that are hard or can break easily.

⚠ 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



Driver's seat belt warning

As a reminder to the driver, the seat belt warning light will illuminate for approximately 6 seconds each time the engine start/stop button is in ON regardless of belt fastening and warning chime will sound for approximately 6 seconds each time the engine start/stop button is in ON when the belt is unfastened.

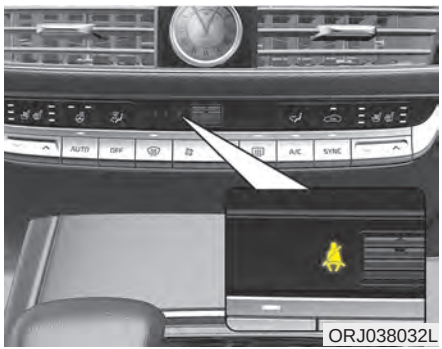
If a driver continues not to fasten the seat belt and drives 5.6 mph (9 km/h) or more the warning light will illuminate and warning chime will sound.

If a driver continues not to fasten the seat belt and drives 12 mph (20 km/h) or more the warning light will blink and the warning chime will sound for approximately 100 seconds.

When the seat belt is unfastened during driving, the warning light will illuminate when the speed is under 5.6 mph (9 km/h).

When the speed is over 5.6 mph (9 km/h), the warning light will illuminate and warning chime will sound until the belt is fastened.

When the speed is 12 mph (20 km/h) and faster, the warning light will blink for approximately 100 seconds and warning chime will sound for approximately 100 seconds.



Front passenger's seat belt warning

As a reminder to the front passenger, the front passenger's seat belt warning lights will illuminate for approximately 6 seconds each time you turn the Engine start/stop button in ON regardless of belt fastening.

If a passenger continues not to fasten the seat belt and the vehicle is moving 5.6 mph (9 km/h) or more the warning light will illuminate and warning chime will sound.

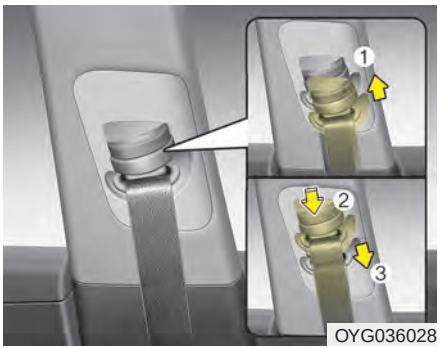
If a passenger continues not to fasten the seat belt and the vehicle is moving 12 mph (20 km/h) or more the warning light will blink and the warning chime will sound for approximately 100 seconds.

If a passenger unfastens the seat belt while the vehicle is moving, the warning light will illuminate when the speed is under 5.6 mph (9 km/h).

When the speed is over 5.6 mph (9 km/h), the warning light will illuminate and warning chime will sound until the belt is fastened.

When the speed is 12 mph (20 km/h) and faster, the warning light will blink for approximately 100 seconds and warning chime will sound for approximately 100 seconds.

Lap/shoulder belt



Height adjustment

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

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

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

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

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

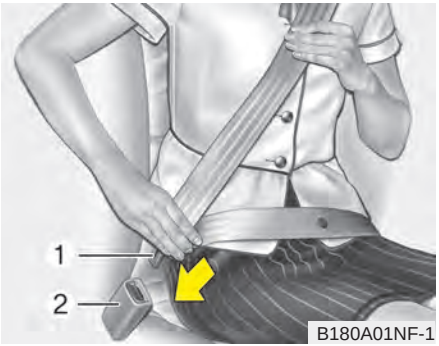
Improperly positioned seat belts can cause serious injuries in an accident.

⚠ 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.



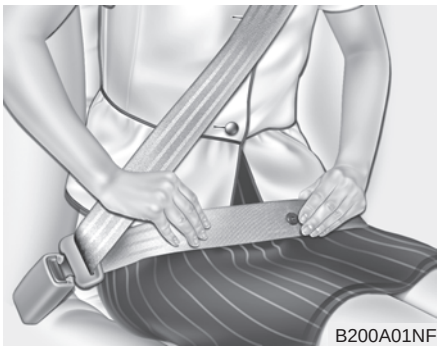
To fasten your seat belt:

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

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

✻ NOTICE

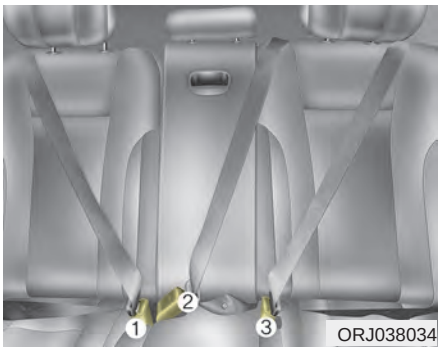
If you are not able to pull out the seat belt from the retractor, firmly pull the belt out and release it. Then you will be able to pull the belt out smoothly.



⚠ WARNING

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

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

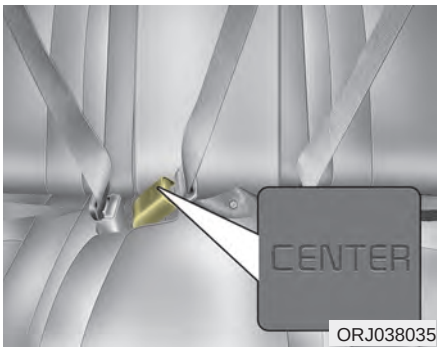


The seat belt should be locked into the buckle on each seat cushion to be properly fastened.

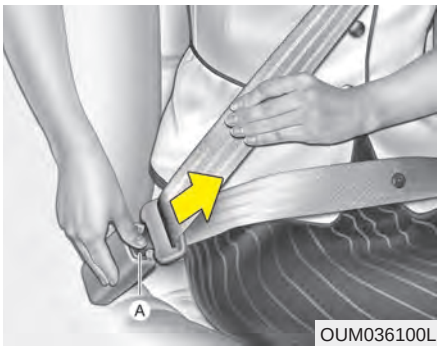
① : Rear right seat belt fastening buckle

② : Rear center seat belt fastening buckle

③ : Rear left seat belt fastening buckle



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 (A) in the locking buckle. When it is released, the belt should automatically draw back into the retractor.

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

⚠ WARNING

Prior to fastening the rear seat belts, ensure the latch matches the seat belt buckle. Forcefully fastening the left or right seat belt to the center buckle can result in an improper fastening scenario that will not protect you in an accident.

Pre-tensioner seat belt



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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.

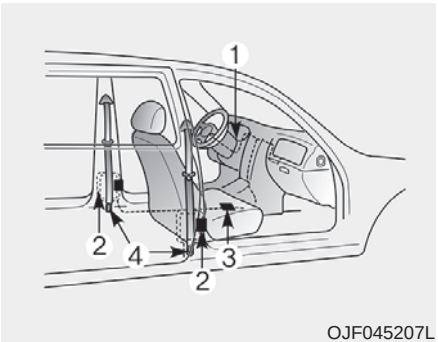
(2) EFD (Emergency Fastening Device)

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.

✻ NOTICE

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



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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) Front retractor pre-tensioner assembly
(3) SRS control module
(4) Emergency fastening device (EFD)

⚠ 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.

✻ NOTICE

- **Both the driver's and front passenger's seat belt pre-tensioner system may be activated not only in certain frontal collisions, but also in certain side collisions or rollovers, if the vehicle is equipped with a side or curtain air bag.**
- **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 Engine Start/Stop button has been turned to the ON position, and then it should turn off.**

If the pre-tensioner seat belt system is not working properly, this warning light will illuminate even if there is not a malfunction with the SRS air bag. If the SRS air bag warning light does not illuminate when the Engine Start/Stop button 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 K900 Kia dealer inspect the pre-tensioner seat belt and SRS air bag system as soon as possible.

✻ NOTICE

Do not attempt to service or repair the pre-tensioner seat belt system in any manner. Do not attempt to inspect or replace the pre-tensioner seat belts yourself. This must be done by an authorized K900 Kia dealer.

⚠ WARNING - Hot pretensioner

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.

Pre-tensioners are designed to operate only one time. After activation, pre-tensioner seat belts must be replaced. If the pre-tensioner must be replaced, contact an authorized K900 Kia dealer.

Pre-active Seat belt (PSB) (if equipped)


OVI039069

The purpose of the pre-active seat belt is to prevent passengers from getting hurt by tightening the seat belt right before a collision or dangerous maneuver.

⚠ CAUTION

The pre-active seat belt activates only when the passenger is wearing his/her seat belt.



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The pre-active seat belt warning will turn on if there is a problem with your pre-active seat belt.

In this case, have the system checked by an authorized K900 Kia dealer.

The warning message comes on while the vehicle is in motion. If the PSB warning message disappears, the warning indicator (master symbol) will turn on.

In order to maximize the safety of the passenger, the pre-active seat belt system operates as below

- The seat belt is tightened when:
  - The vehicle senses a collision
  - Emergency braking situation occurs
  - Losing control of the vehicle
- The seat belt vibrates when:
  - The vehicle senses a object too near the vehicle

⚠ CAUTION

Do not be surprised when the seat belt vibrates. It's not a malfunction but a warning for your safety.

This system also tightens a loose seat belt after unfastening the seat belt.

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 section.

✻ NOTICE

Small children are best protected from injury in an accident when properly restrained in the rear seat by a child restraint system that meets the requirements of the Federal Motor Vehicle Safety Standards. Before buying any child restraint system, make sure that it has a label certifying that it meets Federal Motor Vehicle Safety Standard 213. The restraint must be appropriate for your child's height and weight. Check the label on the child restraint for this information. Refer to “Child restraint system” in this section.

Larger children

Children who are too large for child restraint systems should always occupy the rear seat and use the available lap/shoulder belts. The lap portion should be fastened and snugged on the hips as low as possible. Check periodically to insure that the belt fits. 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 13) 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 13 and under should be restrained securely in the rear seat. NEVER place a child age 13 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 vehicle. In a crash the seat belt will inflict 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 SECURELY AND LOW AS POSSIBLE.

⚠ 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 and rear seats should be in an upright position when the vehicle is moving. A seat belt cannot provide proper protection if the person is lying down in the rear seat or if the front and rear seats are 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 belt

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. Chemical substances should not be used on seat belts to prevent any damage. Heated up seatbelts may burn infants and children.

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 K900 Kia dealer.

CHILD RESTRAINT SYSTEM (CRS)

Children Always in the Rear

⚠ 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 airbag and seriously injured.

⚠ 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.

Children under age 13 must always ride in the rear seats 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. Even with air bags, children can be seriously injured or killed. Children too large for a child restraint must use the seat belts provided.

All 50 states have child restraint laws which require children to travel in approved child restraint devices. The laws governing the age or height/weight restrictions at which seat belts can be used instead of child restraints differs among states, so you should be aware of the specific requirements in your state, and where you are travelling.

Child restraint systems 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 generally designed to be secured in a vehicle seat by lap belt portion of a lap/shoulder belt, or by a LATCH system in the rear seats of the vehicle.

Child restraint system (CRS)

Infants and younger children must be restrained in an appropriate rear-facing or forward-facing CRS that has first been properly secured to the rear seat of the vehicle. Read and comply with the instructions for installation and use provided by the manufacturer of the child restraint.

⚠ WARNING
- Child Restraint Installation

An improperly secured child restraint can increase the risk of serious injury or death in an accident. Always take the following precautions when using a child restraint system:

- **Always follow the child restraint system manufacturer's instructions for installation and use.**

(Continued)

(Continued)

- **Always properly restrain your child in the child restraint.**
- **If the vehicle head restraint prevents proper installation of a child seat (as described in the child restraint system manual), the head restraint of the respective seating position shall be readjusted or entirely removed.**
- **Do not use an infant carrier or a child safety seat that "hooks" over a seatback, it may not provide adequate protection in an accident.**

✻ NOTICE

After an accident, have a K900 Kia dealer check the child restraint system, seat belts, tether anchors and lower anchors.

Selecting a Child Restraint System (CRS)

When selecting a CRS for your child, always:

- Make sure the CRS has a label certifying that it meets applicable Federal Motor Vehicle Safety Standards (FMVSS 213).
- Select a child restraint based on your child's height and weight. The required label or the instructions for use typically provide this information.
- Select a child restraint that fits the vehicle seating position where it will be used.
- Read and comply with the warnings and instructions for installation and use provided with the child restraint system.

⚠ 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 - Unattended Children

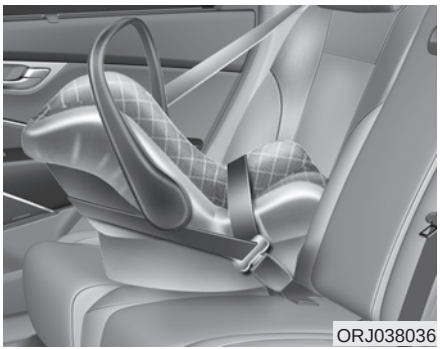
Never leave children unattended in a vehicle. The car can heat up very quickly, resulting in injuries to the child in the vehicle.

⚠ 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.

Child restraint system types

There are three main types of child restraint systems: rear-facing seats, forward-facing seats, and booster seats. They are classified according to the child's age, height and weight.


ORJ038036

Rear-facing child seats

A rear-facing child seat provides restraint with the seating surface against the back of the child. The harness system holds the child in place, and in an accident, acts to keep the child positioned in the seat and reduces the stress to the neck and spinal cord.

All children under age one must always ride in a rear-facing infant child restraint.

Convertible and 3-in-1 child seats typically have higher height and weight limits for the rear-facing position, allowing you to keep your child rear-facing for a longer period of time.

Continue to use a rear-facing child seat for as long as your child will fit within the height and weight limits allowed by the child seat manufacturer. It's the best way to keep them safe. Once your child has outgrown the rear-facing child restraint, your child is ready for a forward-facing child restraint with a harness.


ORJ038037

Forward-facing child restraints

A forward-facing child seat provides restraint for the child's body with a harness. Keep children in a forward-facing child seat with a harness until they reach the top height or weight limit allowed by your child restraint's manufacturer.

Once your child outgrows the forward-facing child restraint, your child is ready for a booster seat.

Booster seats

A booster seat is a restraint designed to improve the fit of the vehicle's seat belt system. A booster seat positions the seat belt so that it fits properly over the lap of your child.

Keep your child in a booster seat until they are big enough to sit in the seat without a booster and still have the seat belt fit properly. For a seat belt to fit properly, the lap belt must lie snugly across the upper thighs, not the stomach. The shoulder belt should lie snug across the shoulder and chest and not across the neck or face. Children under age 13 must always ride in the rear seats and must always be properly restrained to minimize the risk of injury.

Installing a Child Restraint System (CRS)

After selecting a proper child seat for your child, check to make sure it fits properly in your vehicle. Follow the instructions provided by the manufacturer when installing the child seat. Note these general steps when installing the seat to your vehicle:

- **Properly secure the child restraint to the vehicle.** All child restraints must be secured to the vehicle with the lap part of a lap/shoulder belt or with the LATCH system.
- **Make sure the child restraint is firmly secured.** After installing a child restraint to the vehicle, push and pull the seat forward and from side-to-side to verify that it is securely attached to the seat. A child restraint secured with a seat belt should be installed as firmly as possible. However, some side-to-side movement can be expected.
- **Secure the child in the child restraint.** Make sure the child is properly strapped in the child restraint according to the manufacturer instructions.

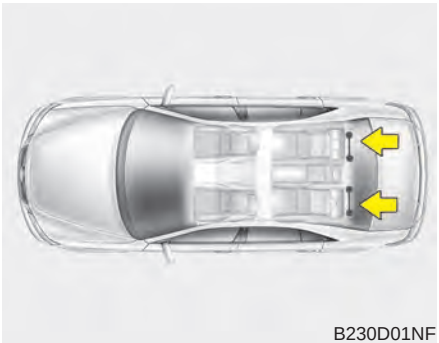
Lower Anchors and Tether for Children (LATCH) System

The LATCH system holds a child restraint during driving and in an accident. This system is designed to make installation of the child restraint easier and reduce the possibility of improperly installing your child restraint. The LATCH system uses anchors in the vehicle and attachments on the child restraint. The LATCH system eliminates the need to use seat belts to secure the child restraint to the rear seats.

Lower anchors are metal bars built into the vehicle. There are two lower anchors for each LATCH seating position that will accommodate a child restraint with lower attachments.

To use the LATCH system in your vehicle, you must have a child restraint with LATCH attachments.

The child seat manufacturer will provide you with instructions on how to use the child seat with its attachments for the LATCH lower anchors.

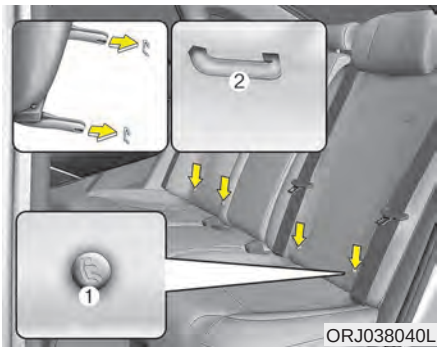


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LATCH anchors have been provided in the left and right outboard rear seating positions. Their locations are shown in the illustration. There are no LATCH anchors provided for the center rear seating position.

⚠ 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 in the left and right rear outboard seating positions. You may damage the anchors or the anchors may fail and break in a collision.



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The lower anchor position indicator symbols are located on the left and right rear seat backs to identify the position of the lower anchors in your vehicle (see arrows in illustration).

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

❈ (1) : Lower Anchor position indicator
(2) : Lower Anchor

Securing a child restraint with the LATCH anchors system

To install a LATCH-compatible child restraint in either of the rear outboard seating positions:

1. Move the seat belt buckle away from the lower anchors.
2. Move any other objects away from the anchors that could prevent a secure connection between the child restraint and the lower anchors.
3. Place the child restraint on the vehicle seat, then attach the seat to the lower anchors according to the instructions provided by the child restraint manufacturer.
4. Follow the child restraint instructions for properly adjusting and tightening the lower attachments on the child restraint to the lower anchors.

⚠ WARNING

Take the following precautions when using the LATCH system:

- **Read and follow all installation instructions provided with your child restraint system.**
- **To prevent the child from reaching and taking hold of the unused seat belts, buckle all unused rear seat belts before the child is placed into the vehicle. Lock each unused seat belt following the instructions in the "Automatic locking mode" subsection, and place the webbing behind the child seat or against an unused seat back. Children can be strangled if a shoulder belt becomes wrapped around their neck and the seat belt tightens.**
- **NEVER attach more than one child restraint to a single anchor. This could cause the anchor or attachment to come loose or break.**

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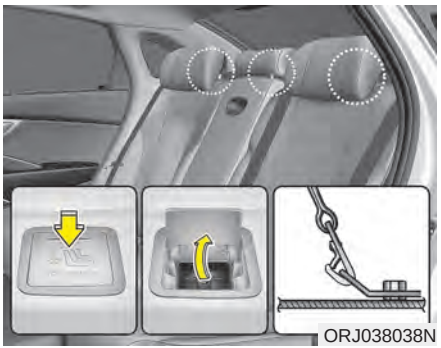
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- **Always have the LATCH system inspected by your authorized K900 Kia dealer after an accident. An accident can damage the LATCH system and may not properly secure the child restraint.**

✻ NOTICE

The recommended maximum weight for the LATCH system is 65 lbs. (30 kg). When selecting a proper child restraint, consider that the maximum total weight of the child plus the child restraint should be less than 65 lbs (30 kg).
As a guide, the MAX child restraint weight should be determined by the following calculation:
Child Restraint Weight =
65 - (child's total weight in lbs.)

Securing a child restraint seat with "Tether Anchor" system



First secure the child restraint with the LATCH lower anchors or the seat belt. If the child restraint manufacturer recommends that the top tether strap be attached, attach and tighten the top tether strap to the top tether strap anchor.

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

⚠ WARNING

Take the following precautions when installing the tether strap:

- **Read and follow all installation instructions provided with your child restraint system.**
- **NEVER attach more than one child restraint to a single tether anchor. This could cause the anchor or attachment to come loose or break.**
- **Do not attach the tether strap to anything other than the correct tether anchor. It may not work properly if attached to something else.**
- **Do not use the tether anchors for adult seat belts or harnesses, or for attaching other items or equipment to the vehicle.**
- **Always fasten the seat belts behind the child restraint seat when they are not used to secure the child seat. Failure to do so may result in child strangulation.**

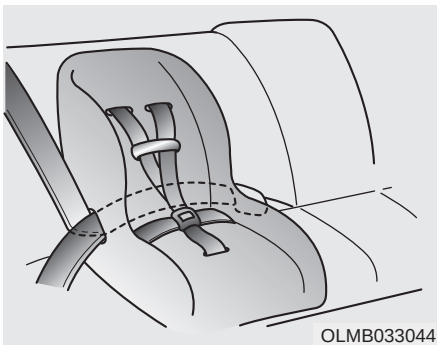

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To install the tether anchor:

1. Route the child restraint tether strap over the child restraint seatback. Route the tether strap under the head restraint and between the head restraint posts, or route the tether strap over the top of the vehicle seatback. Make sure the strap is not twisted.
2. Connect the tether strap hook to the tether anchor, then tighten the tether strap according to the child seat manufacturer's instructions to firmly secure the child restraint to the seat.
3. Check that the child restraint is securely attached to the seat by pushing and pulling the seat forward and from side-to-side.

Securing a child restraint with a lap/shoulder belt

When not using the LATCH system, all child restraints must be secured to a vehicle rear seat with the lap part of a lap/shoulder belt.


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Automatic locking mode

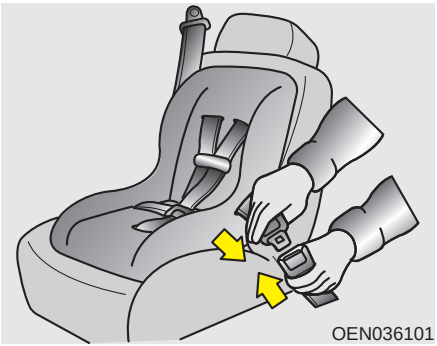
Since all passenger seat belts move freely under normal conditions and only lock under extreme or emergency conditions (emergency locking mode), you must manually pull the seat belt all the way out to shift the retractor to the "Automatic Locking" mode to secure a child restraint.

The "Automatic Locking" 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.

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

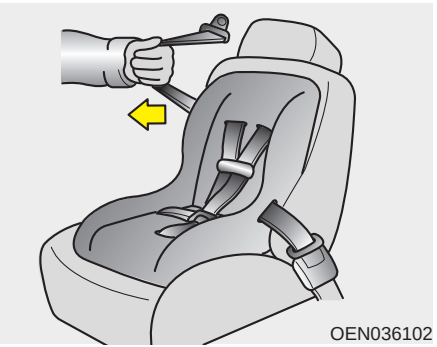
1. Place the child restraint system on a rear seat and route the lap/ shoulder belt around or through the child restraint, following the restraint manufacturer's instructions.

   Be sure the seat belt webbing is not twisted.

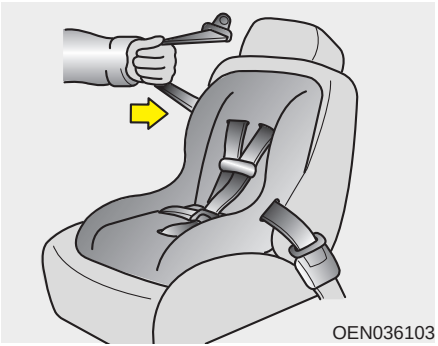

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2. Fasten the lap/shoulder belt latch into the buckle. Listen for the distinct "click" sound.

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


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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 "Automatic Locking" (child restraint) mode.


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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 “Automatic Locking” mode. If no distinct sound is heard, repeat steps 3 and 4.
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 “Automatic Locking” mode by attempting to pull more of the seat belt out of the retractor. If you cannot, the retractor is in the “Automatic Locking” mode.

If your CRS manufacturer instructs or recommends you to use a tether anchor with the lap/shoulder belt, refer to the previous pages for more information.

✻ NOTICE

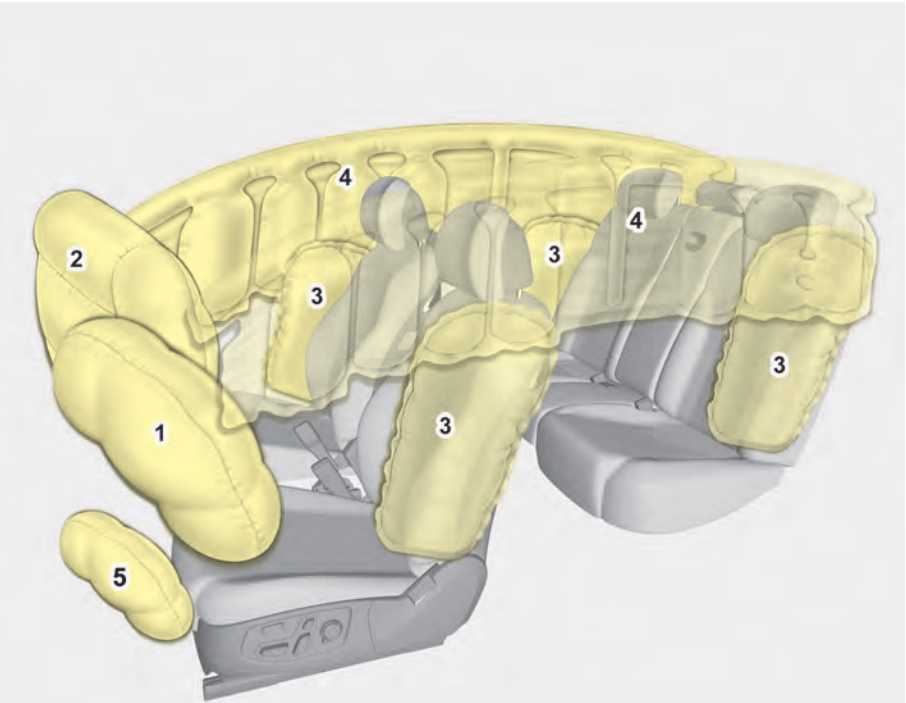
When the seat belt is allowed to retract to its fully stowed position, the retractor will automatically switch from the “Automatic Locking” mode to the emergency lock mode for normal adult usage.

⚠ WARNING - Auto lock mode

Set the retractor to Automatic Lock mode when installing any child restraint system. If the retractor is not in the Automatic Locking mode, the child restraint can move when your vehicle turns or stops suddenly.

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.

AIR BAG - ADVANCED SUPPLEMENTAL RESTRAINT SYSTEM



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

ORJ038041

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

⚠ WARNING

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

How does the air bag system operate?

- Air bags are activated (able to inflate if necessary) only when the Engine Start/Stop button is turned to the ON or engine is running.
- The appropriate air bags inflate instantly in the event of a serious frontal collision or side collision in order to help protect the occupants from serious physical injury.
- There is no single speed at which the air bags will inflate.

  Generally, air bags are designed to inflate based upon the severity of a collision and its direction. These two factors determine whether the sensors produce an electronic deployment/ inflation signal.
- Air bag deployment depends on a number of factors including vehicle speed, angles of impact, and, the density and stiffness of the vehicles or objects which your vehicle hits in the collision. The determining factors are not limited to those mentioned above.
- The front air bags will completely inflate and deflate in an instant.

  It is virtually impossible for you to see the air bags inflate during an accident.

  It is much more likely that you will simply see the deflated air bags hanging out of their storage compartments after the collision.
- In addition to inflating in serious side collisions, side and/or curtain air bags will inflate if the sensing system detects a rollover.
- When a rollover is detected, side and/or curtain air bags will remain inflated longer to help provide protection from ejection, especially when used in conjunction with the seat belts.
- In order to help provide protection, the air bags must inflate rapidly. The speed of the air bag inflation is a consequence of extremely short time in which to inflate the air bag between the occupant and the vehicle structures before the occupant impacts those structures. This speed of inflation reduces the risk of serious or life-threatening injuries and is thus a necessary part of the air bag design.

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

⚠ WARNING - Airbag inflation

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 can result in airbag inflation injuries to the driver.

Noise and smoke

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

Though smoke and powder are nontoxic, it may cause irritation to the skin (eyes, nose and throat, etc). If this is the case, wash and rinse with 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 airbag 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.

⚠ WARNING

Do not install or place any accessories near air bag deployment areas, such as the instrument panel, windows, pillars, and roof rails.

Do not install a child restraint on the front passenger's seat.



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 restraints in the front passenger's seat. If the front passenger air bag inflates, it could 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.**
- **Do not install or place any accessories near air bag deployment areas, such as the instrument panel, windows, pillars, and roof rails.**

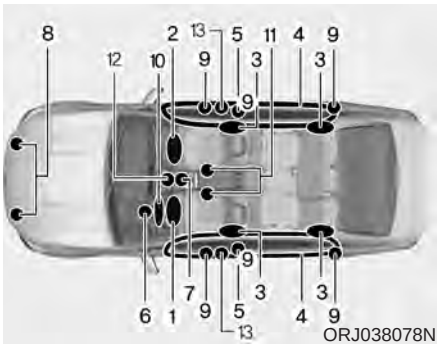
Air bag warning light



W7-147

The purpose of air bag warning light in your instrument panel is to alert you of a potential problem with your air bag system, which could include your side and/or curtain air bags used for rollover protection.

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) / Rollover sensor
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. Emergency fastening device (EFD)
13. Driver`s knee air bag module

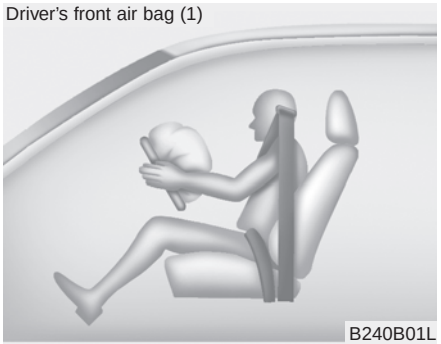


If the air bag warning light is illuminated for more than 6 seconds after the Engine Start/Stop button is turned on, or of it illuminates during vehicle operation, an SRS component may not be functioning properly and you should have your vehicle checked by an authorized K900 Kia dealer.

If any of the following conditions occur, this indicates a malfunction in the air bag system. Have an authorized K900 Kia dealer inspect the air bag system as soon as possible.

- The light does not turn on briefly when you turn the Engine Start/Stop button to the ON position.
- The light stays on after illuminating for approximately 6 seconds.
- The light comes on while the vehicle is in motion.
- The light blinks when the Engine Start/Stop button to the ON position.

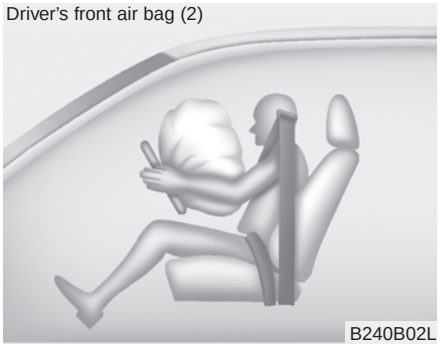
Driver's front air bag (1)



B240B01L

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

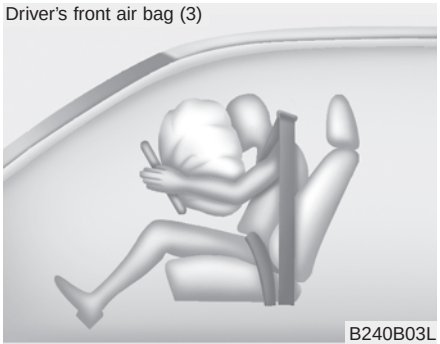
Driver's front air bag (2)



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)

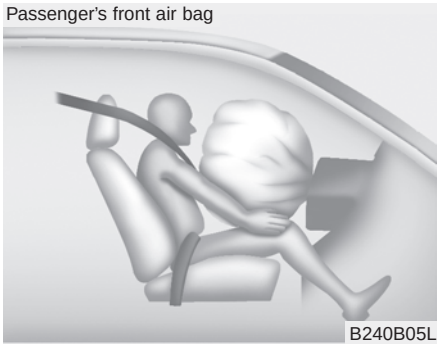


B240B03L

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.

⚠ 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.

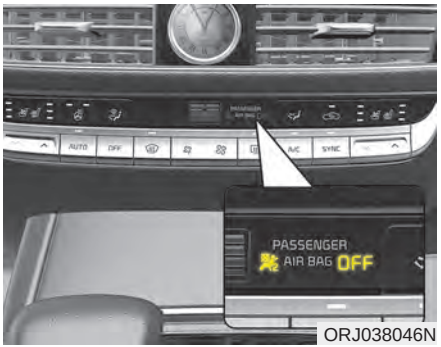
- If an air bag deploys, there may be a loud noise followed by a fine dust released in the vehicle. These conditions are normal and are not hazardous - the air bags are packed in this fine powder. The dust generated during air bag deployment may cause skin or eye irritation as well as aggravate asthma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

- The SRS can function only when the Engine Start/Stop button is in the ON position. If the SRS air bag warning light does not illuminate, or continuously remains on after illuminating for about 6 seconds when the ignition switch is turned to the ON position, or after the engine is started, comes on while driving, the SRS is not working properly. If this occurs, have your vehicle immediately inspected by an authorized K900 Kia dealer.

✻ NOTICE

Before you replace a fuse or disconnect a battery terminal, turn the Engine Start/Stop button to the OFF position.
Never remove or replace the air bag related fuse (s) when the Engine Start/Stop button to the ON position.
Failure to heed this warning will cause the SRS air bag warning light to illuminate.

Occupant Detection System (ODS)



ORJ038046N

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. Only the front passenger front air bag is controlled by the Occupant Detection System.

Do not put anything in front of the PASSENGER AIR BAG OFF indicator.

Main components of the occupant detection system

- An detection device located within the front passenger seat cushion.
- An electronic system which determines whether the 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” indicates 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 appropriate 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.

Condition and operation in the front passenger occupant detection system

Condition detected by the occupant classification system	Indicator/Warning light		Devices
	"PASSENGER AIR BAG OFF" indicator light	SRS warning light	Front passenger air bag
1. Adult*1	Off	Off	Activated
2. Child restraint system with child under 12 months old *2 *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 larger child who has outgrown a child restraint system sits in the front passenger seat, the system may recognize him/her as an adult depending upon his/her physique or sitting position.

*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.

⚠ CAUTION

- ***Do not install a child restraint seat in the passenger seat when the seat is heavily soaked with any type of liquid.***
- ***Do not alter or remodel the ODS (Occupant Detection System). This may damage the system and prevent its proper function in a collision.***

✻ NOTICE

- **Do not use car seat cushions that cover up the surface of the seat and aftermarket manufactured passenger seat heaters.**
- **After conducting car interior cleaning using steam or detergent, the seat should be dried properly. Afterward, check for normal operation of the "PASS AIR BAG "OFF" and air bag warning lights.**
- **Any service related to the passenger seat and the ODS must be done at Kia service center.**
- **After the passenger seat has been removed or installed for repair purposes, check for normal operation of the "PASS AIR BAG "OFF" and air bag warning lights with a person seated or not seated in the passenger seat.**

⚠ WARNING - ODS System

Riding in an improper position adversely affects the Occupant Detection System and may result in the deactivation of the front passenger airbag. It is important for the driver to instruct the passenger as to the proper seating instructions as contained in this manual.

✻ NOTICE

When the "PASS AIR BAG "OFF" symbol is illuminated, the passenger air bag system will not operate. The passenger air bag system will operate when necessary if the symbol is not illuminated.

✻ NOTICE

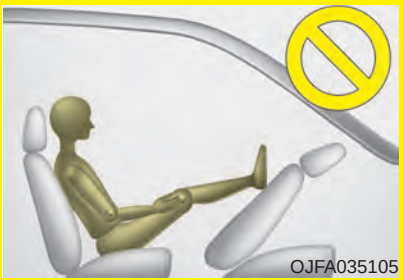
Do not modify or replace the front passenger seat. Don't place anything on or attach anything such as a blanket, front seat cover or after market seat heater to the front passenger seat. This can adversely affect the occupant detection system.

⚠ WARNING - ODS System

Riding in an improper position adversely affects the Occupant Detection System and may result in the deactivation of the front passenger airbag. It is important for the driver to instruct the passenger as to the proper seating instructions as contained in this manual.



- **Do not place a heavy load in the front passenger seatback pocket or on the front passenger seat.**



- **Do not place feet on the front passenger seatback.**



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



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



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

(Continued)

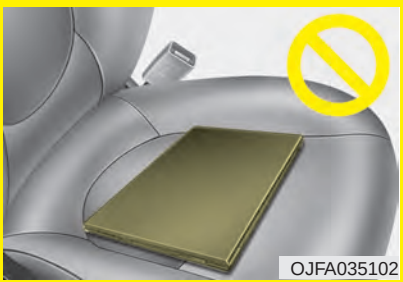
(Continued)


OJFA035101

- **Do not use car seat accessories such as thick blankets and cushions which cover up the car seat surface.**


OJFA035109

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

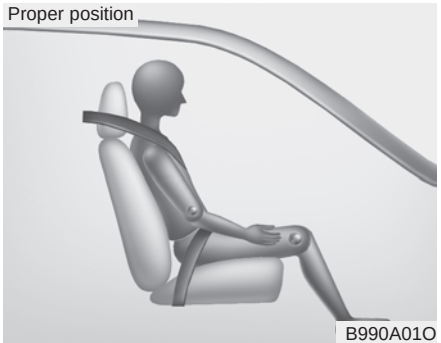

OJFA035102

- **Do not place electronic devices such as laptops, DVD player, or conductive materials such as water bottles on the passenger seat.**

Do not use electronic devices such as laptops and satellite radios which use inverter chargers.

⚠ WARNING
- Wet Passenger Seat

Do not spill liquid in the passenger seat. Spilled liquid on the passenger seat may cause the air bag warning light to illuminate or malfunction. If any liquid is spilled, make sure the seat has been completely dried before driving the vehicle.



When an adult is seated in the front passenger seat, if the PASSENGER AIR BAG “OFF” indicator is on, turn the Engine Start/Stop button to the OFF 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 Engine Start/Stop button 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.

- Even though your vehicle is equipped with the occupant detection system, never install a child restraint system in the front passenger's seat. A deploying air bag can forcefully strike a child resulting in serious injuries or death. 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.
- If the PASSENGER AIR BAG "OFF" indicator is illuminated when the front passenger's seat is occupied by an adult 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), have that person sit in the rear seat.

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.

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.

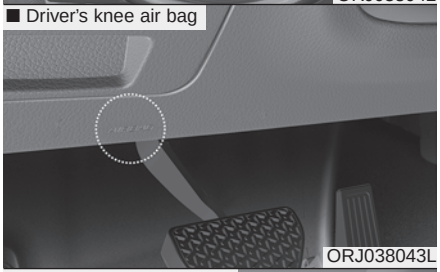
Driver's and passenger's front air bag

■ Driver's front air bag



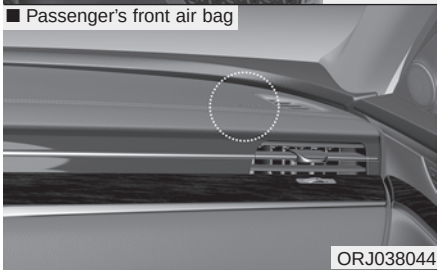
ORJ038042

■ Driver's knee air bag



ORJ038043L

■ Passenger's front air bag



ORJ038044

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

The SRS consists of air bags installed under the pad covers in the center of the steering wheel and the passenger's side 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 and front passenger's seat belt usage and impact severity.

The seat belt buckle sensors determine if the driver and front passenger's seat belts are fastened.

These sensors provide the ability to control the SRS deployment based on whether or not the seat belts are fastened, and how severe the impact is.

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 restrained in the rear seat.

According to the impact severity 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.

✻ NOTICE

The driver’s hands should be placed on the steering wheel at the 9:00 and 3:00 positions. The passenger’s arm and hands should be placed on their laps.

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 chapter.

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

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 K900 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.

✻ NOTICE

Air bags can only be used once – have an authorized K900 Kia dealer replace the air bag immediately after deployment.

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

⚠ 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.

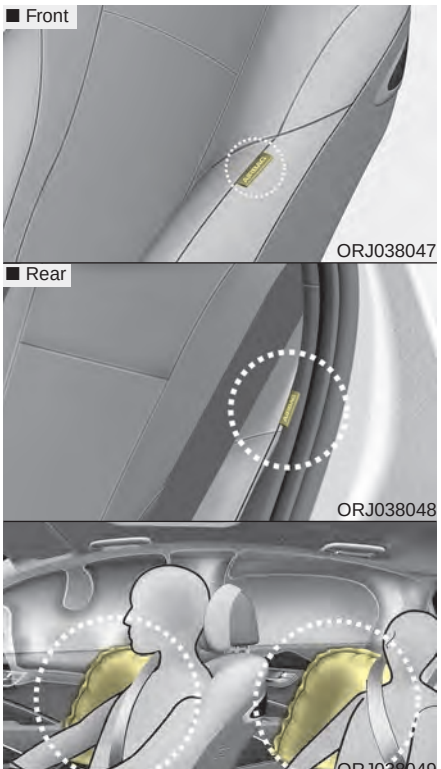
⚠ WARNING - No attaching objects

- **No objects (such as crash pad cover, cellular phone holder, cup holder, perfume or stickers) should be placed over or near the air bag modules on the steering wheel, instrument panel, windshield glass, and the front passenger's panel above the glove box. Such objects could cause harm if the vehicle is in a crash severe enough to cause the air bags to deploy.**

  Do not place any objects over the air bag or between the air bag and yourself.
- **Never place or insert any object into any small opening near side airbag labels attached to the vehicle seats.**

  When the air bag deploys, the object may affect the deployment and result in unexpected accident or bodily harm.

Side air bag



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

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

- The side air bags are designed to deploy during certain side-impact collisions, depending on the crash severity, angle, speed and point of impact. However, when side deployment threshold is satisfied at front-impact, side air bags may deploy.
- The side air bags may deploy on the side of the impact or on both sides.
- The side and/or curtain air bags on both sides of the vehicle will deploy if a rollover or possible rollover is detected.
- The side air bags are not designed to deploy in all side impact or rollover situations.

⚠ WARNING - Unexpected deployment

Avoid impact to the side impact airbag sensor when the Engine Start/Stop button is ON to prevent unexpected deployment of the side air bag.

- 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.
- 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 K900 Kia dealer. Inform the dealer that your vehicle is equipped with side air bags and an occupant detection system.

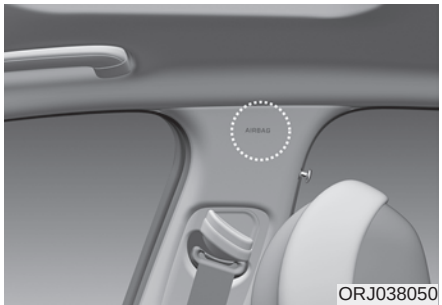
⚠ WARNING - Flying objects

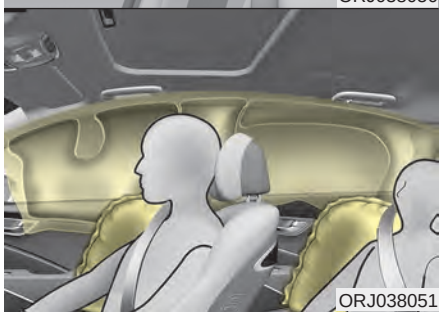
Do not place any objects (an umbrella, bag, etc.) between the front door and the front seat. Such objects may become dangerous projectiles if the side airbag inflates.

⚠ WARNING - No attaching objects

- **Do not place any objects over the air bag or between the air bag and yourself. Also, do not attach any objects around the area the air bag inflates such as the door, side door glass, front and rear pillar.**
- **Do not put any objects between the side airbag label and seat cushion. It could cause harm if the vehicle is in a crash severe enough to cause the air bags to deploy.**
- **Never place or insert any object into any small opening near side airbag labels attached to the vehicle seats. When the air bag deploys, the object may affect the deployment and result in unexpected accident or bodily harm.**
- **Do not install any accessories on the side or near the side air bags.**

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 occupants in certain side impacts and to help prevent them from ejecting out of the vehicle as a result of a rollover, especially when the seatbelts are also in use.

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

Do not allow the passengers to lean their heads or bodies against the 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 impact and/or curtain air bags.

✻ NOTICE

Never try to open or repair any components of the side and curtain air bag system. This should only be done by an authorized K900 Kia dealer.

⚠ WARNING - No attaching objects

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

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



ORJ038052/ORJ038053/ORJ038054/ORJ038055/ORJ038056/ORJ038057

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

⚠ WARNING - Air bag sensors

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

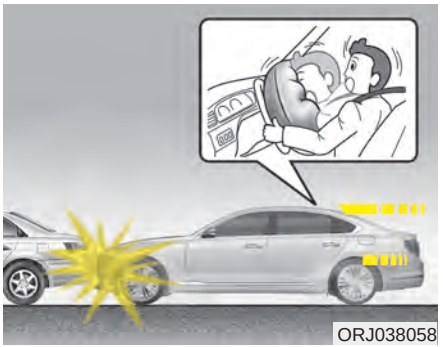
  This may cause unexpected air bag deployment, which could result in serious bodily injury or death.
- **If the installation location or angle of the sensors is altered in any way, the air bags may deploy when they should not or they may not deploy when they should.**

  Therefore, do not try to perform maintenance on or around the air bag sensors. Have the vehicle checked and repaired by an authorized K900 Kia dealer.

Problems may arise if the sensor installation angles are changed due to the deformation of the front bumper, front end module, body or front doors where side collision sensors are installed. Have the vehicle checked and repaired by an authorized K900 Kia dealer.

Installing bumper guards (or side step or running board) or replacing a bumper (or front door module) with non-genuine parts may adversely affect your vehicle's collision and air bag deployment performance.

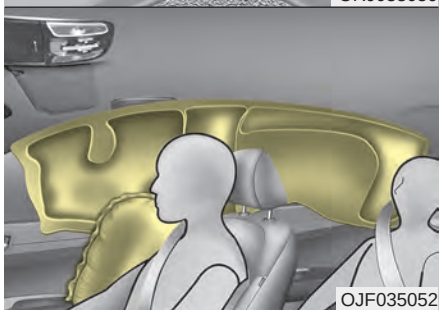
Air bag inflation conditions



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 and/or curtain 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.

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

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 and curtain air bags are designed to inflate in certain side impact collisions. They may inflate in other types of collisions where a side force is detected by the sensors. Side air bag and/or curtain air bags may also inflate where rollover sensors indicate the possibility of a rollover occurring (even if none actually occurs) or in other situations, including when the vehicle is tilted while being towed.

Even where side and/or curtain air bags would not provide impact protection in a rollover, however, they will deploy to prevent ejection of occupants, especially those who are restrained with seat belts.

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

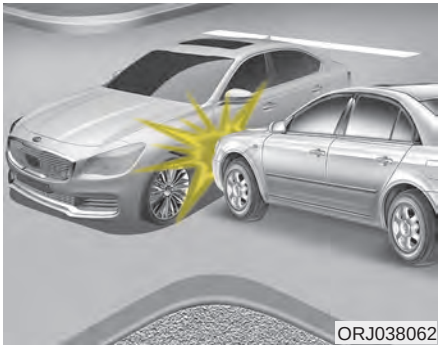
Air bag non-inflation conditions



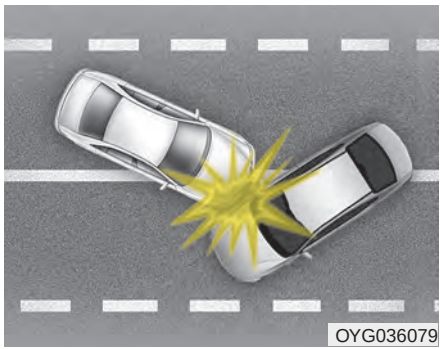
- In certain low-speed collisions the air bags may not deploy. The air bags are designed not to deploy in such cases because they may not provide benefits beyond the protection of the seat belts in such collisions.



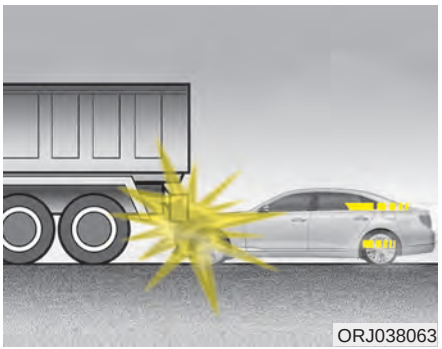
- Air bags are not designed to inflate in rear collisions, because occupants are moved backward by the force of the impact. In this case, inflated air bags would not be able to provide any additional benefit.



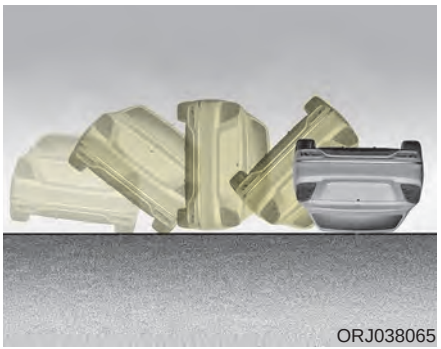
- Front air bags may not inflate in side impact collisions, because occupants move to the direction of the collision, and thus in side impacts, frontal air bag deployment would not provide additional occupant protection.



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



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



- Front air bags may not inflate in all rollover accidents where the SRSCM indicates that the front air bag deployment would not provide additional occupant protection.



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

SRS Care

The SRS is virtually maintenance-free and so there are no parts you can safely service by yourself. If the SRS air bag warning light does not illuminate, or continuously remains on, have your vehicle immediately inspected by an authorized K900 Kia dealer.

Any work on the SRS system, such as removing, installing, repairing, or any work on the steering wheel, the front passenger's panel, front seats and roof rails must be performed by an authorized K900 Kia dealer. Improper handling of the SRS system may result in serious bodily 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.

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 K900 Kia dealer knows these precautions and can give you the necessary information. Failure to follow these precautions and procedures could increase the risk of bodily injury.

⚠ 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 render the SRS inoperative.

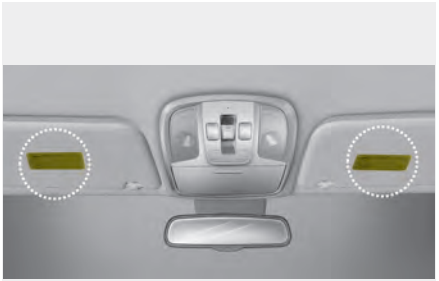
⚠ WARNING - Towing Vehicle

Always have the Engine Start/Stop button in the OFF position when your vehicle is being towed. The side air bags may inflate if the vehicle is tilted such as when being towed because of the rollover sensors in the vehicle.

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



ORJ038068N

Air bag warning labels, some required by the U.S. National Highway Traffic Safety Administration (NHTSA), are attached to the sunvisor 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 K900 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



OCK047005N

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


ORJ048003

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 28~40 in. (0.7~1 m) 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 Engine Start/Stop button is in the ACC or ON position.
- Any door 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.

The hazard warning lights will blink 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. (0.7~1m) from the outside door handle.

When Two press unlock function is activated,

- If you press the driver's outside door handle button, the driver`s door will unlock.
- If you press the driver's outside door handle button within four seconds again, then all the doors will unlock.

✻ NOTICE

You can activate or deactivate the Two Press Unlock function. Refer to "Set Up" in the Navigation touch screen in instrument panel.

Trunk unlocking

If you are within 28 ~ 40 in. (0.7 ~ 1 m) from the outside trunk handle, with your smart key in possession, the lift gate will unlock and open when you press the trunk handle switch.

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

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

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 K900 Kia dealer.
- A maximum of 2 smart keys can be registered to a single vehicle. If you lose a smart key, you should immediately take the vehicle and key to your authorized K900 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 is near a mobile two way radio system or a cellular phone.
  - Another vehicle's smart key is being operated close to your vehicle.

If the smart key does not work correctly, you may lock and unlock the door with the mechanical key.

If you have a problem with the smart key, contact an authorized K900 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 calls, 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.
- Do not leave the smart key near metallic objects such as golf bags, metal cases and so on.
- Door Lock/Unlock failure or poor starting can occur when the smart key is placed near metallic objects.
- Always carry your smart key when you leave the car. An unattended smart key close to the vehicle can cause the vehicle battery to be discharged.
- Internal circuit damage may occur when the key comes into contact with moisture (beverage, water etc.) or heat. Damage to the smart key due to exposure to liquids or heat is not covered by the manufacturer's vehicle warranty.
- When the smart key is left with a bunch of keys, the Lock/Unlock button for doors and trunk can be accidently pressed. Pay careful attention to key use.

⚠ 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



OCK047005N

Locking (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.

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

Unlocking (2)

All doors (and trunk) can be unlocked if the unlock button is pressed. The hazard warning lights will blink twice again to indicate that all doors (and trunk) are unlocked. After pressing this button, the doors will lock automatically unless you open any door within 30 seconds.

When Two press unlock function is activated,

- If you press the Door Unlock button (2) on the smart key, the driver`s door will unlock.
- If you press Door Unlock button(2) on the smart key within four seconds again, then all the doors will unlock.

✻ NOTICE

You can activate or deactivate the Two Press Unlock function. Refer to "Door/Trunk" mode in Navigation touch screen in instrument panel.

✻ 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 Unlocking (3)

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

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

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

Also, 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.



ORJ048008

Restrictions in handling keys

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

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

1. Unlock the glove box by using the mechanical key then open it.
2. Set the trunk lid control button to the LOCK position (pressed).
3. Close and lock the glove box using the main key.

When leaving your keys with a parking lot or valet attendant, perform steps 1 to 3 above, and leave the auxiliary key with the attendant. In this manner the auxiliary 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 UNLOCK position (unpressed).

Transmitter precautions

The smart key will not

work if any of following occurs:

- You exceed the operating distance limit (about 32.8 feet [10 m]).
- The battery in the smart key is weak.
- Other vehicles or objects may be blocking the signal.
- The weather is extremely cold.
- 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 transmitter.

If the smart key does not work correctly, you may lock and unlock the door with the mechanical key. If you have a problem with the smart key, contact an authorized K900 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 calls, 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.

⚠ CAUTION - Transmitter damage

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

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.

✻ 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

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 K900 Kia dealer.



OCK047004N

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

Mechanical key operations



OCK047003N

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

Smart key

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

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

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.

✻ 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.

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.

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 smart key.

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 K900 Kia dealer.

⚠ CAUTION - Immobilizer damage

Do not expose your immobilizer system to moisture, static electricity or 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.

This device complies with Part 15 of the FCC rules.

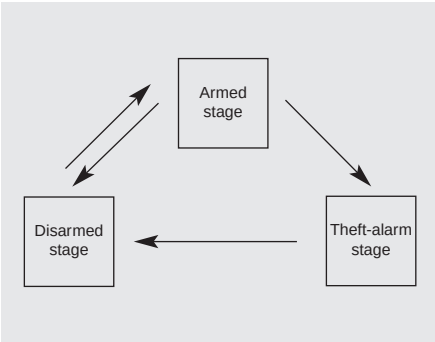
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1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

✻ NOTICE

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

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 smart key.

After completion of the steps above, the hazard warning lights will blink (for smart key, the chime also sounds) once to indicate that the system is armed.

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

The system can also be armed by locking the doors with the key from the front doors; however, the hazard warning lights will not blink using this method.

✻ NOTICE

The theft-alarm system can be deactivated by an authorized K900 Kia dealer.
If you want this feature, consult an authorized K900 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) leave the vehicle. If any door (or trunk) or engine hood is opened within 30 seconds after the system enters the armed stage, the system is disarmed to prevent an 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.
- The trunk is opened without using the smart key.
- The engine hood is opened.

The horn will sound and the hazard warning lights will blink continuously for approximately 30 seconds, and repeat the horn 2 times unless the system is disarmed. To turn off the system, unlock the doors with the smart key.

Disarmed stage

The system will be disarmed when

- The doors (and trunk) are unlocked with the smart key.

After depressing the unlock button, the hazard warning lights will blink and the chime will sound twice (in smart key) to indicate that the system is disarmed.

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

✻ NOTICE

- **Avoid trying to start the engine while the alarm is activated. The vehicle starting motor is disabled during the theft-alarm stage.**
  If the system is not disarmed with the smart key, open the doors by using the mechanical key and start the engine by directly pressing the engine Start/Stop button with the smart key.

- If you lose your keys, consult your authorized K900 Kia dealer.

⚠ CAUTION - Adjusting alarm system

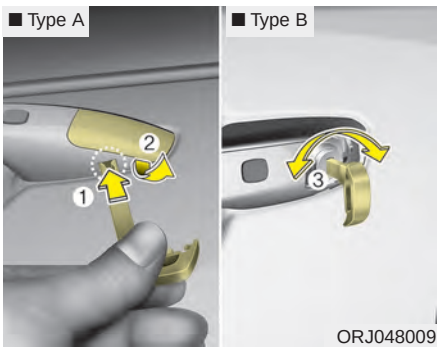
Do not change, alter or adjust the theft-alarm system because it could cause the theft-alarm system to malfunction.

✻ NOTICE

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

DOOR LOCKS

Operating door locks from outside the vehicle



- To remove the cover :

1. Pull out the door handle.
2. Press the lever (1) located inside the bottom part of the cover with a key or flat-head screwdriver.
3. Push out the cover (2) while pressing the lever.

- Turn the key (3) counterclockwise to lock and clockwise to unlock.
- 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 the doors are closed securely.
- If the vehicle's battery runs out and you leave the vehicle, make sure all the doors are locked. You can lock the driver's door with a key and the rest of the door with the lock button above the door inside handle.

✻ NOTICE

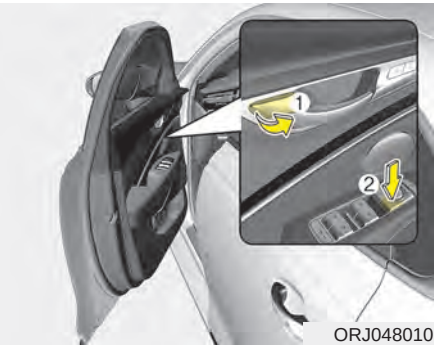
- **In cold and wet climates, door lock and door mechanisms may not work properly due to freezing conditions.**
- **If the door is locked/unlocked multiple times in rapid succession with either the vehicle key or door lock switch, the system may stop operating temporarily in order to protect the circuit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

⚠ CAUTION

Do not unnecessarily open and close the door repeatedly or with excessive force. Such action can damage the vehicle door.

⚠ WARNING

If adult passengers must remain in the vehicle while it is very hot or cold outside, there is risk of injuries or danger to life. Do not lock the vehicle from the outside when there are adult passengers in the vehicle.



ORJ048010

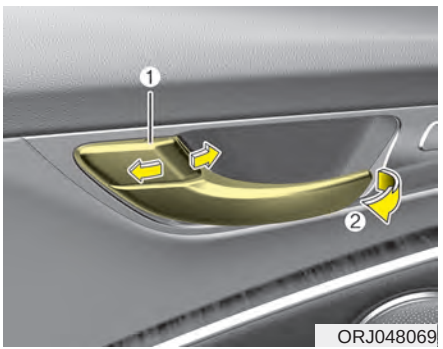
- To lock a door without the key, push the inside door lock button (1) or central door lock switch (2) to the “Lock” position and close the door.
- If you lock the door with the central door lock switch (2), all vehicle doors will lock automatically.

✻ NOTICE

Always place the Engine Start/Stop button is in the OFF position, engage the parking brake, close all windows, and lock all doors when leaving your vehicle unattended.

Operating door locks from inside the vehicle

With the door lock button



ORJ048069

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

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

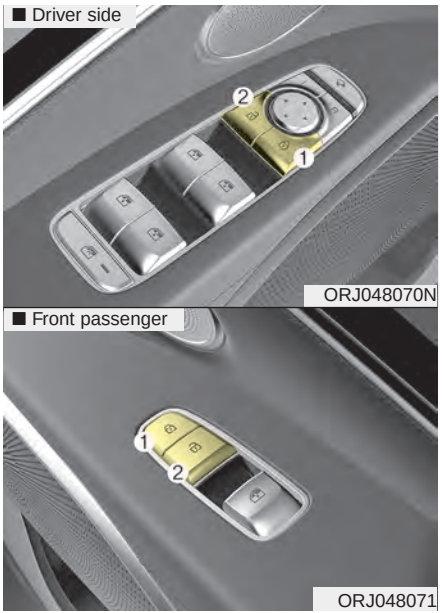
⚠ WARNING

Do not pull the inner door handle while the vehicle is moving.

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.

For Driver's door:

- When pushing down on the right portion (1) of the switch, all vehicle doors will lock.
- When pushing down on left portion (2) of the switch, all vehicle doors will unlock.

For Front Passenger's door:

- When pushing down on the front portion (1) of the switch, all vehicle doors will lock.
- When pushing down on the rear portion (2) of the switch, all vehicle doors will unlock.
- If the smart key is in the vehicle and any front door is opened, the doors will not lock even though the right portion(1, driver`s door) of the central door lock switch is pressed.

⚠ WARNING - Doors

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

⚠ 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.

Door lock/unlock features

Speed sensing door lock system

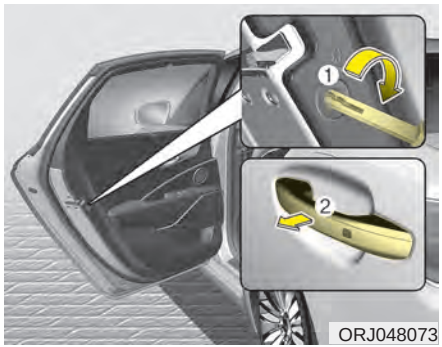
All doors will automatically lock after the vehicle speed exceeds 9 mph (15 km/h).

Auto door lock/unlock feature (if equipped)

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

You can activate or deactivate the auto door lock/unlock features in the vehicle. Refer to "Set Up" in Navigation touch screen in instrument panel.

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. Turn 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, the 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 moving, they may fall out.

Safe Exit Assist (If equipped)



If a vehicle occupant opens a door and the system senses a car approaching from behind the opened door, the warning message “Watch for traffic” appears and the alarming sound will continue for five seconds.

⚠ WARNING

If a car approaching from behind is too fast or a door is opened too suddenly the alarm system may not set off in time, which can increase the chance of an accident. Therefore, when exiting the vehicle, always check your surroundings to make sure that there are no cars or objects approaching.

This function works for ten minutes even after the ignition is turned off. The function will stop as soon as the car doors are locked with the smart key.

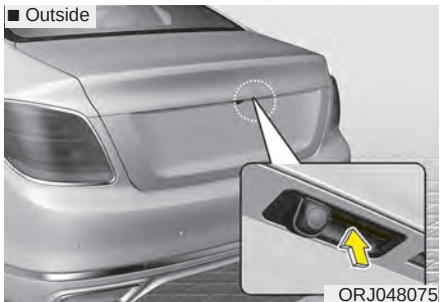
The alarming sound will generate from the door speaker. The sound will continue for five seconds.

TRUNK

Non-power trunk

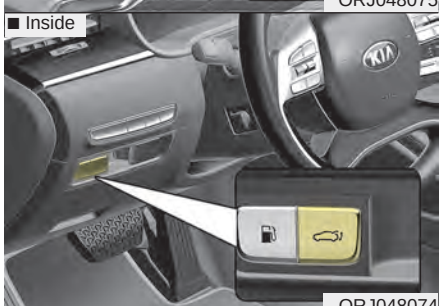
Opening the trunk

■ Outside



ORJ048075

■ Inside



ORJ048074

- The trunk is locked or unlocked when all doors are locked or unlocked with the smart key or central door lock/unlock button.
- Press the open button to open the trunk.
- Only the trunk is unlocked if the trunk unlock button on the smart key is pressed for approximately 1 second.
- If unlocked, the trunk can be opened by pressing the handle and pulling it up.
- Once the trunk is opened and then closed, the trunk locks automatically. (All doors must be locked.)

✻ NOTICE

In cold and wet climates, door lock and door 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.

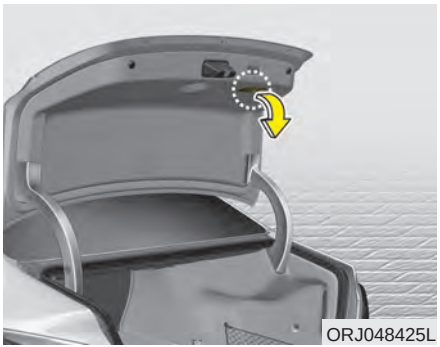
⚠ CAUTION

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.

✻ NOTICE

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

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, poisonous exhaust gases may enter the car and serious illness or death may result.

⚠ WARNING

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

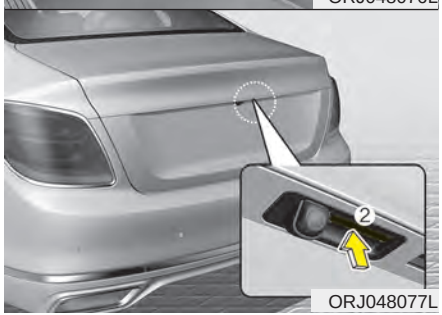
⚠ WARNING - Riding in cargo area

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

Power trunk (if equipped)









(1) Power trunk open/close button
(2) Power trunk handle switch
(3) Power trunk close button
(4) Power trunk lock button

✻ NOTICE

If the engine start/stop button is ON, the power trunk can operate when the automatic transaxle is in P (Park).

⚠ WARNING

Never leave children or animals unattended in your vehicle. Children or animals might operate the power trunk which could result in injury to themselves or others, or damage to the vehicle.

✻ NOTICE

Do not put heavy objects on the power trunk when you operate it. This could damage the power trunk system.

⚠ WARNING


ORJ048082N

Make sure that there are no people or objects in the path of the power trunk (or smart trunk) prior to use. Serious injury, damage to the vehicle or damage to surrounding objects may result if contact with the power trunk (or smart trunk) occurs.

⚠ CAUTION

Do not close or open the power trunk manually. This may cause damage to the power trunk. If it is necessary to close or open the power trunk manually when the battery is discharged or disconnected, do not apply excessive force.

Opening the trunk

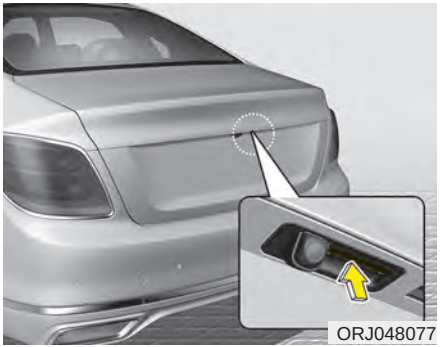

OCK047057N

The power trunk will open automatically by doing one of the following:

- Press the trunk unlock button on the smart key for approximately one second.



- Press the power trunk open button for approximately one second.
- To stop the power trunk while it is operating, press the power trunk open/close button shortly.



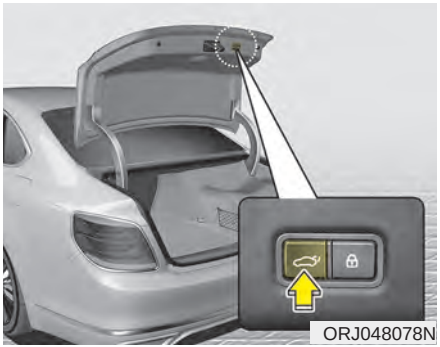
- Press the trunk handle switch carrying the smart key with you.

Closing the trunk



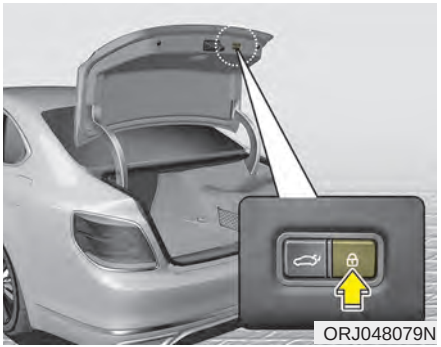
- Press the power trunk close button for approximately one second when the trunk is opened.

  The trunk will close and lock automatically.
- To stop the power trunk while it is operating, press the power trunk open/close button.



- Press the power trunk close button for approximately one second when the trunk is opened.

  The trunk will close and lock automatically.



▶ Power trunk Lock button operation

Press the Lock button on the trunk while carrying the Smart Key with all the vehicle's doors closed.

All doors will lock and arm the theft alarm system.

The operating conditions are as follows.

- All doors are closed, the ignition status is in the OFF state and the smart key is outside the vehicle
- If you do not meet the above conditions and press the button, alarm sounds.

✻ NOTICE

The Power Trunk Lock button will not work if you press the button when:

- **Any door is open.**
- **The Engine Start/Stop button is not in the OFF position.**
- **The Smart Key is in the vehicle.**

Power trunk non-opening conditions

The power trunk will not open or close automatically, when the vehicle is moving more than 2 mph (3 km/h).

⚠ WARNING

The chime will sound continuously if you drive over 2 mph (3 km/h) with the trunk opened. Stop your vehicle immediately at a safe place and check if your trunk is opened.

⚠ CAUTION

Do not operate the power trunk more than 5 times continuously.

It may damage the power trunk system. If you operate the power trunk more than 5 times continuously, the chime will sound 3 times and the power trunk will not operate. At this time, stop operating the trunk and leave it for more than 1 minute.

✻ NOTICE

- **The power trunk can be operated when the engine is not running. However the power trunk operation consumes large amounts of vehicle electric power. To prevent the battery from being discharged, do not operate it excessively e.g.: more than approximately 10 times repeatedly.**
- **To prevent the battery from being discharged, do not leave the power trunk in the open position for a long lime.**
- **Do not modify or repair any part of the power trunk by yourself. This must be done by an authorized Kia dealer.**
- **When jacking up the vehicle to change a tire or repair the vehicle, do not operate the power trunk. This could cause the power trunk to operate improperly.**
- **In cold and wet climates, the power trunk may not work properly due to freezing conditions.**

Automatic reversal



During power opening and closing if the power trunk is blocked by an object or part of the body, the power trunk will detect the resistance.

- If the resistance is detected while opening the trunk, it will stop and move in the opposite direction.
- If the resistance is detected while closing the trunk, it will stop and move in the opposite direction.

However, if the resistance is weak such as from an object that is thin or soft, or the trunk is near the latched position, the automatic stop and reversal may not detect the resistance.

If the automatic reversal feature operates continuously more than twice during opening or closing operation, the power trunk may stop at that position. At this time, close the trunk manually and operate the trunk automatically again.

⚠ WARNING

To prevent serious injury and damage take the following precautions when operating the power trunk:

- **Keep all faces, hands, arms, body parts and other objects away from the path of the power trunk.**
- **Do not intentionally place any body parts or objects in the path of the power trunk to make sure the automatic stop and reversal operates.**
- **Do not allow children to play with the power trunk.**

How to reset the power trunk

If the battery has been discharged or disconnected, or if the related fuse has been replaced or disconnected, for the power trunk to operate normally, reset the power trunk as follows:

1. Put the shift lever in P (Park).
2. While Pressing the trunk close button, press the trunk handle switch for more than 3 seconds. (the chime will sound)
3. Close the trunk manually.

If the power trunk does not work properly after the above procedure, have the system checked by an authorized K900 Kia dealer.

✻ NOTICE

If the power trunk does not operate normally, check again if the transmission position is in right position.

Trunk lid control button



ORJ048008

- When the trunk lid control button is in the UNLOCK position (not depressed), the power trunk can be controlled with the power trunk main switch, power trunk open, close button, and the smart key.
- When the trunk lid control button is in the LOCK position (depressed), the power trunk can only be controlled with the mechanical key of the smart key.

⚠ WARNING

Do not allow children to play with the power trunk. Keep the trunk lid control button in the LOCK (depressed) position when not in use. Serious injury or death can result from unintentional power operation by a child.

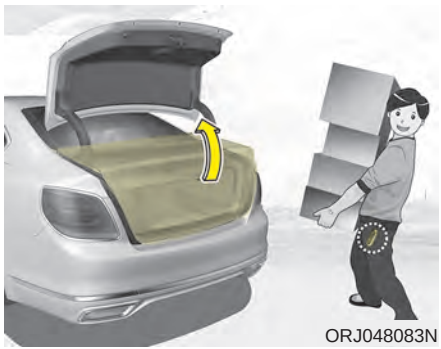
✻ NOTICE

Close the trunk, and keep the trunk lid control button in the LOCK (depressed) position before washing the vehicle in an automatic car wash.

⚠ WARNING

Even though the trunk lid control button is in the LOCK (depressed) position, the trunk will still be propelled upward by mechanical force if the trunk is manually opened more than 10 degrees beyond the fully closed position. In addition, if the trunk is manually closed to the secondary latch position, the trunk will be electrically moved to the fully latched position. Make sure that face, arms, hands, and other obstructions are safely out of the way before operating the trunk.

SMART TRUNK (IF EQUIPPED)


ORJ048083N

On a vehicle equipped with a smart key, the trunk lock is released with no-touch activation using the Smart Trunk system.

How to use the Smart Trunk

The trunk can be if the conditions below are satisfied. If the following conditions are met:

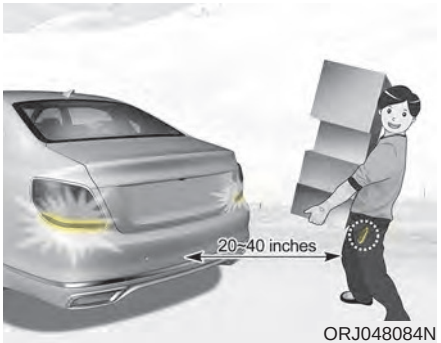
- It has been over 15 seconds since all the doors have been closed and locked.
- The smart key is positioned in the detecting area for more than 3 seconds.

✻ NOTICE

- **The Smart Trunk does not operate when:**
  - **The smart key is detected within 15 seconds after the doors are closed and locked, and is continuously detected.**
  - **The smart key is detected within 15 seconds after the doors are closed and locked, and 60 inches (1.5 m) from the front door handles (for vehicles equipped with Welcome Light).**
  - **A door is not locked or closed.**
  - **The smart key is in the vehicle.**

1. Setting

To activate the Smart Trunk, go to “Set Up” in the Navigation touch screen in instrument panel and select Smart Trunk.



2. Detect and Alert

If you are positioned in the detecting area (20 ~ 40 inches (50 ~100 cm) behind the vehicle) carrying a smart key, the hazard warning lights will blink and the chime will sound for about 3 seconds to alert you the smart key has been detected and the trunk will open.

✻ NOTICE

Do not approach the detecting area if you do not want the trunk to open. If you have unintentionally entered the detecting area and the hazard warning lights and chime starts to operate, leave the detecting area with the smart key. The trunk will stay closed.


ORJ048085

3. Automatic opening

The hazard warning lights will blink and the chime will sound 2 times and then the trunk lock will be released.

Make certain that you close the trunk before driving your vehicle.

Make sure there are no people or objects around the trunk before opening or closing the trunk.

Make sure to deactivate the Smart trunk function when washing your vehicle.

Otherwise, the trunk may open inadvertently.

⚠ WARNING

Make sure objects in the rear cargo area do not come out when opening the trunk as this could cause serious injury.

✻ NOTICE

The key should be kept out of reach of children. Children may inadvertently open the Smart Trunk while playing around the rear area of the vehicle.

How to deactivate the Smart Trunk function using the smart key



ORJ048417

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

If you press any button of the smart key during the Detect and Alert stage, the Smart Trunk function will be deactivated.

Make sure to be aware of how to deactivate the Smart Trunk function for emergency situations.

✻ NOTICE

- **If you press the door unlock button (2), the Smart Trunk function will be deactivated temporarily. But, if you do not open any door for 30 seconds, the smart trunk function will be activated again.**
- **If you press the trunk open button (3) for more than 1 second, the trunk opens.**
- **If you press the door lock button (1) or trunk open button (3) when the Smart Trunk function is not in the Detect and Alert stage, the smart trunk function will not be deactivated.**
- **If you have deactivated the Smart Trunk function by pressing the smart key button or opening a door, the smart trunk function can be activated again by closing and locking all doors.**

Detecting area

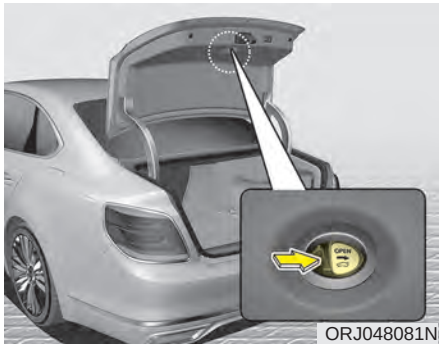


- The Smart Trunk operates a welcome alert if the smart key is detected within 20 ~ 40 inches (50 ~ 100 cm) from the trunk.
- The alert stops if the smart key is positioned outside the detecting area during the Detect and Alert stage.

✻ NOTICE

- **The Smart Trunk function will not work if any of the following occurs:**
  - **The smart key is close to a radio transmitter such as a radio station or an airport which can interfere with normal operation of the transmitter.**
  - **The smart key is near a mobile two way radio system or a cellular phone.**
  - **Another vehicle's smart key is being operated close to your vehicle.**
- **The detecting range may decrease or increase when :**
  - **One side of the vehicle is raised to replace a tire or to inspect the vehicle.**
  - **The vehicle is parked on a slope or unpaved road, etc.**

Emergency trunk safety release



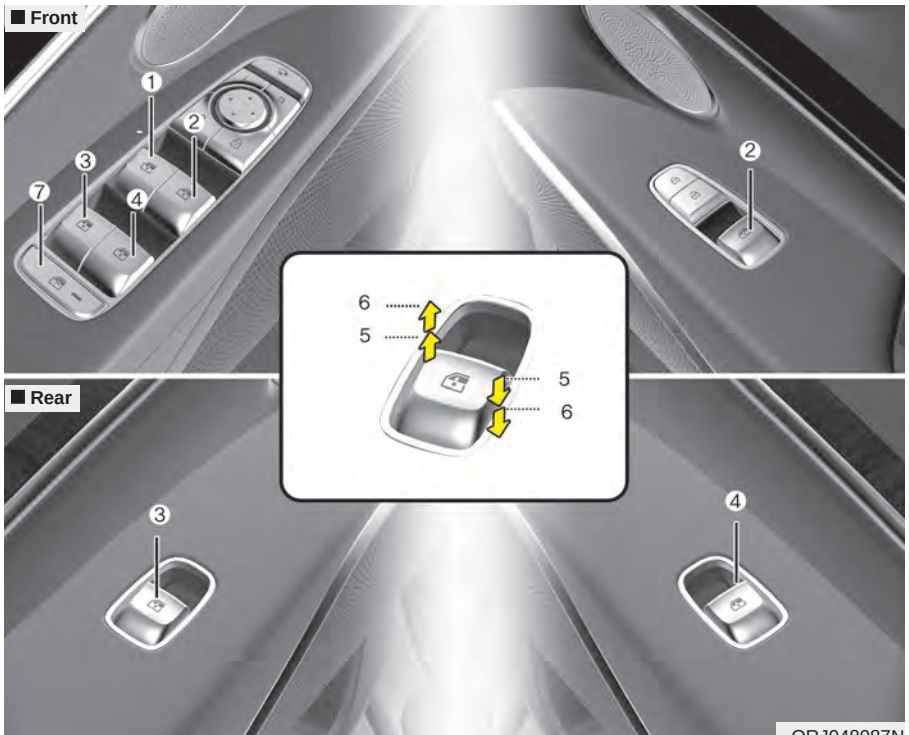
ORJ048081N

Your vehicle is equipped with an emergency trunk safety release lever located inside the trunk. In the event that someone is inadvertently locked in the trunk, the trunk can be opened by moving the lever in the direction of the arrow and pushing open the trunk.

⚠ WARNING

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

WINDOWS



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

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

Power windows

The Engine Start/Stop Button must be in the ON position for power windows to operate.

Each door has a power window switch that controls the door's window. The driver has a power window lock button which can block the operation of rear passenger windows.

The power windows can be operated for approximately 30 seconds after the engine start/stop button is set to the ACC or OFF position.

However, if the front doors are opened, the power windows cannot be operated even within the 30 seconds period.

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

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

✻ 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.

⚠ CAUTION

Do not install any accessories in the vehicle that extend into the open window area. Such objects will impact the proper function of the Automatic reversal "jam protection" feature described in this chapter.

⚠ WARNING - Power Windows

Do not extend your face or arms outside of the window opening while the vehicle is in motion. Doing so could result in significant injury.

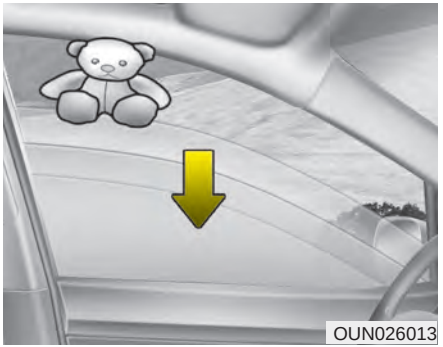
Auto up/down window



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

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

1. Press the Engine Start/Stop Button twice to the ON position.
2. Close the driver's and front passenger's window and continue pulling up the driver's power window switch for at least 1 second after the window is completely closed.



Automatic reversal

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

The distance may vary based on the size or position of the window. 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).

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 and front passenger'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.

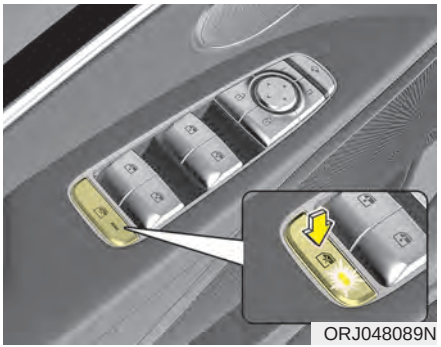
⚠ WARNING

The automatic reverse feature doesn't activate while resetting power window system. Make sure body parts or other objects are safely out of the way before closing the windows to avoid injuries or vehicle damage.

⚠ WARNING

Do not install any accessories in the vehicle that extend into the open window area. Such objects could prevent the automatic reverse feature from functioning.

Power window lock button



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

- **When the power window lock button is pressed :**
  - The driver's master control can operate all the power windows.
  - The front passenger's control can operate the front passenger's power window.

- The rear passenger's control cannot operate the rear passenger's power 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.

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

⚠ WARNING - Power windows

- **Do not allow children to play with the power windows. Keep the power window lock button (on the driver's door) in the LOCK (pressed) position.**
- **Do not extend a face or arms outside through the window opening while driving. Doing so could result in significant injury.**

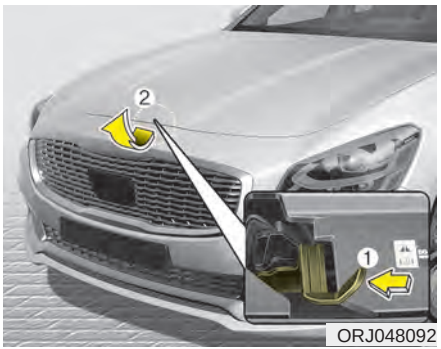
HOOD

Opening the hood



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

Only open the hood with the vehicle on a flat surface, engine is turned off, shift lever placed in P (Park) position and the parking brake set.



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

Hood open warning



The warning message will appear on the LCD display when hood is open.

The warning chime will operate when the vehicle is being driven at or above 2 mph (3 km/h) with the hood open.

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.
3. Check that the hood has engaged properly. If the hood can be raised slightly, it is not properly engaged.

   Open it again and close it with a little more force.

⚠ CAUTION - Hood obstruction

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.

⚠ 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.

⚠ 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.

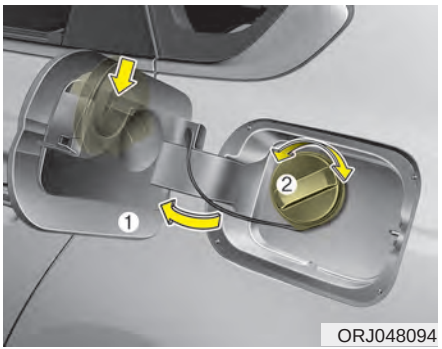
FUEL FILLER LID

Opening the fuel filler lid



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

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 button.
3. Pull open the fuel filler lid (1).
4. To remove the cap, turn the fuel filler cap (2) counterclockwise.
5. Refuel as needed.

Closing the fuel filler lid

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

✻ NOTICE

There may be an intermittent noise near the refueling hole while the engine is idling if the fuel cap is not closed securely. This occurs normally with the OBD system.

✻ NOTICE

When refueling on unlevel ground, the fuel gauge may not point to the F position.
It is not a malfunction. If you move your vehicle to a level ground, the fuel gauge will move to the full position.

Emergency fuel filler lid release



ORJ048095N

If the fuel filler lid does not open using the fuel filler lid opener button, you can open it manually.

Remove the panel in the cargo area. Pull the handle out slightly.

⚠ CAUTION

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

⚠ 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.

✻ NOTICE

Tighten the cap until it clicks once, otherwise the fuel cap open warning indicator light will illuminate.

⚠ WARNING - Fire/explosion risk

Read and follow all warnings posted at the gas station facility. Failure to follow all warnings may 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.**

(Continued)

(Continued)

Static electricity discharge can ignite fuel vapors resulting in rapid burning. If you must reenter 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 - 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.

⚠ 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.

Make sure to refuel your vehicle according to the “Fuel requirements” suggested in chapter 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.

SUNROOF (IF EQUIPPED)


ORJ048096

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 be operated for approximately 30 seconds after the Engine Start/Stop button is set to ACC or OFF position.

However, if the driver's door is opened, the sunroof cannot be operated even within the 30 second period.

⚠ CAUTION - Sunroof motor damage

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

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.

⚠ 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.

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

⚠ WARNING - Roof cargo

Do not operate the sun roof while using the roof rack to transport cargo. This may cause the cargo to come loose and distract the driver.

⚠ WARNING

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

⚠ WARNING

Do not allow children to operate the sunroof. This may result in injury to the child.

⚠ WARNING

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

⚠ WARNING

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

⚠ CAUTION

Do not extend any luggage outside the sunroof while driving.

Sunroof open warning



ORJ048114

If the driver turns off the engine when the sunroof is not fully closed, the warning chime will sound for a few seconds and the above warning illustration will appear on the LCD display.

Close the sunroof securely when leaving your vehicle.

⚠ CAUTION

Make sure the sunroof is fully closed when leaving your vehicle. If the sunroof is opened, rain or snow may leak through the sunroof and wet the interior as well as allow theft to occur.

Sunshade



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

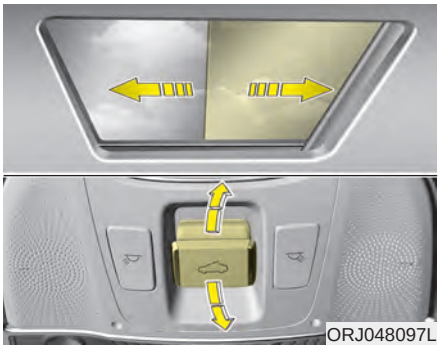
✻ NOTICE

Wrinkles formed on the sunshade as material characteristic are normal.

⚠ CAUTION - Automatic sunroof shade

- ***Do not pull or push the sunshade by hand as such action may damage the sunshade or cause it to malfunction.***
- ***Close the sunroof when driving in dusty environments. Dust may cause a malfunction of the vehicle system.***

Sliding the sunroof



To open the sunroof, push the sunroof control lever backward.

To close the sunroof, push the sunroof control lever forward.

To open the sunroof automatically:

Pull the sunroof control lever backward to the second detent position and then release it.

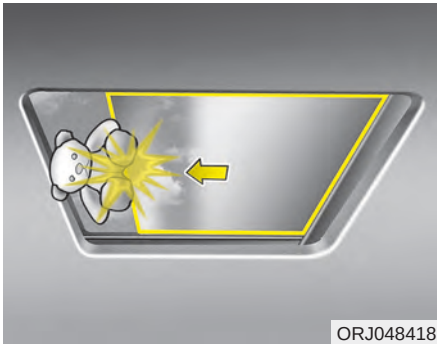
To stop the sunroof sliding at any point, push the sunroof control lever briefly.

To close the sunroof automatically:

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

To stop the sunroof sliding at any point, push the sunroof control lever briefly.

Automatic reversal



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

The auto reverse function may not work if a tiny obstacle is lodged between the sliding glass and the sunroof frame.

You should always check that all passengers and objects are away from the sunroof before closing it.

Objects less than 0.16 inch (4 mm) in diameter caught between the sunroof glass and the front glass channel may not be detected by the automatic reverse glass and the glass will not stop and reverse direction.

⚠ WARNING - Sunroof

- **Be careful that no head, hands and body parts are obstructed by a closing sunroof.**
- **Do not extend the face, neck, arms or body outside the sunroof while driving.**

⚠ 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.

⚠ CAUTION

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

✻ NOTICE

If you drive with the sunroof opened right after a vehicle wash or rain, water may get inside the vehicle.

⚠ 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.

Tilting the sunroof



To tilt open the sunroof, push the sunroof control lever upward. To stop the sunroof tilting at any point, operate the control lever.

To tilt down the sunroof, push the sunroof control lever upward again.

Resetting the sunroof

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

1. Start the engine.
2. Close the sunshade and sunroof completely if opened.
3. Release the sunroof control lever.
4. Push the sunroof control lever forward in the direction of close until the sunroof slightly moves. Then, release the lever.
5. Push the sunroof control lever forward in the direction of close, until the sunroof operates as follows again:

   Tilt up → Tilt down → Slide open → Slide close

   Then, release the lever.

When this is complete, the sunroof system has been reset and one touch open and close should be restored.

✻ NOTICE

If the Resetting the Sunroof procedure is not correctly followed, the sunroof may not operate properly.

STEERING WHEEL

Electric power steering (EPS)

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

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

Should you notice any change in the effort required to steer during normal vehicle operation, have the power steering checked by an authorized K900 Kia dealer.

- When you operate the steering wheel in low temperature, noise may occur. If temperature rises, the noise will likely disappear. This is a normal condition.
- When the vehicle is stationary, and the steering wheel is turned all the way to the left or right continuously, the steering wheel becomes harder to turn. The power assist is limited to protect the motor from overheating.

  As time passes, the steering wheel will return to its normal condition.

✻ NOTICE

The following symptoms may occur during normal vehicle operation:

- **The EPS warning light does not illuminate.**
- **The steering gets heavy 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 Engine Start/Stop button is turned to the ON or OFF position.**
- **A motor noise may be heard when the vehicle is at a stop or at a low driving speed.**
- **If the Electric Power Steering System does not operate normally, the warning light will illuminate on the instrument cluster. The power steering system will not operate and steering effort can increase. Take your vehicle to an authorized K900 Kia dealer and have the vehicle checked as soon as possible.**

(Continued)

(Continued)

- **When the charging system warning light comes on due to low voltage (when the alternator or battery do not operate normally or malfunction), the steering wheel may require increased steering effort.**

Tilt and telescopic steering

Tilt and telescopic 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.

Electric type



Adjust the steering wheel angle (2) and position (3) with the switch (1).

✻ NOTICE

To prevent discharge of the battery, do not operate when the engine is stopped.

Heated steering wheel (if equipped)



When the Engine Start/Stop Button is in the ON position, pressing the heated steering wheel button warms the steering wheel. The indicator on the button will illuminate.

• Heated steering wheel control

OFF→HIGH( )→LOW( )

▶Steering wheel heater automatic control system

• When the steering wheel heater automatic control system is in use at the level two (High).

After thirty minutes of use, the system will automatically switch to level one (Low). If any switch operation is not made, the system is kept at level one (Low). Press the switch to turn off the steering wheel heater.

The steering wheel automatic control system will not work if the driver switches the system to level one (Low) before thirty minutes pass.

• If you turn on the ignition with “The Auto Comfort Control” set from Navigation touch screen in instrument panel, the wheel heater wiring will be automatically controlled according to the temperature. Using the switch, the driver can operate the system according to the switch level.

⚠ 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.

⚠ CAUTION

- ***Do not install any type of grip cover for the steering wheel, it may impair the function of the heated steering wheel system.***
- ***When cleaning the heated steering wheel, do not use an organic solvent such as paint thinner, benzene, alcohol and gasoline. Doing so may damage the surface of the steering wheel.***
- ***If the surface of the steering wheel is damaged by a sharp object, damage to the heated steering wheel components could occur.***

Horn



ORJ048401

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

✻ NOTICE

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

MIRRORS

Inside rearview mirror

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

Do not place objects in the rear seat or cargo area 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.

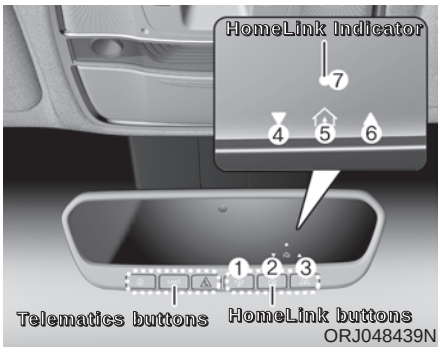
⚠ WARNING

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

Electric chromic mirror (ECM) with HomeLink® system

Your vehicle may be equipped with a Gentex Automatic-Dimming Mirror 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.



ORJ048439N

(1) HomeLink Channel 1
(2) HomeLink Channel 2
(3) HomeLink Channel 3
(4) Garage Door Opener Status Indicator : Closing or Closed
(5) HomeLink Operation Indicator
(6) Garage Door Opener Status Indicator : Opening or Opened
(7) HomeLink User Interface Indicator

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

The NVS® Mirror in your vehicle is designed to reduce annoying glare in the rearview mirror while driving. For more information regarding NVS® mirrors and other applications, please refer to the Gentex 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.

✻ NOTICE

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

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.

❊ HomeLink® is a registered trademark of Johnson Controls, Inc.

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 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 program most devices, follow these instructions:



1. Press and release (1), (2) or (3) button.
   - If the indicator (4) is turned ON in Orange, go to Step 3) since it is a new programming.
   - If the indicator (4) is continuously turned ON or flashes in Green rapidly several times, go to Step 2) since it is a programmed button.

2. Press and hold the button you wish to program about 15-25 seconds until the LED flashes in Orange for several times.
3. Hold the Garage Door Opener Original Transmitter (OT) near the HomeLink Mirror.



4. Press the Original Transmitter (OT) button until the indicator (4) is turned continuously ON or flashes in Green for approximately 10 seconds and it indicates the programming is completed.

✻ NOTICE

- **Some garage door openers may require you to press the program button on the mirror up to three times right after the programming is completed to operate the garage door.**
- **The indicator (4) is turned ON in Orange and flashes for about 60seconds, during the programming mode and if a programming is not successful within the 60 seconds, the programming mode will be abort.**

Gate operator & Canadian programming

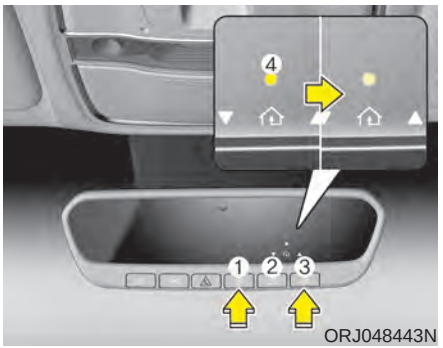
During programming, your handheld-transmitter may automatically stop transmitting. Continue to press the Integrated HomeLink® Wireless Control System button while you press and re-press (“cycle”) your handheld transmitter every two seconds until the frequency signal has been learned. The indicator light will flash slowly and then rapidly after several seconds upon successful training.

Operating HomeLink®



1. Press and release one of the HomeLink buttons (1, 2 or 3) that programed.
2. The HomeLink indicator (4) will operate as below:
   - Indicates Green and is continuously ON (Fixed Code Garage Door Opener)
   - Flashes in Green rapidly (Rolling Code Garage Door Opener)

Erasing HomeLink® buttons



1. Press and hold the button (1) and (3) simultaneously.
2. The indicator (4) is turned continuously ON in orange for about 10 seconds.
3. Then the indicator (4) color changes to Green and flashes rapidly.

   Release the buttons once the green indicator flashes.
4. Now HomeLink button (1), (2) and (4) memories are all cleared.

NVS® is a registered trademark and Z-Nav™ is a trademark of the Gentex Corporation, Zeeland, Michigan. HomeLink® is a registered trademark owned by Johnson Controls, Incorporated, Milwaukee, Wisconsin.

FCC ID: NZLZTVHL3

IC: 4112A-ZTVHL3

✻ NOTICE

This device complies with Part 15 of the FCC Rules.
Operation is subject to the following three 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.**
3. **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.**

Two Way Communication Programming

1. Complete the HomeLink “Programming” first.
2. Before the first 10 times the HomeLink button is pressed after the programming, the following steps MUST occur to program two way communication. (only for some older garage doors)



3.Press and release the programmed HomeLink button to activate the garage door.

4.Once the garage door is stopped, press and release the “Lean” or “Smart” button on the Garage door opener within 1 minute from the time of pressing the programmed HomeLink button on the rearview mirror.



5.If the both indicator (4) and (6) are flashing rapidly for about 5 seconds, the two way synchronization is completed.

✻ NOTICE

Some newer garage door openers provides automatic two way communication synchronization while just programming the OT (Original Transmitter).

Operating Two Way Communication



1.Press and release (1), (2) or (3) button.



ORJ048446N

2. The indicator (4) and (6) operates as below:
   - If the indicator (4) flashes in Orange, it indicates that the garage door is “closing”.
   - If the indicator (4) is ON continuously in Green, it indicates that the garage door is “closed”.
   - If the indicator (6) flashes in Orange, it indicates that the garage door is “Opening”.
   - If the indicator (6) is ON continuously in Green, it indicates that the garage door is “Opened”.
   - If the indicator (4) or (6) does not turn to Green, it indicates that the last status of garage door was not received properly (HomeLink mirror tries to receive the last status of garage door for seconds.)

Recalling Garage Door Status

Homelink mirror provides a way to view the last stored message from the garage door opener. In order to recall the last known status of the last activated device, press the buttons “1 and 2” OR “2 and 3” simultaneously.

- If the indicator (4) is ON continuously in Green, it indicates that the last activated device was “closed” properly.
- If the indicator (6) is ON continuously in Green, it indicates that the last activated device was “open” properly.

✻ NOTICE

Two way communication range distance between "vehicle" and "garage door opener" is 100m.
The range may be reduced or increased due to obstacle conditions around the garage door opener, such as houses or trees.

Outside rearview mirror

Be sure to adjust the mirror angles before driving.

Your vehicle is equipped with both left-hand and right-hand outside rearview mirrors. The mirrors can be adjusted remotely with the remote switch. The mirror heads can be folded back to prevent damage during an automatic vehicle 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

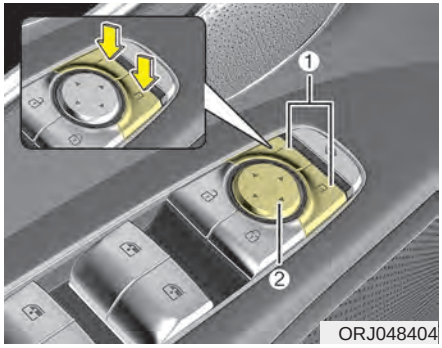
Do not scrape ice off the mirror face; this may damage the surface of the glass. If ice should restrict the movement of the mirror, do not force the mirror for adjustment. To remove ice, use a deicer spray, a sponge or soft cloth with very warm water.

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

⚠ WARNING - 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, press the R or L button (1) to select the right side mirror or the left side mirror, then press a corresponding point (▲) on the mirror adjustment control to position the selected mirror up, down, left or right.

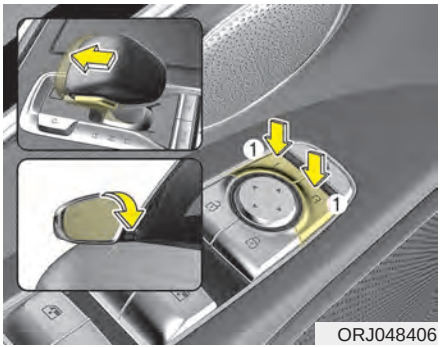
After adjustment, press the R or L button again to prevent the inadvertent adjustment.

⚠ 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 in reverse, 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:

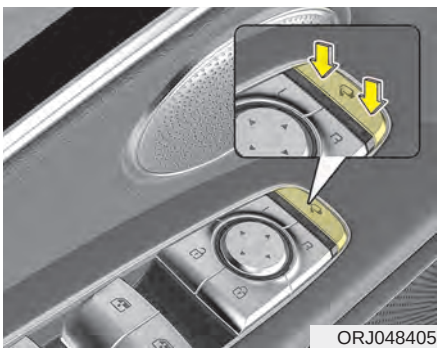
L/R : When the remote control outside rearview mirror switch (1) is selected to the L (left) or R (right) position, both outside rearview mirrors will move downward.

Neutral : When the remote control outside rearview mirror switch is placed in the middle position, 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 Engine Start/Stop button is in the OFF position.
2. Shift lever is moved to any position except R (Reverse).
3. The remote control outside rearview mirror switch is not selected.

Folding the outside rearview mirror



Electric type

The outside rearview mirror can be folded or unfolded by pressing the button.

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.

⚠ CAUTION - Electric type outside rearview mirror

The electric type outside rearview mirror operates even though the engine start/stop button 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.

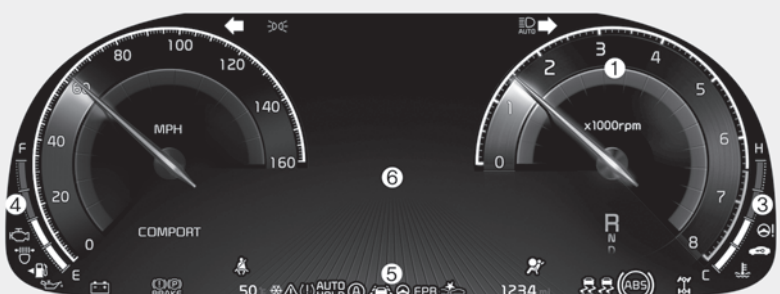
Do not fold the electric type outside rearview mirror by hand. This could cause motor failure.

INSTRUMENT CLUSTER

■ **Type A**



■ **Type B**



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

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

ORJ048100N/ORJ048101N

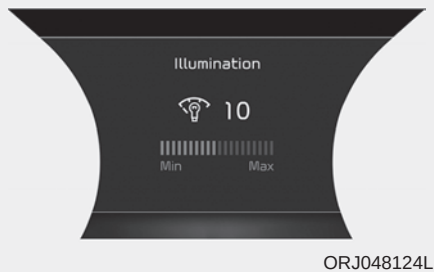
Instrument Cluster Control

Adjusting Instrument Cluster Illumination

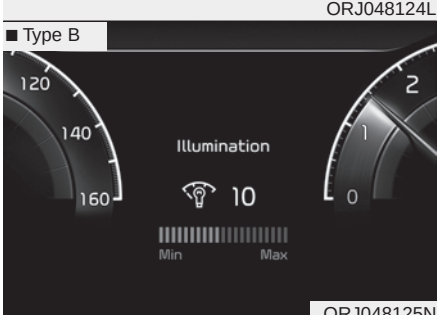


The brightness of the instrument panel illumination is changed by pressing the illumination control button (“+” or “-”) when the Engine Start/Stop button is ON, or the taillights are turned on.

■ Type A

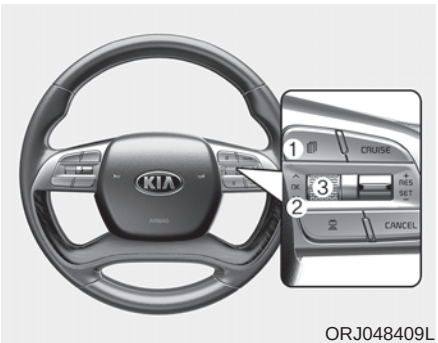


■ Type B



- 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 Window Control



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

(1) : MODE button for changing modes

(2) ∧/∨ : MOVE scroll switch for selecting the items

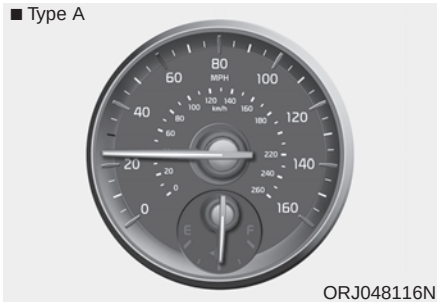
(3) OK : SET/RESET button for setting the items or resetting the items

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

Gauges

Speedometer

■ Type A



ORJ048116N

■ Type B



ORJ048117N

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



ORJ048118

■ Type B



ORJ048119

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

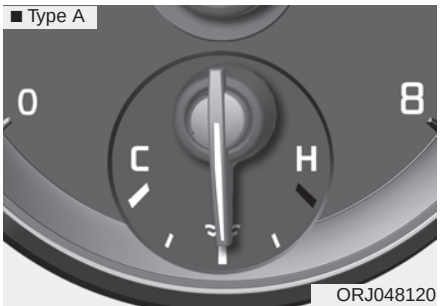
Use the tachometer to select the correct shift points and to prevent lugging and/or over-revving the engine.

⚠ CAUTION - Red zone

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

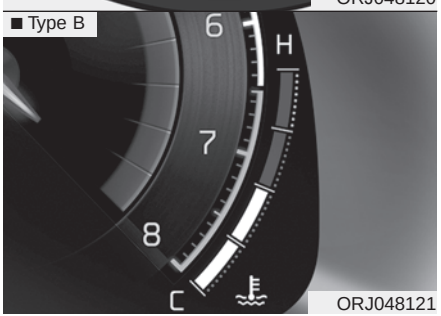
Engine Coolant Temperature Gauge

■ Type A



ORJ048120

■ Type B



ORJ048121

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

If the gauge pointer moves or displays 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.

⚠ WARNING - Hot radiator

Never remove the radiator cap when the engine is hot. The engine coolant is under pressure and could cause severe burns. Wait until the engine is cool before adding coolant to the reservoir.

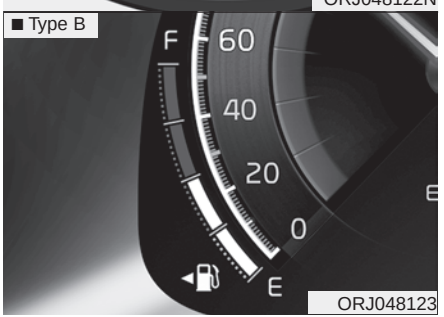
Fuel Gauge

■ Type A



ORJ048122N

■ Type B



ORJ048123

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 - Fuel gauge

Running out of fuel can expose vehicle occupants to danger. You must 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 - Low fuel

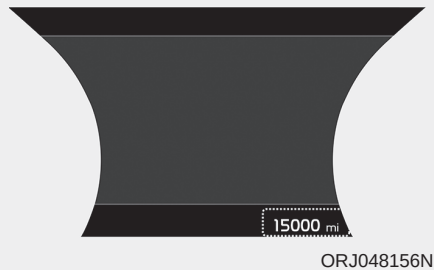
Avoid driving with an extremely low fuel level. Running out of fuel could cause the engine to misfire damaging the catalytic converter.

✻ NOTICE

The fuel display may not be accurate if the vehicle is on an incline.

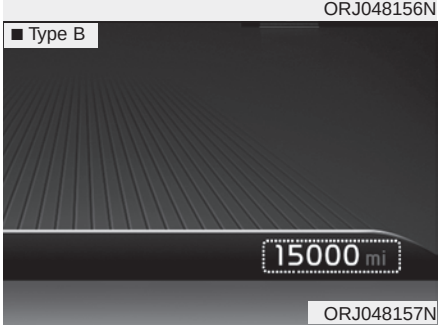
Odometer

■ Type A



ORJ048156N

■ Type B



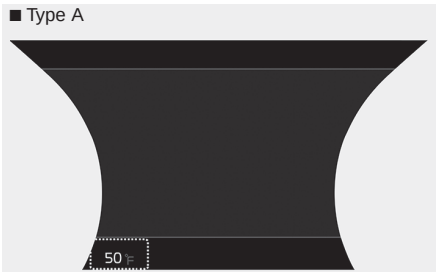
ORJ048157N

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 0 ~ 1599999 kilometers.

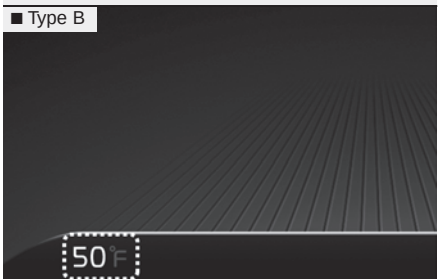
Outside Temperature Gauge

■ Type A



ORJ048126N

■ Type B



ORJ048128N

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

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

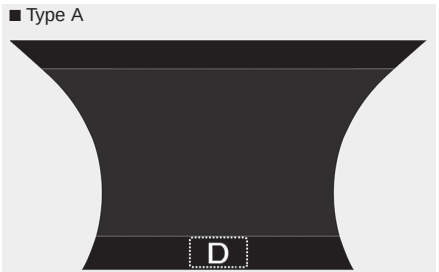
The outside temperature on the display may not change immediately like a general thermometer to prevent the driver from being distracted.

The temperature unit can be changed by using the “Set Up” mode of the Navigation touch screen in instrument panel.

Transmission Shift Indicator

Automatic Transmission Shift Indicator

■ Type A



ORJ048127

■ Type B



ORJ048129

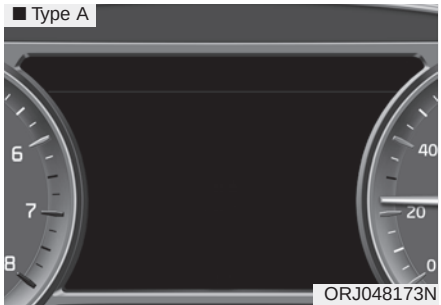
This indicator displays which automatic transmission shift lever is selected.

- Park : P
- Reverse : R
- Neutral : N
- Drive : D

LCD WINDOWS (IF EQUIPPED)

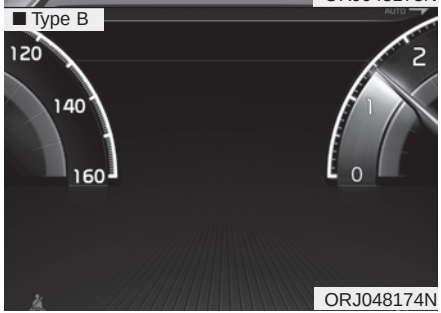
Over view

■ Type A



ORJ048173N

■ Type B



ORJ048174N

LCD windows show the following information to drivers.

- Trip information
- LCD modes
- Warning messages

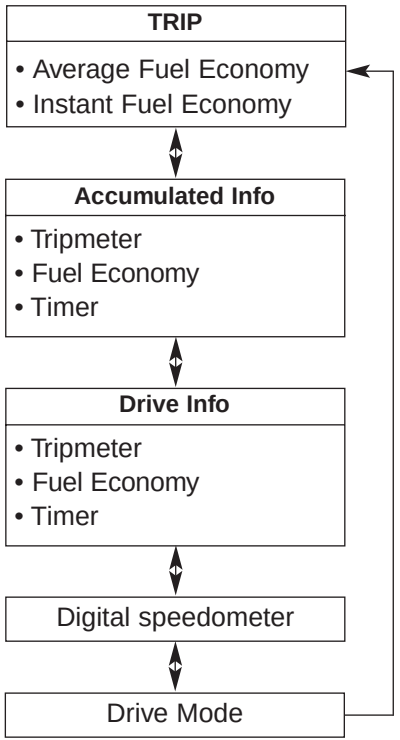
Trip information (Trip computer)

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

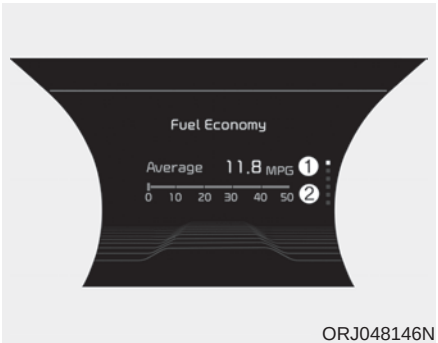
✻ NOTICE

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

Trip Modes



Fuel Economy



ORJ048146N

Average Fuel Economy (1)

- 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.

✻ NOTICE

The fuel economy may vary significantly based on driving conditions, driving habits, and condition of the vehicle.

Manual reset

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

Automatic reset

To make the average fuel economy be reset automatically whenever refueling, select the “Fuel economy auto reset” mode in Set Up menu of the Navigation touch screen in instrument panel.

- OFF - You may set to default manually by using the trip switch reset button.
- When driving - The vehicle will automatically set to default once 4 hours pass after the Engine Start/Stop Button is in the ACC or OFF position.
- When refueling - After refueling more than 2 gallons (6 liters) and driving over 1 mph (1 km/h), the vehicle will reset to default automatically.

✻ NOTICE

For a more accurate calculation of the average fuel economy, the vehicle must be continuously driven more than 10 seconds and 0.03 miles (50 meters).

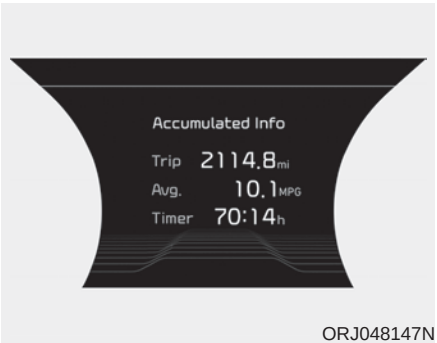
Instant Fuel Economy (2)

- 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), 0 ~ 30 (km/L, L/100 km).

⚠ CAUTION - Low Fuel Level

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

Accumulated driving information mode



ORJ048147N

Displays accumulated information starting from mileage/fuel efficiency/time default point.

- Accumulated information is calculated after the vehicle has run for more than 0.19 mi. (300 meters).
- If you press “OK” button for more than 1 second after the Cumulative Information is displayed, the information will be reset.
- If the engine is running, even when the vehicle is not in motion, the information will be accumulated.

One time driving information mode



ORJ048148N

The vehicle will display Driving Information once per one ignition cycle.

- Fuel efficiency is calculated after the vehicle has run for more than 0.19 mi. (300 meters).
- The Driving Information will be reset 4 hours after ignition has been turned off. So, when the vehicle ignition is turned on within 4 hours, the information will not be reset.
- If you press “OK” button for more than 1 second after the Driving Information is displayed, the information will be reset.
- If the engine is running, even when the vehicle is not in motion, the information will be accumulated.

Digital speedometer



ORJ048149N

This mode displays the current speed of the vehicle.

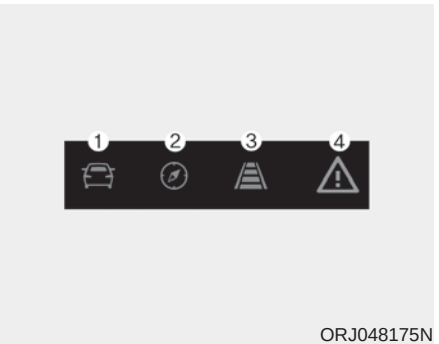
Drive mode (if equipped)



ORJ048150N

This mode displays the currently selected drive mode.

LCD Modes



ORJ048175N

(1) Trip Computer mode

This mode displays driving information such as the tripmeter, fuel economy, and so on.

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

(2) Turn by Turn mode (if equipped)

This mode displays the state of the navigation.

(3) Assist mode

This mode displays the state of the lane safety systems (Lane Keeping Assist, Lane Following Assist),Smart Cruise Control, Driver Attention Warning and Tire pressure.

❈ For more details, refer to chapters 5 and 6.

(4) Master warning mode

This mode informs of warning messages related to low tire pressure or malfunction of Blind-spot Collision Warning and so on.

❈ For controlling the LCD modes, refer to “LCD window Control” in this chapter.

Trip computer mode



ORJ048130N

This mode displays driving information like the tripmeter, fuel economy, and so on.

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

Turn By Turn Mode (if equipped)



ORJ048131N

This mode displays the state of the navigation.

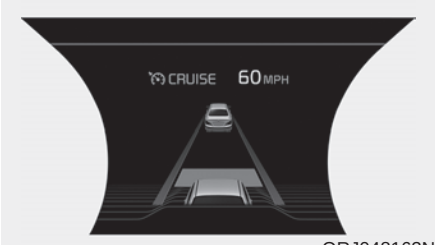
Assist mode (if equipped)



ORJ048132L



ORJ048133L



ORJ048163N



ORJ048134L

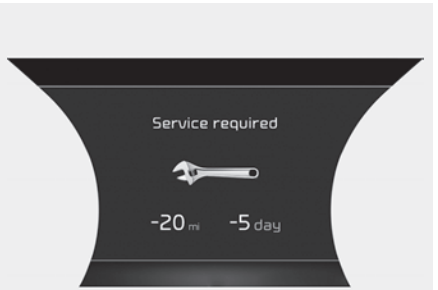


ORJ048135L

This mode displays the state of the lane safety systems (Lane Keeping Assist, Lane Following Assist),Smart Cruise Control, Driver Attention Warning and Tire pressure.

❈ For more details, refer to chapters 5 and 6.

Service mode



ORJ048136N

When Service Required is set, the remaining distance/time before service is required appears on the LCD screen.

From the point at which the remaining distance to drive amounts to 900 mi. (1,500 km) or the remaining time amounts to 3 days, the Service Required message automatically displays and remains on the LCD screen for a number of seconds every time the engine start/stop button is ON.

When Service Required is set, a Service Required Alarm message pops up when an aggregated amount of miles/time driven reaches a certain point.

With Service Required mode, press OK button for more than 1 second.

The values will return to initial setting values.

❈Service Required Setting

If the Battery Cable is disconnected, Fuse Switch is turned OFF, the Service Required Setting values (an amount of miles/time driven) may change. In this situation, re-enter Service Required settings.

Master warning mode (if equipped)



- This warning light informs the driver of the following situations:
- LED head lamp malfunction (if equipped)
- Blind-Spot Collision Warning system malfunction
- Rear Cross-Traffic Collision Warning system malfunction (if equipped)
- Smart Cruise Control with Stop & Go malfunction
- Forward Collision-Avoidance Assist malfunction
- Blind-Spot Collision Warning radar blind
- Smart Cruise Control with Stop & Go radar blind
- Forward Collision-Avoidance Assist radar blind
- Lamp malfunction
- High Beam Assist malfunction (if equipped)

The Master Warning Light illuminates if one or more of the above warning situations occur.

Distance to empty



ORJ048139N

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

✻ NOTICE

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

Set Up Mode

Description



ORJ048410L

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

You can change the modes on the Navigation touch screen in instrument panel.

⚠ WARNING

Do not adjust the Set Up while driving. You may lose your steering control which could cause an accident and severe bodily injury.

Shift to P to edit settings

This warning message appears on Navigation touch screen in instrument panel, if you try to adjust the Set Up while driving.

For your safety, change the Vehicle Settings after parking the vehicle, applying the parking brake and moving the shift lever to P (Park).

Warning Messages (if equipped)

Shift to P

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

Low Key Battery

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

Press brake pedal to start engine

- 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

- 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

- This warning message illuminates if you cannot operate the Engine Start/Stop Button when there is a problem with the Engine Start/Stop Button system.
- It means that you could start the engine by pressing the Engine Start/ Stop Button once more.
- If the warning illuminates each time you press the Engine Start/Stop Button, have the vehicle inspected by an authorized K900 Kia dealer.

Press start button with key

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

Check BRAKE SWITCH fuse

- 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

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

✻ NOTICE

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

Windows open



ORJ048141

- The window status will be displayed for six seconds if the window is opened with the ignition “OFF”. Close the window.

Door, Hood, Trunk

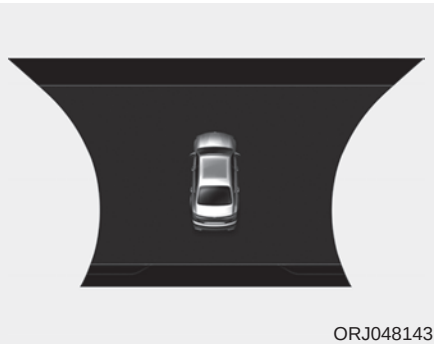


ORJ048142

- It means that a door, hood, or trunk is open.
- The hood warning message will appear on the LCD display when hood is open.

  The warning chime will operate when the vehicle is being driven at or above 2 mph (3 km/h) with the hood open.

Sunroof Open (if equipped)



ORJ048143

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

Icy Road Warning Light (if equipped)



ORJ048170N

This warning pop-up message and light are to warn the driver the road may be icy.

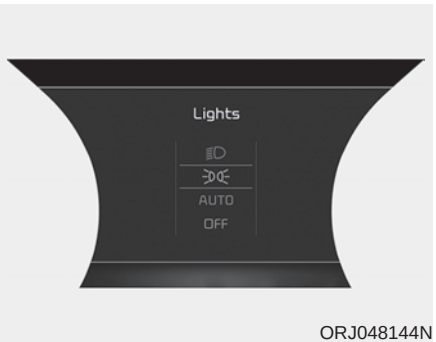
When the Outside Temperature is below approximately 39°F (4°C),

- The warning light (including Outside Temperature) blinks 5 times and then illuminates.
- The warning pop-up message displays, and the warning chime sounds once at the same time only once for each ignition cycle.

✻ NOTICE

If the icy road warning light appears while driving, you should drive more attentively and refraining from speeding, rapid acceleration, sudden braking or sharp turning.

Light mode



ORJ048144N

- When you activate the headlamp switch, the corresponding mode is displayed.

Wiper mode



ORJ048145L

- When the wiper switch is operated, the corresponding mode is displayed.

Check headlight LED

This warning message illuminates if LED headlamp malfunctions.

Check headlight cooling fan

This warning message illuminates if LED headlamp cooling fan malfunctions.

Check shift lever

If there is a problem with the main function of the shift lever, this warning is displayed.

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.

Turn on FUSE SWITCH

- This warning message illuminates if the fuse switch under the steering wheel is OFF.
- It means that you should turn the fuse switch on.

❈For more details, refer to “Fuses” in chapter 7.

Check headlights (if equipped)

This warning message illuminates if there is a malfunction (burned-out bulb or circuit malfunction) with the head lights (high and low beam). In this case, have the vehicle inspected by an authorized K900 Kia dealer.

✻ NOTICE

- **When replacing the bulb, use the same wattage bulb.**
  For more information, refer to "BULB WATTAGE" in chapter 8.
- **If the different wattage bulb is equipped with the vehicle, this warning message is not displayed.**

Low Fuel

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

WARNING AND INDICATOR LIGHTS

Warning lights

✻ NOTICE - Warning lights

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

Air bag Warning Light



This warning light illuminates:

- Once you set the 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 the vehicle inspected by an authorized K900 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 Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds
- When the parking brake is applied, the warning light will remain on.
- 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 leak on the brake system is still found, the warning light remains on, or the brakes do not operate properly, do not drive the vehicle.

In this case, have your vehicle towed to an authorized K900 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, greater pedal pressure will be required to stop the vehicle.

Also, the vehicle will require increased stopping 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 illuminate with the parking brake released, this indicates that the brake fluid level is low.

In this case, have your vehicle inspected by an authorized K900 Kia dealer.

Anti-lock Brake System (ABS) Warning Light



This warning light illuminates:

- 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 ABS, the warning light will remain on. The braking system will be operational without the assistance of the anti-lock brake system.

  In this case, have the vehicle inspected by an authorized K900 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 the vehicle inspected by an authorized K900 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 and injury.

In this case, avoid high speed driving and abrupt braking.

Have your vehicle inspected by an authorized K900 Kia dealer as soon as possible.

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

When the ABS Warning Light is on or both the ABS and the Parking Brake & Brake Fluid Warning Lights are on, the speedometer, odometer, or tripmeter may not work. Also, the EPS Warning Light may illuminate and the steering effort may increase or decrease.
In this case, have the vehicle inspected by an authorized K900 Kia dealer.

Electronic Power Steering (EPS) Warning Light (if equipped)



This warning light illuminates:

- Once you set the 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 the vehicle inspected by an authorized K900 Kia dealer.

Malfunction Indicator Lamp (MIL)



This warning light illuminates:

- Once you set the 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 the vehicle inspected by an authorized K900 Kia dealer.

⚠ CAUTION - Malfunction Indicator Lamp (MIL)

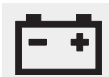
Driving with the Malfunction Indicator Lamp (MIL) on may cause damage to the emission control systems which could effect drivability and/or fuel economy.

⚠ CAUTION

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 the vehicle inspected by an authorized K900 Kia dealer.

Charging System Warning Light



This warning light illuminates:

- Once you set the 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 the vehicle inspected by an authorized K900 Kia dealer.

Engine Oil Pressure Warning Light



This warning light illuminates:

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

If the engine oil pressure is low:

1. Drive carefully to the nearest safe location and stop your vehicle.
2. Turn the engine off and check the engine oil level (For more details, refer to “Engine Oil” in chapter 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 the vehicle inspected by an authorized K900 Kia dealer.

⚠ CAUTION - Engine Overheating

Do not continue driving with the engine overheated. Otherwise the engine may be damaged.

⚠ CAUTION - Engine damage

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

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 “E” can cause the engine to misfire and damage the catalytic converter (if equipped).

Low Tire Pressure Warning Light (if equipped)



This warning light illuminates:

- Once you set the 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.

- 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.

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

- When there is a malfunction with the TPMS.

  In this case, have the vehicle inspected by an authorized K900 Kia dealer.

✻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 on low pressure tires will cause the tires to overheat and fail.**

LED Headlamp Warning Light (if equipped)



This warning light illuminates:

- 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 LED headlamp.

In this case, have the vehicle inspected by an authorized K900 Kia dealer.

This warning light blinks:

- When there is a malfunction with a LED headlamp related part.

In this case, have the vehicle inspected by an authorized K900 Kia dealer.

✻ NOTICE

Continuous driving with the LED Headlamp Warning Light on or blinking can reduce LED headlamp (low beam) life.

Engine Coolant Temperature Warning Light



This warning light illuminates:

- When the engine coolant temperature is above 248°F (120°C). This means that the engine is overheated and may be damaged.

  If your vehicle is overheated, refer to “Overheating” in chapter 6.
- When your vehicle is overheated, the color of the engine coolant temperature symbol will change (white → red).

⚠ CAUTION - Engine Overheating

Do not continue driving with the engine overheated. Otherwise engine may be damaged.

Forward Collision-avoidance Assist Warning light (FCA)



This indicator light illuminates:

- When there is a malfunction with the FCA.

In this case, have the vehicle inspected by an authorized K900 Kia dealer.

All Wheel Drive (AWD) Warning Light



This indicator light illuminates:

- When there is a malfunction with the AWD system.

In this case, have the vehicle inspected by an authorized K900 Kia dealer.

Master Warning Light



This indicator light illuminates:

- LED head lamp malfunction
- Blind-Spot Collision Warning system malfunction
- Rear Cross-Traffic Collision Warning system malfunction (if equipped)
- Smart Cruise Control with Stop & Go malfunction
- Forward Collision-Avoidance Assist malfunction
- Blind-Spot Collision Warning radar blind
- Smart Cruise Control with Stop & Go radar blind
- Forward Collision-Avoidance Assist radar blind
- Lamp malfunction
- High Beam Assist malfunction (if equipped)

Dynamic Bending Light (DBL) Warning Light (if equipped)



This warning light blinks:

- When there is a malfunction with the Dynamic Bending Light (DBL).

If there is a malfunction with the Dynamic Bending Light (DBL):

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 the vehicle inspected by an authorized K900 Kia dealer.

Electronic Parking Brake (EPB) Warning Light



This warning light illuminates:

- 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 EPB.

  In this case, have the vehicle inspected by an authorized K900 Kia dealer.

✻ NOTICE - Electronic Parking Brake (EPB) Warning Light

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

Indicator Lights

Electronic Stability Control (ESC) Indicator Light (if equipped)



This indicator light illuminates:

- 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 ESC system.

  In this case, have the vehicle inspected by an authorized K900 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 (if equipped)



This indicator light illuminates:

- Once you set the 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.

Auto stop indicator (if equipped)



This indicator will illuminate when the engine enters the Idle Stop mode of the ISG (Idle Stop and Go) system.

When the automatic starting occurs, the auto stop indicator on the cluster will blink for 5 seconds.

❈For more details, refer to the ISG (Idle Stop and Go) system in chapter 5.

✻ NOTICE

When the engine automatically starts by the ISG system, some warning lights (ABS, ESC, ESC OFF, EPS or Parking brake warning light) may turn on for a few seconds.
This happens because of the low battery voltage. It does not mean the system is malfunctioning.

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 cannot detect the smart key which is in the vehicle while the Engine Start/Stop Button is ON.

  In this case, have the vehicle inspected by an authorized K900 Kia dealer.

This indicator light blinks:

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

  In this case, have the vehicle inspected by an authorized K900 Kia dealer.

Turn Signal Indicator Light



This indicator light blinks:

- When you switch on 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 the vehicle inspected by an authorized K900 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.

High beam assist indicator (if equipped)



This warning light illuminates:

- When the high-Beam is on with the light switch in the AUTO light position.
- If your vehicle detects oncoming or preceding vehicles, the high beam assist system will switch the high beam to low beam automatically.

❊For more details, refer to “High beam assist” in chapter 4.

AUTO HOLD Indicator Light (if equipped)



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 the vehicle inspected by an authorized K900 Kia dealer.

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

LKA(Lane Keeping Assist) indicator



The LKA indicator will illuminate when you turn the lane keeping assistant system on by pressing the LKA button.

If there is a problem with the system, the yellow LKA indicator will illuminate.

❈For more details, refer to “Lane Keeping Assist” in chapter 5.

⚠ 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.

HEAD UP DISPLAY (HUD) (IF EQUIPPED)

Description



ORJ048413N

The head up display is a transparent display which projects a shadow of some information of the instrument cluster and navigation on the windshield glass.

- The head up display image on the windshield glass may not be visible when:
  - Sitting posture prevents visibility.
  - Wearing polarized sunglasses.
  - There is an object on the cover of the head up display.
  - Driving on a wet road.
  - Lighting is turned on inside the vehicle.
  - Any light comes from the outside.
  - Wearing inadequate glasses for your eyesight.
- If the head up display image is not shown well, adjust the height, rotation or illumination of the head up display in the Navigation touch screen in instrument panel.
- When the head up display needs inspection or repair, consult an authorized K900 Kia dealer.
- Do not place any accessories on the dashboard or attach any objects on the windshield glass.

✻ NOTICE

Installing window tint or any other type of metallic coating on the windshield can prevent the driver from seeing the Head Up Display images.

⚠ WARNING - Head up display

The Head up display is a supplemental system. Do not solely rely on the system, always drive safely, and pay attention to the driving conditions on the road.

✻ NOTICE

When replacing the front windshield glass of vehicles equipped with the head up display, replace it with a windshield glass designed for the head up display operation. Otherwise, duplicated images may be displayed on the windshield glass.

Head Up Display ON/OFF



ORJ048159

The HUD display will be activated or deactivated in Set Up mode while engine is ON.

Head Up Display Information



ORJ048176N

1. Turn By Turn navigation information
2. Road signs
3. Speedometer
4. Cruise setting speed
5. Smart Cruise Control (SCC) information
6. Lane Keeping Assist information
7. Blind-spot Collision Warning information
8. Warning lights (Low fuel)
9. AV mode information

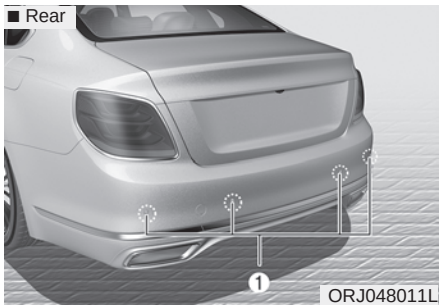
Head Up Display Setting

On the LCD display, you can change the head up display settings as follows.

1. Display height
2. Rotation
3. Brightness
4. Content select
5. Speedometer size
6. Speedometer color

PARKING DISTANCE WARNING

■ Rear



■ Front



The parking distance warning assists the driver during movement of the vehicle by chiming if any object is sensed within the distance of 39 in. (100 cm) in front and 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 sensors (①) are limited. Whenever moving pay as much attention to what is in front and behind of you as you would in a vehicle without a parking distance warning.

⚠ WARNING

The parking distance warning is a supplemental system only.

The operation of the parking distance warning can be affected by several factors (including environmental conditions).

It is the responsibility of the driver to always check the areas around the vehicle before and while parking.

Operation of the parking distance warning

Operating condition



- This system activates when the parking distance warning button is pressed with the ignition switch ON.
- The indicator of the parking distance warning button turns on automatically and activates the parking distance warning when you shift the gear to the R (Reverse) position. It will turn off automatically when you drive above 12.4 mph (20 km/h).

- The sensing distance while backing up is approximately 47 in. (120 cm) when you are driving less than 6.2 mph (10 km/h).
- The sensing distance while moving forward is approximately 39 in. (100 cm) when you are driving less than 6.2 mph (10 km/h).
- When more than two objects are sensed at the same time, the closest one will be recognized first.
- The side sensors are activated when you shift the gear to the R (Reverse) position.
- If the vehicle speed is above 12.4 mph (20 km/h), the system automatically turns off. To activate again, push the button.

✻ NOTICE

The system may detect an object if the vehicle's distance from the object is already less than approximately 10 in. (25 cm) when the system is turned ON.

Type of warning indicator and sound

: with Warning sound

Distance from object		Warning indicator		Warning sound
		When driving forward	When driving rearward	
39 ~ 24 inch	Front		-	Buzzer beeps intermittently
47 ~ 24 inch	Rear	-		Buzzer beeps intermittently
23 ~12 inch	Front			Buzzer beeps frequently
	Rear	-		Buzzer beeps frequently
11 inch	Front			Buzzer sounds continuously
	Rear	-		Buzzer sounds continuously

✻ NOTICE

- **The actual warning sound and indicator may differ from the illustration according to objects or sensor status.**
- **Do not wash the vehicle's sensor with high pressure water.**

✻ 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.**

Non-operational conditions of parking distance warning

parking distance warning may not operate when:

1. Moisture is frozen to the sensor. (It will operate normally when the ice melts.)
2. Sensor is covered with foreign matter, such as snow or water, or the sensor cover is blocked. (It will operate normally when the material is removed or the sensor is no longer blocked.)
3. Driving on uneven road surfaces such as unpaved roads, gravel, bumps, or gradient.
4. Objects generating excessive noise such as vehicle horns, loud motorcycle engines, or truck air brakes can interfere with the sensor.
5. The weather conditions produce heavy rain or water spray.
6. Wireless transmitters or mobile phones present near the sensor.

Detecting range may decrease when:

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

The following objects may not be recognized by the sensor:

1. Sharp or slim objects such as ropes, chains or small poles.
2. Objects, which tend to absorb sensor frequency such as clothes, spongy material or snow.
3. Undetectable objects smaller than 4 in. (1 m) and narrower than 5.5 in. (14 cm) in diameter.

✻ NOTICE

1. **The warning may not sound sequentially depending on the speed and shapes of the objects detected.**
2. **The parking distance warning system may malfunction if the vehicle bumper height or sensor installation has been modified. Any non-factory installed equipment or accessories may also interfere with the sensor performance.**
3. **Sensor may not recognize objects less than 12 in. (30 cm) from the sensor, or it may sense an incorrect distance. Use with caution.**
4. **When the sensor is frozen or stained with snow or water, the sensor may be inoperative until the stains are removed using a soft cloth.**
5. **Do not push, scratch or strike the sensor with any hard objects that could damage the surface of the sensor. Sensor damage could occur.**

✻ NOTICE

This system can only sense objects within the range and location of the sensors, it can not detect objects in other areas where sensors are not installed. Also, small or slim objects, or objects located between sensors may not be detected.
Always visually check in front and behind the vehicle when driving.
Be sure to inform any drivers in the vehicle that may be unfamiliar with the system regarding the system's capabilities and limitations.

Pay close attention when the vehicle is driven close to objects on the road, particularly pedestrians, and especially children. Be aware that some objects may not be detected by the sensors, due to the objects distance, size or material, all of which can limit the effectiveness of the sensor. Always perform a visual inspection to make sure the vehicle is clear of all obstructions before moving the vehicle in any direction.

Self-diagnosis

When you shift the gear to the R (Reverse) position and if one or more of the below occurs you may have a malfunction in the parking distance warning system.

- You don't hear an audible warning sound or if the buzzer sounds intermittently.
-  is displayed. (if equipped)
  (blinks)

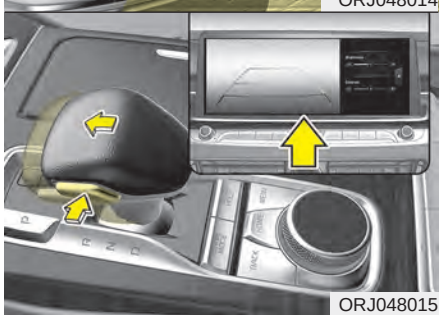
If this occurs, have the system checked by an authorized K900 kia dealer.

✻ NOTICE

Your new vehicle warranty does not cover any accidents or damage to the vehicle or injuries to its occupants. Always drive safely and cautiously.

REAR VIEW MONITOR


ORJ048014


ORJ048015

The rear view monitor will activate with the ignition switch ON, engine ON and the shift lever in the R (Reverse) position.

This system is a supplemental system that shows the area behind the vehicle on the audio screen while backing up. If the vehicle is equipped with a navigation system, then the system will display the image on the navigation screen. Also, the system displays the area behind the vehicle when the vehicle is in Neutral or Drive if the following conditions are met:

- IGN Status : ON
- Gearshift Status : D or N
- Rear view camera switch (1) : ON

• This system is a supplemental system only. It is the responsibility of the driver to always check the inside/outside rearview mirrors and the area behind the vehicle before and while backing up.

• Always keep the camera lens clean. If lens is covered with foreign matter, the camera may not operate normally.

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

⚠ WARNING
- Backing & using monitor

Never rely solely on the rear view monitor. You must always use methods of viewing the area behind you including looking over both shoulders as well as continuously checking all three 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 suspect that a person, and especially a child, might be behind you.

SURROUND VIEW MONITORING SYSTEM (SVM) (IF EQUIPPED)



ORJ048420N


ORJ048017

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 (1) into the [ON] position to operate the system.

To cancel the system, push the button (1) again.

Operating conditions

- When the Engine Start/Stop Button is ON position (When the ISG Mode(if equipped) On, Surround View Monitoring System (SVM) deactivates.)
- When the transaxle is on D, N or R

- When the vehicle moves backwards, the SVM operates automatically.
- When the trunk and driver/passenger door are opened and the outside mirror is folded, a warning is illuminated in the SVM system.
- If the SVM system is not operating normally, the system should be checked by an authorized K900 Kia dealer.

⚠ WARNING

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

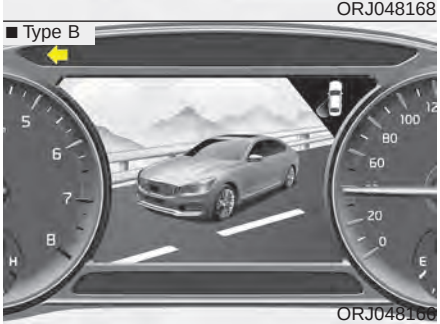
BLIND SPOT VIEW MONITOR SYSTEM (IF EQUIPPED)

■ Type A



ORJ048168

■ Type B



ORJ048169

BVM (Blind-spot view monitor) system displays the passenger-side rear areas in the cluster when the system is activated.

To turn on BVM system: Under condition BVM system is enabled in the settings

(1) The ignition switch is turned to the ON position.

(2) The turn signal is activated (When Hazard warning switch is pushed on, BVM (Blind-spot view monitor) deactivates.)

To turn off BVM system

(1) The ignition switch is turned to the OFF position.

(2) The turn signal is deactivated

(3) A warning screen pops up and takes priority over the BVM system.

⚠ WARNING

- **This system is a supplemental system only. It is the responsibility of the driver to always check the area around the vehicle before and while making turns or moving lanes.**
- **ALWAYS look around your vehicle to make sure there are no objects or obstacles before moving the vehicle in any direction to prevent a collision.**
- **Objects are closer than they appear. Failure to visually confirm that is safe to change the lane before doing so may result in crash and serious injury or death.**
- **Always keep the camera lens clean. The camera may not work normally if the lens is covered with foreign material.**

LIGHTING

Battery saver function

- The purpose of this feature is to prevent the battery from being discharged if the lights are left in the ON position. The system automatically shuts off the parking lights 30 seconds after the ignition key is removed and the driver's door is opened and closed.
- With this feature, the parking lights will turn off automatically if the driver parks on the side of the road at night and opens the driver's side door.

  If necessary, to keep the parking lights on when the ignition key is removed, perform the following:

  1) Open the driver-side door.
  2) Turn the parking lights OFF and ON again using the light switch on the steering column.

Daytime running light

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

The DRL system will turn the dedicated lamp OFF when :

1.The headlight switch is on

- It includes that the headlight is on in the dark when the headlight switch is in the auto light position.

2.The engine is off

3.Engaging the Parking Brake

Lighting control



ORJ048432N

The light switch has a Headlight and a Parking light position.

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

(1) OFF position

(2) Auto light position

(3) Parking & Tail light

(4) Headlight position

Parking & Tail light ( )



ORJ048433N

When the light switch is in the parking light position, the tail, license and parking lights will turn ON.

Headlight position ( )



ORJ048434N

When the light switch is in the headlight position, the head, tail, license lights will turn ON.

✻ NOTICE

The ignition switch must be in the ON position to turn on the headlights.

Auto light/DBL position



ORJ048020N

When the light switch is in the AUTO light position, the taillights and headlights will turn ON or OFF automatically depending on the amount of light outside the vehicle.

If your vehicle is equipped with the dynamic bending light (DBL), 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.***
- ***If your vehicle has window tint or other types of metallic coating on the front windshield, the Auto light system may not work properly.***

High beam operation



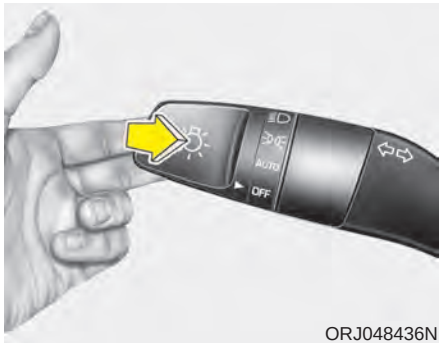
ORJ048435N

To turn on the high beam headlamp, push the lever away from you. The lever will return to its original position. The high beam indicator will light when the headlight high beams are switched on.

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

⚠ WARNING - High beams

Do not use high beam when there are other vehicles in front of your vehicle. Using high beam could obstruct the other driver's vision.



ORJ048436N

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

High Beam Assist (if equipped)



ORJ048437N

The High Beam Assist is a system that automatically adjusts the headlamp range (switches between high beam and low beam) according to the brightness of other vehicles and road conditions.

Operating condition

1. Place the light switch in the AUTO position.
2. Turn on the high beam by pushing the lever away from you.
3. The High Beam Assist (AUTO) indicator will illuminate.
4. The High Beam Assist will turn on when vehicle speed is above 25 mph (40 km/h).
5. The details of operation with the light switch while the High Beam Assist is on are below.
   1) If the light switch is pushed away, the High Beam Assist will turn off and the high beam will be on continuously.
   2) If the light switch is pulled towards you when the high beam is off, the high beam will be on without cancellation of the High Beam Assist. (When you take your hands off the switch the lever will move to the middle and the high beam will turn off.)

3) If the light switch is pulled towards you when the high beam is on by the High Beam Assist, the low beam will be on and the High Beam Assist will turn off.
4) If the light switch is turned to the headlamp position ( ) from AUTO position, the High Beam Assist will turn off and the low beam will be on continuously.

When the High Beam Assist is operating, the high beam switches to low beam in the below conditions.

- When the headlamp is detected from the on-coming vehicle.
- When the tail lamp is detected from the front vehicle.
- When headlamp/tail lamp of bicycle/motorcycle is detected.
- When the surrounding is so bright that high beams are not needed.
- When streetlights or other lights are detected.
- When the light switch is not in the AUTO position.
- When the High Beam Assist is off.
- When vehicle speed is below 22 mph (35 km/h).

Warning light and message



ORJ058203L

When the High Beam Assist is not working properly, a warning message will come on for a few second. After the message disappears, the master warning light ( ) will illuminate.

Have the system checked by an authorized K900 kia dealer.

⚠ CAUTION

The driver must be cautious in the below situations as the system may not operate in the following conditions

- ***When the light from on-coming or front vehicle is poor***
- ***When the light from the on-coming or front vehicle is not detected because of lamp damage, or because it is hidden from sight, etc.***
- ***When the lamp of the on-coming or front vehicle is covered with dust, snow or water.***
- ***When the front vehicle's headlamps are off but the fog lamps on and etc.***
- ***When external conditions intervene***
- ***When there is a a lamp that has a similar shape as a vehicle's lamps.***

(Continued)

(Continued)

- ***When the headlamp is not repaired or replaced at an authorized dealer.***
- ***When headlamp aiming is not properly adjusted.***
- ***When driving on a narrow curved road, rough road, downhill or uphill.***
- ***When only part of the vehicle in front is visible on a cross-road or curved road.***
- ***When there is a traffic light, reflecting sign, flashing sign or mirror ahead.***
- ***When there is a temporary reflector or flash ahead (construction area).***
- ***When the road conditions are bad such as being wet, iced or covered with snow.***
- ***When a vehicle suddenly appears from a curve.***
- ***When the vehicle is tilted from a flat tire or being towed.***

(Continued)

(Continued)

- ***When the LKA (Lane Keeping Assist) system failure indicator (yellow) illuminates (if equipped) and etc.***
- ***When front visibility is poor***
- ***When the lamp of the on-coming or front vehicle is covered with dust, snow or water.***
- ***When the light from the on-coming or front vehicle is not detected because of exhaust fume, smoke, fog, snow, etc.***
- ***When the front window is covered with foreign matters.***
- ***When it is hard to see because of fog, heavy rain or snow and etc.***

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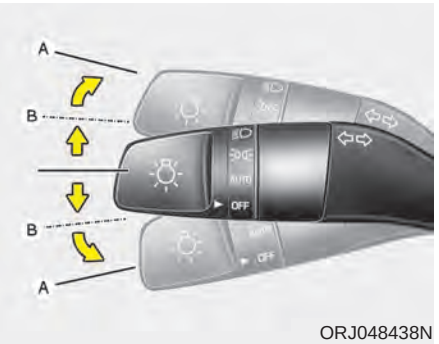
- ***Do not disassemble a front view camera temporarily for tinted window or attaching any types of coatings and accessories. If you disassemble the camera and assemble it again, take your vehicle to an authorized K900 Kia dealer and have the system checked to need a calibration.***
- ***When you replace or reinstall the windshield glass, or front view camera, take your vehicle to an authorized K900 Kia dealer and have the system checked.***
- ***Be careful that water doesn't get into the High Beam Assist unit and do not remove or damage related parts of the High Beam Assist system.***
- ***Do not place objects on the crash pad that reflect light such as mirrors, white paper, etc. The system may not be able to function if sunlight is reflected.***

(Continued)

(Continued)

- ***At times, the High Beam Assist may not operate due to system limitations. The system is for your convenience only. It is the responsibility of the driver for safe driving practices and always check the road conditions for your safety.***
- ***When the system does not operate normally, change the lamp position manually between the high beam and low beam.***

Turn signals and lane change signals



ORJ048438N

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.

✻ 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.

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 the turn signal indicator stays on and does not flash, or if it flashes abnormally, a bulb may be burned out or have a poor electrical connection in the circuit. The bulb may require replacement.

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 it does not work properly even though your car is inclined backward according to passenger's posture, or the headlight beam is irradiated to the high or low position, have the system be inspected by an authorized K900 Kia dealer.
Do not attempt to inspect or replace the wiring yourself.

Dynamic Bending Light (DBL) (if equipped)



Dynamic Bending Light (DBL) uses the steering angle and vehicle speed, to keep your field of vision wide by swiveling and leveling the headlamp.

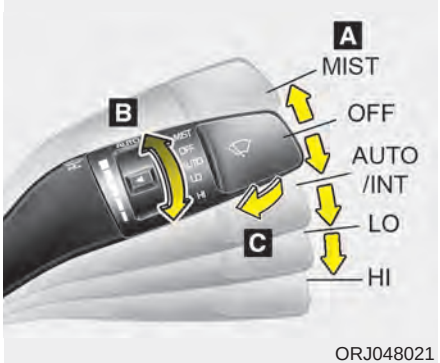
Change the switch to the AUTO position when the engine is running. The dynamic Bending Light (DBL) will operate when the headlamp is ON. To turn off the DBL, change the switch to other positions. After turning the DBL off, headlamp swiveling no longer occurs, but leveling operates continuously.



If the DBL malfunction indicator comes on, the DBL is not working properly. Drive to the nearest safe location and restart the engine. If the indicator continuously remains on, have your vehicle checked by an authorized K900 Kia dealer as soon as possible.

WIPERS AND WASHERS

Windshield wiper/washer



A : Wiper speed control (front)

- · MIST – Single wipe
- · OFF – Off
- · INT – Intermittent wipe
  AUTO* – Auto control wipe
- · LO – Low wiper speed
- · HI – High wiper speed

B : Intermittent control wipe time adjustment

C : Wash with brief wipes (front)*

* if equipped

Windshield wipers

Operates as follows when the ignition switch is turned ON.

MIST : For a single wiping cycle, move the lever to this (MIST) position and release it. The wipers will operate continuously if the lever is held in this position.

OFF : Wiper is not in operation

INT : Wiper operates intermittently at the same wiping intervals. Use this mode in light rain or mist. To vary the speed setting, turn the speed control knob.

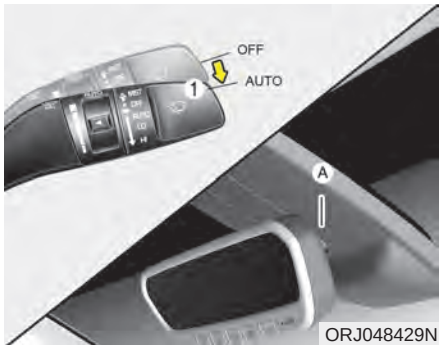
LO : Normal wiper speed

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.
If you do not remove the snow and/or ice before using the wiper and washer, it may damage the wiper and washer system.

Auto control (if equipped)



The rain sensor (A) 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.

⚠ WARNING

When the ignition switch is ON and the windshield wiper switch is placed in the AUTO mode, use caution in the following situations to avoid any injury to the hands or other parts of the body:

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

⚠ CAUTION

- ***When washing the vehicle, set the wiper switch in the OFF 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.***

Front windshield washers



ORJ048023

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.

⚠ CAUTION - Washer pump

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

⚠ WARNING - Obscured visibility

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

⚠ CAUTION - Wipers & windshields

- ***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 LIGHTS

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 the lights are in the ON position.

If your vehicle is equipped with the theft alarm system, the interior lights automatically turn off approximately 5 seconds after the system is armed.

Map lamp



ORJ048024

- : Press either of these buttons 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.

- : Press the button to turn ON all front lamps. Press the button again turn OFF all front lamps.

- : 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 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 Engine Start/Stop button is in the ON position or all doors are locked, the front and rear lamps will turn off. If a door is opened with the Engine Start/Stop button in the ACC position or the OFF position, the front and rear lamps stay on for about 20 minutes.

- : Press this button to turn the front and rear room lamps on and off.

✻ NOTICE

The DOOR mode and ROOM mode can not be selected at a time.

Room lamp



- : Press the button to turn ON the rear map lamp and the door handle lamps. You cannot separately turn OFF the door handle lamps. Re-press the button to turn OFF the rear map lamp and the door handle lamps together.

- : Press this button to turn the rear room lamps on and off.

- : Press the button to dim the rear mood lamp. Re-press the button to turn OFF the rear mood lamp.

Trunk room lamp

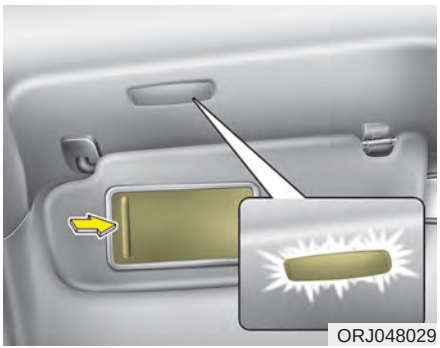

ORJ048027

The trunk room lamp comes on when the trunk is opened.

⚠ CAUTION

The trunk room lamp comes on as long as the trunk lid opens. To prevent unnecessary charging system drain, close the trunk lid securely after using the trunk room.

Vanity mirror lamp


ORJ048029

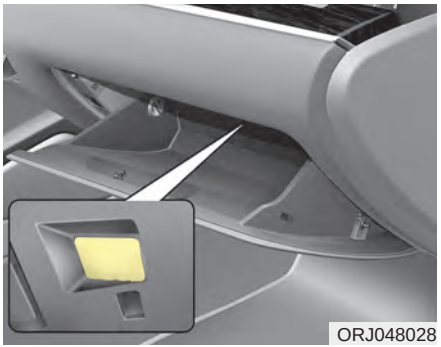
Opening the lid of the vanity mirror will automatically turn on the mirror light.

* The actual sunvisor lamp in the vehicle may differ from the illustration.

⚠ CAUTION - Vanity mirror lamp

Always close the lid of the vanity mirror 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.

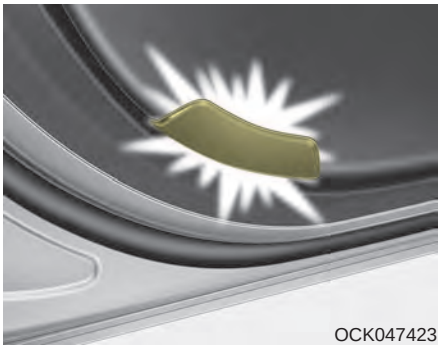
Glove box lamp



The glove box lamp comes on when the glove box is opened.

To prevent unnecessary battery drain, close the glove box securely after using the glove box.

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.

WELCOME SYSTEM (IF EQUIPPED)

Headlight (Headlamp) escort function

When the headlight(light switch in the headlight or AUTO position) is on and all doors (and trunk) are locked and closed, the position light and headlight will come on for 15 seconds if any of the below is performed.

- With the smart key system
  - When the door unlock button is pressed on the smart key.

At this time, if you press the door lock or unlock button, the position light and headlight will turn off immediately.

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.

- 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.

At this time, if you press the door lock button, the lamps will turn off immediately.

Pocket lamp (if equipped)


ORJ048030

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

- With the smart key system
  - When the vehicle is approached with the smart key in possession.

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.

If you want to defrost and defog the front windshield, refer to “Windshield defrosting and defogging” in this section.

Rear window defroster



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

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

If there is heavy accumulation of snow on the rear window, brush it off before operating the rear defroster.

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

Outside rearview mirror defroster

If your vehicle is equipped with the outside rearview mirror defrosters, they will operate at the same time you turn on the rear window defroster.

AUTOMATIC CLIMATE CONTROL SYSTEM

■ **Front seat**



■ **Rear seat**



System Overview

1. Driver's temperature control button
2. Driver's AUTO button
3. OFF button
4. Front windshield defroster button
5. Fan speed control button
6. Rear window defroster button
7. Air conditioning button
8. SYNC button
9. Passenger's temperature control button
10. Driver's Seat Heat/Ventilation control button
11. Steering wheel Heat control button
12. Driver's mode selection button
13. Passenger's mode selection button
14. Air intake control button
15. Passenger's Seat Heat/Ventilation control button
16. Rear fan speed control knob
17. Rear OFF button
18. Rear AUTO button
19. Rear mode selection button
20. Rear temperature control knob

⚠ CAUTION

Operating the blower when the ignition switch is in the ON position could cause the battery to discharge. Operate the blower when the engine is running.

ORJ048300L/ORJ048301N

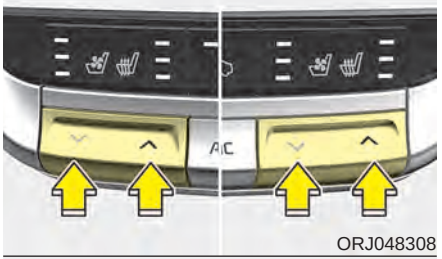
Automatic heating and air conditioning



ORJ048303

1. Press the AUTO button. The modes, fan speeds, air intake and air-conditioning will be controlled automatically by setting the temperature.

■ Front seat



ORJ048308

■ Rear seat



ORJ048309

2. Press the temperature buttons or turn the temperature control knob to the desired temperature.

✻ NOTICE

- **To turn the automatic operation off, select any button or switch of the following:**
  - **Mode selection button**
  - **Air conditioning button**
  - **Front windshield defroster button (Press the button one more time to deselect the front windshield defroster function. The 'AUTO' sign will illuminate on the information display once again.)**
  - **Air intake control button**
  - **Fan speed control switch**

  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 72°F (22°C).**

(Continued)

(Continued)

- If you turn on the ignition with "The Auto Comfort Control" set from the audio display, the wheel heater wiring/ seat warmer/ air ventilation seat will be automatically controlled according to the temperature. Using the switch, the driver can operate the system according to the switch level. Initial setting for "The Auto Comfort Control" is off, so activate it on the audio display for use. This function operates only for vehicles equipped with the wheel heater wiring/seat warmer/air ventilation seat.



✻ NOTICE

Never place anything near the sensor to ensure better control of the heating and cooling system.

Manual heating and air conditioning

The heating and cooling system can be controlled manually by pressing buttons or turning knob(s) other than the AUTO button. In this case, the system works sequentially according to the order of buttons or knob(s) selected.

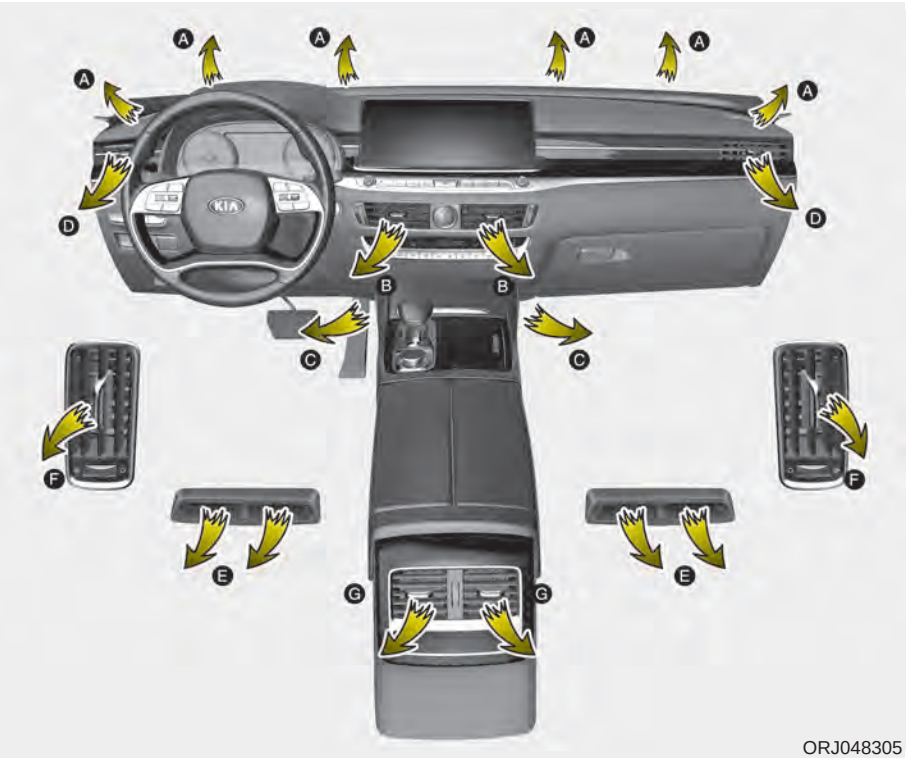
1. Start the engine.
2. Set the mode to the desired position.

   For improving the effectiveness of heating and cooling;

   - Heating:
   - Cooling:
3. Set the temperature control to the desired position.
4. Set the air intake control to the outside (fresh) air position.
5. Set the fan speed control to the desired speed.
6. If air conditioning is desired, turn the air conditioning system on.

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

Mode selection



ORJ048305



ORJ048304

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, F, G)

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, G)

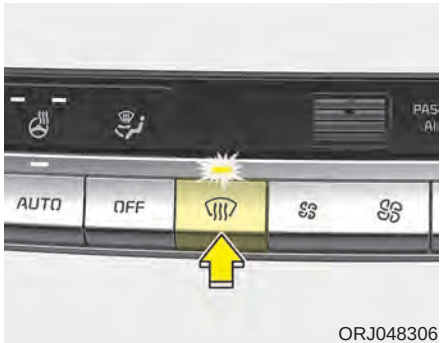
Air flow is directed towards the face and the floor.

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-Level (A, C, D, E)

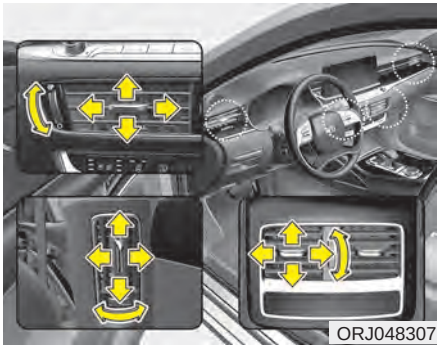
Most of the air flow is directed to the floor and the windshield with a small amount directed to the side window defrosters.



ORJ048306

Defrost-Level

Most of the air flow is directed to the windshield with a small amount of air directed to the side window defrosters.


ORJ048307

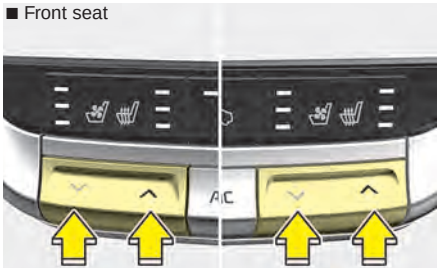
Instrument panel vents

The outlet vents can be opened or closed separately using the thumb-wheel (if equipped).

Also, you can adjust the direction of air delivery from these vents using the vent control lever as shown.

Temperature control

■ Front seat



ORJ048308

■ Rear seat


ORJ048309N

• Front seat

The temperature will increase to the maximum (HI) by pressing the temperature button with the arrow pointed upward or turning the knob to the extreme right.

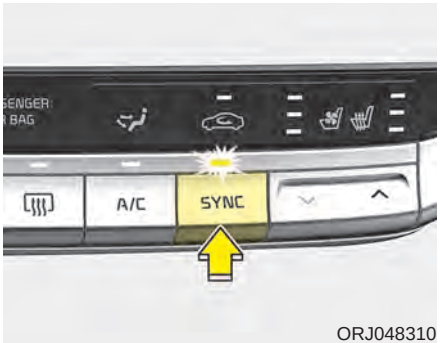
The temperature will decrease to the minimum (Lo) by pressing the temperature button with the arrow pointed downward or turning the knob to the extreme left.

When pressing the temperature button or turning the knob, the temperature will increase or decrease by 0.5°C/1°F. When set to the lowest temperature setting, the air conditioning will operate continuously.

• Rear seat

Turn the rear seat temperature control knob to adjust temperature.

The front and rear seat side temperature is adjusted individually.



ORJ048310

Adjusting the driver and passenger side temperature equally

- Press the “SYNC” button to adjust the driver and passenger side temperature equally.

  The passenger side temperature will be set to the same temperature as the driver side temperature.
- Turn the driver side temperature control knob. The driver and passenger side temperature will be adjusted equally.

Adjusting the driver and passenger side temperature individually

- Press the “SYNC” button again to adjust the driver and passenger side temperature individually. The illumination of button turns off.
- Operate the driver side temperature control button to adjust the driver side temperature.
- Operate the passenger side temperature control button to adjust the passenger side temperature.

Temperature conversion

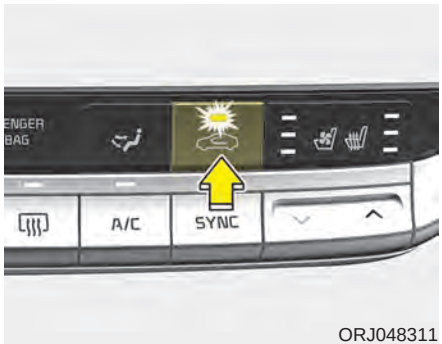
You can switch the temperature mode from Centigrade to Fahrenheit as follows:

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



ORJ048311

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

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

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.

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.

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.

Sunroof inside air recirculation (if equipped)

If the sunroof opens while the heater or Air Conditioning system operates, the outside (fresh) air will be selected automatically for ventilating the car. Then, if you select the recirculated air position, the outside (fresh) air will be selected automatically after 3 minutes.

If you close the sunroof, the intake mode will be changed to the previous selected mode.

Fan speed control

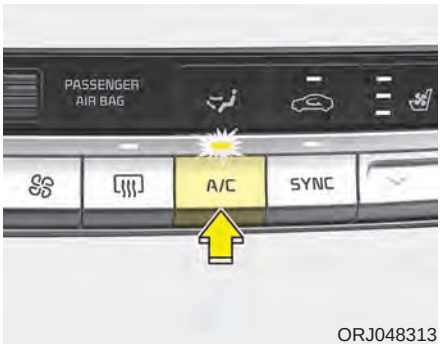


ORJ048312

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

To change the fan speed, press (✤) the button for higher speed, or push (✤) the button for lower speed. To turn the fan speed control off, press the front blower OFF button.

Air conditioning



ORJ048313

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.

⚠ 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.

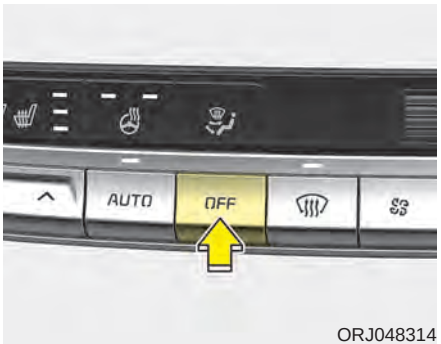
⚠ WARNING - Recirculated Air

Continued use of 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.

⚠ WARNING - Sleeping with A/C on

Do not sleep in a vehicle with the air conditioning or heating on as this may cause serious harm or death due to a drop in the oxygen level and/or body temperature.

OFF mode



ORJ048314

Press the front blower OFF button to turn off the front air climate control system. However, you can still operate the mode and air intake buttons as long as the ignition switch is in the ON position.

Switch lighting function (if equipped)


ORJ048318

During night driving, if hands are near to touch the climate control system, button lighting will increase for better recognition. Switch lighting function can be selected or deselected on the audio display. Hands in gloves are not recognized for this function.

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

All Kia Air Conditioning Systems are filled with R-1234yf 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.

- When maximum cooling is desired, set the temperature control to the extreme left position, then set the fan speed control to the highest speed.

⚠ CAUTION - Excessive 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.

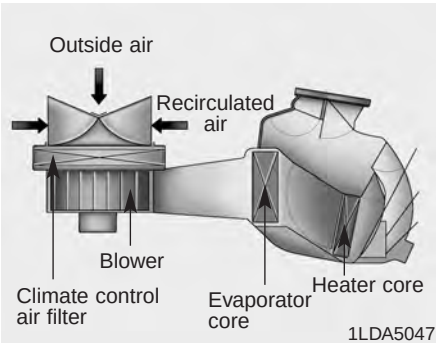
✻ NOTICE

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.

Climate control air filter (if equipped)



The climate control air filter installed behind the glove box, filters 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, 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, have the climate control air filter replaced by an authorized K900 Kia dealer.

✻ NOTICE

- **Replace the filter every 15,000 miles or once a year.**
  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, the system should be checked at an authorized K900 Kia dealer.**

Checking the amount of air conditioner refrigerant and compressor lubricant

When the amount of refrigerant is low, the performance of the air conditioning is reduced. Overfilling also has a negative impact on the air conditioning system.

Therefore, if abnormal operation is found, have the system inspected by an authorized K900 Kia dealer.

⚠ 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.

⚠ CAUTION

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.

Air Conditioning refrigerant label

■ Example



OUM066035L

❊ The actual Air Conditioning refrigerant label in the vehicle may differ from the illustration.

Each symbol and specification on the air conditioning refrigerant label is represented below :

1. Classification of refrigerant
2. Amount of refrigerant
3. Classification of compressor lubricant

❊ Refer to chapter 8 for more detail on the location of air conditioning refrigerant label.

WINDSHIELD DEFROSTING AND DEFOGGING

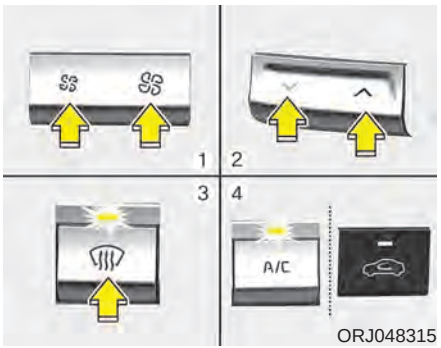
⚠ WARNING - Windshield heating

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

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

Automatic climate control system

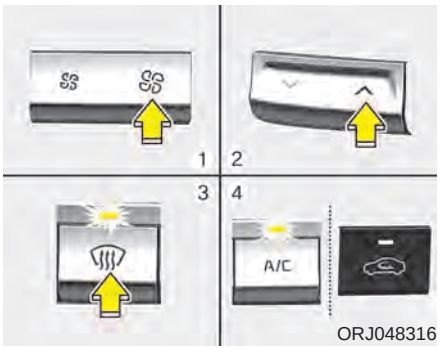
To defog inside windshield



1. Set the fan speed to the desired position.
2. Select desired temperature.
3. Press the defroster button ( ).
4. The outside (fresh) air position will be selected automatically and the air conditioning will turn on according to the detected ambient temperature.

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

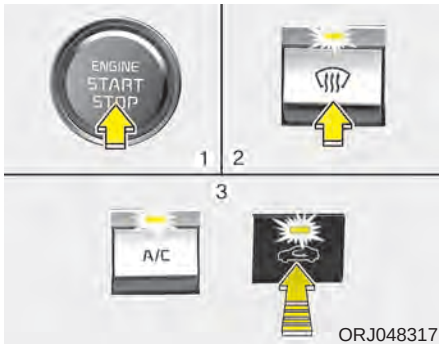


1. Set the fan speed to the highest position.
2. Set the temperature to the extreme hot (HI) position.
3. Press the defroster button ( ).
4. The outside (fresh) air position will be selected automatically and the air conditioning will turn on according to the detected ambient temperature.

Defogging logic

To reduce the possibility of fogging up the inside of the windshield, the air intake or air conditioning is controlled automatically according to certain conditions such as or position. To cancel automatic defogging logic or return to the automatic defogging logic, do the following.

Automatic climate control system



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 recirculation indicator blinks 3 times with 0.5 second 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.

The auto defogging system does not work if you push the Air intake control button, Air conditioning button, or Mode selection button with the Auto Defogging system in operation. To ensure a proper view, do not press the following buttons while the auto defogging system is in operation.



This indicator illuminates when the auto defogging system senses the moisture on the inside of the windshield and operates.

The Auto defogging system addresses excess, moisture on the inside of the windshield in stages. For example, if auto defogging does not defog inside the windshield at step 1 Operating the air conditioning, it tries to defog again at step 2 Outside air position.

Step 1 : Operating the air conditioning

Step 2 : Outside air position

Step 3 : Blowing air flow toward the windshield

Step 4 : Increasing air flow toward the windshield

To cancel or reset the Auto Defogging System

Press the front windshield defroster button for 3 seconds when the ignition switch is in the ON position.

When the ADS system is canceled, Indicator on the button will blink 3 times per 0.5 sec and the position “ADS OFF” will be displayed on the climate control information screen.

When the ADS system is reset, Indicator on the button will blink 6 times per 0.25sec and the position “ADS OFF” will be disappeared on the climate control information screen.

You can set or release the Auto Defogging System on the AVN Climate Information selection screen.

“AVN → Climate → Menu → Auto defog”

If the battery is discharged or detached, the auto defogging system

will be reset. Adjust the feature accordingly.

⚠ 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.

Automatic ventilation (if equipped)

The system automatically selects the outside (fresh) air position when the climate control system operates over a certain period of time (approximately 5 minutes) in low temperature with the recirculated air position and Floor/Bi-level Mode selected and the state that air conditioning is turned off.

To cancel or reset the Automatic Ventilation

When the air conditioning system is on, select Face Level mode and while pressing the A/C button, press the recirculated air position button five times within three seconds.

When the automatic ventilation is canceled, the indicator blinks 3 times. When the automatic ventilation is activated, the indicator blinks 6 times.

If the battery is discharged or detached, the automatic ventilation will be reset. Adjust the feature accordingly.

Smart ventilation (if equipped)

The smart ventilation system maintains pleasant/fresh air condition inside the passenger compartment by automatically detecting/controlling the temperature and humidity when you drive the vehicle with the climate control system in the OFF position.

When the smart ventilation system starts to operate, the message, “SMART VENTILATION ON” appears for 5 seconds.

The driver can activate the smart ventilation by placing the ignition switch to the ON position and by selecting on the audio display:

“AVN → Climate → Menu → Smart vent”

- The smart ventilation system stops operating, when the OFF button of the climate control system is selected.
- The smart ventilation system stops operating, when any button of the climate control system is selected for operation.
- The smart ventilation system may not operate, when the vehicle is driven at low speed.

STORAGE COMPARTMENTS

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

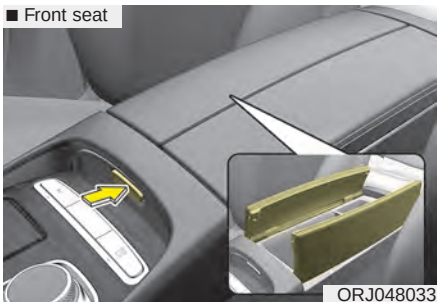
- To avoid possible theft, do not leave valuables in the storage compartment.
- Always keep the storage compartment covers closed while driving. Do not attempt to place so many items in the storage compartment that the storage compartment cover can not close securely.

⚠ WARNING - Flammable materials

Do not store, 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

■ Front seat

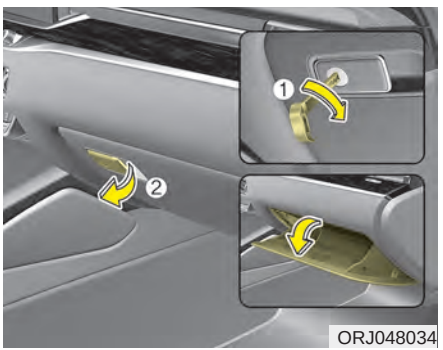


■ Rear seat



To open the center console storage, push the button.

Glove box



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

To open the glove box, pull the lever (2) and the glove box will automatically open. Close the glove box after use.

⚠ WARNING - Glove Box

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

✻ NOTICE

If the temperature control knob is in the warm or hot position, warm or hot air will flow into the glove box.

Sunglass holder



To open the sunglass holder, press the cover and the holder will slowly open. Place your sunglasses with the lenses facing out.

To close the sunglass holder push it up.

⚠ WARNING - 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.

⚠ CAUTION

- ***Do not open the sunglass holder while the vehicle is moving. The rear view mirror of the vehicle can be blocked by an opened sunglass holder.***
- ***Do not put the glasses forcibly into a sunglass holder to prevent breakage or deformation of the glasses. It may cause bodily injury if you try to open it forcibly when the glasses are jammed in the holder.***

INTERIOR FEATURES

Cup holder

⚠ WARNING - Hot liquids

Do not place uncovered cups with hot liquid in the cup holder while the vehicle is in motion. If the hot liquid spills, you may burn yourself. Such a burn to the driver could lead to loss of control of the vehicle.

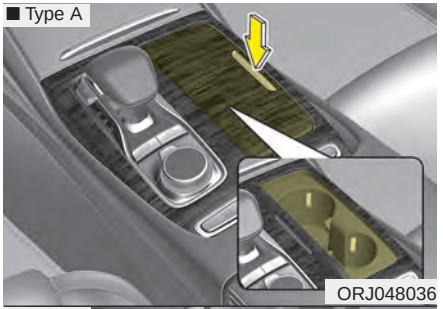
⚠ CAUTION

Keep your drinks sealed while driving to prevent spilling your drink. If liquid spills, it may get into the vehicle's electrical/electronic system and damage electrical/electronic parts.

⚠ CAUTION

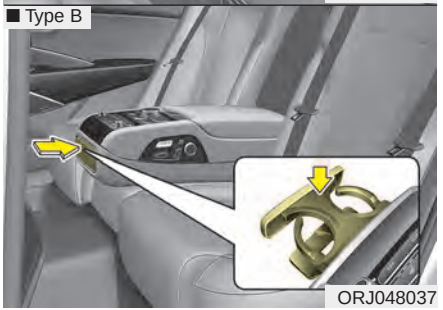
When cleaning spilled liquids, do not use heat to dry the cup holders. This may damage the cup holder.

■ Type A



ORJ048036

■ Type B

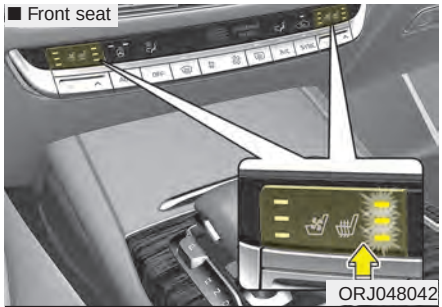


ORJ048037

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

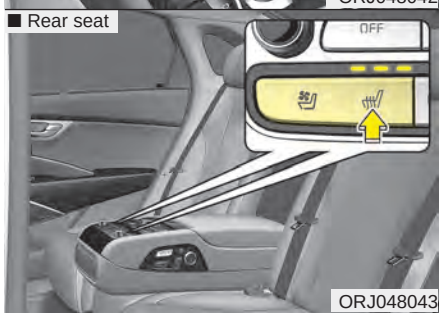
Seat warmer (if equipped)

■ Front seat



ORJ048042

■ Rear seat



ORJ048043

The seat warmer is provided to warm the front seats during cold weather. With the ignition switch in the ON position, press 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.

▶ Temperature control (Manual)

- Each time you push up or press the switch, the temperature setting of the seat will change as follows :

■ Front seat

OFF→HIGH( )→MIDDLE( )→LOW( )

■ Rear seat

OFF→HIGH( )→MIDDLE( )→LOW( )

- The seat warmer defaults to the OFF position whenever the ignition switch is turned on.

▶ Temperature control(Automatic)

The seat warmer starts to automatically control the seat temperature in order to prevent low-temperature burns after being manually turned ON.

OFF→HIGH( )→MIDDLE( )→LOW( )

30min 60min

You may manually push up the button to increase the seat temperature. However, it soon returns to the automatic mode again.

- When pushing up the switch for more than 1.5 seconds with the seat warmer operating, the seat warmer will turn OFF.
- The seat warmer defaults to the OFF position whenever the Engine Start/Stop button is in the ON position.

✻ 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.

⚠ 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.)**

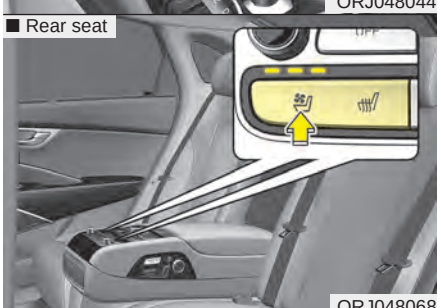
Air ventilation seat (if equipped)

■ Front seat



ORJ048044

■ Rear seat



ORJ048068

The temperature setting of the seat changes according to the switch position.

- If you want to ventilate your seat cushion, push down the switch (blue color).
- Each time you push down the button, the airflow will change as follows:

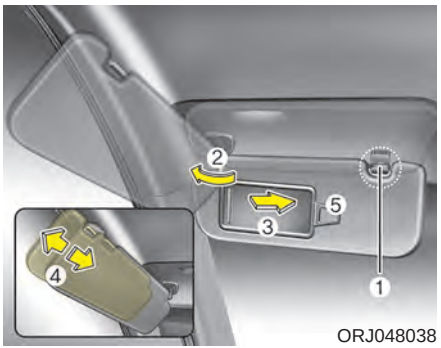
OFF→HIGH( )→MIDDLE( )→LOW( )

- The seat warmer (with air ventilation) defaults to the OFF position whenever the ignition switch is turned on.

⚠ 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 air ventilation seat.***
- ***Do not place heavy or sharp objects on the seat. Those things may damage the air ventilation seat.***
- ***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 air ventilation seat, dry the seat completely.***
- ***If you turn on the ignition with "The Auto Comfort Control" set from AVN, air ventilation seat will be automatically controlled according to the temperature. Using the switch, the driver can operate the system according to the switch level.***

Sunvisor



ORJ048038

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

To use the sunvisor, pull it downward.

To use the sunvisor for the side window, pull it downward, unsnap it from the bracket (1) and swing it to the side (2).

To use the vanity mirror, pull down the visor and slide the mirror cover (3).

Adjust the sunvisor extension forward or backward (4).

The ticket holder (5) is provided for holding a tollgate ticket. (if equipped)

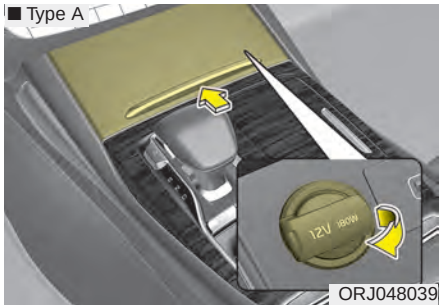
* The actual sunvisor lamp in the vehicle may differ from the illustration.

⚠ CAUTION - Vanity mirror lamp

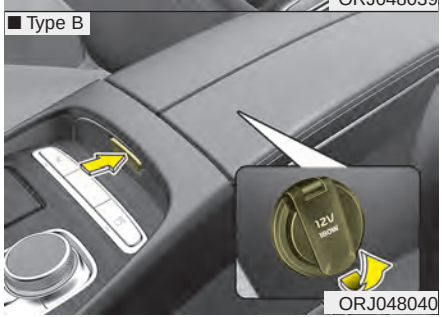
If you use the vanity mirror lamp, turn off the lamp before returning the sunvisor to its original position, otherwise it could result in battery discharge and possible sunvisor damage.

Power outlet

■ Type A



■ Type B



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 20 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 20A 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.
- Push the plug in as far as it will go. If good contact is not made, the plug may overheat and the fuse may open.
- Plug in battery equipped electronic devices with reverse current protection. The current from the battery may flow into the vehicle's electri cal/electronic system and cause system malfunction.
- Refrain from using the heater or A/C if you need to use the multipurpose socket. If the heater or A/C has to be used simultaneously, have it to the lowest setting.
- Some add-on electrical equipment will induce electromagnetic interference. This will lead to subsequent malfunction or hinder good reception of the Audio/Video and electrical system.
- Always make sure that electric add-ons are fully plugged into the multipurpose sockets.

  Insecure contacts may lead to electrical malfunctions.
- When using the front power outlet, you can close the center console cover after pulling out the wire through the front corner of right side of the console cover. (Car charger & Cable is not provided with your purchase.)

⚠ WARNING - Electric shock

Do not put a finger or a foreign object (pen, etc.) into a power outlet and do not touch with a wet hand. You may receive an electric shock.

USB charger

■ Type A



ORJ048041

■ Type B



ORJ048431

The USB charger is designed to recharge devices using a USB cable.

The electrical devices can be recharged when the Engine Start/Stop button is in ACC/ON/START position.

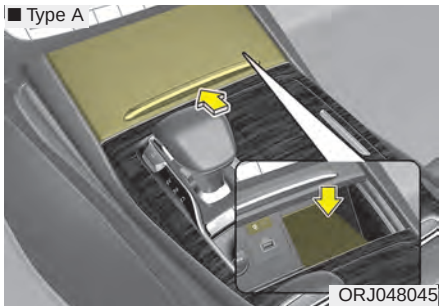
The battery charging state may be monitored on the electrical device.

Disconnect the USB cable from the USB port after use.

- Use the USB charger when the engine is running to prevent battery discharge.
- Only devices that fits the USB port can be used.
- The USB charger can be used only for battery charging purposes.

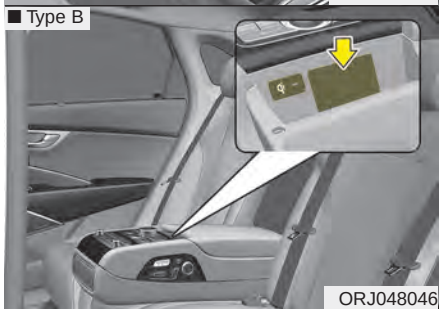
Wireless smart phone charging system (if equipped)

■ Type A



ORJ048045

■ Type B



ORJ048046

A wireless smart phone charging system is located in front of the center console.

Firmly close all doors, and turn the ignition to ACC or IGN ON. To start wireless charging, place the smart phone equipped with wireless charging function on the wireless charging pad.

For best wireless charging results, place the smart phone on the center of the charging pad.

The wireless charging system is designed for one smart phone equipped with QI. Please refer to the smart phone accessory cover or the smart phone manufacturer homepage to check whether your smart phone supports QI function.

Wireless smart phone charging

1. Remove any object on the smart phone charging pad including the smart key. If there is any foreign object on the pad other than a smart phone, the wireless charging function may not operate properly.
2. Place the smart phone on the center of the wireless charging pad.
3. The indicator light will change to orange once the wireless charging begins. After the charging is complete, the orange light will change to green.
4. You can choose to turn the wireless charging function to either ON or OFF by selecting it on the AVN. (Please refer to the AVN manual for more details.)

If the wireless charging does not work, gently move your smart phone around the pad until the charging indicator light turns yellow. Depending on the smart phone, the charging indicator light may not turn green even after the charging is complete.

If the wireless charging is not functioning properly, the orange light will blink and flash for ten seconds then turn off. In such cases, remove the smart phone from the pad and replace it on the pad again, or double check the charging status.

If you leave the smart phone on the charging pad when the vehicle ignition is in OFF, the vehicle will alert you through warning messages and sound (applicable for vehicles with voice guidance function) after the 'Good bye' function on the instrument cluster ends. However, it does not alert for every smart phone. It is not a malfunction of the system, but the smart phone soft ware incompatibility.

⚠ WARNING - Distracted driving

Driving while distracted can result in a loss of vehicle control that may lead to an accident, severe bodily 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.

⚠ CAUTION - Liquid in Wireless Smart Phone Charger

To prevent liquid from damaging the wireless smart phone charging system in your vehicle, securely close the tray cover when charging your phone.

⚠ WARNING - Metal in Wireless Charging System

If any metallic object such as a coin is placed between the wireless charging system and the smart phone, the charging may be disrupted. Also, the metallic object may heat up and potentially damage the charging system. If there is any metallic object between the smart phone and the charging pad, immediately remove the smart phone. Remove the metallic object after it has cooled down.

✻ NOTICE

- **If it is not possible to close the tray cover due to the size of your smart phone or because the tray cover has been broken, do not use the wireless smart phone charging function.**
- **Even if you're not charging your smart phone, keep the tray cover closed at all times when it is left in the tray. Driving with the tray cover opened will increase the chance of accidents and result in injury as you're highly likely to get distracted by the smart phone.**
- **When the interior temperature of the wireless charging system rises above a set temperature, the wireless charging will cease to function. After the interior temperature drops below the threshold, the wireless charging function will resume.**
- **The wireless charging may not function properly when there is a heavy accessory cover on the smart phone.**
- **Charging a smart phone with a protection cover on may heat up.**

(Continued)

(Continued)

- **The wireless charging will stop when the smart key is moved out of the vehicle with the ignition in ON.**
- **Charging may be temporarily interrupted when smart key detection is activated. (when turning on ignition, opening or closing the doors)**
- **The wireless charging will stop when the vehicle is turned OFF.**
- **The wireless charging will stop when the smart phone is not in complete contact with the wireless charging pad.**
- **Items equipped with magnetic components such as credit cards, telephone cards, bank-books, or a transportation ticket may become damaged during wireless charging.**
- **Place the smart phone on the center of the charge pad for best results. The smart phone may not charge when placed near the rim of the charging pad. When the smart phone does get charged, it may heat up excessively.**

(Continued)

(Continued)

- **For smart phones without built-in wireless charging system, an appropriate accessory has to be equipped in order to use the vehicle's wireless charging system.**
- **Cellphones that are not certified for wireless smart phone charging standards (QI) may not be able to charge.**
- **Self-protection features in some smart phones could slow down or stop charging.**
- **In some cases, the wireless charging indicator could not turn green even when the phone is fully charged.**
- **Smart phones of some manufacturers may display messages on weak current. This is due to the particular characteristic of the smart phone and does not imply a malfunction on wireless charging function.**

(Continued)

(Continued)

- **The indicator light of some manufacturers' smart phones may still be yellow after the smart phone is fully charged.**
  This is due to the particular characteristic of the smart phone and not a malfunction of the wireless charging system.
- **When any smart phone without a wireless charging function or a metallic object is placed on the charging pad, a small noise may sound. This small sound is due to the vehicle discerning compatibility of the object placed on the charging pad. It does not affect your vehicle or the smart phone in any way.**

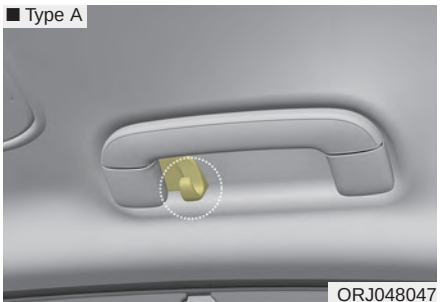
This device complies with Part 15 of the FCC rules.

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

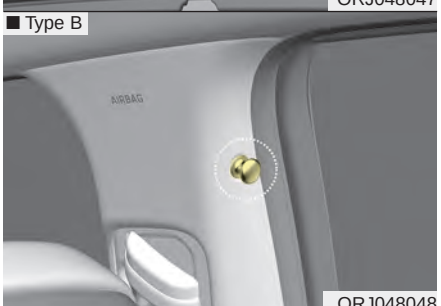
Coat hook

■ Type A



ORJ048047

■ Type B



ORJ048048

❉ This actual feature may differ from the illustration.

To use the coat hook, pull down the upper portion of hanger.

⚠ CAUTION - Hanging clothing

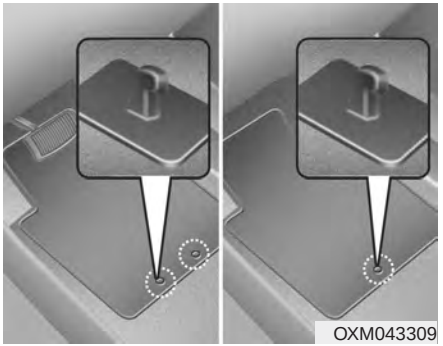
Do not hang heavy clothes, since they may damage the hook.

⚠ WARNING



Do not hang other objects such as hangers or hard objects except clothes. Also, do not put heavy, sharp or breakable objects in the pockets of the clothing. In an accident or when the curtain air bag is inflated, it may cause vehicle damage or bodily injury.

Floor mat anchor (s)



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 - After market floor mat

Do not install aftermarket floor mats that are not capable of being securely attached to the vehicle's floor mat anchors.

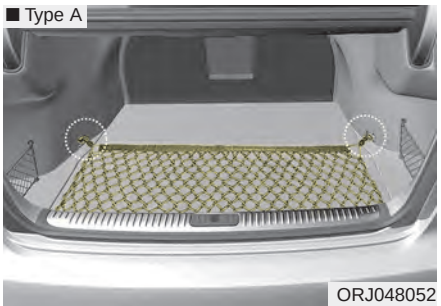
Unsecured floor mats can interfere with pedal operation.

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.

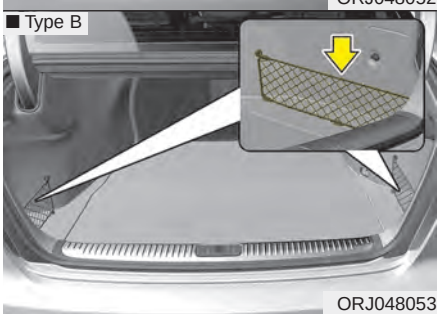
Luggage net (holder) (if equipped)

■ Type A



ORJ048052

■ Type B



ORJ048053

To keep items from shifting in the cargo area, you can use the holders located in the cargo area to attach the luggage net.

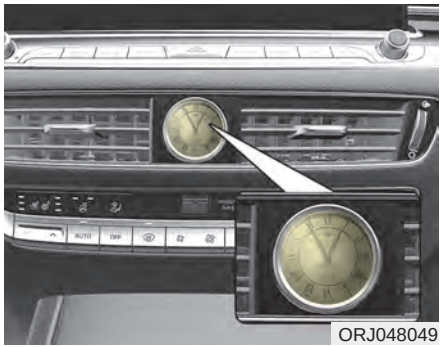
⚠ CAUTION

To prevent damage to the goods or the vehicle, care should be taken when carrying fragile or bulky objects in the luggage compartment.

⚠ WARNING

To avoid eye injury, DO NOT overstretch the luggage net. ALWAYS keep your face and body out of the luggage net's recoil path. DO NOT use the luggage net when the strap has visible signs of wear or damage.

Clock


ORJ048049

You can set the clock by using the AVN (Audio, Video and Navigation) system.

For more information, refer to the separately supplied manual.

⚠ WARNING

Do not adjust the clock while driving. You may lose your steering control and cause an accident that results in severe bodily injury or death.

Bag hanger



ORJ048050

Pull the strap (1) to hang a bag on the hook (2). Fold the hook when not in use.

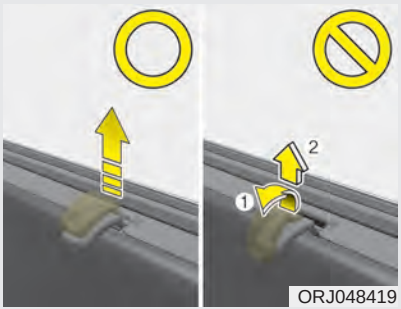
Side curtain (if equipped)


ORJ048051

To use the side curtain:

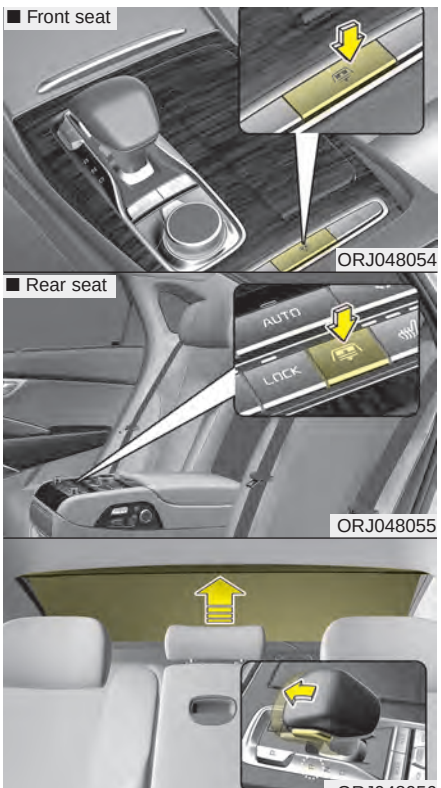
1. Lift the curtain by the hook.
2. Hang the curtain on both sides of the hook.

⚠ CAUTION



To open up the flap on the door, lift the knob straight up. If knob is pulled outward and lift it up, the flap will not open up. To close it, lift the knob down slowly.

Rear curtain (if equipped)



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 mph (20 km/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.

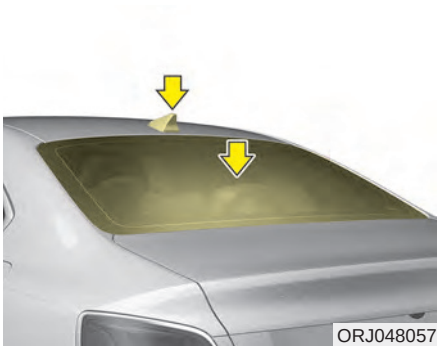
AUDIO SYSTEM

✻ 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



Glass antenna

Your vehicle uses a glass antenna to receive both AM and FM signals.

Shark fin antenna

The shark fin antenna will receive the transmit data.

⚠ CAUTION

- ***Do not clean the inside of the rear window glass or quarter glass with a cleaner or use a scraper to remove any foreign deposits as this may cause damage to the antenna elements.***
- ***Avoid adding metallic coating such as Ni, Cd, and so on. These can interfere with AM/FM reception.***
- ***To prevent damage to the rear glass antenna, never use sharp instruments or window cleaner containing abrasives to clean the window. Clean the inside surface of the rear glass window with a piece of soft cloth.***
- ***When putting a sticker on the inside surface of the rear window, be careful not to damage to the rear glass antenna.***
- ***Do not put sharp instruments nearby the rear glass antenna.***
- ***Tinted rear window may affect the proper functioning of the antenna.***

USB port



You can use an USB port to plug in an USB or iPod®.

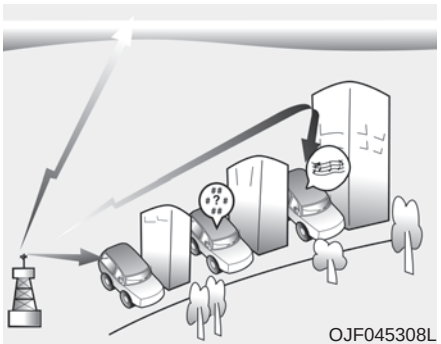
✻ NOTICE

When using a portable audio device connected to the power outlet, noise may occur during playback. If this happens, use the power source of the portable audio device.

* iPod® is a trademark of Apple Inc.

How vehicle radio works

FM reception

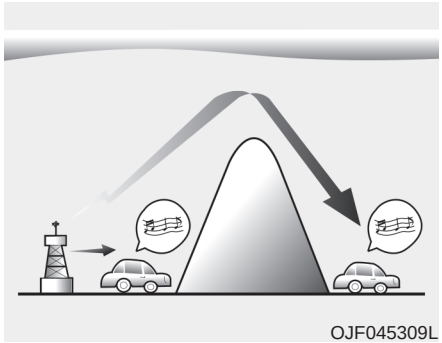


AM and FM radio signals are broadcast from transmitter towers located around your city. They are intercepted by the radio antenna on your vehicle. This signal is then processed by the radio and sent to your vehicle speakers.

However, in some cases the signal coming to your vehicle may not be strong and clear.

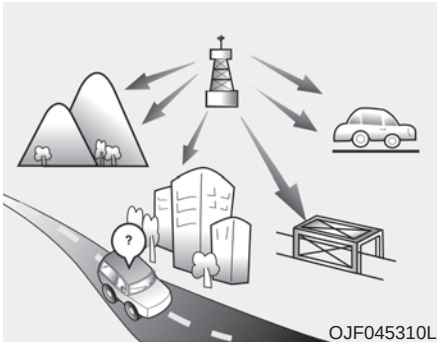
This can be due to factors, such as the distance from the radio station, closeness of other strong radio stations or the presence of buildings, bridges or other large obstructions in the area.

AM reception

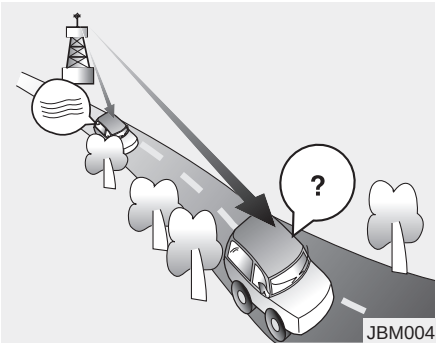


AM broadcasts can be received at greater distances than FM broadcasts. This is because AM radio waves are transmitted at low frequencies. These long distance,low frequency radio waves can follow the curvature of the earth rather than travelling straight. In addition, they curve around obstructions resulting in better signal coverage.

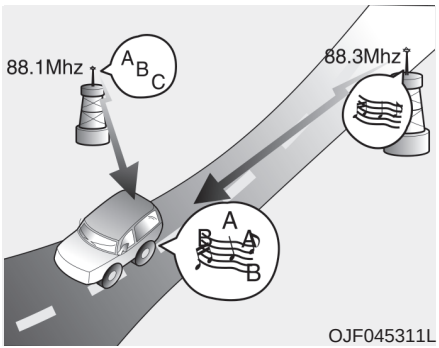
FM radio station



FM broadcasts are transmitted at high frequencies and do not bend to follow the earth's surface. Because of this, FM broadcasts generally begin to fade within short distances from the station. Also, FM signals are easily affected by buildings, mountains, and obstructions. This can lead to undesirable or unpleasant listening conditions which might lead you to believe a problem exists with your radio. The following conditions are normal and do not indicate radio trouble:



- Fading - As your vehicle moves away from the radio station, the signal will weaken and sound will begin to fade. When this occurs, we suggest that you select another station with a stronger signal.
- Flutter/Static - Weak FM signals or large obstructions between the transmitter and your radio can disturb the signal causing static or fluttering noises to occur. Reducing the treble level may lessen this effect until the disturbance clears.



- Station Swapping - As an FM signal weakens, another more powerful signal near the same frequency may begin to play. This is because your radio is designed to lock onto the clearest signal. If this occurs, select another station with a stronger signal.
- Multi-Path Cancellation - Radio signals being received from several directions can cause distortion or fluttering. This can be caused by a direct and reflected signal from the same station, or by signals from two stations with close frequencies. If this occurs, select another station until the condition has passed.

Using a cellular phone or a two-way radio

When a cellular phone is used inside the vehicle, noise may be produced from the audio system. This does not mean that something is wrong with the audio equipment. In such a case, try to operate mobile devices as far from the audio equipment as possible.

When using a communication system such as a cellular phone or a radio set inside the vehicle, a separate external antenna must be fitted. When a cellular phone or a radio set is used with an internal antenna alone, it may interfere with the vehicle's electrical system and adversely affect safe operation of the vehicle.

⚠ WARNING - Cell phone use

Do not use a cellular phone while driving. Stop at a safe location to use a cellular phone.

⚠ WARNING - Distracted driving

Driving while distracted can result in a loss of vehicle control that may lead to an accident, severe bodily injury, or death. The driver's primary responsibility is the safe and legal operation of the vehicle, and the 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 the vehicle, or which are not permissible by law, should never be used during the operation of the vehicle.

Declaration of Conformity

FCC

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions,may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures :

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions :

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

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operatedwith minmum 20cm between the and your body. This transmitter must not be collocated or operating in conjunction with any other antenna or transmitter unless authorized to do so by the FCC.

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- GVWR (Gross Vehicle Weight Rating) 5-161

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 K900 Kia dealer.

⚠ WARNING - Engine exhaust

Do not inhale exhaust fumes or leave your engine running in a 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.**

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, at the exact interval depending on the fluid. Further details are provided in chapter 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 handled 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 out.

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

⚠ 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 fire.

⚠ WARNING - Check surroundings

Always check the surrounding areas near your vehicle for people, especially children, before putting a vehicle into D (Drive) or R (Reverse).

⚠ WARNING - Loose objects

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 - 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.

⚠ 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.

ENGINE START/STOP BUTTON

Illuminated engine start/stop button



ORJ058001

Whenever the front door is opened, the engine start/stop button will illuminate for your convenience. The light will go off after about 30 seconds when the door is closed.

When all doors are closed and you lock the vehicle by using the transmitter or the smart key, the light will go off immediately.

Engine start/stop button position

OFF

To turn off the engine (START/RUN position) or vehicle power (ON position), press the engine start/stop button with the shift lever in the P (Park) position. When you press the engine start/stop button without the shift lever in the P (Park) position, the engine start/stop button will not change to the OFF position but to the ACC position.

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)



OCK057163

Press the engine start/stop button while it is in the OFF position without depressing the brake pedal.

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.

Accessory is displayed on the LCD of the cluster.

ON

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 an extended period of time. The battery may discharge, because the engine is not running.

START/RUN

To start the engine, depress the brake pedal and press the ENGINE START/ STOP button with the shift lever in the P (Park) or the N (Neutral) position. For your safety, start the engine with the shift lever in the P (Park) position.

If you press the engine start/stop button without depressing the brake pedal, the engine will not start and the engine start/stop button changes as follow:

OFF ➔ ACC ➔ ON ➔ OFF or ACC

✻ NOTICE

If you leave the ENGINE START/STOP button in the ACC or ON position for an extended period of 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.

Starting the engine with a smart key

1. Carry the smart key or place it inside the vehicle.
2. Make sure the parking brake is firmly applied
3. Place the shift lever in P (Park). Depress the brake pedal fully.

   You can also start the engine when the shift lever is in the N (Neutral) position.
4. Press the engine start/stop button 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.)

- Even if the smart key is in the vehicle, if it is position far away from you, the engine may not start.
- When the ENGINE START/STOP button is in the ACC or ON position and any door is opened, the system checks for the presents of the smart key. If the smart key is not in the vehicle, a message “key is not in the vehicle” will appear on the LCD display. And if all doors are closed, the chime will sound for 5 seconds. The indicator or warning will turn off while the vehicle is moving. Always have the smart key with you.

⚠ WARNING - 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.



ORJ058003

- If the smart key 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 TRANSMISSION (SHIFT-BY-WIRE) (IF EQUIPPED)



When you move the shift lever (1), depress the brake pedal while pressing the UNLOCK button (2).
To shift the gear to P (Park), press the [P] button(3).

ORJ058005L

Automatic transmission operation

The automatic transmission has 8 forward speeds and one reverse speed.

The individual speeds are selected automatically in the D (Drive) position.

⚠ WARNING

To reduce the risk of serious injury or death:

- **ALWAYS check the surrounding areas near your vehicle for people, especially children, before shifting a vehicle into D (Drive) or R (Reverse).**
- **Before leaving the driver's seat, always make sure the shift lever is in the P (Park) position, then set the parking brake, and place the engine start/stop button in the OFF position. Unexpected and sudden vehicle movement can occur if these precautions are not followed.**
- **Do not use engine braking (rapidly shifting from a high gear to lower gear) on slippery roads. The vehicle may slip causing an accident.**

Transmission ranges

The indicator in the instrument cluster displays the shift lever position when the engine start/stop button is in the ON position.

However, if the gear is in N (Neutral) or P (Park), the position is displayed on the instrument cluster when the engine start/stop button is in the OFF or ACC position.

⚠ CAUTION - Transmission

To avoid damage to your transmission, do not accelerate the engine in R (Reverse) or any forward gear position with the brakes on. The transmission may be damaged if you shift into P (Park) while the vehicle is in motion.



ORJ058006

P (Park)

Always come to a complete stop before shifting into P (Park).

To shift the gear from R (Reverse), N (Neutral), D (Drive) or Manual mode to P (Park), press the [P] button.

If you turn off the engine in D (Drive) or R (Reverse), the shifting automatically changes to P (Park).

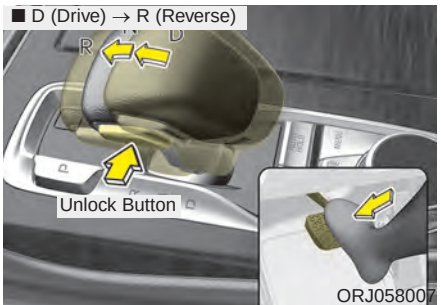
When you park the vehicle, press the [P] button while depressing the brake pedal and then apply the parking brake.

To reduce rollaway risk, do not use the P (Park) Position in place of the parking brake.

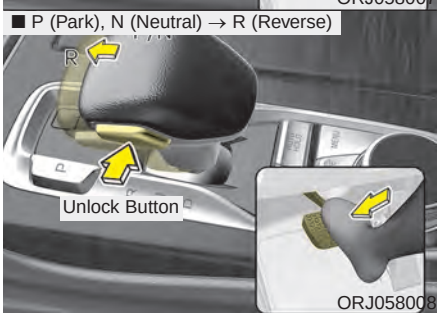
⚠ WARNING

- **Shifting into P (Park) while the vehicle is in motion may cause you to lose control of the vehicle.**
- **Do not use the P (Park) position in place of the parking brake.**

■ D (Drive) → R (Reverse)



■ P (Park), N (Neutral) → R (Reverse)

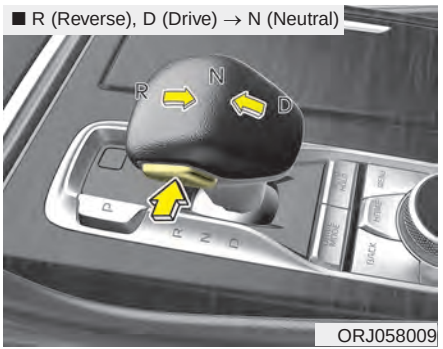


R (Reverse)

Use this position to drive the vehicle backward.

To move the shift lever to R (Reverse), press the [UNLOCK] button while depressing the brake pedal and then move the shift lever forward.

■ R (Reverse), D (Drive) → N (Neutral)



N (Neutral)

When in N (Neutral), the wheels and transmission are not engaged.

Use N (Neutral) if you need to restart a stalled engine, or if it is necessary to stop with the engine ON. Shift into P (Park) if you need to leave your vehicle for any reason.

Always depress the brake pedal when you are shifting from N (Neutral) to another gear.

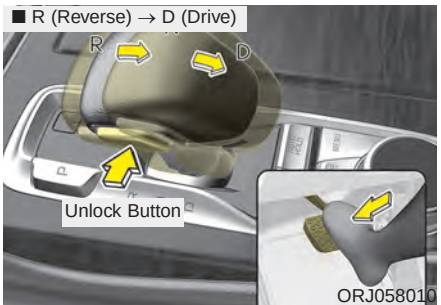
To turn off the engine, re-press the engine start/stop button to the ON position, press the [P] button, and press the engine start/stop button to the OFF position.

When either the driver's door or the front passenger's door is opened with the engine start/stop button in the ACC position and the shift lever in N (Neutral) position, the engine is automatically turned OFF and the transmission automatically changes to the P (Park) position.

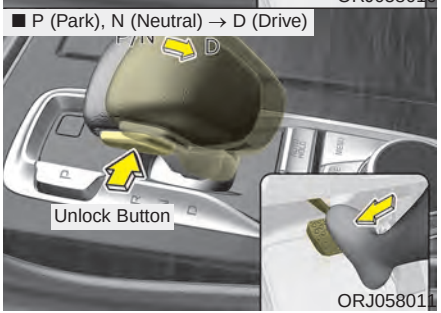
⚠ WARNING

- **To avoid inadvertent vehicle movement, do not shift into gear unless your foot is firmly on the brake pedal.**
- **D not permit your vehicle to idle in the N (Neutral) position for an extended period of time as this will preclude the wheels and the transmission from engaging. While parking the vehicle with the engine running, depress the brake pedal, shift the vehicle to the P (Park) position and apply the parking brake.**
- **Do not drive with the shift lever in N (Neutral). The engine brake will not work and may lead to an accident.**

■ R (Reverse) → D (Drive)



■ P (Park), N (Neutral) → D (Drive)



D (Drive)

This is the normal driving position. The transmission will automatically shift through a 8-gear sequence, providing the best fuel economy and power.

For extra power when passing another vehicle or driving uphill, depress the accelerator pedal further until you feel the transmission downshift to a lower gear.

To shift into D (Drive), depress the brake pedal and press the [UNLOCK] button on the shift lever. Move the shift lever backward.

To shift into D (Drive) from N (Neutral), you must depress the brake pedal.

✻ NOTICE

Always come to complete stop before shifting into D (Drive).

- Parking in N (Neutral) gear

Follow the steps below when parking and you want the vehicle to move when pushed.

1. After parking your vehicle, step on the brake pedal and press the [P] button with the ignition button in [ON] or while the engine is running.
2. If the parking brake is applied unlock the parking brake.
   - For EPB (Electronic Parking Brake) equipped vehicles, push the brake pedal with the ignition button in [ON] or while the engine is running to disengage the parking brake. If [AUTO HOLD] function is used while driving (If [AUTO HOLD] indicator is on in the cluster), press [AUTO HOLD] switch and [AUTO HOLD] function will be turned off.
3. While pressing the brake pedal, turn the ignition button [OFF].
   - For smart key equipped vehicles, the ignition switch can be [OFF] only after pressing the [P] button.
4. Remove the cap-cover and insert a tool (e.g. flathead screwdriver) into the access hole while depressing the brake pedal. Then, the gear will change to the N (Neutral) position. The tool should be inserted into the access hole within 3 minutes after turning OFF the engine.

✻ NOTICE

When moving the shift lever to N(Neutral) position, a normal mechanical sound will occur.

⚠ CAUTION

For EPB (Electronic Parking Brake) equipped vehicles with [AUTO HOLD] function used while driving, if the ignition button has been turned [OFF], the electronic parking brake will be engaged automatically. Therefore, [AUTO HOLD] function should be turned off before the ignition button is turned off.

⚠ WARNING

- **With the exception of parking in neutral gear, always park the vehicle in [P] (Park) for safety and apply the parking brake.**
- **Before parking in [N] (Neutral) gear, first make sure the parking ground is level and flat. Do not park in [N] gear on any slopes or gradients. If parked and left in [N], the vehicle may move and cause serious damage or injury.**

✻ NOTICE

After the ignition switch has been turned off, the electronic parking brake cannot be disengaged.

Paddle shifter (Manual mode)



The paddle shifter is available when the shift lever is in the D (Drive) position.

Pull the [+] or [-] paddle shifter once to shift up or down one gear and the system changes from automatic mode to manual mode.

When the vehicle speed is lower than 4.3 mph (7 km/h), if you don't press the accelerator pedal for more than 6 seconds. (Except drive mode (SPORT, CUSTOM)). For more information, refer to Drive mode integrated control system in chapter 5 or if you shift the shift lever from D (Drive) to manual mode and shift it from manual mode to D (Drive) again or if you pull the [+] paddle shifter more than 1 second, the system changes from manual mode to automatic mode.

✻ NOTICE

If the [+] and [-] paddle shifters are pulled at the same time, gear shift may not occur.

Shift-lock system

For your safety, the automatic transmission has a shift-lock system which prevents shifting the transmission from P (Park) into R (Reverse) or D (Drive) unless the [UNLOCK] button is pressed while depressing the brake pedal.

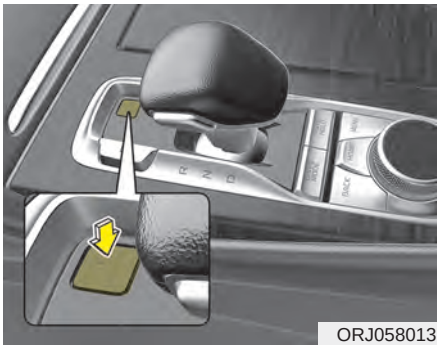
To shift the transmission from P (Park) into R (Reverse) or D (Drive):

1. Depress and hold the brake pedal.
2. Start the engine or place the engine start/stop button in the ON position.
3. Move the shift lever to R (Reverse) or D (Drive) while pressing the [UNLOCK] button.

⚠ 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 which could injure persons in or around the vehicle.

When the battery is discharged:



You can move the shift lever, when the battery is discharged. However, it will not change the gear from P (Parking) to N (Neutral) or others.

In emergencies, do the following to move the shift lever to N (Neutral) on a level ground.

1. Connect the cables between the jump-starting terminals inside the engine compartment and the battery terminals of another vehicle/ supplementary battery.

   For more information refer to "Jump Starting" in chapter 6.
2. Release the parking brake with the engine start/stop button in the ON position.
3. Press the engine start/stop button to the OFF position.
4. Remove the cap-cover and insert a tool (e.g. flathead screwdriver) into the access hole while depressing the brake pedal. Then, the gear will change to the N (Neutral) position. The tool should be inserted into the access hole within 3 minutes after turning OFF the engine.

✻ NOTICE

In situations where the gear needs to be changed from P (Park) to N (Neutral) when the engine start/stop button is in the OFF position, refer to step 4.
The actuators work to shift the gear into the N (Neutral) or P (Parking) and make a normal mechanical sound.

Parking

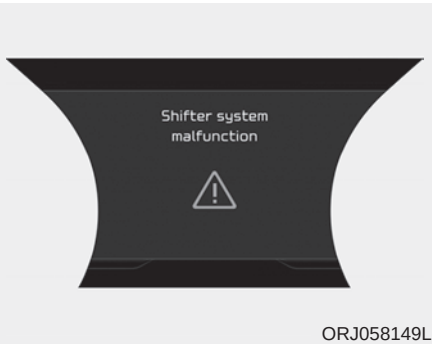
Always come to a complete stop and continue to depress the brake pedal. Move the shift lever into the P (Park) position, apply the parking brake, and place the engine start/stop button in the OFF position. Take the Key with you when exiting the vehicle.

⚠ WARNING

- **Do not depress the accelerator pedal while sitting in the vehicle with the engine running. Depressing the accelerator pedal for a long period of time may cause the engine or exhaust system to overheat and start a fire.**
- **The exhaust gas and the exhaust system are very hot . Keep away from the exhaust system components. Do not stop or park over flammable materials, such as dry grass, paper or leaves. They may ignite and cause a fire.**

LCD display messages

Shifter Malfunction



ORJ058149L

The warning message appears on the LCD display, when the transmission or the shift lever does not properly operate in the P (Park) position. In this case, have the vehicle inspected by an authorized K900 Kia dealer immediately.

Check shift lever



ORJ058150L

The warning message appears on the LCD display, when there is a malfunction with one of the key transmission components.

In this case, have the vehicle inspected by an authorized K900 Kia dealer immediately.

Shifting conditions not met



ORJ058151L

The warning message appears on the LCD display, when engine RPM is too high, or when driving speed is too fast to shift the gear.

We recommend you decrease your RPM level or slow down before shifting the gear.

Press brake pedal to change gear



ORJ058152L

The warning message appears on the LCD display, when the brake pedal is not depressed while shifting the gear.

We recommend you depress the brake pedal and then shift the gear.

Shift to P after stopping



ORJ058153L

The warning message appears on the LCD display, when the brake pedal is not depressed while shifting the gear.

We recommend you depress the brake pedal and then shift the gear.

Press UNLOCK to change gear



ORJ058154L

The warning message appears on the LCD display, when the [UNLOCK] button is not pressed while shifting the gear.

We recommend you press the [UNLOCK] button and then shift the gear.

Good driving practices

- Never move the shift lever from P (Park) or N (Neutral) to any other position with the accelerator pedal depressed.
- Never move the shift lever into P (Park) when the vehicle is in motion.

  Be sure the vehicle is completely stopped before you attempt to shift into R (Reverse) or D (Drive).
- Do not move the shift lever to N (Neutral) when driving. Doing so may result in an accident because of a loss of engine braking and the transmission could be damaged.
- Do not drive with your foot resting on the brake pedal. Even light, but consistent pedal pressure can result in the brakes overheating, brake wear and possibly even brake failure.

- Depressing both accelerator and brake pedals at the same time can trigger logic for engine power reduction to assure vehicle deceleration. Vehicle acceleration will resume after the brake pedal is released.
- When driving in Sports Mode, slow down before shifting to a lower gear. Otherwise, the lower gear may not be engaged if the engine rpms are outside of the allowable range.
- Always apply the parking brake when leaving the vehicle. Do not depend on placing the transmission in P (Park) to keep the vehicle from moving.
- Exercise extreme caution when driving on a slippery surface. Be especially careful when braking, accelerating or shifting gears. On a slippery surface, an abrupt change in vehicle speed can cause the drive wheels to lose traction and may cause loss of vehicle control resulting in an accident.
- Optimum vehicle performance and economy is obtained by smoothly depressing and releasing the accelerator.

⚠ WARNING

To reduce the risk of SERIOUS INJURY or DEATH:

- **ALWAYS wear your seatbelt. In a collision, an unbelted occupant is significantly more likely to be seriously injured or killed than a properly belted occupant.**
- **Avoid high speeds when cornering or turning.**
- **Do not make quick steering wheel movements, such as sharp lane changes or fast, sharp turns.**
- **The risk of rollover is greatly increased if you lose control of your vehicle at highway speeds.**

(Continued)

(Continued)

- **Loss of control often occurs if two or more wheels drop off the roadway and the driver over steers to reenter the roadway.**
- **In the event your vehicle leaves the roadway, do not steer sharply. Instead, slow down before pulling back into the travel lanes.**
- **Do not attempt sudden or abrupt driving maneuvers on slippery surfaces. Attempting such maneuvers can result in loss of vehicle control and accidents.**

✻ NOTICE

K900 kia recommends you follow all posted speed limits.

✻ NOTICE

- Kickdown Mechanism

Use the kickdown mechanism for maximum acceleration. Depress the accelerator pedal beyond the pressure point. The automatic transmission will shift to a lower gear depending on the engine speed.

THE ECO-COASTING SYSTEM (IF EQUIPPED)

When certain conditions are met, the engine is automatically decoupled from the transmission while the shift lever is remained in D (Drive). In this ECO Coasting mode, the engine stays at idling speed to reduce fuel consumption and increase coasting distance. The engine is automatically coupled back again when ECO Coasting deactivation conditions are met. Please refer to ECO Coasting activation and deactivation conditions.

The Eco-Coasting system setting

The Eco-Coasting system activates if you select the Eco-Coasting system from AVN : "Setting → Vehicle → Coasting" (Please refer to AVN manual for more details.)

When the Eco-Coasting system is activated, the message "Coasting" appears at the top center of the cluster.

⚠ CAUTION

- ***If the accelerator pedal is pressed quickly for accelerating with the Eco-Coasting system in operation, acceleration may occur after the engagement of the clutch inside the transmission. In turn, the driver may continue to feel acceleration even after the system is turned off.***
- ***Driving with the Eco-Coasting system off may be required in some cases since the engine brake is not applied while the Eco-Coasting system is in operation.***
- ***Operation the AVN screen to activate or deactivate Eco-Coasting system while driving may be dangerous as the driver's attention is dispersed.***

Eco-Coasting operation conditions

The Eco-Coasting system is activated when the accelerator pedal is depressed and released under the following conditions.

- When the driving mode is ECO mode.
- When driver acceleration is SMART ECO in SMART mode.
- When the shift lever is in the D (Drive) position.
- When Cruise Control/Smart Cruise Control button is OFF.
- The accelerator or brake pedal is not depressed.
- When the vehicle speed is within the range of 55 km/h to 160 km/h.
- If the road gradient is within the range of -5% to +5%.
- In SMART mode, if the distance between the vehicle ahead and the relative speed is within a certain range (if the Smart Cruise system is equipped)

❈If the front radar for smart cruise system cannot operate normally, the inter-vehicle distance and relative speed condition are automatically ignored.

❈The Eco-Coasting system works after the engine is turned on, the transmission is warmed up, and the engine sensor self-diagnosis is completed after starting.

❈Depending on the driving situation, Eco-Coasting operation may be temporarily delayed even if the above conditions are met.

The Eco-Coasting system release conditions

The Eco-Coasting system will be automatically released when the following conditions are met.

- When the drive mode is COMFORT or SPORT mode.
- In SMART mode, when driver acceleration is SMART COMFORT or SMART SPORT.
- When using the paddle shift of the steering wheel.
- When the Cruise Control/Smart Cruise Control button is on (The /CRUISE indicator is on.).
- When pressing the accelerator pedal or brake pedal.
- When the vehicle speed is outside the rage of 55 km/h to 160 km/h.
- Road inclination is less than -5% or exceeds +5%.
- In SMART mode, if the headway distance to the vehicle ahead is too close of the relative speed changes momentarily (if the smart cruise control system is equipped)

- If lane change is predicated in SMART mode (LKA warning by turn signal lamp operation or steering wheel).

❈It is recommended to turn off the Eco-Coasting system in the driving condition where frequent acceleration or deceleration is repeated.

Change the drive mode to COMFORT or SPORT mode, or disable Eco-Coasting mode on the AVN screen.

ALL WHEEL DRIVE (AWD)

Using All Wheel Drive (AWD)

The All Wheel Drive (AWD) System delivers engine power to front and rear wheels for maximum traction. AWD is useful when extra traction is required, such as when driving slippery, muddy, wet, or snow-covered roads.

If the system determines there is a need for four wheel drive, the engine's driving power is distributed to all four wheels automatically.

⚠ WARNING

If the AWD warning light ( ) stays on the instrument cluster, your vehicle may have a malfunction with the AWD system. When the AWD warning light ( ) illuminates we recommend that the vehicle be checked by an authorized K900 Kia dealer as soon as possible.

⚠ WARNING

To reduce the risk of SERIOUS INJURY or DEATH:

- **Do not drive in conditions that exceed the vehicle's intended design such as challenging off-road conditions.**

(Continued)

(Continued)

- **Avoid high speeds when cornering or turning.**
- **Do not make quick steering wheel movements, such as sharp lane changes or fast, sharp turns.**
- **The risk of a rollover is greatly increased if you lose control of your vehicle at highway speeds.**
- **Loss of control often occurs if two or more wheels drop off the roadway and the driver over steers to reenter the roadway.**
- **In the event your vehicle leaves the roadway, do not steer sharply. Instead, slow down before pulling back into the travel lanes.**

✻ NOTICE

- **Do not drive in water if the level is higher than the bottom of the vehicle.**
- **Check your brake condition once you are out of mud or water. Depress the brake pedal several times as you move slowly until you feel normal braking return.**
- **Shorten your scheduled maintenance interval if you drive in off-road conditions such as sand, mud or water (see "Maintenance Under Severe Usage Conditions" in chapter 7).**
- **Make sure that AWD vehicle is towed by a flatbed tow truck.**

For safe AWD operation

Before driving

- Make sure all passengers are wearing seat belts.
- Sit upright and closer to the steering wheel than usual. Adjust the steering wheel to a position comfortable for you to drive.

Driving on snow-covered or icy roads

- Start off slowly by applying the accelerator pedal gently.
- Use snow tires or tire chains.
- Keep sufficient distance between your vehicle and the vehicle in front of you.
- Use engine braking during deceleration.
- Avoid speeding, rapid acceleration, sudden brake applications, and sharp turns to prevent skids.

Driving in sand or mud

- Maintain slow and constant speed.
- Use tire chains driving in mud if necessary.
- Keep sufficient distance between your vehicle and the vehicle in front of you.
- Reduce vehicle speed and always check the road condition.
- Avoid speeding, rapid acceleration, sudden brake applications, and sharp turns to prevent getting stuck.

✻ NOTICE

When the vehicle is stuck in snow, sand or mud, place a non-slip material under the drive wheels to provide traction OR slowly spin the wheels in forward and reverse directions which causes a rocking motion that may free the vehicle. See the Section "Rocking the Vehicle" for more details. However, avoid running the engine continuously at high rpm, which could damage the AWD system.

✻ NOTICE

- **When using Snow Tires, mount them on all four wheels.**
- **When using Tire Chains, install them on all four tires. However, if you are in a situation to use only two tire chains, install them on the rear tires. In this case, do not drive more than a short distance to prevent damage to the AWD system.**
- **If tire chains must be used, use AutoSock (fabric snow chain) and install the tire chain after reviewing the instructions provided with the tire chains.**

❋ **For more information on Snow Tires and Tire Chains, refer to "Winter Driving" in this chapter.**

Driving up or down hills

- Driving uphill
  - Before starting off, check if it is possible to drive uphill.
  - Drive as straight as possible.
- Driving downhill
  - Do not change gear while driving downhill. Select gear before driving downhill.
  - Drive slowly using engine braking while driving downhill.
  - Drive as straight as possible.

⚠ WARNING

Exercise extreme caution driving up or down steep hills. The vehicle's tires could lose traction depending on the grade, terrain and water/mud conditions.

Emergency precautions

Tires

⚠ WARNING

Do not use tires and wheels of a different size and type than the ones originally installed on your vehicle. It can affect the safety and performance of your vehicle, which could lead to increased steering difficulty or rollover causing serious injury.

When replacing the tires, be sure to equip all four tires with the tire and wheel of the same size, type, tread, brand and load-carrying capacity.

In case of emergency such as tire puncture, repair it using TMK (Tire Mobility Kit) for temporary use. Afterwards, have the tire be inspected by an authorized K900 Kia dealer.

⚠ WARNING



Never start or run the engine while an AWD vehicle is raised on a jack. The vehicle can slip or roll off of a jack causing serious injury or death to you or those nearby.

Towing

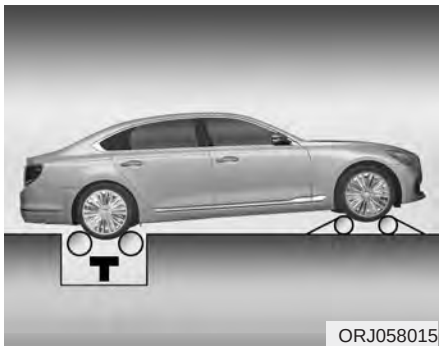
AWD vehicles must be towed with a wheel lift and dollies or flatbed equipment with all the wheels off the ground. For more information, refer to "Towing" in chapter 6.

Vehicle inspection

- When the vehicle is on a car lift, do not operate the front and rear wheels separately. All four wheels should be operated.
- Never engage the parking brake while running the engine on a car lift. This may damage the AWD system.

Dynamometer testing

An AWD vehicle must be tested on a special four wheel chassis dynamometer.



An AWD vehicle should not be tested on a 2WD roll tester. If a 2WD roll tester must be used, perform the following procedure:

1. Check the tire pressures recommended for your vehicle.
2. Place the rear wheels on the roll tester for a speedometer test as shown in the illustration.
3. Release the parking brake.
4. Place the front wheels on the temporary free roller as shown in the illustration.

⚠ WARNING

Keep away from the front of the vehicle while the vehicle is in gear on the dynamometer. The vehicle can jump forward and cause serious injury or death.

BRAKE SYSTEM

Power brakes

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

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

When the engine is not running, the reserve brake power is partially depleted each time the brake pedal is applied. Do not pump the brake pedal when the power assist has been interrupted.

Pump the brake pedal only when necessary to maintain steering control on slippery surfaces.

⚠ 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. Always test your brakes in this fashion after driving through deep water. To dry the brakes, apply them lightly while maintaining a safe forward speed until brake performance returns to normal.

In the event of brake failure

If the 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. 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.

Always replace the front or rear brake pads as pairs.

⚠ 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.

⚠ 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.



W-75

Check the brake warning light by turning the ignition switch ON (do not start the engine). This light will be illuminated when the parking brake is applied with the ignition switch in the START or ON position.

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

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

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

Electronic parking brake (EPB)

Applying the parking brake



ORJ058017

To apply the EPB (electronic 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 pull up 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 remain at a standstill, do as follows:

1. **Apply the EPB.**
2. **Pull up the EPB switch for more than 3 seconds.**

Do not operate the parking brake/ EPB while the vehicle is moving except in an emergency situation.

✻ NOTICE

A click or electric brake motor whine sound may be heard while operating or releasing the EPB. These conditions are normal and indicate that the EPB is functioning properly.

Releasing the parking brake



To release the EPB (electronic parking brake), press the EPB switch while doing the following:

- Have the ignition switch or engine start/stop button in the ON position.
- Depress the brake pedal.
- The shift lever must be in P (Park).

Make sure the brake warning light goes off.

To release EPB (electronic parking brake) automatically:

- Shift lever in P (Park)

  With the engine running depress the brake pedal and shift out of P (Park) to R (Reverse) or D (Drive).
- Shift lever in N (Neutral)

  With the engine running depress the brake pedal and shift out of N (Neutral) to R (Reverse) or D (Drive).
- Automatic Transmission

  1. Close the driver's door, engine hood and trunk.
  2. Fasten the driver's seat belt.
  3. Start the engine.
  4. Depress the accelerator pedal while the shift lever is in R (Reverse), 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.

✻ NOTICE

If the parking brake warning light is still on even though the EPB has been released, have the system checked by an authorized K900 Kia dealer.

⚠ CAUTION

Do not drive your vehicle with the EPB applied. It may cause excessive brake pad and brake rotor wear.

EPB (electronic parking brake) may be automatically applied when:

- The EPB is overheated
- Requested by other systems

✻ NOTICE

For EPB (Electronic Parking Brake) equipped vehicles with AUTO HOLD function used while driving, if the ignition button has been turned OFF, the EPB will be engaged automatically. Therefore, AUTO HOLD function should be turned off before the ignition button is turned off.

System warning



ORJ058155L

- If you try to drive off depressing the accelerator pedal with the EPB applied, but the EPB doesn't release automatically, a warning will sound and a message will appear.
- If the driver's seat belt is not fastened and the engine hood, driver's door 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

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.

- A click or electric brake motor whine sound may be heard while operating or releasing the EPB. 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.

System warning



ORJ058156L

When the conversion from Auto Hold to EPB is not working properly a warning will sound and a message will appear.

✻ NOTICE

Depress the brake pedal when the above message appears for the Auto Hold and EPB may not activate.

System warning



ORJ058157L

If the EPB is applied while Auto Hold is activated because of an ESC (Electronic Stability Control) signal, a warning will sound and a message will appear.

EPB malfunction indicator



ORJ058084

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 operating 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 K900 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 K900 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 EPB 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 K900 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

Do not operate the electronic parking brake while the vehicle is moving except in an emergency situation. Applying the electronic 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 electronic 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.

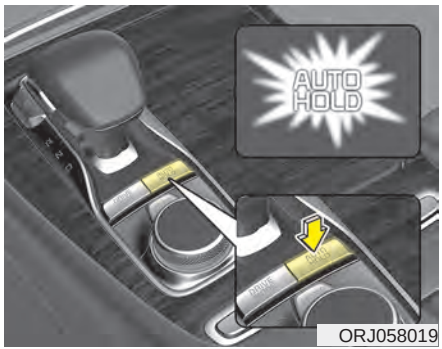
If you notice a continuous noise or burning smell when the EPB is used for emergency braking, have your vehicle checked by an authorized K900 Kia dealer.

When the EPB (electronic parking brake) is not released

If the EPB does not release normally, take your vehicle to an authorized K900 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.



1. Depress the brake pedal, start the engine and then press the Auto Hold button. The white AUTO HOLD indicator will come on indicating the system is in standby.

   Before the Auto Hold will engage, the driver's door and engine hood must be closed and the driver's seat belt must be fastened.



2. When coming to a complete stop by depressing the brake pedal, the AUTO HOLD indicator changes from white to green indicating the AUTO HOLD is engaged. The vehicle will remain at a standstill even if you release the brake pedal.
3. If EPB is applied, Auto Hold will be released.
4. If you press the accelerator pedal with the shift lever in D (Drive) or manual mode, the Auto Hold will be released automatically and the vehicle will start to move. The indicator changes from green to white indicating the Auto Hold is in standby and the EPB is released.

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 following are conditions when the Auto Hold will not engage (Auto Hold light will not turn green and the Auto Hold system remains in stand by):**
  - **The driver's seat belt is unfastened and driver's door is opened**
  - **The engine hood is opened**
  - **The shift lever is in P (Park) or R (Reverse)**
  - **The EPB is applied**
- **For your safety, the Auto Hold automatically switches to EPB under any of the following conditions (Auto Hold light remains white and the EPB automatically applies):**
  - **The driver's seat belt is unfastened and driver's door is opened**
  - **The engine hood is opened**
  - **The vehicle is in a standstill for more than 10 minutes**
  - **The vehicle is standing on a steep slope**
  - **The vehicle moved for a few seconds**

(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 K900 Kia dealer and have the system checked.**

⚠ 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 or engine hood open detection system, the Auto Hold may not work properly.

Take your vehicle to an authorized K900 Kia dealer and have the system checked.

✻ NOTICE

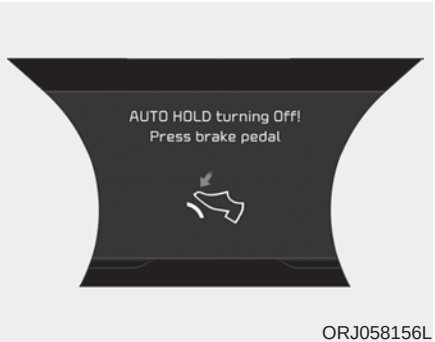
A click or electric brake motor whine sound may be heard while operating or releasing the EPB, but these conditions are normal and indicate that the EPB is functioning properly.

Warning messages



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When the EPB is applied from Auto Hold, a warning will sound and a message will appear.

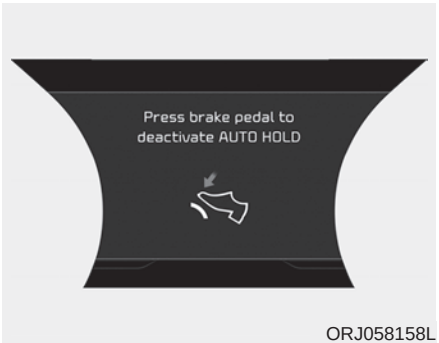


ORJ058156L

When the conversion from Auto Hold to EPB is not working properly a warning will sound and a message will appear.

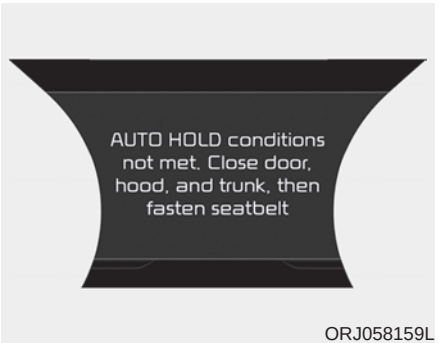
✻ NOTICE

When this message is displayed, the Auto Hold and EPB may not operate. For your safety, depress the brake pedal.



ORJ058158L

If you do not apply the brake pedal when you release the Auto Hold by pressing the [AUTO HOLD] switch, a warning will sound and a message will appear.



ORJ058159L

When you press the [AUTO HOLD] switch, if the driver's door and engine hood are not closed or the driver's seat belt is unfastened, a warning will sound and a message will appear on the LCD display. At this moment, press the [AUTO HOLD] button after closing the driver's door and engine hood and fastening the seat belt.

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.

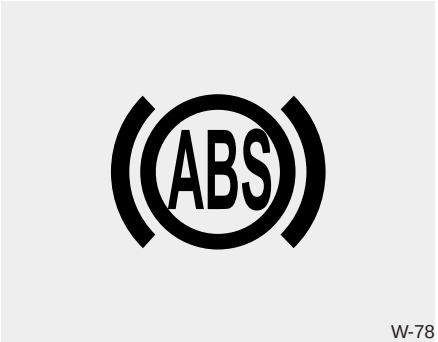
Driving in these conditions increases the stopping distance for your vehicle.

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 to allow the ABS to control the force being delivered to the brakes.

- Even with the anti-lock brake system, your vehicle still requires sufficient stopping distance. Always maintain a safe distance from the vehicle in front of you.
- Always slow down when cornering. The anti-lock brake system cannot prevent accidents resulting from excessive speeds.
- On loose or uneven road surfaces, operation of the anti-lock brake system may result in a longer stopping distance than for vehicles equipped with a conventional brake system.



W-78

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. Contact an authorized K900 Kia dealer as soon as possible.

✻ 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.

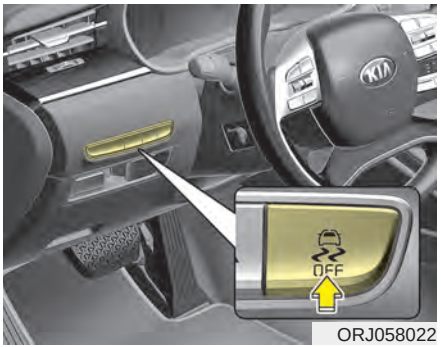
- When you drive on a road having poor traction, such as an icy road, and have operated your brakes continuously, the ABS will be active continuously and the ABS warning light may illuminate. Pull your vehicle over to a safe place and stop the engine.
- Restart the engine. If the ABS warning light goes off, then your ABS system is normal. Otherwise, you may have a problem with the ABS. Contact an authorized K900 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 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)



ORJ058022

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.

⚠ 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.

The Electronic Stability Control (ESC) system is an electronic system designed to help the driver maintain vehicle control under adverse conditions. It is not a substitute for safe driving practices. Factors including speed, road conditions and driver steering input can all affect whether ESC will be effective in preventing a loss of control. It is still your responsibility to drive and corner at reasonable speeds and to leave a sufficient margin of safety.

When you apply your brakes under conditions which may lock the wheels, you may hear a “tik-tik” sound from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your ESC is active.

✻ NOTICE

A click sound may be heard in the engine compartment when the vehicle begins to move after the engine is started. These conditions are normal and indicate that the Electronic Stability Control System is functioning properly.

ESC operation

ESC ON condition

-

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

When operating



When the ESC is in operation, the 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 driving on a slippery road, pressing the accelerator pedal may not cause the engine rpm (revolutions per minute) to increase.

ESC operation off

ESC OFF state



There are 2 types of ESC OFF states; Traction Control disabled and Traction & Stability Control disabled.

If the ignition is turned off when ESC is off, ESC remains off.

Upon restarting the engine, the ESC will automatically turn on again.



ORJ058160L

• 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.



ORJ058161L

• ESC off state 2

To cancel ESC operation, press the ESC OFF button (ESC OFF) for more than 3 seconds. ESC OFF indicator light (ESC OFF) illuminates and ESC OFF warning chime will sound. At this state, the engine control function and brake control function do not operate. It means the car stability control function does not operate any more.

Indicator light

■ ESC indicator light



■ ESC OFF indicator light



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

The ESC indicator light blinks whenever ESC is operating or illuminates when ESC fails to operate.

The ESC OFF indicator light comes on when the ESC is turned off with the button.

⚠ 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

- ESC should be turned on for daily driving whenever possible.
- To turn ESC off while driving, press the ESC OFF button while driving on a flat road surface.

⚠ WARNING - Operating ESC

Never press the ESC OFF button while ESC is operating (ESC indicator light blinks).

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

✻ NOTICE

- **When operating the vehicle on a dynamometer, ensure that the ESC is turned off (ESC OFF light illuminated). If the ESC is left on, it may prevent the vehicle speed from increasing, and result in false diagnosis.**
- **Turning the ESC off does not affect ABS or brake system operation.**

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 detects changes in coefficient of friction between right wheels and left wheels when braking.

⚠ WARNING - Tire/ Wheel size

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.

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 and/or abnormal steering responses (EPS- Electronic Power Steering). This is only the effect of brake and EPS control and indicates nothing unusual.

The VSM does not operate when:

- Driving on a sloping road such as a gradient or incline
- Driving in reverse
- ESC OFF indicator light ( ) remains on the instrument cluster
- EPS 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.

⚠ WARNING - Vehicle stability management

Drive carefully even though your vehicle has Vehicle stability management. It can only assist you in maintaining control under certain circumstances.

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 EPS warning light remains on, take your vehicle to an authorized K900 Kia dealer and have the system checked.

✻ NOTICE

- **The VSM is designed to function above approximately 13 mph (22 km/h) on curves.**
- **The VSM is designed to function above approximately 6 mph (10 km/h) when a vehicle is braking on a split-mu surface. A split-mu surface is made of two 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.

⚠ 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.

Hill-start assist control (HAC)

A vehicle has the tendency to roll back on a steep hill when it starts to go after stopping. The Hill-start Assist Control (HAC) prevents the vehicle from rolling back by applying the brakes automatically for about 2 seconds. The brakes are released when the accelerator pedal is depressed or after about 2 seconds.

The HAC is activated only for about 2 seconds, so when the vehicle is starting off always depress the accelerator pedal.

⚠ 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.

Good braking practices

- Check to be sure the parking brake is not engaged and 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 K900 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 Transmission, 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 transmission). 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 transmission) and block the rear wheels so the vehicle cannot roll. Then release the parking brake.
- Do not hold the vehicle on an incline with the accelerator pedal. This can cause the transmission to overheat. Always use the brake pedal or parking brake.

Electronic control suspension (ECS) (if equipped)

The Electronic Control Suspension (ECS) controls the vehicle suspension automatically to maximize driving comfort by taking into account the driving conditions such as speed, surface of the road, cornering, stopping requirements and acceleration. If the ECS warning message “Check ECS” comes on, you may have a problem with the ECS system. In this case, have the vehicle inspected by an authorized K900 Kia dealer immediately.

FORWARD COLLISION-AVOIDANCE ASSIST (FCA) SYSTEM - SENSOR FUSION TYPE (FRONT RADAR + FRONT CAMERA)

The Forward Collision-avoidance Assist (FCA) system is designed to help detect and monitor the vehicle ahead or help detect a pedestrian in the roadway through radar signals and camera recognition to warn the driver that a collision is imminent, and if necessary, apply emergency braking.

⚠ WARNING

Take the following precautions when using the Forward Collision-avoidance Assist (FCA) system:

- **This system is only a supplemental system and it is not intended to, nor does it replace the need for extreme care and attention of the driver. The sensing range and objects detectable by the sensors are limited. Pay attention to the road conditions at all times.**
- **NEVER drive too fast in accordance with the road conditions or while cornering.**
- **Always drive cautiously to prevent unexpected and sudden situations from occurring. The Forward Collision Avoidance system may not always stop the vehicle completely and is only intended to help mitigate a collision that is imminent.**

System setting and activation

System setting

- The driver can activate the FCA by placing the ignition switch to the ON position and by selecting:

  "AVN → Settings → Vehicle → Driver assistance → Forward safety"

  - If you select "Active assistance", the FCA system activates. The FCA produces warning messages and warning alarms in accordance with the collision risk levels. Also, it controls the brakes in accordance with the collision risk levels.
  - If you select "Warning only", the FCA system activates and produces only warning alarms in accordance with the collision risk levels. You should control the brake directly because the FCA system do not control the brake.
  - If you select "Off", the FCA system deactivates,



The warning light illuminates on the LCD display, when you cancel the FCA system. The driver can monitor the FCA ON/OFF status on the LCD display. Also, the warning light illuminates when the ESC (Electronic Stability Control) is turned off. If the warning light remains ON when the FCA is activated, we recommend that you have the system checked by an authorized K900 kia.

- The driver can select the initial warning activation time on the LCD display.

  Go to the "AVN → Settings → Vehicle → Driver assistance → Warning timing → Normal/Later".

The options for the initial Forward Collision Warning includes the following:

- Normal:

  When this condition is selected, the initial Forward Collision Warning is activated normally. This setting allows for a nominal amount of distance between the vehicle or pedestrian, ahead before the initial warning occurs.

- Later:

  When this condition is selected, the initial Forward Collision Warning is activated later than normal. This setting reduces the amount of distance between the vehicle or pedestrian, ahead before the initial warning occurs.

  Select 'Later' when traffic is light and when driving speed is slow.

✻ NOTICE

If you change the warning timing, the warning time of other systems may change. Always be aware before changing the warning timing.

Prerequisite for activation

The FCA gets ready to be activated, when the FCA is selected on the LCD display, and when the following prerequisites are satisfied.

- The ESC (Electronic Stability Control) is on.
- Vehicle speed is over 6 mph (10 km/h). (The FCA is only activated within a certain speed range.)
- The system detects the vehicle or pedestrian in front, which may collide with your vehicle. (The FCA may not be activated or may sound a warning alarm in accordance with the driving situation or vehicle condition.)

⚠ WARNING

- **Completely stop the vehicle on a safe location before operating the switch on the steering wheel to activate/ deactivate the FCA system.**
- **The FCA automatically activates upon placing the Engine Start/Stop button to the ON position. The driver can deactivate the FCA by canceling the system setting on the LCD display.**
- **The FCA automatically deactivates upon canceling the ESC (Electronic Stability Control). When the ESC is canceled, the FCA cannot be activated on the LCD display. The FCA warning light will illuminate which is normal.**

FCA warning message and system control

The FCA system produces warning messages, warning alarms, and emergency braking based on the level of risk of a frontal collision, such as when a vehicle ahead suddenly brakes.

The driver can select the initial warning activation time in the Settings in the AVN. The options for the initial Forward Collision Warning include Normal or Late initial warning time.

Collision Warning (First warning)

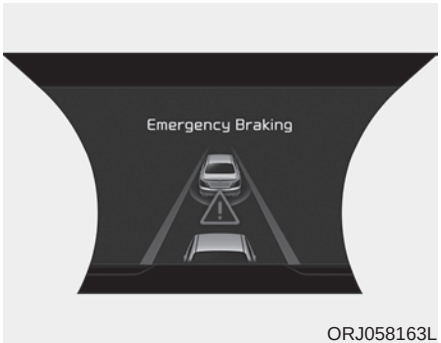


ORJ058162L

This warning message appears on the LCD display with a warning chime. Additionally, some vehicle system intervention occurs by the engine management system to help decelerate the vehicle.

- Your vehicle speed may decelerate moderately.
- The FCA system limitedly controls the brakes to preemptively mitigate impact in a collision.
- If you select "Warning only", for the FCA system setting, the FCA system activates and produces only warning alarms in accordance with the collision risk levels. You should control the brake directly because the FCA system will not control the brake.

Emergency braking (Second warning)



ORJ058163L

This warning message appears on the LCD display with a warning chime.

Additionally, some vehicle system intervention occurs by the engine management system to help decelerate the vehicle.

- The FCA system limitedly controls the brakes to preemptively mitigate impact in a collision. The brake control is maximized just before a collision.

- If you select "Warning only", for the FCA system setting, the FCA system activates and produces only warning alarms in accordance with the collision risk levels. You should control the brake directly because the FCA system will not control the brake.

Brake operation

- In an urgent situation, the braking system enters into the ready status for prompt reaction against the driver's depressing the brake pedal.
- The FCA system provides additional braking power for optimum braking performance, when the driver depresses the brake pedal.
- The braking control is automatically deactivated, when the driver sharply depresses the accelerator pedal, or when the driver abruptly operates the steering wheel.
- The FCA brake control is automatically canceled, when risk factors disappear.

⚠ CAUTION

The driver should always use extreme caution while operating the vehicle, whether or not there is a warning message or alarm from the FCA system.

⚠ WARNING

- **The braking control cannot completely stop the vehicle nor avoid all collisions. The driver is responsible to safely drive and control the vehicle.**
- **If any other warning sound such as seat belt warning chime is already generated, the Forward Collision-Avoidance Assist (FCA) system warning may not sound.**

⚠ WARNING

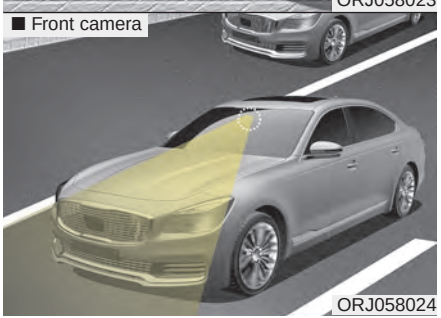
The FCA system logic operates within certain parameters, such as the distance from the vehicle ahead, the speed of the vehicle ahead, and the driver's vehicle speed. Certain conditions such as inclement weather and road conditions may affect the operation of the FCA system.

⚠ WARNING

Never deliberately drive dangerously to activate the system.

FCA sensor





In order for the FCA system to operate properly, always make sure the sensor cover or sensor is clean and free of dirt, snow, and debris.

Dirt, snow, or foreign substances on the lens may adversely affect the sensing performance of the sensor.

✻ NOTICE

- **Do not apply license plate molding or foreign objects such as a bumper sticker or a bumper guard near the radar sensor. Doing so may adversely affect the sensing performance of the radar.**
- **Always keep the radar sensor and cover clean and free of dirt and debris.**
- **Use only a soft cloth to wash the vehicle. Do not spray pressurized water directly on the sensor or sensor cover.**
- **Be careful not to apply unnecessary force on the radar sensor or sensor cover. If the sensor is forcibly moved out of proper alignment, the FCA system may not operate correctly. In this case, a warning message may not be displayed. Have the vehicle inspected by an authorized K900 Kia dealer.**

(Continued)

(Continued)
- **If the front bumper becomes damaged in the area around the radar sensor, the FCA system may not operate properly. Have the system checked by an authorized K900 Kia dealer.**
- **Use only genuine parts to repair or replace a damaged sensor or sensor cover. Do not apply paint to the sensor cover.**

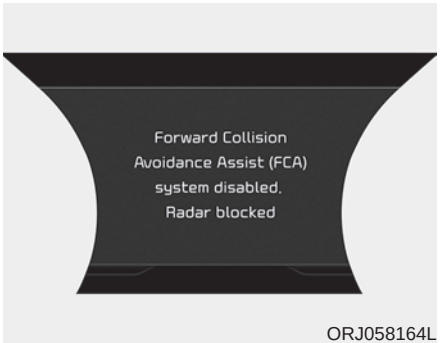
✻ NOTICE

- **NEVER install any accessories or stickers on the front windshield, or tint the front windshield.**
- **NEVER place any reflective objects (i.e. white paper, mirror) over the dashboard. Any light reflection may cause a malfunction of the system.**
- **Make sure the frontal camera does not get wet.**
- **NEVER disassemble the camera assembly, or apply any impact on the camera assembly.**
- **Playing the vehicle audio system at high volume may prevent occupants from hearing the FCA warnings.**

✻ NOTICE

Have the system checked by an authorized K900 Kia dealer.
- **The windshield glass is replaced.**
- **The radar sensor or cover gets damaged or replaced.**

Warning message and warning light



ORJ058164L

Forward Collision Avoidance Assist (FCA) system disabled.

Radar blocked

When the sensor cover is covered with dirt, snow, or debris, the FCA system operation may not be able to detect vehicles. If this occurs, a warning message will appear on the LCD display.

Remove any dirt, snow, or debris and clean the radar sensor cover before operating the FCA system.

The system will operate normally when such dirt, snow or debris is removed.

However, the FCA may not properly operate in an area (e.g. open terrain), where any substances are not detected or the camera is blocked with dirt, snow or debris after turning ON the engine.

Also, even though a warning message does not appear on the LCD display, the FCA may not properly operate.

System malfunction



Check Forward Collision Avoidance Assist system

- When the FCA is not working properly, the FCA warning light (⚠) will illuminate and the warning message will appear for a few seconds. After the message disappears, the master warning light (⚠) will illuminate. In this case, have the system checked by an authorized K900 Kia dealer.
- The FCA warning message may appear along with the illumination of the ESC (Electronic Stability Control) warning light.

⚠ WARNING

- **The FCA is only a supplemental system for the driver's convenience. It is the driver's responsibility to control the vehicle operation. Do not solely depend on the FCA system. Rather, maintain a safe braking distance, and, if necessary, depress the brake pedal to reduce the driving speed.**
- **In certain instances and under certain driving conditions, the FCA system may activate unintentionally. This initial warning message appears on the LCD display with a warning chime.**

  Also, due to sensing limitations, in certain situations, the front radar sensor or camera recognition system may not detect the vehicle ahead. The FCA system may not activate and the warning message may not be displayed.

(Continued)

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- Even if there is any problem with the brake control function of the FCA system, the vehicle's basic braking performance will operate normally. However, brake control function for avoiding collision will not activate.
- If the vehicle in front stops suddenly, you may have less control of the brake system. Therefore, always keep a safe distance between your vehicle and the vehicle in front of you.
- The FCA system may activate during braking and the vehicle may stop suddenly shifting loose objects toward the passengers. Always keep loose objects secured.
- The FCA system may not activate if the driver applies the brake pedal to avoid the risk of a collision.

(Continued)

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- The brake control may be insufficient, possibly causing a collision, if a vehicle in front abruptly stops. Always pay extreme caution.
- The FCA system may not activate according to the road conditions, inclement weather, driving conditions or traffic conditions.
- Occupants may get injured, if the vehicle abruptly stops by the activated FCA system. Pay extreme caution.
- The FCA system operates only to detect vehicles in front of the vehicle.

⚠ WARNING

- The FCA system operates only to help detect vehicles or pedestrians in front of the vehicle.
- The FCA system does not operate when the vehicle is in reverse.
- The FCA system is not designed to detect other objects on the road such as animals.
- The FCA system does not detect vehicles in the opposite lane.
- The FCA system does not detect cross traffic vehicles that are approaching.
- The FCA system cannot detect the driver approaching the side view of a parked vehicle (for example on a dead end street.)

(Continued)

(Continued)

- **The FCA system cannot detect any cross traffic cyclists that are approaching.**

  In these cases, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce the driving speed in order to maintain a safe distance.

Limitations of the system

The Forward Collision avoidance assist (FCA) system is designed to monitor the vehicle or pedestrian ahead in the roadway through radar signals and camera recognition to warn the driver that a collision is imminent, and if necessary, apply emergency braking.

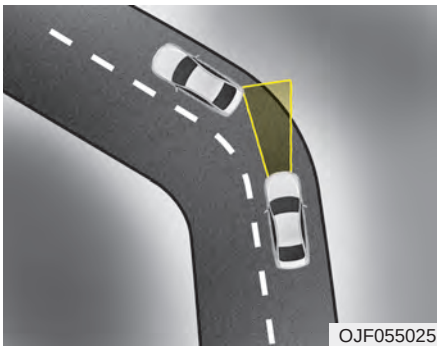
In certain situations, the radar sensor or the camera may not be able to detect the vehicle or pedestrian ahead. In these cases, the FCA system may not operate normally. The driver must pay careful attention in the following situations where the FCA operation may be limited.

Detecting vehicles

The sensor may be limited when:

- The radar sensor or camera is blocked with a foreign object or debris
- The camera lens is contaminated due to tinted, filmed or coated windshield, damaged glass, or stuck of foreign matter (sticker, bug, etc.) on the glass
- Inclement weather such as heavy rain or snow obscures the field of view of the radar sensor or camera
- There is interference by electromagnetic waves
- Something in the path of travel deflects the radar waves.
- The radar/camera sensor recognition is limited
- The vehicle in front is too small to be detected (for example a motor cycle, a bicycle etc.)
- The vehicle in front is an oversize vehicle or trailer that is too big to be detected by the camera recognition system (for example a tractor trailer, etc.)

- The camera's field of view is not well illuminated (either too dark or too much reflection or too much backlight that obscures the field of view)
- The vehicle in front does not have their rear lights or their rear lights does not turned ON or their rear lights are located unusually.
- The outside brightness changes suddenly, for example when entering or exiting a tunnel
- When light coming from a street light or an oncoming vehicle is reflected on a wet road surface such as a puddle in the road
- The field of view in front is obstructed by sun glare
- The windshield glass is fogged up; a clear view of the road is obstructed
- The vehicle in front is driving erratically
- The vehicle is on unpaved or uneven rough surfaces, or road with sudden gradient changes.
- The vehicle is driven near areas containing metal substances as a construction zone, railroad, etc.
- The vehicle drives inside a building, such as a basement parking lot
- The camera does not recognize the entire vehicle in front.
- The camera is damaged.
- The brightness outside is too low such as when the headlamps are not on at night or the vehicle is going through a tunnel.
- A shadow is on the road by a median strip, trees, etc.
- The vehicle drives through a tollgate.
- The rear part of the vehicle in front is not fully visible. (the vehicle turns in other direction or the vehicle is overturned.)
- Adverse road conditions cause excessive vehicle vibrations while driving
- The sensor recognition changes suddenly when passing over a speed bump
- The vehicle in front is moving vertically to the driving direction
- The vehicle in front is stopped vertically
- The vehicle in front is driving towards your vehicle or reversing
- You are on a roundabout and the vehicle in front circles


OJF055025

- Driving on a curve

The performance of the FCA system may be limited when driving on a curved road.

On curved roads, the other vehicle in the same lane may not be recognized. The FCA system may produce the warning message and the warning alarm prematurely, or it may not produce the warning message or the warning alarm at all.

When driving on a curve the driver must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.


OJF055026

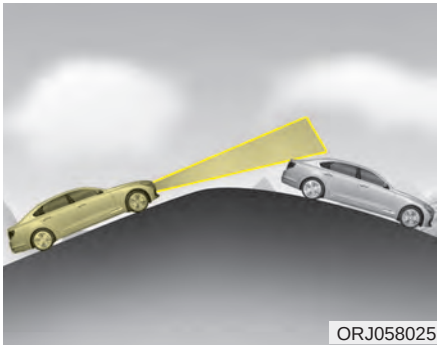
The FCA system may recognize a vehicle in the next lane when driving on a curved road.

In this case, the system may unnecessarily alarm the driver and apply the brake.

Always pay attention to road and driving conditions, while driving. If necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

Also, when necessary depress the accelerator pedal to prevent the system from unnecessarily decelerating your vehicle.

Always check the traffic conditions around the vehicle.

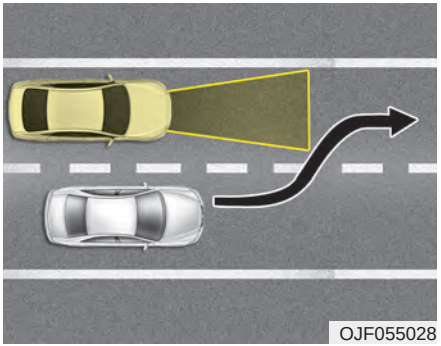

ORJ058025

- Driving on a slope

The performance of the FCA may be limited while driving upward or downward on a slope any may not recognize the vehicle in front in the same lane. It may unnecessarily produce the warning message and the warning alarm prematurely, or it may not produce the warning message and the warning alarm at all.

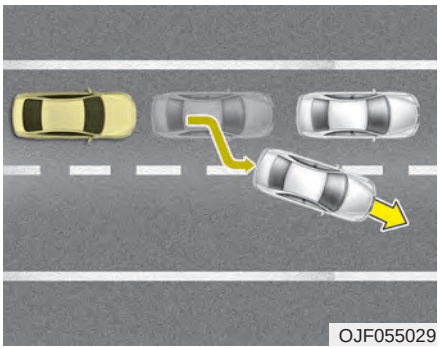
When the FCA suddenly recognizes the vehicle in front while passing over a slope, you may experience sharp deceleration.

Always keep your eyes forward while driving upward or downward on a slope, and, if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

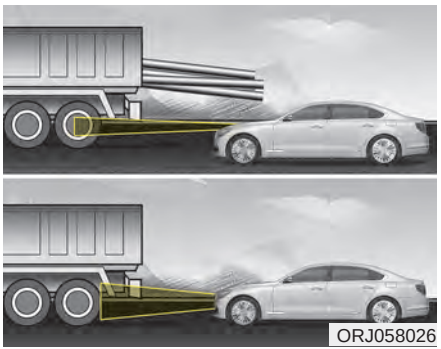

OJF055028

- Changing lanes

When a vehicle changes lanes in front of you, the FCA system may not immediately detect the vehicle, especially if the vehicle changes lanes abruptly. In this case, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.


OJF055029

When driving in stop-and-go traffic, and a stopped vehicle in front of you merges out of the lane, the FCA system may not immediately detect the new vehicle that is now in front of you. In this case, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.


ORJ058026

- Detecting the vehicle in front of you

If the vehicle in front of you has cargo that extends rearward from the cab, or when the vehicle in front of you has higher ground clearance, additional special attention is required. The FCA system may not be able to detect the cargo extending from the vehicle. In these instances, you must maintain a safe braking distance from the rearmost object, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain distance.

Recognizing pedestrians

- The pedestrian is not fully captured by the camera sensor, or the pedestrian does not walk in the upright position.
- The pedestrian moves very fast.
- The pedestrian abruptly appears in front.
- The pedestrian wears clothes in the color similar to the background.
- The outside is too bright or too dark.
- The vehicle drives at night or in the darkness.
- There is an item similar to a person's body structure.
- The pedestrian is small.
- The pedestrian has impaired mobility.
- It is difficult to distinguish the pedestrian from the surroundings.
- The sensor recognition is limited.
- There is a group of pedestrians.
- If a sudden change in the sensor recognition takes place while passing through the speed bump,

- When the vehicle is severely shaken,
- When driving around circular intersection after the vehicle in front,
- If the front of the camera lens is contaminated by front glass tinting, film, water repellent coating, damage on glass, foreign matter (sticker, insect, etc.)
- The radar or camera or camera lens is damaged.
- If the headlights of the vehicle are not used at night or in the tunnel section, or the light is too weak
- If street light or the light of the vehicle coming from the opposite is reflected or when sunlight is reflected by the water on the road surface
- When the back light is projected in the direction of the vehicle's motion (including the headlights of vehicles)
- Road sign, shadow on the road, tunnel entrance, toll gate, partial pavement
- If the windshield has moisture on its surface or if windshield freezes,
- Driving in the fog.
- When objects are out of the sensing range of the sensor or radar.
- When the cyclist in front is riding intersected with the driving direction
- When there is any other electromagnetic interference
- When the construction area, rail or other metal object is near the cyclist
- If the bicycle material is not reflected well on the radar

⚠ WARNING

- **Do not use the Forward Collision avoidance Assist (FCA) system when towing a vehicle. Application of the FCA system while towing may adversely affect the safety of your vehicle or the towing vehicle.**
- **Use extreme caution when the vehicle in front of you has cargo that extends rearward from the cab, or when the vehicle in front of you has higher ground clearance.**
- **The FCA system is designed to detect and monitor the vehicle ahead in the roadway through radar signals and camera recognition. It is not designed to detect bicycles, motorcycles, or smaller wheeled objects such as luggage bags, shopping carts, or strollers.**

(Continued)

(Continued)

- **Never try to test the operation of the FCA system. Doing so may cause severe injury or death.**
- **If the front bumper, front glass, radar or camera have been replaced or repaired, we recommend that you have your vehicle inspected by an authorized K900 Kia dealer.**

✻ NOTICE

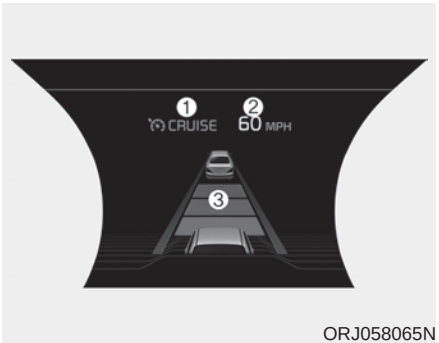
In some instances, the FCA system may be cancelled when subjected to electromagnetic interference.

This device complies with Part 15 of the FCC rules.

Operation is subject to the following three conditions:

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

SMART CRUISE CONTROL WITH STOP & GO SYSTEM



ORJ058065N

① Cruise indicator
② Set speed
③ Vehicle-to-vehicle distance

To see the SCC screen on the LCD display on the cluster, select Assist mode (). For more informations, refer to “LCD Display” in chapter 4.

The Smart Cruise Control system allows you to program the vehicle to maintain a constant speed and a predetermined distance to the vehicle ahead without having to depress the accelerator or brake pedal

The Smart Cruise Control system will automatically adjust your vehicle speed to maintain your programmed speed and following distance without requiring you to depress the accelerator or brake pedals.

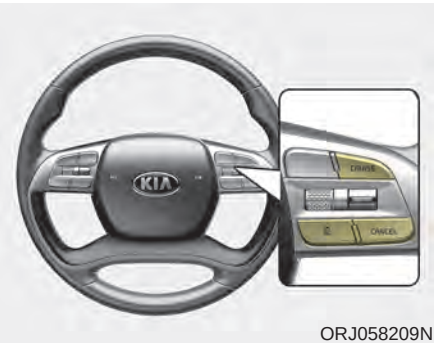
⚠ WARNING

For your safety, please read the owner's manual before using the Smart Cruise Control system.

⚠ WARNING

The Smart Cruise Control system is not a substitute for safe driving practices, but a convenience function only. It is the responsibility of the driver to always check the speed and distance to the vehicle ahead.

Smart Cruise Control Switch



ORJ058209N

CRUISE : Turns cruise control system on or off.

RES+: Resumes or increases cruise control speed.

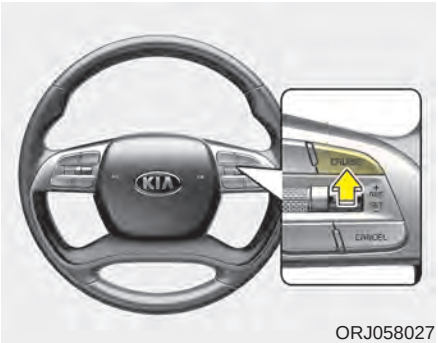
SET-: Sets or decreases cruise control speed.

: Sets vehicle-to-vehicle distance.

CANCEL : Cancels cruise control operation.

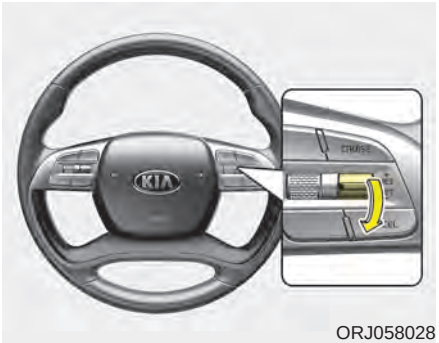
Smart Cruise Control speed

To set Smart Cruise Control speed



ORJ058027

1. Push the CRUISE button on the steering wheel to turn the system on. The cruise indicator will illuminate.
2. Accelerate to the desired speed. The Smart Cruise Control speed can be set as follows:
   - 5 mph (10km/h) ~ 120 mph (200 km/h) : when there is no vehicle in front
   - 0 mph (0 km/h) ~ 120 mph (200 km/h) : when there is a vehicle in front



ORJ058028

3. Push the toggle switch down (SET-). The Set Speed and Vehicle-to-Vehicle Distance on the LCD display will illuminate.
4. Release the accelerator pedal. The desired speed will automatically be maintained.

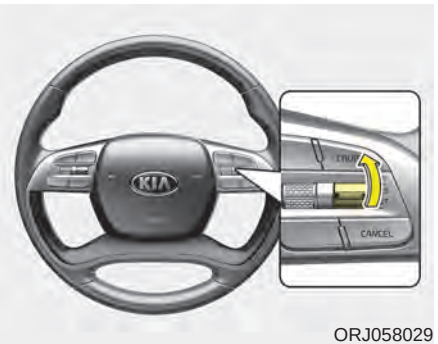
If there is a vehicle in front of you, the speed may decrease to maintain the distance to the vehicle ahead.

On a steep grade, the vehicle may slow down or speed up slightly while going uphill or downhill.

✻ NOTICE

- **Vehicle speed may decrease on an upward slope and increase on a downward slope.**
- **When you are setting the cruise control speed, with a vehicle in front and your vehicle speed is between 0~20 mph (0~30 km/h), the speed will set to 20 mph (30 km/h)**

To increase Smart Cruise Control set speed



ORJ058029

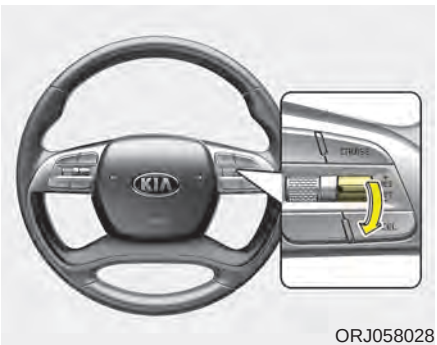
Follow either of these procedures:

- Push the toggle switch up (RES+), and release it immediately. The cruising speed will increase by 1 mph (1 km/h) each time you move the toggle switch up in this manner.
- Push the toggle switch up (RES+), and hold it. Your vehicle set speed will increase by 5 mph (10 km/h). Release the toggle switch at the speed you want.
- You can set the speed to 120 mph (200 km/h)

⚠ CAUTION

Check the driving condition before using the toggle switch. Driving speed sharply increases, when you push up and hold the toggle switch.

To decrease the Smart Cruise Control set speed



ORJ058028

Follow either of these procedures:

- Push the toggle switch down (SET-), and release it immediately. The cruising speed will decrease by 1 km/h (1 mph) each time you move the toggle switch down in this manner.
- Push the toggle switch down (SET-), and hold it. Your vehicle set speed will decrease by 5 mph (10 km/h). Release the toggle switch at the speed you want.
- You can set the speed to 20 mph (30 km/h).

To temporarily accelerate with the Smart Cruise Control on

If you want to speed up temporarily when the Smart Cruise Control is on, depress the accelerator pedal. Increased speed will not interfere with Smart Cruise Control operation or change the set speed.

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

If you push the toggle switch down (SET-) at increased speed, the cruising speed will be set again.

✻ NOTICE

Be careful when accelerating temporarily, because the speed is not controlled automatically at this time even if there is a vehicle in front of you.

Smart Cruise Control will be temporarily canceled when:



ORJ058030

Cancelled manually

- Depressing the brake pedal.
- Pushing the CANCEL/O button located on the steering wheel.

The Smart Cruise Control turns off temporarily when the Set Speed and Vehicle-to-Vehicle Distance indicator on the LCD display turns off.

The cruise indicator is illuminated continuously.

Cancelled automatically

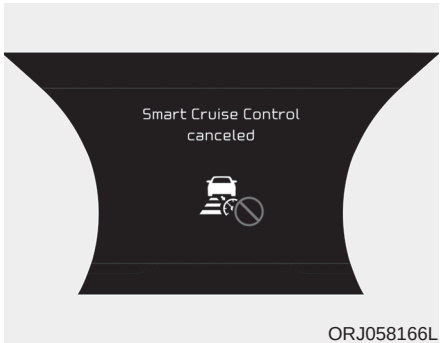
- The driver's door is opened.
- The vehicle is shifted to N (Neutral), R (Reverse) or P (Park).
- The EPB (Electronic Parking Brake) is applied.
- The vehicle speed is over 130 mph (210 km/h)
- The ESC (Electronic Stability Control), TCS (Traction Control System) or ABS is operating.
- The ESC is turned off.
- The sensor or the cover is dirty or blocked with foreign matter.
- The vehicle is stopped for a certain period of time.
- The vehicle stops and goes repeatedly for a long period of time.
- The accelerator pedal is continuously depressed for a long period of time.
- The engine performance is abnormal.
- Engine rpm is in the red zone.
- The driver starts driving by pushing the toggle switch up (RES+)/down (SET-) or depressing the accelerator pedal, after the vehicle is stopped by the Smart Cruise Control system with no other vehicle ahead.
- The driver starts driving by pushing the toggle switch up (RES+)/down (SET-) or depressing the accelerator pedal, after stopping the vehicle with a vehicle stopped far away in front.
- The Forward Collision-Avoidance Assist (FCA) is activated.

Each of these actions will cancel the Smart Cruise Control operation. The Set Speed and Vehicle-to-Vehicle Distance on the LCD display will go off.

If the Smart Cruise Control is cancelled automatically, the Smart Cruise Control will not resume even though the RES+ or SET- toggle switch is pushed.

✻ NOTICE

If the Smart Cruise Control is cancelled during a scenario that is not discussed in the "Canceled automatically" secion above, have the system checked by an authorized K900 Kia dealer.



ORJ058166L

Smart Cruise Control cancelled

If the system is cancelled, this 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 Smart Cruise Control set speed

If any method other than the cruise toggle switch was used to cancel cruising speed and the system is still activated, the cruising speed will automatically resume when you push the toggle switch up (RES+) or down (SET-).

If you push the toggle switch up (RES+), the speed will resume to the recently set speed. However, if vehicle speed drops below 5 mph (10 km/h), it will resume when there is a vehicle in front of your vehicle.

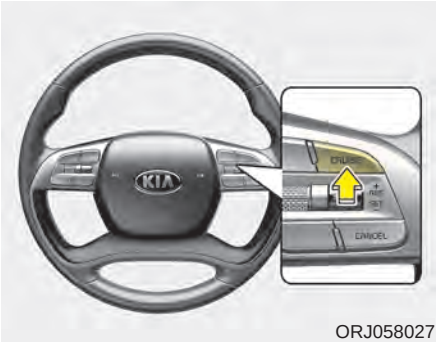
✻ NOTICE

Always check the road conditions when you push the toggle switch up (RES+) to resume speed.

⚠ 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



ORJ058027

- Push the CRUISE button. The cruise indicator will go off.

  If you wish not to use the cruise control system, always turn the system off by pushing the CRUISE button.

⚠ WARNING

Take the following precautions :

- **Always set the vehicle speed under the speed limit in your country.**
- **If the Smart Cruise Control is left on, (CRUISE indicator light in the instrument cluster is illuminated) the Smart Cruise Control can be activated unintentionally. Keep the Smart Cruise Control system off (CRUISE indicator light OFF) when the Smart Cruise Control is not in use, to avoid inadvertently setting a speed.**
- **Use the Smart Cruise Control system only when traveling on open highways in good weather.**
- **Do not use the Smart Cruise Control when it may not be safe to keep the vehicle at a constant speed:**
  - **When driving in heavy traffic or when traffic conditions make it difficult to drive at a constant speed**

(Continued)

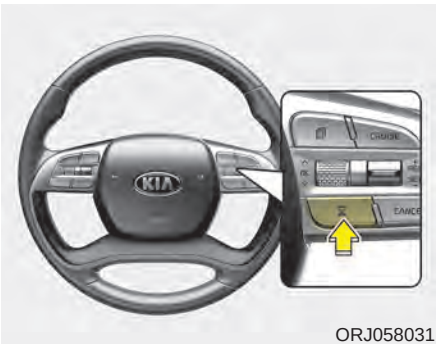
(Continued)

- **When driving on rainy, icy, or snow-covered roads**
- **When driving on a steep downhill or uphill**
- **When driving in windy areas**
- **When driving in parking lots**
- **When driving near crash barriers**
- **When driving on a sharp curve**
- **When driving with limited view (possibly due to bad weather, such as fog, snow, rain or sandstorm)**
- **When the vehicle sensing ability decreases due to vehicle modification resulting level difference of the vehicle's front and rear**

- **Unexpected situations may lead to possible accidents. Pay attention continuously to road conditions and driving even when the smart cruise control system is being operated.**

Smart Cruise Control Vehicle-to-Vehicle Distance

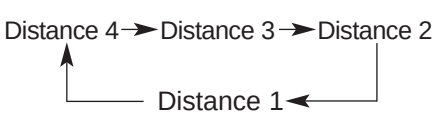
To set Vehicle-to-Vehicle Distance



ORJ058031

When the Smart Cruise Control system is ON, you can set and maintain the distance to the vehicle ahead without pressing the accelerator or brake pedal.

Each time the button is pressed, the vehicle to vehicle distance changes as follows:



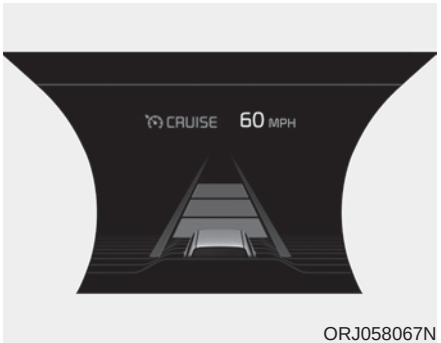
For example, if you drive at 56 mph (90 km/h), the distance maintain as follows:

Distance 4 - approximately 172 feet
Distance 3 - approximately 130 feet
Distance 2 - approximately 106 feet
Distance 1 - approximately 82 feet

✻ NOTICE

The distance is set to the last set distance when the system is used for the first time after starting the engine.

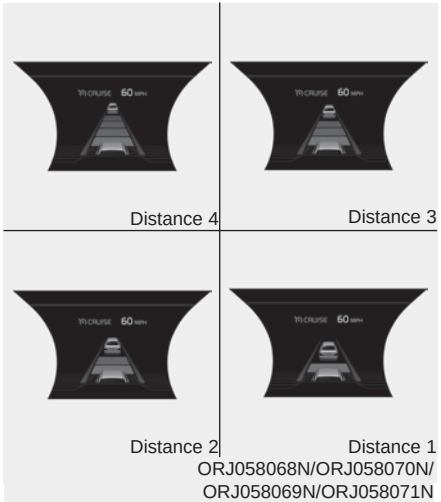
When the lane ahead is clear:



ORJ058067N

The vehicle speed will maintain the set speed.

When there is a vehicle ahead of you in your lane:



ORJ058068N/ORJ058070N/
ORJ058069N/ORJ058071N

- Your vehicle speed will slow down or speed up to maintain the selected distance.
- If the vehicle ahead speeds up, your vehicle will travel at a steady cruising speed after accelerating to the set speed.
- If distance from the front vehicle has been changed due to accelerating or decelerating of front vehicle, the distance on the LCD may be changed.

⚠ WARNING



ORJ058162L

When using the Smart Cruise Control System:

- **The warning message appears and warning chime sounds if the vehicle is unable to maintain the selected distance from the vehicle ahead.**

(Continued)

(Continued)

- **If the warning message appears and warning chime sounds, depress the brake pedal to actively adjust the vehicle speed, and the distance to the vehicle ahead.**
- **Even if the warning message does not appear and warning chime does not sound, always pay attention to driving conditions to prevent dangerous situations from occurring.**
- **Playing the vehicle audio system at high volume may cause the occupants to not hear the system warning sounds.**

⚠ CAUTION

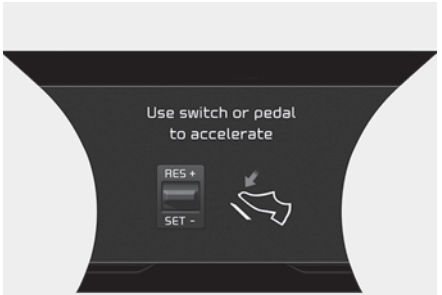


ORJ058167L

If the vehicle ahead (vehicle speed: less than 20 mph (30 km/h)) moves to the next lane, the warning chime will sound and a message "Watch for surrounding vehicles" will appear. Adjust your vehicle speed for vehicles or objects that can suddenly appear in front of you by depressing the brake pedal.

Always pay attention to the road conditions ahead.

In traffic situation



ORJ058168L

Use switch or pedal to accelerate

- 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 push up the toggle switch (RES+) or push down the toggle switch (SET-) to start driving.

- If you push the smart cruise control toggle switch (RES+ or SET-) while Auto Hold and smart cruise control is operating, the Auto Hold will be released regardless of accelerator pedal operation and the vehicle will start to move. The AUTO HOLD indicator changes from green to white.

Sensor to detect distance to the vehicle ahead


ORJ058023

The Smart Cruise Control uses a sensor to detect 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 clean.

Warning message



ORJ058169L

Smart Cruise Control disabled. Radar blocked

When the sensor lens cover is covered with dirt, snow, or debris, the Smart Cruise Control system operation may stop temporarily. If this occurs, a warning message will appear on the LCD display. Remove any dirt, snow, or debris and clean the radar sensor lens cover before operating the Smart Cruise Control system.

The Smart Cruise Control system may not properly activate, if the radar is totally contaminated, or if any substance is not detected after turning ON the engine (e.g. in an open terrain).

✻ NOTICE

If SCC operation is temporarily deactivated due to a blocked radar, but you wish to use cruise control mode (speed control function), you must convert to the conventional cruise control mode (refer to "To convert to Cruise Control mode" in this chapter.

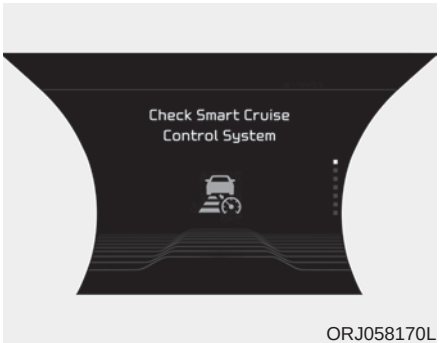
⚠ CAUTION

- ***Do not apply license plate frame or foreign objects such as a bumper sticker or a bumper guard near the radar sensor. Doing so may adversely affect the sensing performance of the radar.***
- ***Always keep the radar sensor and lens cover clean and free of dirt and debris.***
- ***Use only a soft cloth to wash the vehicle. Do not spray pressurized water directly on the sensor or sensor cover.***
- ***Be careful not to apply unnecessary force on the radar sensor or sensor cover. If the sensor is forcibly moved out of proper alignment, the Smart Cruise Control system may not operate correctly. In this case, a warning message may not be displayed. Have the system checked by an authorized K900 Kia dealer.***

(Continued)

(Continued)

- ***If the front bumper becomes damaged in the area around the radar sensor, the Smart Cruise Control system may not operate properly. We recommend that you have the system checked by an authorized K900 Kia dealer.***
- ***Use only Kia parts to repair or replace a damaged sensor or sensor cover. Do not apply paint to the sensor cover.***



ORJ058170L

Check Smart Cruise Control System

The message will appear when the vehicle to vehicle distance control system is not functioning normally.

Have the system checked by an authorized K900 Kia dealer.

To adjust the sensitivity of Smart Cruise Control

The sensitivity of vehicle speed when following the front vehicle to maintain the set distance can be adjusted. Go to the 'AVN → Settings → Vehicle → Driver assistance → SCC response → Fast/Normal/Slow' on the LCD display. You may select one of the three stages you prefer.

- Fast:

  Vehicle speed to the vehicle ahead to maintain the set distance is faster than normal speed.
- Normal:

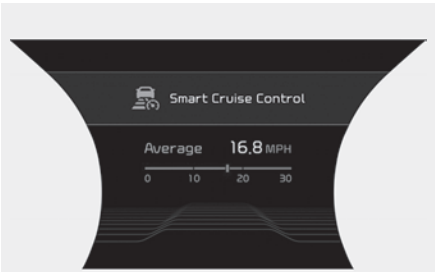
  Vehicle speed to the vehicle ahead maintain the set distance is normal.
- Slow:

  Vehicle speed to the vehicle ahead to maintain the set distance is slower than normal speed.

✻ NOTICE

The last selected speed sensitivity of the smart cruise control is remembered in the system.

To convert to Cruise Control mode



ORJ058171L



ORJ058172L

The driver may choose to only use the conventional Cruise Control mode (speed control function) by doing as follows:

1. Turn the Smart Cruise Control System on (the cruise indicator light will be on but the system will not be activated).
2. Push and hold the Vehicle-to-Vehicle Distance button for more than 2 seconds.
3. Choose between "Smart Cruise Control" and "Cruise Control".

When the system is canceled using the CRUISE button or the CRUISE button is used after the engine is turned on, the Smart Cruise Control mode will turn on.

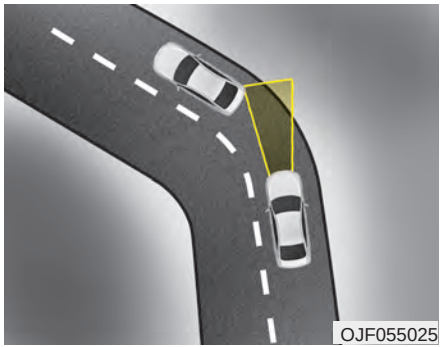
⚠ WARNING

When using the Cruise Control mode, you must manually adjust the distance to other vehicles by depressing the brake pedal. The system does not automatically adjust the distance to vehicles in front of you.

Limitations of the system

The Smart Cruise Control system may have limits to its ability to detect distance to the vehicle ahead due to road and traffic conditions.

On curves


OJF055025

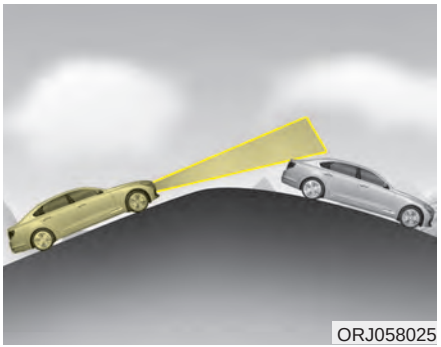
- The Smart Cruise Control system may not immediately detect a moving vehicle in your lane, and then your vehicle could accelerate to the set speed. Also, the vehicle speed will decrease when the vehicle ahead is recognized suddenly.
- Select the appropriate set speed on curves and apply the brakes or accelerator pedal if necessary.


OJF055026

Your vehicle speed can be reduced due to a vehicle in the adjacent lane.

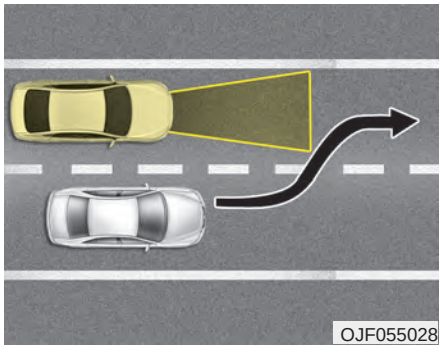
Apply the accelerator pedal and select the appropriate set speed. Check to be sure that the road conditions permit safe operation of the Smart Cruise Control.

On inclines


ORJ058025

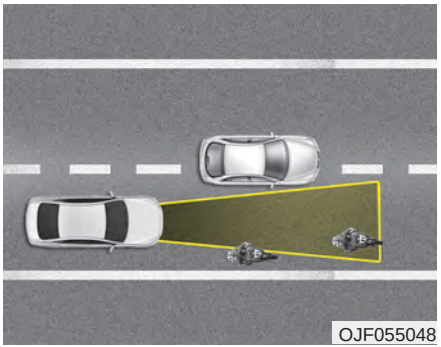
- During uphill or downhill driving, the Smart Cruise Control system may not detect a moving vehicle in your lane, and cause your vehicle to accelerate to the set speed. Also, the vehicle speed will rapidly decrease when the vehicle ahead is recognized suddenly.
- Select the appropriate set speed on inclines and apply the brake or accelerator pedal if necessary.

Lane changing



- 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 radar may not detect immediately when a vehicle cuts in suddenly. Always pay attention to the traffic, road and driving conditions.
- If a slower vehicle moves into your lane, your speed may decrease to maintain the distance to the vehicle ahead.
- If a faster vehicle which moves into your lane, your vehicle will accelerate to the set speed.

Vehicle recognition



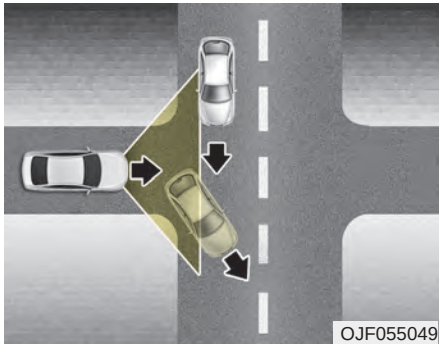
Some vehicles in your lane cannot be recognized by the sensor:

- 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

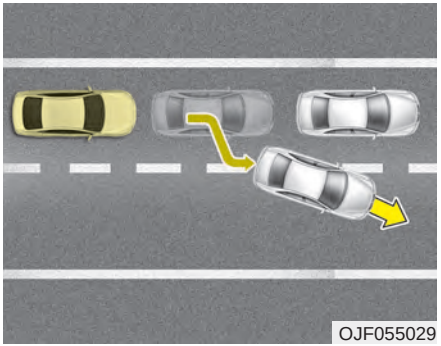
A vehicle ahead cannot be recognized correctly by the sensor if any of following occurs:

- When the vehicle is pointing upwards due to overloading in the luggage compartment
- While the steering wheel is operating
- When driving to one side of the lane
- When driving on narrow lanes or on curves

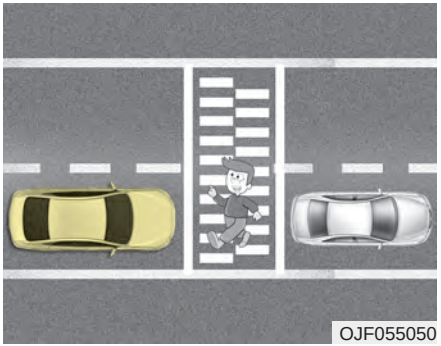
Apply the brake or accelerator pedal if necessary.


OJF055049

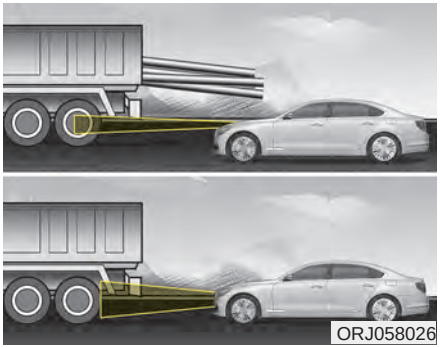
- Your vehicle may accelerate when a vehicle ahead of you disappears.
- When you are warned that the vehicle ahead of you is not detected, drive with caution.


OJF055029

- When driving in stop-and-go traffic, and a stopped vehicle in front of you merges out of the lane, the system may not immediately detect the new vehicle that is now in front of you. In this case, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.


OJF055050

- Always look out for pedestrians when your vehicle is maintaining a distance with the vehicle ahead.



- Always be cautious for vehicles with higher height or vehicles carrying loads that sticks out from the back of the vehicle.

⚠ WARNING

When using the Smart Cruise Control take the following precautions:

- **If an emergency stop is necessary, you must apply the brakes. The Smart Cruise Control system may not be able to completely stop the vehicle or avoid a collision in every situation.**
- **Keep a safe distance according to road conditions and vehicle speed. If the vehicle to vehicle distance is too close during a high-speed driving, a serious collision may result.**
- **Always maintain sufficient braking distance and decelerate your vehicle by applying the brakes if necessary.**
- **The Smart Cruise Control system cannot recognize a stopped vehicle, pedestrians or an oncoming vehicle.**

(Continued)

(Continued)

Always look ahead cautiously to prevent unexpected and sudden situations from occurring.

- **Vehicles moving in front of you with a frequent lane change may cause a delay in the system's reaction or may cause the system to react to a vehicle actually in an adjacent lane. Always drive cautiously to prevent unexpected and sudden situations from occurring.**
- **Always be aware of the selected speed and vehicle to vehicle distance. The driver should not solely rely on the system but always pay attention to driving conditions and control your vehicle speed.**
- **The Smart Cruise Control system may not recognize complex driving situations so always pay attention to driving conditions and control your vehicle speed.**

✻ NOTICE

The Smart Cruise Control system may not operate temporarily due to:

- **Electrical interference**
- **Modified suspension**
- **Differences of tire abrasion or tire pressure**
- **Installation of different type of tires**

This device complies with Part 15 of the FCC rules.

Operation is subject to the following three 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.
3. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

Radio frequency radiation exposure information:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance of 8 in. (20 cm) between the radiator (antenna) and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

LEADING VEHICLE DEPARTURE ALERT (IF EQUIPPED)

The Leading Vehicle Departure Alert system alerts the driver of the departure of the vehicle in front when the vehicle is stopped and the Smart Cruise Control (SCC) system is in activation.

System setting and operating conditions

System setting

With the engine ON, the Leading Vehicle Departure Alert system turns on and gets ready to be activated when the 'AVN → Settings → Vehicle → Driver Assistance → Driving assist → Leading vehicle departure alert' is selected on the cluster. The system stops operation when the setting is deactivated. However, if the engine is turned off then on again, the system maintains the previous state.

Operating conditions



ORJ058168L

While the Smart Cruise Control (SCC) system is in operation, your vehicle stops behind the vehicle in front when it stops. The message is displayed on the cluster within 3 seconds after the stop and the system will be in the standby position.

System activation



ORJ058190L

If the driver does not take action for a certain period of time after the vehicle in front departs, the message is displayed on the cluster.

The vehicle departs automatically if the accelerator pedal is depressed or [RES +] or [SET -] switch is activated when there is a vehicle in front.

The Smart Cruise Control (SCC) system is deactivated if the accelerator pedal is depressed or [RES +] or [SET -] switch is activated when there is no vehicle in front.

⚠ WARNING

Always check the front of the vehicle and road conditions before departure.

ISG (IDLE STOP AND GO) SYSTEM

Your vehicle may be equipped with the ISG system, which reduces fuel consumption by automatically shutting down the engine, when the vehicle is at a standstill. (For example : red light, stop sign and traffic jam)

The engine starts automatically as soon as the starting conditions are met.

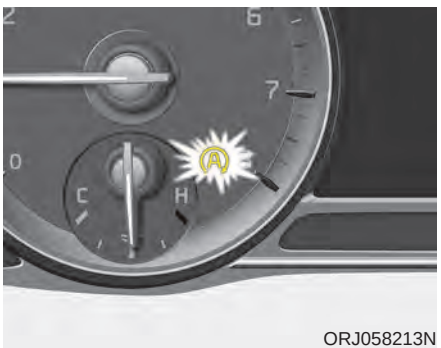
The ISG system is ON whenever the engine is running.

✻ NOTICE

When the engine automatically starts by the ISG system, some warning lights (ABS, ESC, ESC OFF, EPS or Parking brake warning light) may turn on for a few seconds.
This happens because of low battery voltage. It does not mean the system has malfunctioned.

Auto stop

To stop the engine in idle stop mode



ORJ058213N

Stop the vehicle completely by pressing the brake pedal when the shift lever is in the D (Drive) or N (Neutral) position.

The engine will stop and the green AUTO STOP(Ⓐ) indicator on the instrument cluster will illuminate.



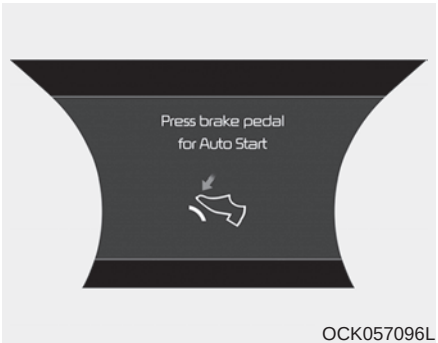
OCK057095L

✻ NOTICE

If you open the engine hood in auto stop mode, the following will happen:

- **The ISG system will deactivate (the light on the ISG OFF button will illuminate).**
- **A message will appear on the LCD display.**

(Continued)



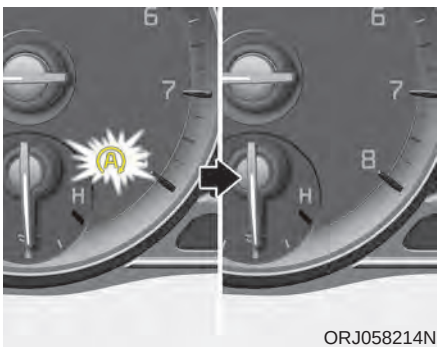
OCK057096L

(Continued)

- **If you move the transmission lever from N to D (manual mode) or R without depressing the brake pedal after stopping engine automatically, the engine does not restart automatically and a warning chime alarms. When this happens, press the brake pedal for auto start.**

Auto start

To restart the engine from idle stop mode


ORJ058214N

- Release the brake pedal.

or

- Move the shift gear to the R (Reverse) position or the manual mode while depressing the brake pedal.

The engine will start and the green AUTO STOP indicator (Ⓐ) on the instrument cluster will go out.

The engine will also restart automatically without any driver actions if the following occurs:

- The fan speed of manual climate control system is set above the 3rd position when the air conditioning is on.
- The fan speed of automatic climate control system is set above the 6th position when the air conditioning is on.
- When a certain amount of time has passed with the climate control system on.
- When the defroster is on.
- The brake vacuum pressure is low.
- The battery charging status is low.
- The vehicle speed exceeds 1 mph (1 km/h).
- Engine is turned off by Auto Stop for a long time.
- If you unfasten the seat belt or open the driver's door while depressing the brake pedal.

Condition of ISG system operation

The ISG system will operate under the following condition:

- The driver's seat belt is fastened.
- The driver's door and engine hood are closed.
- The brake vacuum pressure is adequate.
- The battery is sufficiently charged.
- The outside temperature is between -10°C to 35°C (14°F to 95°F).
- The engine coolant temperature is not too low.

✻ NOTICE

- **If the ISG system does not meet the operation condition, the ISG system is deactivated. The light on the ISG OFF button will illuminate and a message "Auto Stop conditions not met" will appear on the LCD display.**
- **If the light or notice comes on continuously, please check the operation condition.**

ISG system deactivation



- If you wish to deactivate the ISG system, press the ISG OFF button (1). The light on the ISG OFF button will illuminate.
- If you press the ISG OFF button again, the system will be activated and the light on the ISG OFF button will turn off.

ISG system malfunction

The system may not operate when:



The system may not operate when an ISG related sensor or system error occurs.

The following will happen:

- The yellow AUTO STOP (Ⓐ) indicator on the instrument cluster will stay on after blinking for 5 seconds.
- The light on the ISG OFF button will illuminate.

✻ NOTICE

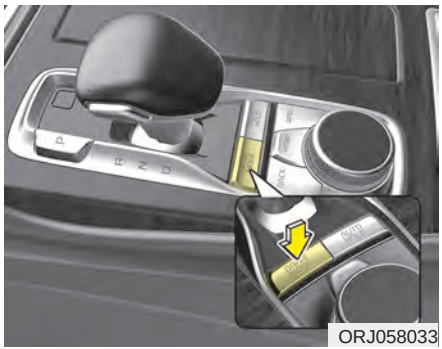
If the ISG OFF button light is not turned off by pressing the ISG OFF button again or if the ISG system continuously does not work correctly, have your vehicle inspected by an authorized K900 Kia dealer.

When the engine is in Idle Stop mode, it's possible to restart the engine without the driver taking any action. Before leaving the car or doing anything in the engine compartment, stop the engine by turning the ignition switch to the LOCK/OFF position or removing the ignition key.

✻ NOTICE

If the AGM battery is reconnected or replaced, ISG function will not operate immediately.
If you want to use the ISG function, the battery sensor needs to be calibrated for approximately 4 hours with the ignition off. After calibration, turn the engine on and off 2 or 3 times.

DRIVE MODE INTEGRATED CONTROL SYSTEM


ORJ058033

The drive mode may be selected according to the driver's preference or road condition.

The mode changes whenever the DRIVE MODE button is pressed.

- SMART mode : SMART mode automatically adjusts the driving mode (ECO " COMFORT " SPORT) in accordance with the driver's driving habits. Press the DRIVE MODE button long to select it.
- COMFORT mode : COMFORT mode provides soft driving and comfortable riding.
- SPORT mode : SPORT mode provides sporty but firm riding.
- ECO mode : ECO mode improves fuel efficiency for eco-friendly driving.
- CUSTOM mode : The driver can separately adjust modes of each driving system.

If it is in ECO mode, ECO mode will be set when the engine is restarted.

(However, if it is in SMART/COMFORT/SPORT/CUSTOM mode, the driving mode will be set to COMFORT mode when the engine is restarted.)

SMART mode



ORJ058173L



ORJ058174L



ORJ058175L

SMART SMART mode selects the proper driving mode among ECO, COMFORT and SPORT by judging the driver's driving habits (i.e. mild or dynamic) from the brake pedal depression or the steering wheel operation.

- Press the DRIVE MODE button to activate SMART mode. When SMART mode is activated, the indicator illuminates on the instrument cluster.
- The indicator illuminates in blue, when the driver's driving is categorized to be mild. It illuminates in white, when the driver's driving is categorized to be normal. It illuminates in red, when the driver's driving is categorized to be dynamic during abrupt braking or sharp curving.
- The vehicle starts in COMFORT mode, when the engine was turned OFF in SMART mode.
- SMART mode automatically controls the vehicle driving, such as gear shifting patterns, engine torque, riding quality (if equipped with the electronic suspension system), and power distribution (if equipped with the All-Wheel Drive (AWD) system), in accordance with the driver's driving habits.

✻ NOTICE

- **When you mildly drive the vehicle in SMART mode, the driving mode changes to ECO mode to improve fuel efficiency. However, the actual fuel efficiency may differ in accordance with your driving situations (i.e. upward/downward slope, vehicle deceleration/acceleration).**
- **When you dynamically drive the vehicle in SMART mode by abruptly decelerating or sharply curving, the driving mode changes to SPORT mode. However, it may adversely affect fuel economy.**

Various driving situations, which you may encounter in SMART mode

- The driving mode automatically changes to ECO mode after a certain period of time, when you gently depress the accelerator pedal (Your driving is categorized to be mild.).
- The driving mode automatically changes from SMART ECO mode to SMART COMFORT mode after a certain period of time, when you sharply or repetitively depress the accelerator pedal.
- The driving mode automatically changes to SMART COMFORT mode with the same driving patterns, when the vehicle starts to drive on an upward slope of a certain angle. The driving mode automatically returns to SMART ECO mode, when the vehicle enters a leveled road.
- The driving mode automatically changes to SMART SPORT, when you abruptly accelerate the vehicle or repetitively operate the steering wheel (Your driving is categorized to be sporty.). In this mode, your vehicle drives in a lower gear for abrupt accelerating/decelerating and increases the engine brake performance.
- You may still sense the engine brake performance, even when you release the accelerator pedal in SMART SPORT mode. It is because your vehicle remains to be in a lower gear over a certain period of time for next acceleration. Thus, it is a normal driving situation, not indicating any malfunction.
- The driving mode automatically changes to SMART SPORT mode only in harsh driving situations. In most of the normal driving situations, the driving mode sets to be either in SMART ECO mode or in SMART COMFORT mode.

Limitation of SMART mode

The SMART mode may be limited in following situations. (The OFF indicator illuminates in those situations.)

- The driver manually moves the shift lever : It deactivates SMART mode. The vehicle drives, as the driver manually moves the shift lever.
- The cruise control is activated : The cruise system may deactivate the SMART mode. When a higher system is set by the cruise system, it starts to control vehicle speed and deactivates SMART mode. (SMART mode is not deactivated just by activing the cruise system.)
- The transmission oil temperature is either extremely low or extremely high : The SMART mode can be active in most of the normal driving situations. However, an extremely high/ low transmission oil temperature may temporarily deactivate the SMART mode, because the transmission condition is out of normal operation condition.

SPORT mode

SPORT SPORT mode manages the driving dynamics by automatically adjusting the steering effort, and the engine and transmission control logic for enhanced driver performance.

- When SPORT mode is selected by pressing the DRIVE MODE button, the SPORT indicator (orange color) will illuminate.
- Whenever the engine is restarted, the Drive Mode will revert back to COMFORT mode. If SPORT mode is desired, re-select SPORT mode from the DRIVE MODE button.
- When SPORT mode is activated:
  - The engine rpm will tend to remain raised over a certain length of time even after releasing the accelerator
  - Upshifts are delayed when accelerating

✻ NOTICE

In SPORT mode, the fuel efficiency may decrease.

ECO mode

ECO When the Drive Mode is set to ECO mode, the engine and transmission control logic are changed to maximize fuel efficiency.

- When ECO mode is selected by pressing the DRIVE MODE button, the ECO indicator (green color) will illuminate.
- If the vehicle is set to ECO mode, when the engine is turned OFF and restarted the Drive Mode setting will remain in ECO mode.

✻ NOTICE

Fuel efficiency depends on the driver's driving habit and road condition.

When ECO mode is activated:

- The acceleration response may be slightly reduced if the accelerator pedal is depressed moderately.
- The air conditioner performance may be limited.
- The shift pattern of the automatic transmission may change.
- The engine noise may get louder.

The above situations are normal conditions when ECO mode is activated to improve fuel efficiency.

Limitation of ECO mode operation:

If the following conditions occur while ECO mode is operating, the system operation is limited even though there is no change in the ECO indicator.

- When the coolant temperature is low:

  The system will be limited until engine performance becomes normal.
- When driving up a hill:

  The system will be limited to gain power when driving uphill because engine torque is restricted.
- When driving the vehicle with the automatic transmission gear shift lever in manual mode.

  The system will be limited according to the shift location.

CUSTOM mode

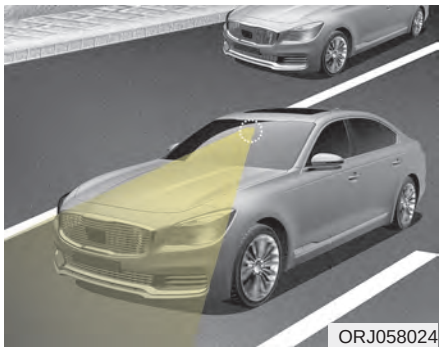
CUSTOM In CUSTOM mode, the driver can select separate modes and combine them on the AVN System screen.

- Engine/Transmission: ECO/COMFORT/ SPORT/SNOW
- Steering wheel: COMFORT/ SPORT
- Suspension: COMFORT+/COMFORT/SPORT
- All-Wheel Drive (AWD) system: ECO/COMFORT/SPORT

For more information, refer to the separately supplied AVN System manual.

- When CUSTOM mode is selected by pressing the DRIVE MODE button, the CUSTOM mode indicator will illuminate.

LANE FOLLOWING ASSIST (LFA) SYSTEM


ORJ058024

With the front camera mounted on the top of the windshield ,the Lane Following Assist system is designed to ensure the vehicle stays in its lane by monitoring the lane ahead of the car and controlling over the direction of the steering wheel.

* LFA stands for Lane Following Assist.

⚠ WARNING

- **It is the driver's responsibility to operate the steering wheel for safe driving.**
- **Do not turn the steering wheel hastily if LFA is activated.**
- **The LFA system assists the steering wheel control over the direction so that the vehicle can stay in the center of the lane. The LFA system does not automatically control the steering wheel at all times, which means the driver must keep hands on the wheel at all times while driving.**
- **When using the LFA system, always be aware of your surroundings and road conditions that may interrupt or stop the LFA system.**

⚠ CAUTION

- ***Do not attach glass tinting, stickers, accessories to the windshield near the front camera near the indoor mirror is placed.***
- ***The removal or re-assembly of the front camera to attach tinting, stickers, accessories may require the LFA system to be thoroughly inspected and modified. In such case, have the system be inspected by an authorized K900 Kia dealer.***
- ***Inspection or modification may be required when replacing parts related to the windshield or front camera, steering. Have the system be inspected by an authorized K900 Kia dealer.***

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- ***Depending on your surroundings and road conditions, the LFA system could fail to recognize the lane and stop working. In turn, extra caution is required while driving with the LFA system on.***
- ***Be sure to check the non-operating conditions and cautions for the driver before using the LFA system.***
- ***Do not place reflective materials such as white paper or mirror on the dashboard pad. Sunlight reflections can cause the LFA system to not operate properly.***
- ***Loud audio volumes can prevent the occupants from hearing the alarm sounds from the LFA system***

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- ***Keeping your hands off the wheel while driving will trigger the hands-off warning and deactivate the steering-assist system. Put your hands back on the wheel, then the steering-assist system will be re-activated.***
- ***When driving at a high speed, the steering assist force can become weak and the vehicle can drive out of its lane. Extra caution is required, and comply with the speed limit.***
- ***Attaching an object to the steering wheel could deter steering assistance.***
- ***Attaching an object to the steering wheel could deter the hands-off alarming system.***

LFA system operation

With the ignition [ON], select or release the setting from "AVN → Settings → Vehicle → Driver assistance → Driving assist → LFA (Lane Following Assist)".
Select the LFA system in the AVN and meet the following conditions, the system will operate.

- When Smart Cruise Control is in operation (Vehicle deceleration and acceleration control)

Refer to <Smart Cruise Control(stop and go)> in chapter five for more details.

- Driving the vehicle at 95 mph (150 km/h) and under

Once the system starts working, the indicator light () comes on the instrument panel.
The indicator light colors according to the system status are as follows.

- White: steering assist mode deactivation
- Green: steering assist mode activation

LFA system activation

If the vehicle is inside the lane with both lanes recognized by the system, and there is no steep steering made by the driver, the LFA system changes into steering assist mode. The indicator light will come on green, and the system helps the vehicle stay in line by controlling the steering wheel.

When the lane is not recognized, the steering wheel is controlled in a limited manner depending on the presence and the driving condition of the preceding vehicle.

When the steering wheel is not controlled temporarily, the indicator light will flash green and changes to white.

Once the LFA system recognizes the lanes, the color of the lane on the screen will change from gray to white.

⚠ WARNING

The LFA system ensures the vehicle stays in its lane. The LFA system does not guarantee 100% safety. Make sure you make decisions on the road after checking the road conditions and safety matters while driving. Never completely rely on your LFA system.

Warning



ORJ058180L

If you keep your hands off the wheel while driving with the LFA system assisting the steering, the hands-off warning will be triggered. (The 1st warning: warning message, the 2nd warning: warning message and warning alarm)

If the driver keeps hands off the wheel even with the hands-off warning on, the steering assist is temporarily released automatically.

If you put your hands back on the wheel with the LFA system released, the steering assist will re-start.

⚠ CAUTION

- ***Hands-off warnings may be delayed depending on road conditions. Always keep your hands on the steering wheel while driving.***
- ***Hold the steering wheel tight. Otherwise, the LFA system could misjudge that the driver hands are off the wheel, and a hands-off warning may occur.***

LFA system malfunction



ORJ058196L

The warning message popped up (turned off after a certain period of time)means a problem with the LFA system.

Have the system checked by an authorized K900 Kia dealer.

⚠ CAUTION

- ***It is the driver's responsibility to operate the steering wheel while driving.***
- ***With the LFA system on, The driver can steer the vehicle by operating the wheel on his own.***
- ***We recommend that the driver turns off the LFA system and operates the steering wheel by himself in the following situations:***
  - ***bad weather***
  - ***bad road conditions***
  - ***when frequent operation of the steering wheel is required***
  - ***When towing other vehicle or trailers***
- ***The steering wheel can feel heavy or light if the LFA system is assisting the steering.***

Limitation of the system

- If the driver turns on the turn signal light or the emergency warning light to change the lane
- Operate the turn signal light switch before changing the lane.
- If you change the lane without operating the turn signal lights, steering reaction force of the wheel may occur.
- Once the LFA system is turned on or the lane is changed, the vehicle should be in the center of the road to switch to the steering assist mode. If the driver keeps driving along the lane, the LFA system will not assist the steering.
- When the ESC or VSM is activated, the system does not assist steering.
- When driving on a curved road at a high speed, steering assist mode may not work.
- When driving at a speed faster than 95 mph (150 km/h), steering assist mode may not work.
- When sudden steering is made, the system could be temporarily deactivated.
- If you change the lane in a hurry, the system does not assist the steering.
- If the vehicle suddenly stops, it does not assist the steering.
- If the lane is too narrow or too wide, steering is not assisted.
- If either of the lanes is not recognized, the steering is not assisted
- If the radius is too small for the curve

▶ *Cautions for the driver*

If the lane recognition is difficult or limited for the LFA system as shown below, the driver may need to be careful because it may not operate or may cause unnecessary operation.

- **Roads or lane markings in bad condition**
  - When The lane is tainted or invisible
  - When the driver cannot see the lane due to rain, snow, dust, sand, oil, puddles, etc
  - When roads are set or the colors of the lane and road are not distinctive
  - If there is a sign other than the lane near the lane or a mark similar to the lane
  - When the lane is not clear or damaged
  - If the road is covered in the shadows of objects around the road, such as medians, guard rails, noise walls, and trees

- If the number of lanes increases or decreases, or if the lanes intersect with each other more intensely (tollgate entry section, road section / joining section, etc.)
- When there are two or more lane markings such as a construction section, a designated lane, etc.
- When the lane is crowded such as the construction section or the lane is replaced by some structures
- If there is a road marking such as a zigzag lane, crosswalk mark, or road surface milestone
- When a lane suddenly becomes invisible or disappears from an intersection

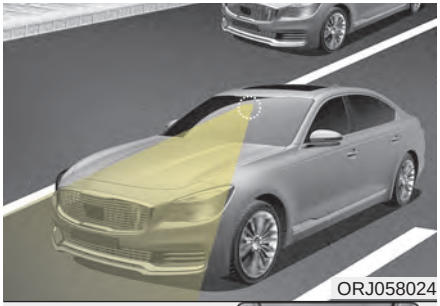
• The external environment affecting the system

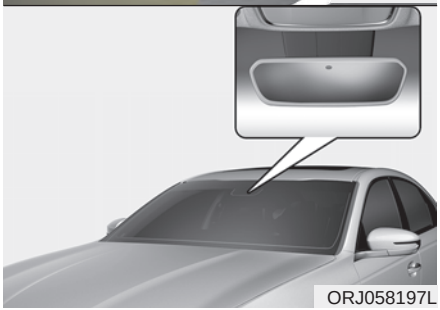
- If the outside brightness of the vehicle suddenly changes, such as when entering or exiting the tunnel or passing under the bridge
- If the vehicle's headlights are not used at night or in the tunnel, or the brightness of the headlights is too weak
- If there are boundary structures such as tollgate booths and sidewalk blocks
- If it is difficult to distinguish lanes due to the reflection on the wet road made by sunlight, streetlight, and oncoming traffic.
- When the backlight is strongly reflected in the direction of the vehicle
- When Driving to the left or right lane by bus lane or on the bus lane
- If there is not enough distance between the front car or if the lane is covered by the car ahead of me
- When the lane change is large, such as a steep curve or a continuous curve
- When passing through speed bump, sudden up / down or left / right slope
- If the vehicle is severely shaken
- When the temperature around the rearview mirror is very high due to direct sunlight

• If the front camera clock is of poor quality

- If the windshield of the vehicle and the front part of the lens of the product are covered with dust, fingerprints, or tinting
- If the clock doesn¡¯t work properly due to bad weather such as fog, heavy rain or heavy snow.
- If moisture is not completely removed from the windscreen.
- When placing an object on the dashboard, etc.

LANE KEEPING ASSIST (LKA) SYSTEM


ORJ058024


ORJ058197L

The Lane Keeping Assist (LKA) system is designed to detect the lane markers on the road with a front view camera at the front windshield, and assists the driver's steering to help keep the vehicle in the lanes.

When the system detects the vehicle straying from its lane, it alerts the driver with a visual and audible warning, while applying a counter-steering torque, trying to prevent the vehicle from moving out of its lane.

⚠ WARNING

- **Driver is responsible for being aware of surroundings and steering the vehicle for safe driving practices.**
- **Do not turn the steering wheel suddenly when the steering wheel is being assisted by the system.**
- **The LKA system is a supplemental system and is not a substitute for safe driving practices. It is the responsibility of the driver to always pay attention and drive safely.**
- **The operation of the LKA system can be canceled or not work properly according to road condition and surroundings. Always be cautious when driving.**
- **Do not disassemble a front view camera temporarily for tinted window or attaching any types of coatings and accesorsories.**

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If you disassemble the camera and assemble it again, take your vehicle to an authorized K900 Kia dealer and have the system checked to need a calibration.

- When you replace the windshield glass, front view camera or related parts of the steering, take your vehicle to an authorized K900 Kia dealer and have the system checked to need a calibration.
- The system is designed to detect lane markers using a front view camera. If the lane markers are hard to detect, then the system may be limited. Always be cautious when using the system.
- When the lane markers are hard to detect, please refer to "Driver's Attention".

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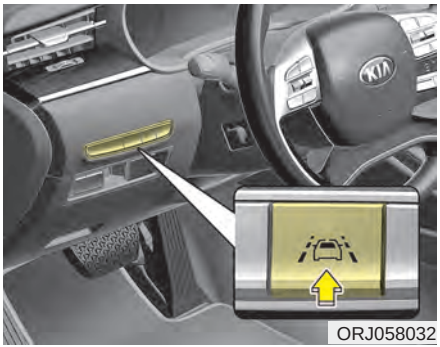
- Do not remove or damage the related parts of LKA system.
- Do not place objects on the dashboard that reflects light such as mirrors, white paper, etc. This may prevent the LKA system from functioning properly.
- You may not hear warning sound of LKA system because of the excessive audio sound.
- When other beeps such as the seat belt warning sound are in operation and override the LKA alarming system, LKA beeps may not occur.
- If the vehicle speed is high, steering torque for assistance will not be enough to keep your vehicle within the lane. If so, the vehicle may move out of its lane. Obey speed limit when using LKA system.

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- If you attach objects to the steering wheel, the system may not assist steering.
- If you attach objects to the steering wheel, hands off alarm may not work properly.

LKA system operation



To activate/deactivate the LKA:

With the ignition switch in the ON position, LKA turns on automatically. The indicator (🚗) in the cluster display will initially illuminate white. If you press the LKA button located on the instrument panel on the lower left hand side of the driver, LKA will be turned off and the indicator on the cluster display will go off.

The color of indicator will change depend on the condition of LKA.

- White : Sensor does not detect the lane marker or vehicle speed is less than 40 mph (64 km/h).
- Green : Sensor detects the lane marker and system is able to control the steering.

LKA system activation

- To see the LKA system screen on the LCD display in the cluster, Tab to the ASSIST mode (🛣).
- For further details, refer to [menu settings] in chapter 4, [LCD windows].
- After LKA system is activated, if both lane markers are detected, vehicle speed is over 40 mph (64 km/h). and all the activation conditions are satisfied, the indicator will turn green and the steering wheel will be controlled.

⚠ WARNING

The Lane Keeping Assist System is a system to help prevent the driver from leaving the lane. However, the driver should not solely rely on the system but always check the road conditions when driving.

■ Lane undetected ■ Lane detected



ORJ058176L/ORJ058205L

If the speed of the vehicle is over 40 mph (64 km/h). and the system detects lane markers, the color changes from gray to white.

Warning

■ Left lane ■ Right lane



ORJ058178L/ORJ058179L

If the vehicle leaves a lane or road edge, the lane marker you cross will blink on the LCD display and the warning sound is provided.

❊ Haptic specification

If the vehicle leaves a lane, the lane marker you cross will blink on the LCD display with steering wheel vibration warning.

If all the conditions to activate LKA is not satisfied, the system will convert to LAW (Lane Departure Warning) and warm the driver only when the driver crosses the lane lines.

When the conditions below are met, LKA will be enable to assist steering.

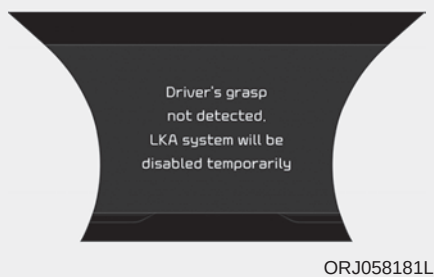
- Vehicle speed is above 40 mph (64 km/h).
- Both lane markers are detected by LKA.
- The vehicle is between the lane markers.

If LKA can assist steering, a green LKA indicator will illuminate.

If the vehicle moves out its lane because steering torque for assistance is not enough, the line indicator of deviation direction will blink and the warning sound or steering wheel vibration warning is provided.



ORJ058180L



ORJ058181L

If the driver takes hands off the steering wheel for several seconds while the LKA is activated, the system will warn the driver.

⚠ WARNING

- **The warning message may appear late according to road conditions. Therefore, always have your hands on the steering wheel while driving.**
- **If you hold the steering wheel lightly, the system would generate hands off warning because LKA system can treat the situation as you do not grab the wheel.**

⚠ WARNING

- **The LKA system is a supplemental system only. It is the responsibility of the driver to safely steer the vehicle and to maintain it in its lane.**
- **Even though the steering is assisted by the system, the driver may control the steering wheel.**
- **Turn off the LKA system and drive without using the system in the following situations:**
  - **In bad weather**
  - **In bad road condition**
  - **When the steering wheel needs to be controlled by the driver frequently.**
  - **When towing a vehicle or trailer.**
- **The steering wheel may feel heavier when the steering wheel is assisted by the system than when it is not.**

✻ NOTICE

- **Even though the steering is assisted by the system, the driver may control the steering.**
- **The steering wheel may feel heavier when the steering wheel is assisted by the system than when it is not.**

The system will be canceled when:

- You change lanes with the turn signal.
  - Using the turn signal to change lanes.
  - If you change lanes without the turn signal on, the steering wheel might be controlled.
- LKA system can transit to steering assist mode when the car is near to middle of the lane after system on or the lane was changed. LKA system can not assist steering if the vehicle follows lane marker too close continuously before transition to steering assist mode.
- The control of ESC (Electronic Stability Control) or VSM (Vehicle Stability Management) is activated.
- The steering will not be assisted when your drive fast on a sharp curve.

- The steering will not be assisted when vehicle speed is below 40 mph (64 km/h) and over 110 mph (177 km/h).
- The steering will not be assisted when you change lanes fast.
- The steering will not be assisted when you brake suddenly.
- The steering will not be assisted when the lane is very wide or narrow.
- There are more than two lane markers such as a construction area.
- Radius of a curve is too small.
- When you turn steering wheel suddenly, the LKA system will be disabled temporarily.
- Driving on a steep slope or hill.

DRIVER'S ATTENTION

The driver must be cautious in the below situations may not work properly when recognition of the lane marker is poor or limited :

▶ When lane and road condition is poor

- **It is difficult to distinguish the lane marker from road when the lane marker is covered with dust or sand.**
- **It is difficult to distinguish the color of the lane marker from road.**
- **There is something looks like a lane marker.**
- **The lane marker is indistinct or damaged.**
- **The number of lanes increases/decreases or the lane lines are crossing (Driving through a toll plaza/toll gate, merged/divided lane).**
- **There are more than two lane markers.**
- **The lane marker is very thick or thin.**

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- **The lane marker is not visible due to snow, rain, stain, a puddle or other factors.**
- **A shadow is on the lane marker because of a median strip, guardrail, noise barriers and others.**
- **When the lane markers are complicated or a structure substitutes for the lines such as a construction area.**
- **There are crosswalk signs or other symbols on the road.**
- **The lane suddenly disappears such as at the intersection.**
- **The lane marker in a tunnel is covered with dirt or oil and etc.**
- **The lane is very wide or narrow.**

▶ When external condition is intervened

- **The brightness of outside changes suddenly when entering/existing a tunnel or passing under a bridge.**
- **The headlamps are not on at night or in a tunnel, or light level is low.**

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- There is a boundary structure in the roadway.
- The light of street, sun, oncoming vehicle and so on reflects from the water on the road.
- When light shines brightly in the reverse direction you drive.
- Road surface is not even.
- The distance from the vehicle ahead is very short or the vehicle ahead drives hiding the lane line or road edge.
- You drive on a steep grade or a sharp curve.
- The vehicle vibrates heavily.
- The temperature near inside mirror is very high due to direct sun light and etc.

▶ when front visibility is poor
- The lens or windshield is covered by strange materials.
- The sensor cannot detect the lane because of fog, heavy rain or snow.
- The windshield is fogged by humid air in the vehicle.
- Putting something on the crash pad and etc.

⚠ WARNING

The Lane Keeping Assist System is a system to help prevent the driver from leaving the lane. However, the driver should not solely rely on the system but always take the necessary actions for safe driving practices.

LKA system malfunction



ORJ058182L

- If there is a problem with the system a message will appear. If the problem continues the LKA system fail indicator will illuminate.

LKA system fail indicator

The LKA system fail indicator (yellow) will illuminate if the LKA system is not working properly. In this case, have the system checked by an authorized K900 Kia dealer.

LKA system function change

The driver can change LKA to Lane Departure Warning (LDW) or change the LKA mode from the AVN.

Lane Keeping Assist

The LKA mode guides the driver to keep the vehicle within the lanes. It rarely controls the steering wheel, when the vehicle drives well inside the lanes. However, it starts to control the steering wheel, when the vehicle is about to deviate from the lanes.

Lane Departure Warning

LDW alerts the driver with a visual and acoustic warning when the system detects the vehicle leaving the lane. In this mode, the system will not provide steering inputs. When the vehicle's front wheel contacts the inside edge of lane line, LKA issues the lane departure warning.

FORWARD COLLISION-AVOIDANCE ASSIST-LANE-CHANGE ONCOMING FUNCTION (FCA)

The Forward Collision-Avoidance Assist-Lane-Change Oncoming function detects the oncoming vehicle with a front view camera at the front wihdshield. And it assists the driver's steering to help avoiding the collision to oncoming vehicle and keeping the vehicle in the lanes, when the vehicle drives over the centerline.

⚠ WARNING

- **This function is only a supplemental system. So, it does not replace the need for extreme care and attention of the driver. The sensing range of oncoming vehicle is limited. Pay attention to the road conditions at all times.**
- **Always drive cautiously to prevent unexpected and sudden situations from occurring. The function does not steer the vehicle completely and is not a collision avoidance system.**

Function operation

Driver can activate(or deactivate) the function from the AVN:

'AVN → Settings → Vehicle → Driver assistance → Forward Collision-Avoidance Assist (FCA)' For further details, refer to [System setting] in this chapter, [FCA].

Warning message and function control



ORJ058123L

- After FCA is on, vehicle speed is over 60 kph (37 mph) and if the vehicle across the centerline even though the oncoming vehicle approacing, this warning message appears on the LCD display with audible warning.
- Additionally, provides steering assist to return vehicle back into lanes.

⚠ WARNING

- **The steering control can not completely avoid the collision to oncomimg vehicle. Driver is reponsible for being aware of surroundings and steering the vehicle for safe driving practices.**
- **The function operated within certain conditions, such as the distance and speed from the oncoming vehicle, the driver's vehicle speed, etc.**

  The function can be cancelled or not work properly according to road condition and surroundings. Always be cautious when driving.
- **Never drive deliberately and dangerously to activate the system.**

Limitations

- Refer to [Limitation of the System] in this chapter, [LKA]
- Refer to [Detecting vehicles] in this chapter, [FCA]

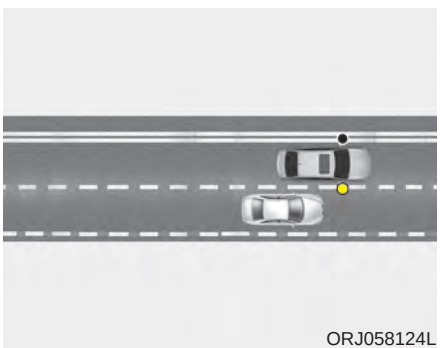
BLIND-SPOT COLLISION WARNING/BLIND-SPOT COLLISION-AVOIDANCE ASSIST

System description

Blind-Spot Collision Warning (BCW)

The Blind-Spot Collision Warning System (BCW) uses radar sensors in the rear bumper to monitor and warn the driver of an approaching vehicle in the driver's blind spot area.

1) Blind-Spot Area

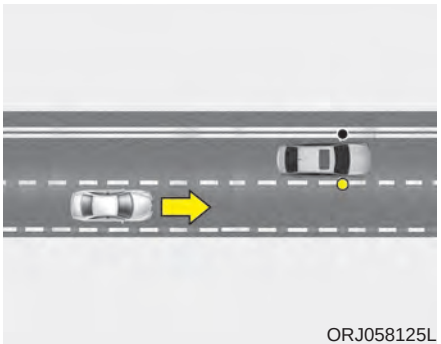


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The blind spot detection range varies relative to vehicle speed.

Note that if your vehicle is traveling much faster than the vehicles around you, the warning will not occur.

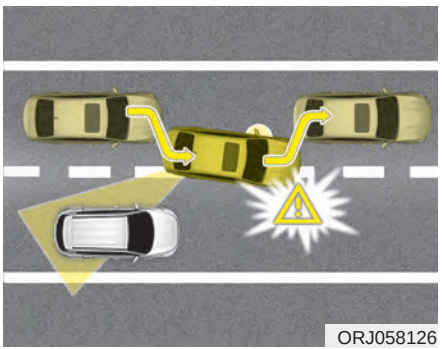
2) Closing at high speed



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The Lane Change Assist feature will alert you when a vehicle is approaching in an adjacent lane at a high rate of speed. If the driver activates the turn signal when the system detects an oncoming vehicle, the system sounds an audible alert.

Blind-Spot Collision-Avoidance Assist (BCA)



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The Blind-Spot Collision-Avoidance Assist System (BCA) detects the front lane through the camera installed on the upper front windshield and detects the side/rear areas through radar sensors.

The Blind-Spot Collision-Avoidance Assist System may activate the Electronic Stability Control (ESC) in accordance with a colliding possibility with an approaching vehicle while changing lanes. It is to lower the colliding risk or mitigate the colliding damage.

⚠ WARNING

- **Always be aware of road conditions while driving and be alert for unexpected situations even though the Blind-Spot Collision Warning System and Blind-Spot Collision-Avoidance Assist System are operating.**
- **The Blind-Spot Collision Warning System (BCW) and Blind-Spot Collision-Avoidance Assist System (BCA) are supplemental systems to assist you. Do not entirely rely on the systems. Always pay attention, while driving, for your safety.**

(Continued)

(Continued)

- **The Blind-Spot Collision Warning System (BCW) and Blind-Spot Collision-Avoidance Assist System (BCA) are not substitutes for proper and safe driving. Always drive safely and use caution when changing lanes or backing up the vehicle. The Blind-Spot Collision Warning System (BCW) and Blind-Spot Collision-Avoidance Assist System (BCA) may not detect every object alongside the vehicle.**

System setting and activation

System setting

- The driver can activate the system by placing the ignition switch to the ON position and by selecting "AVN → Settings → Vehicle → Driver assistance → Blind-spot safety"

  - The BCA and BCW turn on and get ready to be activated when 'Active assist' is selected. Then, if a vehicle approaches the driver's blind spot area a warning sounds or braking power is applied.

  - The BCW turns on and gets ready to be activated when 'Warning only' is selected. Then, if a vehicle approaches the driver's blind spot area a warning sounds.

  - The system is deactivated and the indicator on the BCW/BCA button is extinguished when 'Off' is selected.



- If you press BCW/BCA button while 'Active assist' or 'Warning only' is selected the indicator on the button extinguishes and the system deactivates.
- If you press BCW/BCA button while the system is cancelled the indicator on the button illuminates and the system activates. In this case, the system returns to the state before the engine turned off. When the system is initially turned on and when the engine is turned off then on again while the system is in activation, the warning light will illuminate for 3 seconds on the outside rearview mirror.
- If the engine is turned off then on again, the system maintains the previous state.
- The driver can select the initial warning activation time in the AVN by selecting "AVN → Settings → Vehicle → Driver assistance → Warning timing"
- The options for the initial Blind-Spot Collision Warning includes the following:

  - Normal:

    When this condition is selected, the initial Blind-Spot Collision Warning is activated normally. If this setting feels too sensitive change the option to 'later'.

    The warning activation time may feel late if the side/rear vehicle abruptly accelerates.

  - Later:

    Select this warning activation time when the traffic is light and you are driving in a low speed. However, if you change the warning activation time, the warning activation time of vehicle's other system may also change. Check the warning activation time before changing it.

The driver can select the warning volume of the Rear Cross-Traffic Collision Warning by selecting "AVN → Settings → Vehicle → Driver assistance → Warning volume → High/Medium/ Low". However, if you change the warning volume, the warning volume of vehicle's other system may also change.

❈ For more information refer to "LCD Display" in chapter 4.

Operating Conditions

The system enters the ready status, when 'Active Assist' or 'Warning Only' is selected and the following conditions are satisfied:

• Active Assist

1) The Blind-Spot Collision-Avoidance Assist system will activate when :
   - Vehicle speed is between 40 mph and 110 mph (60 km/h and 180 km/h).
   - The system detects both of the lane lines.
   - An approaching vehicle is detected next to or behind your vehicle.
2) The Blind-Spot Collision Warning system will activate when : The vehicle speed is above approximately 20 mph (30 km/h).

• Warning Only

1) The Blind-Spot Collision Warning system will activate when :
   - Vehicle speed is approximately 20 mph (30 km/h).

❈ The Blind-Spot Collision-Avoidance Assist system is not activated.

Warning message and system control

Blind-Spot Collision Warning (BCW) system

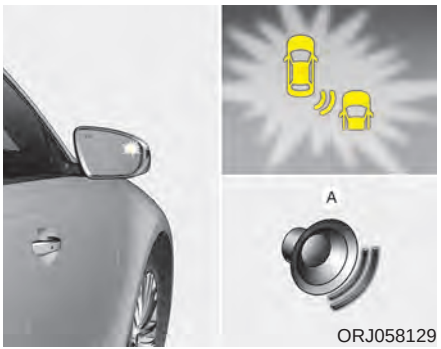


First stage alert

If a vehicle is detected within the boundary of the system, a warning light will illuminate on the outside rearview mirror and the head up display (if equipped).

Once the detected vehicle is no longer within the blind spot area, the warning will turn off according to the driving conditions of the vehicle.





[A] : Warning sound

Second stage alert

A warning chime to alert the driver will activate when:

1. A vehicle has been detected in the blind spot area by the radar system AND.
2. The turn signal is applied (same side as where the vehicle is being detected).

When this alert is activated, the warning light on the outside rearview mirror and the head up display (if equipped) will also blink. And a warning chime will sound.

If you turn off the turn signal indicator, the second stage alert will be deactivated.

Once the detected vehicle is no longer within the blind spot area, the warning will turn off according to the driving conditions of the vehicle.

⚠ WARNING

- **The warning light on the outside rearview mirror will illuminate whenever a vehicle is detected at the rear side by the system.**

  To avoid accidents, do not focus only on the warning light and neglect to see the surrounding of the vehicle.
- **Drive safely even though the vehicle is equipped with a Blind-Spot Collision Warning System (BCW). Do not solely rely on the system but check your surrounding before changing lanes or backing the vehicle up.**
- **The system may not alert the driver in some conditions so always check your surroundings while driving.**

⚠ CAUTION

- ***The driver should always use extreme caution while operating the vehicle, whether or not the warning light on the outside rearview mirror illuminates or there is a warning alarm.***
- ***Playing the vehicle audio system at high volume may offset the Blind-Spot Collision Warning System warning sounds.***
- ***The warning of the Blind-Spot Collision Warning System may not sound while other system's warning sounds.***

Blind-Spot Collision-Avoidance Assist (BCA) system



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The Blind-Spot Collision-Avoidance Assist System (BCA) may apply braking power, when an approaching vehicle is detected within a certain distance next to/behind your vehicle. It gently applies braking power on the tire, which is located in the opposite side of the possibly-colliding point. The instrument cluster will inform the driver of the system activation.

Blind-Spot Collision-Avoidance Assist System (BCA) is automatically deactivated when:

- The vehicle drives a certain distance away
- The vehicle direction is changed against the possible-colliding point
- The steering wheel is abruptly moved
- The brake pedal is depressed
- After a certain period of time

The driver should drive the vehicle in the middle of the vehicle lanes to keep the system in the ready status.

When the vehicle drives too close to one side of the vehicle lanes, the system may not properly operate.

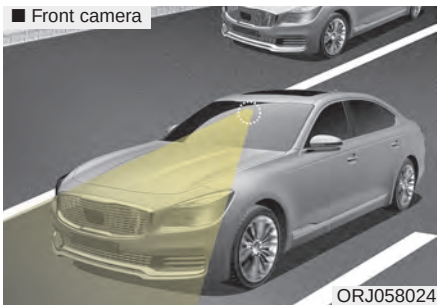
In addition, the system may not properly control your vehicle in accordance with driving situations. Thus, always pay close attention to road situations.

⚠ WARNING

- **The driver is responsible for accurate steering.**
- **Do not unnecessarily operate the steering wheel, when the Blind-Spot Collision-Avoidance Assist System is in operation.**
- **Always pay extreme caution while driving. The Blind-Spot Collision-Avoidance Assist System may not operate or unnecessarily operate in accordance with your driving situations.**
- **The Blind-Spot Collision-Avoidance Assist System is not a substitute for safe driving practices, but a convenience function only. It is the responsibility of the driver to always drive cautiously to prevent unexpected and sudden situations from occurring. Pay attention to the road conditions at all times.**

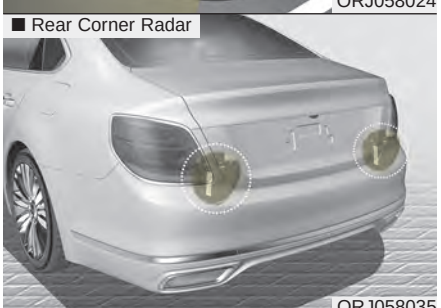
Detecting Sensor (Camera and Radar)

■ Front camera



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■ Rear Corner Radar



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Front camera

The front camera is a sensor detecting the lane. If the sensor is covered with snow, rain or foreign substance, the system may temporarily be cancelled and not work properly until the cancellation due to the degradation of the sensor's detection performance. Always keep the sensor clean.

* Refer to Lane Keeping Assist (LKA) System for cautions for the front camera sensor.

Rear Corner Radars

The Rear Corner Radars are the sensors inside the rear bumper for detecting the side/rear areas. Always keep the rear bumper clean for proper operation of the system.

⚠ CAUTION

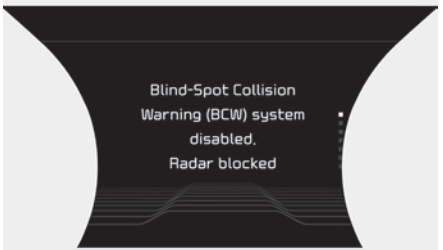
- *The system may not work properly when the bumper has been damaged, or if the rear bumper has been replaced or repaired.*
- *The sensing range differs somewhat according to the width of the road. When the road is narrow, the system may detect other vehicles in the next lane.*
- *The system may turn off due to strong electromagnetic waves.*
- *Always keep the sensors clean.*
- *NEVER arbitrarily disassemble the sensor component nor apply any impact on the sensor component.*
- *Be careful not to apply unnecessary force on the radar sensor or sensor cover. If the sensor is forcibly moved out of proper alignment, the system may not operate correctly. In this case, a warning message may not be displayed.*

(Continued)

(Continued)

Have the vehicle inspected by an authorized K900 Kia dealer.

- *Do not apply foreign objects such as a bumper sticker or a bumper guard near the radar sensor or apply paint to the sensor area. Doing so may adversely affect the performance of the sensor.*
- *NEVER install any accessories or stickers on the front windshield, nor tint the front windshield.*
- *Pay extreme caution to keep the camera sensor out of water.*
- *NEVER locate any reflective objects (i.e. white paper, mirror) over the crash pad. Any light reflection may cause a malfunction of the system.*



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Blind-Spot Collision Warning (BCW) system disabled.

Radar blocked

- This warning message may appear when :
  - One or both of the sensors on the rear bumper is blocked by dirt or snow or a foreign object.
  - Driving in rural areas where the sensor does not detect another vehicle for an extended period of time.
  - When there is inclement weather such as heavy snow or rain.

If any of these conditions occur, the light on the BCW switch and the system will turn off automatically.

Turn off the BCW, BCA and RCCW system (if equipped) when a trailer or carrier is installed.

- Press the BCW/BCA button (the indicator on the button extinguish)
- Deactivate the RCCW system by deselecting

  "AVN → Settings → Vehicle → Driving Assist → Blind-spot safety → Rear Cross-Traffic Collision Warning" (if equipped)

  If you use BCW, BCA and RCCW system, remove a trailer or carrier.

When the BCW canceled warning message is displayed in the cluster, check to make sure that the rear bumper is free from any dirt or snow in the areas where the sensor is located. Remove any dirt, snow, or foreign material that could interfere with the radar sensors.

After any dirt or debris is removed, the BCA should operate normally after about 10 minutes of driving the vehicle.

If the system still does not operate normally have your vehicle inspected by an authorized K900 Kia dealer.



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Check Blind-Spot Collision Warning (BCW) system

If there is a problem with the BCW system, a warning message will appear and the light on the switch will turn off. The system will turn off automatically. BCA will not operate also if the BCW system turns off due to malfunction. We recommend that you have your vehicle inspected by an authorized K900 Kia dealer.



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Check Blind-Spot Collision-Avoidance Assist (BCA) system

If there is a problem with the BCA system, a warning message will appear. The system will turn off automatically. BCW will still operate even if the BCA system turns off due to malfunction. We recommend that you have your vehicle inspected by an authorized K900 Kia dealer to use BCA system.

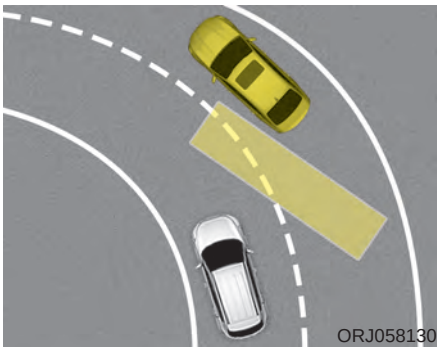
Limitations of the system

The driver must be cautious in the below situations, because the system may not detect other vehicles or objects in certain circumstances.

- When a trailer or carrier is installed.
- The vehicle drives in inclement weather such as heavy rain or snow.
- The sensor is polluted with rain, snow, mud, etc.
- The rear bumper where the sensor is located is covered with a foreign object such as a bumper sticker, a bumper guard, a bike rack, etc.
- The rear bumper is damaged, or the sensor is out of the original default position.
- The vehicle height gets lower or higher due to heavy loading in a trunk, abnormal tire pressure, etc.
- When the temperature of the rear bumper is high.
- When the sensors are blocked by other vehicles, walls or parking-lot pillars.
- The vehicle drives on a curved road.
- The vehicle drives through a tollgate.
- The road pavement (or the peripheral ground) abnormally contains metallic components (i.e. possibly due to subway construction).
- There is a fixed object near the vehicle, such as a guardrail.
- While going down or up a steep road where the height of the lane is different.
- Driving on a narrow road where trees or grass or overgrown.
- Driving in rural areas where the sensor does not detect another vehicle or structure for an extended period of time.
- Driving on a wet road.
- Driving on a road where the guardrail or wall is in double structure.
- A big vehicle is near such as a bus or truck.
- When the other vehicle approaches very close.
- When the other vehicle passes at a very fast speed.

- While changing lanes.
- If the vehicle has started at the same time as the vehicle next to you and has accelerated.
- When the vehicle in the next lane moves two lanes away from you OR when the vehicle two lanes away moves to the next lane from you.
- A motorcycle or bicycle is near.
- A flat trailer is near.
- If there are small objects in the detecting area such as a shopping cart or a baby stroller.
- If there is a low height vehicle such as a sports car.
- The brake pedal is depressed.
- ESC (Electronic Stability Control) is activated.
- ESC (Electronic Stability Control) malfunctions.
- The tire pressure is low or a tire is damaged.
- The brake is reworked.
- The vehicle abruptly changes driving direction.
- The vehicle makes sharp lane changes.
- The vehicle sharply stops.
- Temperature is extremely low around the vehicle.
- The vehicle severely vibrates while driving over a bumpy road, uneven/bumpy road, or concrete patch.
- The vehicle drives on a slippery surface due to snow, water puddle, or ice.
- The Lane Keeping Assist (LKA) or Lane Departure Warning (LDW) do not operate normally. (if equipped)

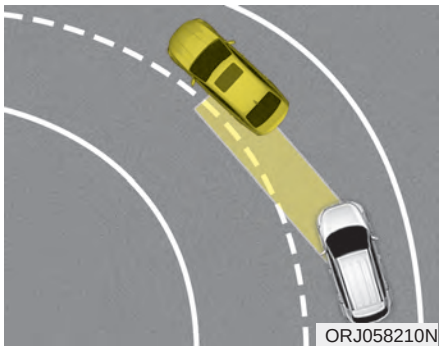
  For more information refer to "Lane Keeping Assist (LKA) system" in this chapter.



- Driving on a curve

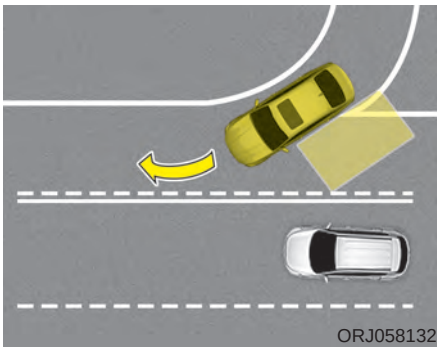
The BCW and BCA systems may not operate properly when driving on a curved road. In certain instances the system may not detect the vehicle in the next lane.

Always pay attention to road and driving conditions, while driving.


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The BCW and BCA systems may not operate properly when driving on a curved road. In certain instances the system may recognize a vehicle in the same lane.

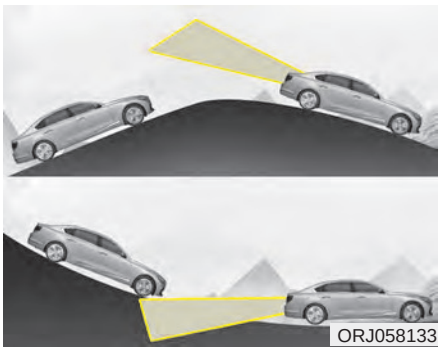
Always pay attention to road and driving conditions, while driving.


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- Driving where the road is merging/dividing

The BCW and BCA systems may not operate properly when driving where the road is merging/dividing. In certain instances the system may not detect the vehicle in the next lane.

Always pay attention to road and driving conditions, while driving.

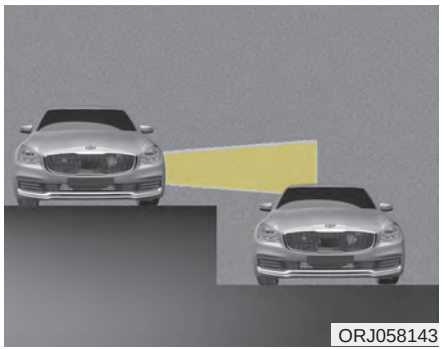

ORJ058133

- Driving on a slope

The BCW and BCA systems may not operate properly when driving on a slope. In certain instances the system may not detect the vehicle in the next lane.

Also, in certain instances the system may wrongly recognize the ground or structures.

Always pay attention to road and driving conditions, while driving.

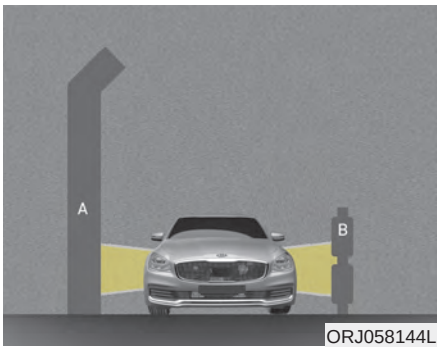

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- Driving where the heights of the lanes are different

The BCW and BCA systems may not operate properly when driving where the heights of the lanes are different.

In certain instances, the system may not detect the vehicle on a road with different lane heights (underpass joining section, grade separated intersections, etc.).

Always pay attention to road and driving conditions, while driving.



ORJ058144L

[A] : noise barrier, [B] : guardrail

- Driving where there is a structure beside the road

The BCW and BCA systems may not operate properly when driving where there is structure beside the road.

In certain instances, the system may wrongly recognize the structures (noise barriers, guardrail, double guardrail, median strip, bollard, street light, road sign, tunnel wall, etc.) beside the road.

Always pay attention to road and driving conditions, while driving.

This device complies with Part 15 of the FCC rules.

Operation is subject to the following three conditions:

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

REAR CROSS-TRAFFIC COLLISION WARNING (RCCW) SYSTEM / REAR CROSS-TRAFFIC COLLISION-AVOIDANCE ASSIST(RCCA) SYSTEM (IF EQUIPPED)

System description

Rear Cross-Traffic Collision Warning (RCCW) System



ORJ058140

The Rear Cross-Traffic Collision Warning (RCCW) System uses radar sensors to monitor the approaching cross traffic from the left and right side of the vehicle when your vehicle is in reverse.

The blind spot detection range varies relative to the approaching vehicle speed.

Rear Cross-Traffic Collision-Avoidance Assist (RCCA) System

The Rear Cross-Traffic Collision-Avoidance Assist (RCCA) System monitors approaching cross traffic from the left and right side of the vehicle when your vehicle is approaching.

The Rear Cross-Traffic Collision-Avoidance Assist (RCCA) System may activate the Electronic Stability Control (ESC) in accordance with a colliding possibility with an approaching vehicle. It is to lower the colliding risk or mitigate the colliding damage.

⚠ WARNING

- **Always be aware of road conditions while driving and be alert for unexpected situations even though the Rear Cross-Traffic Collision Warning System and Rear Cross-Traffic Collision-Avoidance Assist System are operating.**
- **The Rear Cross-Traffic Collision Warning System and Rear Cross-Traffic Collision-Avoidance Assist System are supplemental systems to assist you. Do not entirely rely on the systems. Always pay attention, while driving, for your safety.**
- **The Rear Cross-Traffic Collision Warning System and Rear Cross-Traffic Collision-Avoidance Assist System are not substitutes for proper and safe driving. Always drive safely and use caution when backing up the vehicle.**

System setting and activation

System setting

- The driver can activate the systems by placing the ignition switch to the ON position and by selecting 'AVN → Settings → Vehicle → Driving Assist → Blind-spot safety → Rear Cross-Traffic Safety'. The RCCA and RCCW turn on and get ready to be activated when 'Rear Cross-Traffic safety' is selected.
- When the engine is turned off then on again, the systems always get ready to be activated.
- When the system is initially turned on and when the engine is turned off then on again, the warning light will illuminate for 3 seconds on the outside side view mirror.

The driver can select the initial warning activation time in the AVN by selecting "AVN → Settings → Vehicle → Driver assistance → Warning timing". The options for the initial Rear Cross-Traffic Collision Warning includes the following:

- Normal:

When this condition is selected, the initial Rear Cross-Traffic Collision Warning is activated normally. If this setting feels too sensitive change the option to 'late'.

The warning activation time may feel late if the side/rear vehicle abruptly accelerates.

- Later:

Select this warning activation time when the traffic is light and you are driving in a low speed. However, if you change the warning activation time, the warning activation time of vehicle's other system may also change. Check the warning activation time before changing it.

The driver can select the warning volume of the Rear Cross-Traffic Collision Warning by selecting "AVN → Settings → Vehicle → Driver assistance → Warning volume → High/Medium/Low". However, if you change the warning volume, the warning volume of vehicle's other system may also change.

Operating conditions

To operate:

Go to the 'AVN → Settings → Vehicle → Driving Assist → Blind-spot safety → Rear Cross-Traffic Safety' on the AVN. The system will turn on and standby to activate.

The system will activate when vehicle speed is below 6 mph (10 km/h) and with the shift lever in R (Reverse).

* The system will not activate when the vehicle speed exceeds 10 km/h (6 mph). The system will activate again when the speed is below 10 km/h (6 mph).

The system's detecting range is approximately 1 ft ~ 65 ft (0.5 m ~ 20 m). An approaching vehicle will be detected if their vehicle speed is within 5 mph ~ 22.5 mph (8 km/h ~ 36 km/h). Note that the detecting range may vary under certain conditions. As always, use caution and pay close attention to your surroundings when backing up your vehicle.

Warning message and system control

Rear Cross-Traffic Collision Warning (RCCW) System

■ Left



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■ Right



ORJ058099

■ Left



ORJ058141

■ Right



ORJ058142

If the vehicle detected by the sensors approaches from the rear left/right side of 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 rear view monitor system is in activation, a message will also appear on the AVN screen.

The warning will stop when:

- The vehicle moving at the rear left/right side of your vehicle is not in the detection range.
- The vehicle is right behind your vehicle.
- The vehicle is not driving towards your vehicle.
- The vehicle's approaching speed is decreased.

Rear Cross-Traffic Collision-Avoidance (RCCA) System

■ Left



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■ Right



ORJ058194L

■ Left



ORJ058141

■ Right



ORJ058142

If the risk of collision is detected while the RCCW is generated, brake is controlled. The instrument cluster will inform the driver of the brake control. If the rear view monitor system is in activation, a message will also appear on the audio or AVN screen.

After the brake control the driver must immediately depress the brake pedal and check the surroundings.

- The brake activation by the system lasts for about 2 seconds only.

  The driver must pay attention as the brake is disengaged after the time.
- The brake control by the system is cancelled if the driver depresses the pedal with sufficient power.
- Brake control is activated once for each right/left approach after shifting the shift lever to R (Reverse).

The brake control may not operate properly according to the status of the ESC (Electronic Stability Control). The same warning message is displayed on the instrument cluster for this case also.

- When the ESC (Electronic Stability Control) warning light is on.
- When the ESC (Electronic Stability Control) is engaged in a different function.

⚠ CAUTION

- ***When the operation condition of the Rear Cross-Traffic Collision Warning System is satisfied the warning will occur every time a vehicle approaches the side/rear of your stopped (0 km/h vehicle speed) vehicle.***
- ***The system's warning or brake may not operate properly if the left/right of your vehicle's rear bumper is blocked by a vehicle or obstacle.***
- ***The driver should always use extreme caution while operating the vehicle, whether or not the warning light on the outside rearview mirror illuminates or there is a warning alarm.***
- ***Playing the vehicle audio system at high volume may offset the system's warning sounds.***

(Continued)

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- ***The warning of the Rear Cross-Traffic Collision Warning System may not sound while other system's warning sounds.***

⚠ WARNING

- **Drive safely even though the vehicle is equipped with a Rear Cross-Traffic Collision Warning System and Rear Cross-Traffic Collision-Avoidance Assist System. Do not solely rely on the system but check your surrounding when backing the vehicle up.**
- **The driver is responsible for accurate brake control.**
- **Always pay extreme caution while driving. The Rear Cross-Traffic Collision Warning System and Rear Cross-Traffic Collision-Avoidance Assist System may not operate properly or unnecessarily operate in accordance with your driving situations.**

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- **The Rear Cross-Traffic Collision-Avoidance Assist System is not a substitute for safe driving practices, but a convenience function only. It is the responsibility of the driver to always drive cautiously to prevent unexpected and sudden situations from occurring. Pay attention to the road conditions at all times.**

Detecting Sensor



The rear radars are the sensors inside the rear bumper for detecting the side/rear areas. Always keep the rear bumper clean for proper operation of the system.

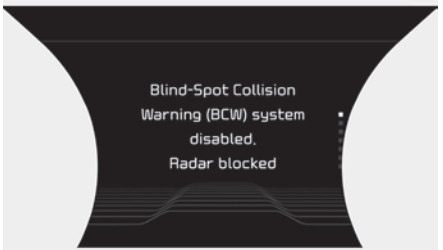
⚠ CAUTION

- *The system may not work properly when the bumper has been damaged, or if the rear bumper has been replaced or repaired.*
- *The system may turn off due to strong electromagnetic waves.*
- *Always keep the sensors clean.*
- *NEVER arbitrarily disassemble the sensor component nor apply any impact on the sensor component.*
- *Be careful not to apply unnecessary force on the radar sensor or sensor cover. If the sensor is forcibly moved out of proper alignment, the system may not operate correctly. In this case, a warning message may not be displayed. Have the vehicle inspected by an authorized K900 Kia dealer.*

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- *Do not apply foreign objects such as a bumper sticker or a bumper guard near the radar sensor or apply paint to the sensor area. Doing so may adversely affect the performance of the sensor.*



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Blind-Spot Collision Warning (BCW) system disabled. Radar blocked

- This warning message may appear when:
  - One or both of the sensors on the rear bumper is blocked by dirt or snow or a foreign object.
  - Driving in rural areas where the sensor does not detect another vehicle for an extended period of time.
  - When there is inclement weather such as heavy snow or rain.

If any of these conditions occur, the light on the BCW switch and the system will turn off automatically.

When the BCW canceled warning message is displayed in the cluster, check to make sure that the rear bumper is free from any dirt or snow in the areas where the sensor is located. Remove any dirt, snow, or foreign material that could interfere with the radar sensors.

After any dirt or debris is removed, the RCCA system should operate normally after about 10 minutes of driving the vehicle.

If the system still does not operate normally have your vehicle inspected by an authorized K900 Kia dealer.

Turn off the BCW, BCA and RCCW system (if equipped) when a trailer or carrier is installed.

- Press the BCW/BCA button (the indicator on the button extinguish)
- Deactivate the RCCW system by deselecting

  "AVN → Settings → Vehicle → Driving Assist → Blind-spot safety → Rear Cross-Traffic Collision Warning" (if equipped)

  If you use BCW, BCA and RCCW system, remove a trailer or carrier.



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Check Blind-Spot Collision Warning (BCW) system

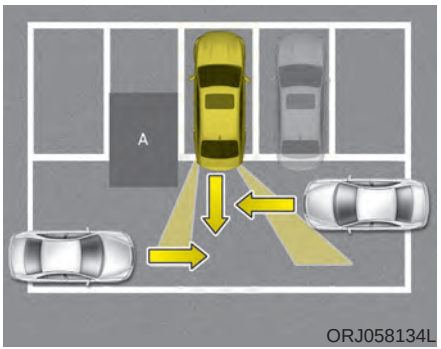
If there is a problem with the BCW system, a warning message will appear and the light on the switch will turn off. The system will turn off automatically. RCCW and RCCA will not operate also if the BCW system turns off due to malfunction. We recommend that you have your vehicle inspected by an authorized K900 Kia dealer.

Limitations of the system

The driver must be cautious in the below situations, because the system may not detect other vehicles or objects in certain circumstances.

- When a trailer or carrier is installed.
- The vehicle drives in inclement weather such as heavy rain or snow.
- The sensor is polluted with rain, snow, mud, etc.
- The rear bumper where the sensor is located is covered with a foreign object such as a bumper sticker, a bumper guard, a bike rack, etc.
- The rear bumper is damaged, or the sensor is out of the original default position.
- The vehicle height gets lower or higher due to heavy loading in a trunk, abnormal tire pressure, etc.
- When the temperature of the rear bumper is high.
- When the sensors are blocked by other vehicles, walls or parking-lot pillars.
- The vehicle drives on a curved road.
- The road pavement (or the peripheral ground) abnormally contains metallic components (i.e. possibly due to subway construction).
- There is a fixed object near the vehicle, such as a guardrail.
- While going down or up a steep road where the height of the lane is different.
- Driving on a narrow road where trees or grass or overgrown.
- Driving in rural areas where the sensor does not detect another vehicle for an extended period of time.
- Driving on a wet road.
- Driving on a road where the guardrail or wall is in double structure.
- A big vehicle is near such as a bus or truck.
- When the other vehicle approaches very close.
- When the other vehicle passes at a very fast speed.
- While changing lanes.
- If the vehicle has started at the same time as the vehicle next to you and has accelerated.
- When the vehicle in the next lane moves two lanes away from you OR when the vehicle two lanes away moves to the next lane from you.
- A motorcycle or bicycle is near.
- A flat trailer is near.
- If there are small objects in the detecting area such as a shopping cart or a baby stroller.
- If there is a low height vehicle such as a sports car.
- The brake pedal is depressed.
- ESC (Electronic Stability Control) is activated.
- ESC (Electronic Stability Control) malfunctions.
- The tire pressure is low or a tire is damaged.
- The brake is reworked.
- The vehicle sharply stops.
- Temperature is extremely low around the vehicle.

- The vehicle severely vibrates while driving over a bumpy road, uneven/bumpy road, or concrete patch.
- The vehicle drives on a slippery surface due to snow, water puddle, or ice.



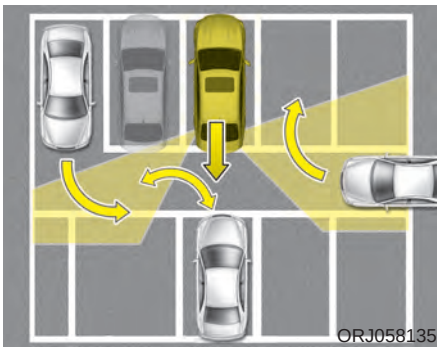
[A] : Structure

- Driving where there is a vehicle or structure near

The system may not operate properly when driving where there is a vehicle or structure near.

In certain instances, the system may not detect the vehicle approaching from behind and the warning or brake may not operate properly.

Always pay attention to your surrounding while driving.

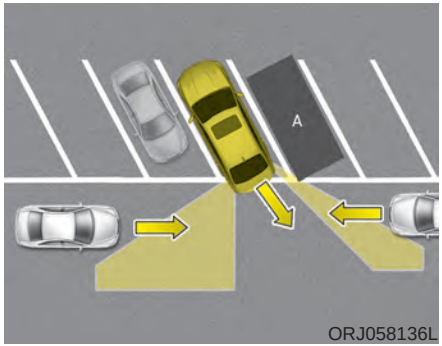


- When the vehicle is in a complex parking environment

The system may not operate properly when the vehicle is in a complex parking environment.

In certain instances, the system may not be able to exactly determine the risk of collision for the vehicles which are parking or pulling out near your vehicle (e.g. a vehicle escaping beside your vehicle, a vehicle parking or pulling out in the rear area, a vehicle approaching your vehicle making a turn, etc.).

In this case, the warning or brake may not operate properly.



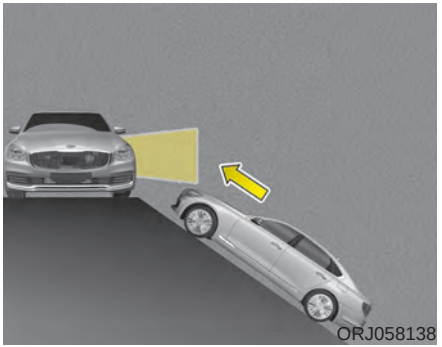
[A] : Vehicle

- When the vehicle is parked diagonally

The system may not operate properly when the vehicle is parked diagonally.

In certain instances, when the diagonally parked vehicle is pulled out of the parking space, the system may not detect the vehicle approaching from the rear left/right of your vehicle. In this case, the warning or brake may not operate properly.

Always pay attention to your surrounding while driving.

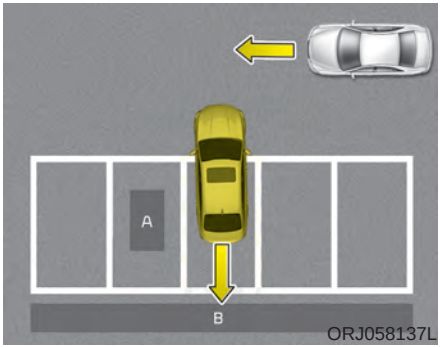


- When the vehicle is on/near a slope

The system may not operate properly when the vehicle is on/near a slope.

In certain instances, the system may not detect the vehicle approaching from the rear left/right and the warning or brake may not operate properly.

Always pay attention to your surrounding while driving.



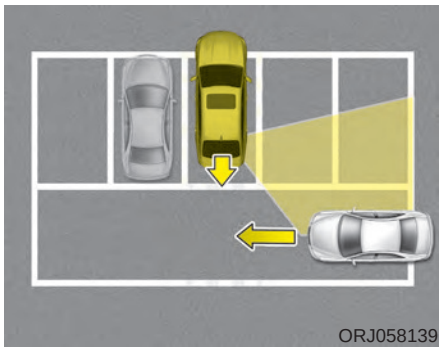
[A] : Structure, [B] : Wall

- Pulling into the parking space where there is a structure

The system may not operate properly when pulling in the vehicle to the parking space where there is a structure at the back or side of your vehicle.

In certain instances, when backing into the parking space, the system may not detect the vehicle moving in front of your vehicle. In this case, the warning or brake may not operate properly.

Always pay attention to the parking space while driving.



• When the vehicle is parked rearward

If the vehicle is parked rearward and the sensor detects the another vehicle in the rear area of the parking space, the system can warn or control braking. Always pay attention to the parking space while driving.

This device complies with Part 15 of the FCC rules.

Operation is subject to the following three conditions:

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

DRIVER ATTENTION WARNING (DAW)

The Driver Attention Warning (DAW), system is designed to warn the driver of potentially hazardous driving situations if it detects inattentive driving practices.

System setting and activation

System setting

- The Driver Attention Warning system is set to be in the OFF position, when your vehicle is first delivered to you from the factory.
- To turn ON the Driver Attention Warning system, turn on the engine, and then select 'AVN → Settings → Vehicle → Driver assistance → DAW(Driver Attention Warning) → High sensitivity/ Normal Sensitivity/Off ' on the AVN.
- The driver can select the Driver Attention Warning system mode.
  - Off : The Driver Attention Warning system is deactivated.
  - Normal Sensitivity : The Driver Attention Warning system alerts the driver of his/her fatigue level or inattentive driving practices.
  - High sensitivity : The Driver Attention Warning system alerts the driver of his/her fatigue level or inattentive driving practices faster than Normal mode.
- The set-up of the Driver Attention Warning system will be maintained, as selected, when the engine is re-started.

Display of the driver's attention level



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- The driver can monitor their driving conditions on the LCD display.
  - Select 'AVN → Settings → Vehicle → Driver assistance' and then 'DAW(Driver Attention Warning)' on the AVN. (For more information, refer to "LCD Display" in chapter 4.)
- The driver's attention level is displayed on the scale of 1 to 5. The lower the number is, the more inattentive the driver is.
- The level decreases when the driver does not take a break for a certain period of time.
- The level increases when the driver attentively drives for a certain period of time.
- When the driver turns on the system while driving, it displays ‘Last Break time’ and level reflected that.

Take a break



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- The "Consider taking a break" message appears on the LCD display and a warning sounds in order to suggest the driver to take a break, when the driver's attention level is below 1.
- The Driver Attention Warning system does not suggest the driver to take a break, when the total driving time is shorter than 10 minutes.

⚠ CAUTION

While other beeps such as the seat belt warning sound are in operation and override the DAW alarming system, DAW beeps may not occur.

Resetting the system



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- The last break time is set to 00:00 and the driver's attention level is set to 5 (very attentive) when the driver resets the Driver Attention Warning system.
- The driver attention warning system resets in the following situations.
  - The engine is turned OFF.
  - The driver unfastens the seat belt and then opens the driver's door.
  - Stop lasting more than 10 minutes.
- The driver attention warning system operates again, when the driver restarts driving.

System disabled

The Driver Attention Warning system enters the ready status and displays the 'Disabled' screen in the following situations.

- The camera sensor keeps failing to detect the lanes.
- Driving speed remains under 40 mph (60 km/h) or over 125 mph (200 km/h).

System malfunction



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When the "Check System" warning message appears, the system is not working properly. In this case, have the system checked by an authorized K900 Kia dealer.

⚠ WARNING

- **The Driver Attention Warning system is not a substitute for safe driving practices, but a convenience function only. It is the responsibility of the driver to always drive cautiously to prevent unexpected and sudden situations from occurring. Pay attention to the road conditions at all times.**
- **It may suggest a break according to the driver's driving pattern or habits even if the driver doesn't feel fatigued.**
- **The driver, who feels fatigued, should take a break, even though there is no break suggestion by the Driver Attention Warning system.**

✻ NOTICE

The Driver Attention Warning system utilizes the camera sensor on the front windshield for its operation. To keep the camera sensor in the best condition, you should observe the followings:

- **Do not disassemble camera temporarily for tinted window or attaching any types of coatings and accessories. If you disassemble a camera and assemble it again, have the system checked by an authorized K900 Kia dealer.**
- **Do not locate any reflective objects (i.e. white paper, mirror) over the dashboard. Any light reflection may cause a mal-function of the Driver Attention Warning (DAW) system.**
- **Pay extreme caution to keep the camera sensor out of water.**
- **Do not arbitrarily disassemble the camera assembly, nor apply any impact on the camera assembly.**

• **Playing the vehicle audio system at high volume may offset the Driver Attention Warning system warning sounds.**

⚠ CAUTION

The Driver Attention Warning system may not properly operate with limited alerting in the following situations:

- ***The lane detection performance is limited. (For more information, refer to "Lane Keeping Assist (LKA) System" in this chapter.)***
- ***The vehicle is violently driven or is abruptly turned for obstacle avoidance (e.g. construction area, other vehicles, fallen objects, bumpy road).***
- ***Forward drivability of the vehicle is severely undermined (possibly due to wide variation in tire pressures, uneven tire wear-out, toe-in/toe-out alignment).***
- ***The vehicle drives on a curvy road.***
- ***The vehicle drives on a bumpy road.***

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- ***The vehicle drives through a windy area.***
- ***The vehicle is controlled by the following driving assist systems:***
  - ***Lane Keeping Assist (LKA) System***
  - ***Forward Collision-Avoidance Assist (FCA) System***
  - ***Blind-Spot Collision-Avoidance Assist (BCA) System***
  - ***Lane Following Assist (LFA) System***
  - ***Smart Cruise Control (SCC) System***

✻ NOTICE

The DAW system does not detect actual driver fatigue or drowsiness. The system monitors driving and provides a warning if it detects inattentive driving practices.

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 chapter 7. If you drive your vehicle in severe conditions, more frequent maintenance is required (see chapter 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 less in crosswinds and headwinds. To help offset some of this loss, slow down when driving in these conditions.

Keeping a vehicle in good operating condition is important both for economy and safety. Therefore, have an authorized K900 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 lead to out of working power driven steering wheel and hard to control steering wheel. Keep the engine on and downshift to an appropriate gear for an 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 the second gear. Accelerate slowly to avoid spinning the drive wheels.
- Use sand, rock salt, 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 transmission 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 Transmission. 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 transmission.

⚠ 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.

⚠ CAUTION - Vehicle rocking

Prolonged rocking may cause engine overheating, transmission 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 that may injure bystanders.

The ESC system should be turned OFF prior to rocking the vehicle.

Smooth cornering

Avoid braking or gear changing in corners, especially when roads are wet. Ideally, corners should always be taken under gentle acceleration. If you follow these suggestions, tire wear will be held to a minimum.

Driving at night



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

- Slow down and keep more distance between you and other vehicles, as it may be more difficult to see at night, especially in areas where there may not be any street lights.

- Adjust your mirrors to reduce the glare from other driver's headlights.
- Keep your headlights clean and properly aimed. (On vehicles not equipped with the automatic headlight aiming feature.) Dirty or improperly aimed headlights will make it much more difficult to see at night.
- Avoid staring directly at the headlights of oncoming vehicles. You could be temporarily blinded, and it will take several seconds for your eyes to readjust to the darkness.

Driving in the rain

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

- A heavy rainfall will make it harder to see and will increase the distance needed to stop your vehicle, so slow down.
- Keep your windshield wiping equipment in good shape. Replace your windshield wiper blades when they show signs of streaking or missing areas on the windshield.
- If your tires are not in good condition, making a quick stop on wet pavement can cause a skid and possibly lead to an accident. Be sure your tires are in good shape.
- Turn on your headlights to make it easier for others to see you.
- Driving too fast through large puddles can affect your brakes. If you must go through puddles, try to drive through them slowly.
- If you believe you may have gotten your brakes wet, apply them lightly while driving until normal braking operation returns.

Driving in flooded areas

Avoid driving through flooded areas unless you are sure the water is no higher than the bottom of the wheel hub. Drive through any water slowly. Allow adequate stopping distance because brake performance may be affected.

After driving through water, dry the brakes by gently applying them several times while the vehicle is moving slowly.

Driving off-road

Drive carefully off-road because your vehicle may be damaged by rocks or roots of trees. Become familiar with the off-road conditions where you are going to drive before you begin driving.

Highway driving

Tires

Adjust the tire inflation pressures to specification. Low tire inflation pressures will result in overheating and possible failure of the tires.

Avoid using worn or damaged tires which may result in reduced traction or tire failure.

Never exceed the maximum tire inflation pressure shown on the tires.

⚠ 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. For proper tire pressures, refer to “Tires and wheels” in chapter 8.

⚠ 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 chapter 7.

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 result in overheating of the engine.

WINTER DRIVING

Severe weather conditions in the winter result in greater wear and other problems. To minimize the problems of winter driving, you should follow these suggestions:

⚠ WARNING - Driving with summer tires

Summer tires are equipped to provide the best driving performance on dry roads, varying according to specification.

Do not use summer tires at temperatures below 45°F (7°C) or when driving on snow or ice. At temperatures below 45°F (7°C), summer tires can lose elasticity, and therefore traction and braking power as well. Change the tires on your vehicle to winter or all-weather tires of the same size as the standard tires of the vehicle. Both types of tires are identified by the M+S (Mud and Snow) marking. Using summer tires at very cold temperatures could cause cracks to form, thereby damaging the tires permanently.

Snowy or icy conditions

To drive your vehicle in deep snow, it may be necessary to use snow tires or to install tire chains on your tires. If snow tires are needed, it is necessary to select tires equivalent in size and type of the original equipment tires. Failure to do so may adversely affect the safety and handling of your vehicle. Furthermore, speeding, rapid acceleration, sudden brake applications, and sharp turns are potentially very hazardous practices.

During deceleration, use engine braking to the fullest extent. Sudden brake applications on snowy or icy roads may cause skids to occur. You need to keep sufficient distance between the vehicle in operation in front of your vehicle. Also, apply the brake gently. It should be noted that installing tire chains on the tire will provide a greater driving force, but will not prevent side skids.

Tire chains are not legal in all states. Check state laws before fitting tire chains.

Snow tires

If you mount snow tires on your vehicle, make sure they are radial tires of the same size and load range as the original tires. Mount snow tires on all four wheels to balance your vehicle's handling in all weather conditions. Keep in mind that the traction provided by snow tires on dry roads may not be as high as your vehicle's original equipment tires. You should drive cautiously even when the roads are clear. Check with the tire dealer for maximum speed recommendations.

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 on some radial tires are thinner than other types of tires, they may be damaged by mounting certain types of tire chains on them. Therefore, the use of snow tires is recommended instead of tire chains. Do not mount tire chains on vehicles equipped with aluminum wheels; if unavoidable, use AutoSock (fabric snow chain). Install the tire chain after reviewing the instructions provided with the tire chains.

Damage to your vehicle caused by improper tire chain use is not covered by your vehicle manufacturer's warranty.

✻ NOTICE

- **Install AutoSock (fabric snow chain) on the rear tires for 2WD vehicles or for AWD vehicles. It should be noted that installing AutoSock (fabric snow chain) on the tires will provide a greater driving force, but will not prevent side skids.**
- **Do not install studded tires without first checking local and municipal regulations for possible restrictions against their use.**

⚠ CAUTION

When using AutoSock (fabric snow chain):

- ***Wrong size chains or improperly installed chains can damage your vehicle's brake lines, suspension, body and wheels.***
- ***To prevent body damage, retighten the chains after driving 0.3 ~ 0.6 miles (0.5 ~ 1.0 km).***

✻ NOTICE

If you hear noise caused by chains contacting the body, retighten the chain to prevent contact with the vehicle body.

Chain installation

When installing AutoSock (fabric snow chain), follow the manufacturer's instructions and mount them as tightly as possible. Drive slowly (less than 20 mph (30 km/h)) 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 the noise stops.

Remove the AutoSock (fabric snow chain) 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. Always place the vehicle in P (Park), apply the parking brake and turn off the engine before installing snow chains.

- 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 chapter 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 chapter 7. The level of charge in your battery can be checked by an authorized K900 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 chapter 8 for recommendations. If you aren't sure what weight oil you should use, consult an authorized K900 Kia dealer.

Check spark plugs and ignition system

Inspect your spark plugs as described in chapter 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 K900 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 gear shift lever in P (Park, Automatic Transmission) and block the rear wheels so the vehicle cannot roll. Then release the parking brake.

Don't let ice and snow accumulate underneath

Under some conditions, snow and ice can build up under the fenders and interfere with the steering. When driving in severe winter conditions where this may happen, you should periodically check underneath the vehicle to be sure the movement of the front wheels and the steering components are not obstructed.

Carry emergency equipment

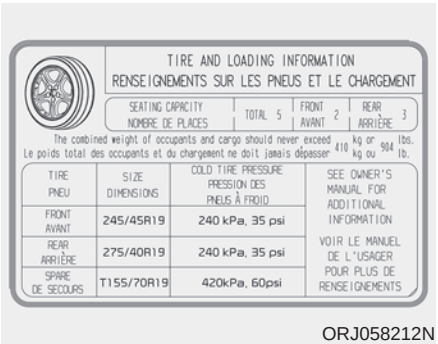
Depending on the severity of the weather, you should carry appropriate emergency equipment. Some of the items you may want to carry include tow straps or chains, flashlight, emergency flares, sand, shovel, jumper cables, window scraper, gloves, ground cloth, coveralls, blanket, etc.

TRAILER TOWING

We do not recommend using this vehicle for trailer towing.

VEHICLE LOAD LIMIT

Tire and loading information label


TIRE AND LOADING INFORMATION
RENSEIGNEMENTS SUR LES PNEUS ET LE CHARGEMENT

SEATING CAPACITY / NOMBRE DE PLACES	TOTAL 5	FRONT / AVANT 2	REAR / ARRIÈRE 3

The combined weight of occupants and cargo should never exceed 410 kg or 904 lbs.
Le poids total des occupants et du chargement ne doit jamais dépasser 410 kg ou 904 lb.

TIRE / PNEU	SIZE / DIMENSIONS	COLD TIRE PRESSURE / PRESSION DES PNEUS À FROID	SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION / VOIR LE MANUEL DE L'USAGER POUR PLUS DE RENSEIGNEMENTS
FRONT / AVANT	245/45R19	240 kPa, 35 psi	
REAR / ARRIÈRE	275/40R19	240 kPa, 35 psi	
SPARE / DE SECOURS	T155/70R19	420kPa, 60psi	

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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.

Steps For Determining Correct Load Limit -

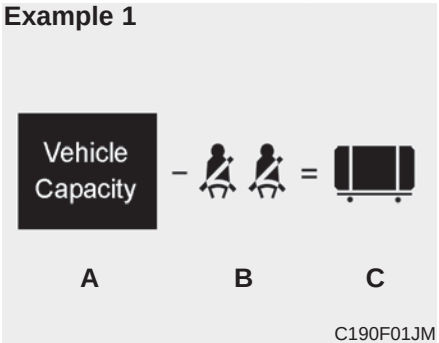
1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle's placard.
2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
3. Subtract the combined weight of the driver and passengers from XXX 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 lb 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.

⚠ WARNING - Loose cargo

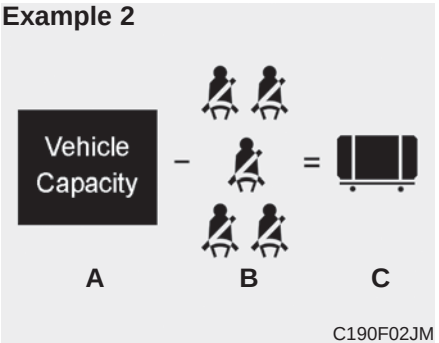
Do not travel with unsecured blunt objects in the passenger compartment of your vehicle (e.g. suit cases or unsecured child seats). These items may strike occupant during a sudden stop or crash.

Example 1



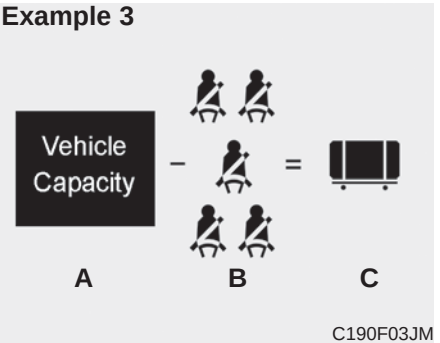
Item	Description	Total
A	Vehicle Capacity Weight	849 lbs (385 kg)
B	Subtract Occupant Weight 150 lbs (68 kg) × 2	300 lbs (136 kg)
C	Available Cargo and Luggage weight	549 lbs (249 kg)

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



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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.

VEHICLE WEIGHT

This chapter 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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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.

Press the flasher switch with the ignition switch in any position. The flasher switch is located in the center facia 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 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 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 transmission in P.
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 the 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 K900 Kia dealer or seek other qualified assistance.

✻ NOTICE

If there was a check engine light and loss of power or stall and if safe to do so, wait at least 10 seconds to restart the vehicle after it stalls. This may reset the car so it will no longer run at low power (limp home) condition.

IF THE ENGINE WILL NOT START

If engine doesn't turn over or turns over slowly

1. 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".

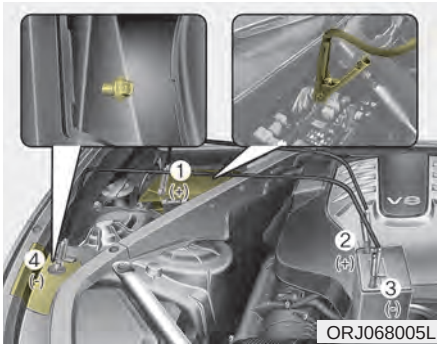
⚠ WARNING - Push/ pull start

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 the fuel level.
2. With the Engine Start/Stop Button in the OFF position, check all connectors at the ignition coils and spark plugs. Reconnect any that may be disconnected or loose.
3. Check the fuel line in the engine compartment.
4. If the engine still does not start, call an authorized K900 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 - Push/pull start to 12 Volt Battery

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.

⚠ 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 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.

Make sure to connect one end of the jumper cable to the negative terminal of the booster battery, and the other end to a metalic point, far away from the battery.

5. Start the engine of the vehicle with the booster battery and let it run at 2,000 rpm, then start the engine of the vehicle with the discharged battery.

If the cause of your battery discharging is not apparent, you should have your vehicle checked by an authorized K900 Kia dealer.

Push-starting

Vehicles equipped with automatic transmission 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.

When the engine starts, the vehicle can suddenly surge forward and 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 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 K900 Kia dealer for assistance.

⚠ WARNING - Radiator cap



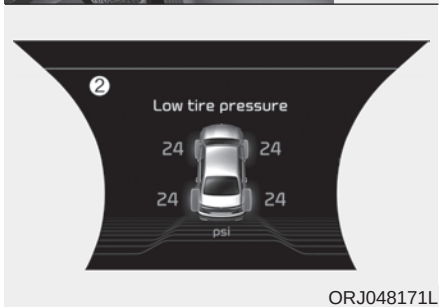
Do not remove the radiator cap when the engine is hot. This may result in coolant being blown out of the opening and cause serious burns.

6. If you cannot find the cause of the overheating, wait until the engine temperature has returned to normal. 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 K900 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 K900 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)

Check tire pressure

- You can check the tire pressure in the information mode on the cluster.
  - Refer to “Assist mode” in chapter 4.
- Tire pressure is displayed 1~2 minutes later after driving.
- If tire pressure is not displayed when the vehicle is stopped, “Drive to display” message displays. After driving, check the tire pressure.
- You can change the tire pressure unit in the user settings mode on the Navigation touch screen in instrument panel.
  - psi, kpa, bar.

✻ NOTICE

- **The tire pressure may change due to factors such as parking condition, driving style, and altitude above sea level.**
- **Low tire pressure warning may sound when a tire’s pressure unit is equal or higher than nearby tires. This is a normal occurrence, which is due to the change in tire pressure along with tire temperature.**
- **The tire pressure shown on the dashboard may differ from the tire pressure measured by tire pressure gauge.**

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a tire pressure monitoring system (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale.

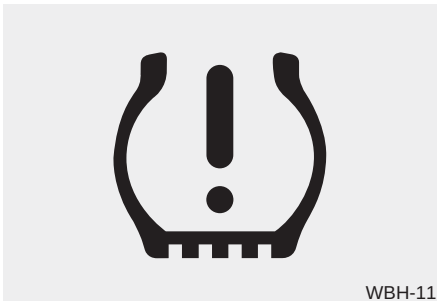
Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale. When the system detects a malfunction, the telltale will flash for approximately one minute and 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

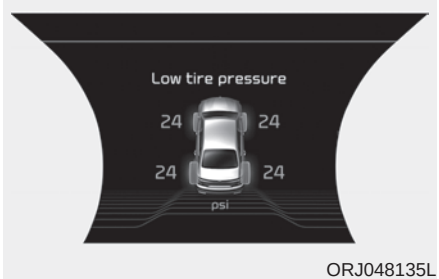
If the TPMS, Low Tire Pressure indicator does not illuminate for 3 seconds when the Engine Start/Stop button is turned to the ON, or engine is running, or if they remain illuminated after coming on for approximately 3 seconds, take your vehicle to your nearest authorized K900 Kia dealer and have the system checked.

Low tire pressure telltale



WBH-11

■ Low tire pressure position information



ORJ048135L

When the tire pressure monitoring system warning indicators are illuminated, one or more of your tires is significantly under-inflated.

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 TPMS malfunction indicator and the Low Tire Pressure telltale may turn on and illuminate after restarting and about 20 minutes of continuous driving before you have the low pressure tire repaired and replaced on the vehicle.

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.

When filling tires with more air, conditions to turn off the low tire pressure telltale may not be met. This is because a tire inflator has a margin of error in performance. The low tire pressure telltale will be turned off if the tire pressure is above 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 low tire pressure telltale will illuminate after it blinks for approximately one minute when there is a problem with the Tire Pressure Monitoring System. If the system is able to correctly detect an underinflation warning at the same time as system failure then it will illuminate both the TPMS malfunction and low tire pressure position telltales e.g. if Front Left sensor fails, the TPMS malfunction indicator illuminates, but if the Front Right, Rear Left, or Rear Right tire is under-inflated, the low tire pressure position telltales may illuminate together with the TPMS malfunction indicator.

Have the system checked by an authorized K900 Kia dealer as soon as possible to determine the cause of the problem.

- The TPMS malfunction indicator may be illuminated if the vehicle is moving around electric power supply cables or radios transmitters 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 be illuminated if snow chains are used or some separate electronic devices such as notebook computer, mobile charger, remote starter or navigation etc., are used in the vehicle. 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 telltale will come on. Have the flat tire repaired by an authorized K900 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 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 K900 Kia dealer.

Even if you replace the low pressure tire with the spare tire, the Low Tire Pressure telltale will remain on until the low pressure tire is repaired and placed on the vehicle.

After you replace the low pressure tire with the spare tire, the TPMS malfunction indicator may illuminate after a few minutes because the TPMS sensor mounted on the spare wheel is not initiated.

Once the low pressure tire is inflated again to the recommended pressure and installed on the vehicle or the TPMS sensor mounted on the replaced spare wheel is initiated by an authorized K900 Kia dealer, the TPMS malfunction indicator and the low tire pressure telltale will turn off within a few minutes of driving.

If the indicator has not disappeared after a few minutes of driving, please visit an authorized K900 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 K900 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.

Never use tire sealant if your vehicle is equipped with a Tire Pressure Monitoring System. The liquid sealant not approved by Kia may damage the tire pressure sensors.

- 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.

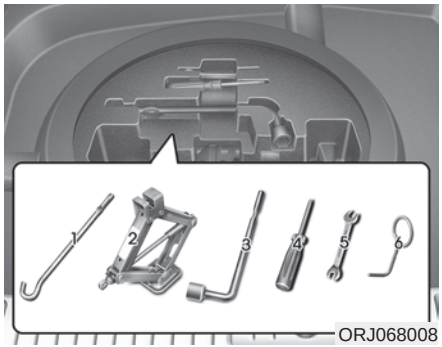
This device complies with Part 15 of the FCC rules.

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 (WITH SPARE TIRE)

Jack and tools



The jack and 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
(4) Screw driver (phillips and flat-head)
(5) Spanner
(6) Tool for removing wheel cover

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 bodily injury.

⚠ 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.

⚠ 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 a 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.
- 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.

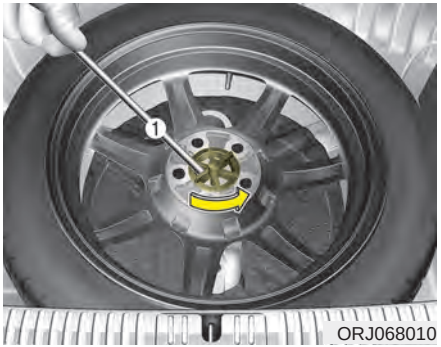
Removing and storing the spare tire


ORJ068009

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.



ORJ068010

If it is hard to loosen the tire hold-down wing bolt by hand, you can loosen it easily using the jack handle.

1. Put the jack handle (1) inside of the tire hold-down wing bolt.
2. Turn the tire hold-down wing bolt counterclockwise with the jack handle.

Use caution when utilizing the sharp jack handle.

Changing tires


OED066033

1. Park on a level surface and apply the parking brake firmly.
2. Place the transmission shift lever in P (Park).
3. Activate the hazard warning flashers.


ORJ068012

4. Remove the wheel lug nut wrench, jack 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 - Jack location

To reduce the possibility of injury, be sure to use only the jack provided with the vehicle in the correct jack position; never use any other part of the vehicle for jack support.

⚠ 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.**



ORJ068010

6. Insert the tool (1) into the hole and pull out the wheel cover.

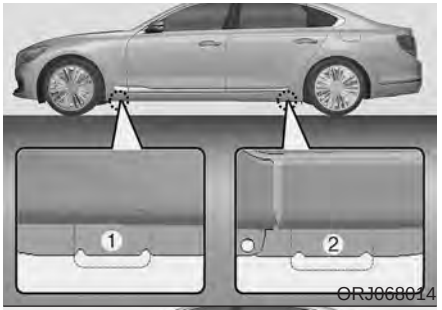
⚠ CAUTION

When removing the wheel cover, if you use any other tool except the tool (1), the wheel cover may be damaged.

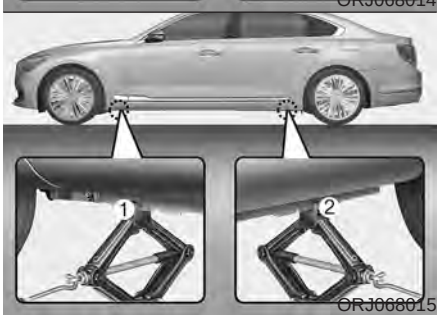


ORJ068016

7. Loosen the wheel lug nuts counterclockwise one turn each, but do not remove any nut until the tire has been raised off the ground.



ORJ068014



ORJ068015

8. Place the jack at the front (1) or rear (2) jacking position closest to the tire you are changing. Place the jack at the designated locations under the frame. The jacking positions are plates welded to the frame with two tabs and a raised dot to line up with the jack.


ORJ068017

9. Insert the wheel lug nut wrench 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. 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.



ORJ068018

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. Double-check each nut for tightness. After changing wheels, have an authorized K900 Kia dealer tighten the wheel nuts to their proper torque as soon as possible.

Wheel nut tightening torque:

79~94 lbf·ft (11~13 kgf·m, 107~127N·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 K900 Kia dealer.

⚠ WARNING - Wheel studs

If the studs are damaged, they may lose their ability to retain the wheel. This could lead to the loss of the wheel and a collision resulting in serious injuries.

To prevent the jack, 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 7.

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.

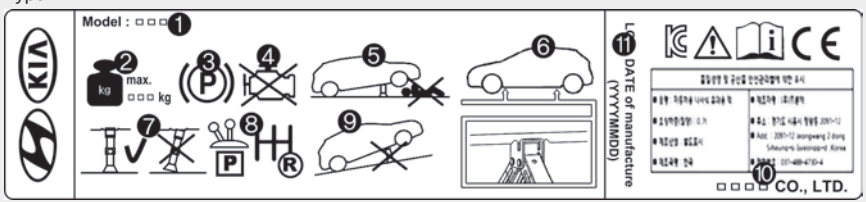
When using a compact spare tire, observe the following precautions:

- 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 bodily 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

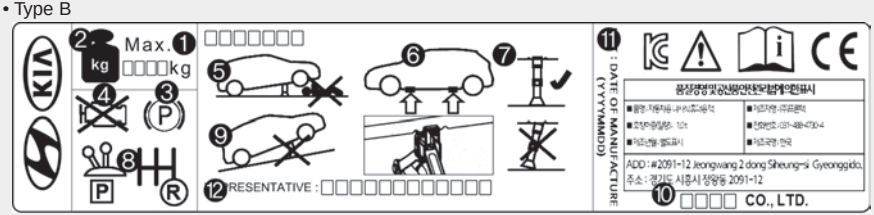
■ Example

• Type A



OHYK064001

• Type B



OHYK064005

• Type C



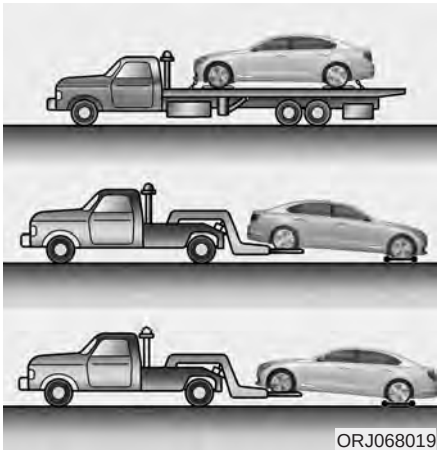
OHYK064002

❊ The actual Jack label in the vehicle may differ from the illustration. For more detailed specifications, refer to the label attached to the jack.

1. Model Name
2. Maximum allowable load
3. When using the jack, set your parking brake.
4. When using the jack, stop the engine.
5. Do not get under a vehicle that is supported by a jack.
6. The designated locations under the frame
7. When supporting the vehicle, the base plate of jack must be vertical under the lifting point.
8. 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


ORJ068019

If emergency towing is necessary, we recommend having it done by an authorized K900 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.

On AWD vehicles, your vehicle must be towed with a wheel lift and dollies or flatbed equipment with all the wheels off the ground.

⚠ CAUTION

The AWD vehicle should never be towed with the wheels on the ground. This can cause serious damage to the transmission or the AWD system.

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 rear of the vehicle should always be lifted, not the front.

✻ NOTICE

If the EPB does not release normally, take your vehicle to an authorized K900 Kia dealer by loading the vehicle on a flatbed tow truck and have the system checked.


ORJ068020

- Ensure any metal parts on the tiedown straps do not contact painted surfaces or the face of the wheels.
- Do not place straps over the body panels or through the wheels.

⚠ CAUTION

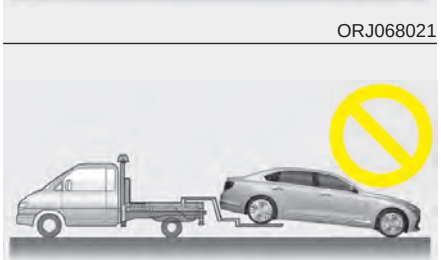
Attaching straps to the chassis, suspension or other parts of the body can cause damage.

⚠ WARNING - Side and curtain Air bag

If your vehicle is equipped with side and curtain air bag, set the the Engine Start/Stop button to 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.


ORJ068021


ORJ068022

⚠ CAUTION - Towing

- ***Do not tow the vehicle backwards with the rear wheels on the ground as this may cause damage to the vehicle.***
- ***Do not tow with sling-type equipment. Use wheel lift or flatbed equipment.***

When towing your vehicle in an emergency without wheel dollies :

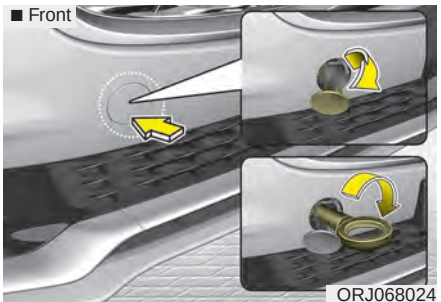
1. Set the Engine Start/Stop button to ACC position.
2. Place the transmission shift lever in N (Neutral).
3. Release the parking brake.

⚠ CAUTION - Towing gear position

Failure to place the transmission shift lever in N (Neutral) may cause internal damage to the transmission.

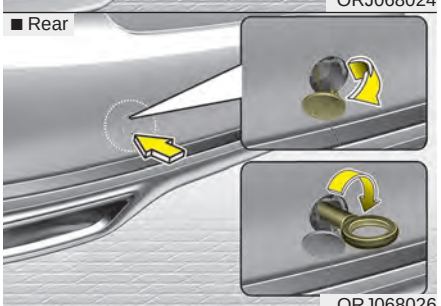
Removable towing hook

■ Front



ORJ068024

■ Rear

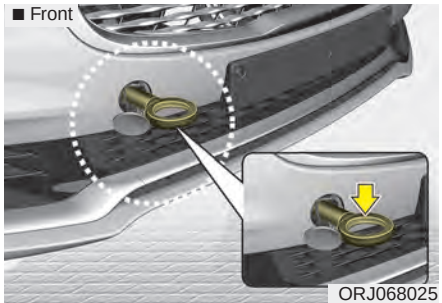


ORJ068026

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.

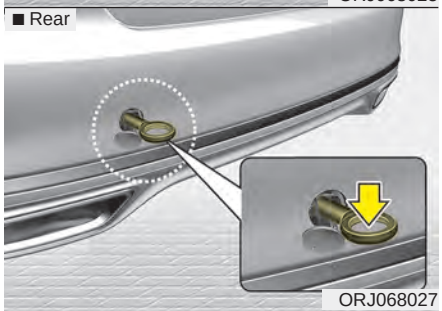
Emergency towing

■ Front



ORJ068025

■ Rear



ORJ068027

If towing is necessary, have it done by an authorized K900 Kia dealer or a commercial tow truck service.

If towing service is not available in an emergency, your vehicle may be temporarily towed using a cable or chain secured to the emergency towing hook under the front (or rear) of the vehicle. Use extreme caution when towing the vehicle. A driver must be in the vehicle to steer it and operate the brakes.

Towing in this manner may be done only on hard-surfaced roads for a short distance and at low speed. Also, the wheels, axles, power train, steering and brakes must all be in good condition.

- Do not use the tow hooks to pull a vehicle out of mud, sand or other conditions from which the vehicle cannot be driven out under its own power.
- Avoid towing a vehicle heavier than the vehicle doing the towing.
- The drivers of both vehicles should communicate with each other frequently.

⚠ CAUTION

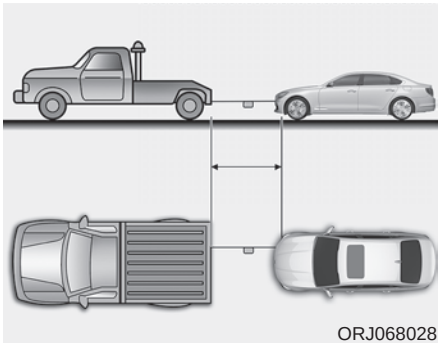
Using a portion of the vehicle other than the tow hooks for towing may damage the body of your vehicle.

- Attach a towing strap to the tow hook.
- Use only a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing hook provided.
- Before emergency towing, check if the hook is not broken or damaged.
- Fasten the towing cable or chain securely to the hook.
- Do not jerk the hook. Apply it steadily and with even force.
- To avoid damaging the hook, do not pull from the side or at a vertical angle. Always pull straight ahead.

⚠ WARNING - Emergency Towing Precautions

Use extreme caution when towing the vehicle.

- **Avoid sudden starts or erratic driving maneuvers which would place excessive stress on the emergency towing hook and towing cable or chain. The hook and towing cable or chain may break and cause serious injury or damage.**
- **If the disabled vehicle is unable to be moved, do not forcibly continue the towing. In this case, contact an authorized K900 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.**



ORJ068028

- 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

- Turn the Engine Start/Stop button to ACC position so the steering wheel isn't locked.
- Place the transmission 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 transmission is in neutral. Be sure the steering is unlocked by placing the Engine Start/Stop button to ACC position. A driver must be in the towed vehicle to operate the steering and brakes.

⚠ CAUTION - Automatic transmission

- ***To avoid serious damage to the automatic, 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 transmission for fluid leaks under your vehicle. If the automatic transmission fluid is leaking, flatbed equipment or a towing dolly must be used.***

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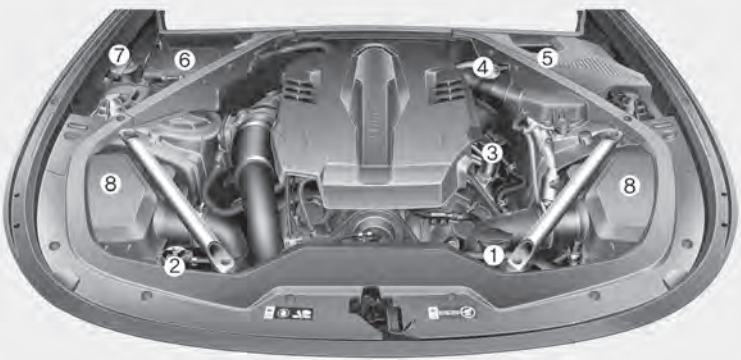
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ENGINE COMPARTMENT

■ **Lambda II 3.3L T-GDI Engine (Gasoline)**



1. Engine coolant reservoir
2. Radiator cap
3. Engine oil filler cap
4. Engine oil dipstick
5. Brake fluid reservoir
6. Fuse box
7. Windshield washer fluid reservoir
8. Air cleaner

❈ The actual engine compartment in the vehicle may differ from the illustration.
❈ The battery is in the luggage room.

ORJ078001

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 K900 Kia dealer perform this work.

An authorized K900 Kia dealer has factory-trained technicians and genuine Kia parts to service your vehicle properly. For expert advice and quality service, see an authorized K900 Kia dealer.

Inadequate, incomplete or insufficient servicing may result in operational problems with your vehicle that could lead to vehicle damage, an accident, or bodily 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 K900 Kia dealer. An authorized K900 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.

✻ NOTICE - NHTSA Safety Corrosion Alert

The National Highway Traffic Safety Administration (NHTSA) has issued a general warning to all vehicle owners of all brands regarding the risks associated with vehicle underbody corrosion. From your initial purchase, take the following steps to prevent unsafe corrosion damage to your vehicle:

- **Wash the undercarriage of your vehicle regularly during the winter and whenever your vehicle has been exposed to such salts or chemicals.**
- **Do a thorough washing of the undercarriage at the end of the winter.**
- **Use professional service technicians or governmental inspection stations to annually inspect for corrosion.**

(Continued)

(Continued)

- **Immediately seek an inspection of your vehicle if you become visually aware of corrosion flaking or scaling or if you become aware of a change in vehicle performance, such as soft or spongy brakes, fluids leaking, impairment of directional control, suspension noises or rattling metal straps.**

NHTSA further advises that after a vehicle is 7 years old, it is essential that you take these indicated maintenance steps to ensure that you protect yourself from unsafe corrosion conditions.

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 K900 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 K900 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.

⚠ WARNING - Touching metal parts



Do not touch metal parts (including strut bars) while the engine is operating or hot. Doing so could result in serious bodily injury. Turn the engine off and wait until the metal parts cool down to perform maintenance work on the vehicle.

OWNER MAINTENANCE

The following lists are vehicle checks and inspections that should be performed by the owner or an authorized K900 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.

⚠ 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 transmission occurs, check the transmission fluid level.
- Check the automatic transmission 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.
- Inspect and lubricate automatic transmission linkage and controls.
- Clean the battery and terminals.
- Check the brake fluid level.

SCHEDULED MAINTENANCE SERVICE

Follow the Normal Maintenance Schedule if the vehicle is usually operated where none of the following conditions apply. If any of the following conditions apply, follow the Maintenance Under Severe Usage Conditions.

- Repeated driving short distance of less than 5 miles (8 km) in normal temperature or less than 10 miles (16 km) in freezing temperature
- Extensive engine idling or low speed driving for long distances
- Driving on rough, dusty, muddy, unpaved, graveled or salt-spread roads
- Driving in areas using salt or other corrosive materials or in very cold weather
- Driving in heavy dust condition
- Driving in heavy traffic area
- Driving on uphill, downhill, or mountain road repeatedly
- Towing a trailer or using a camper, or roof rack
- Driving as a patrol car, taxi, other commercial use of vehicle towing
- Driving over 106 mph (170 km/h)
- Frequently driving in stop-and-go condition

If your vehicle is operated in any of the prior listed conditions, you should inspect, replace or refill more frequently, using the severe usage maintenance schedule instead of the normal usage maintenance schedule.

Normal Maintenance Schedule - Turbo Models

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.

MAINTENANCE INTERVALS / MAINTENANCE ITEM		Number of months or driving distance, whichever comes first														
	Months	**12**	**24**	**36**	**48**	**60**	**72**	**84**	**96**	**108**	**120**	**132**	**144**	**156**	**168**	**180**
	Miles×1,000	**6**	**12**	**18**	**24**	**30**	**36**	**42**	**48**	**54**	**60**	**66**	**72**	**78**	**84**	**90**
	Km×1,000	**10**	**20**	**30**	**40**	**50**	**60**	**70**	**80**	**90**	**100**	**110**	**120**	**130**	**140**	**150**
Drive belts *1		At first, inspect at 60,000 miles (100,000 km) or 72 months, after that, inspect every 12,000 miles (20,000 km) or 24 months														
Engine oil and engine oil filter	Lambda II 3.3L T-GDI	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Fuel additives *2		Add every 6,000 miles (10,000 km) or 12 months														
Air cleaner filter		-	I	-	R	-	I	-	R	-	I	-	R	-	I	-
Spark plugs	Lambda II 3.3L T-GDI	Replace every 42,000 miles (70,000 km)														
Valve clearance *3	Lambda II 3.3L T-GDI	Inspect every 60,000 miles (96,000 km) or 72 months														

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

*1 : The drive belt should be replaced when cracks occur or tension is reduced.

*2 : If TOP TIER Detergent Gasoline is not available, one bottle of additive is recommended. Additives are available from your authorized K900 Kia dealer along with information on how to use them. Do not mix other additives.

*3 : Inspect for excessive valve noise and/or engine vibration and adjust if necessary. Have an authorized K900 Kia dealer perform the operation.

Normal Maintenance Schedule - Turbo Models (CONT.)

MAINTENANCE INTERVALS / MAINTENANCE ITEM	Number of months or driving distance, whichever comes first														
Months	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180
Miles×1,000	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90
Km×1,000	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
Rotate tires	Rotate every 6,000 miles (10,000 km)														
Climate control air filter	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Vacuum hose	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Engine coolant	At first, replace at 120,000 miles (200,000 km) or 10 years : after that, replace every 30,000 miles (50,000 km) or 24 months														
Battery condition	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Brake lines, hoses and connections	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Disc brakes and pads	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Steering gear rack, linkage and boots	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Driveshaft and boots	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Suspension mounting bolts	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Air conditioner refrigerant	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Air conditioner compressor	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Propeller shaft	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Exhaust pipe and muffler	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

Normal Maintenance Schedule - Turbo Models (CONT.)

MAINTENANCE INTERVALS / MAINTENANCE ITEM		Number of months or driving distance, whichever comes first														
	Months	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180
	Miles×1,000	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90
	Km×1,000	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
Intercooler, in/out hose, air intake hose	Lambda II 3.3L T-GDI	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Cooling system		-	-	-	I	-	I	-	I	-	I	-	I	-	I	-
Automatic transaxle fluid		No check, No service required														
Differential oil (rear) *5		-	-	-	-	-	I	-	-	-	-	-	I	-	-	-
Differential oil (front) (AWD) *5		-	-	-	-	-	I	-	-	-	-	-	I	-	-	-
Transfer case oil (AWD)		No check, No service required														
Vapor hose, fuel filler cap and fuel tank		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-
Fuel tank air filter *4		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

*4 : Fuel tank air filter are considered to be maintenance free but periodic inspection is recommended for this maintenance schedule depends on fuel quality.

*5 : Front/rear differential oil should be changed anytime they have been submerged in water.

Normal Maintenance Schedule - Turbo Models (CONT.)

MAINTENANCE INTERVALS / MAINTENANCE ITEM	Number of months or driving distance, whichever comes first														
Months	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180
Miles×1,000	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90
Km×1,000	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
Fuel lines, hoses and connections	-	-	-	I	-	-	-	I	-	-	-	I	-	-	-
Parking brake	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-
Brake fluid	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-

I : Inspect and if necessary, adjust, correct, clean or replace.
R : Replace or change.

Maintenance Under Severe Usage Conditions - Turbo Models

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 engine oil filter	Lambda II 3.3L T-GDI	R	Every 3,000 miles (5,000 km) or 6 months	A, B, C, D, E, F, G, H, I, J, K
Air cleaner filter		I	More frequently	C, E
Spark plugs		R	More frequently	A, B, F, G, H, I, K
Automatic transaxle fluid		R	Every 60,000 miles (100,000 km)	A, C, D, E, F, G, H, I, J
Front brake disc/pads, calipers		I	More frequently	C, D, E, G, H
Rear brake disc/pads		I	More frequently	C, D, E, G, H
Parking brake		I	More frequently	C, D, G, H
Steering gear box, linkage & boots/ Lower arm ball joint, upper arm ball joint		I	More frequently	C, D, E, F, G

MAINTENANCE ITEM	MAINTENANCE OPERATION	MAINTENANCE INTERVALS	DRIVING CONDITION
Drive shafts and boots	I	More frequently	C, D, E, F, G, H, I, J
Differential oil (rear)	R	Every 72,000 miles (120,000 km)	C, E, G, H, I, J
Differential oil (front) (AWD)	R	Every 72,000 miles (120,000 km)	C, E, G, H, I, J
Climate control air filter (for evaporator and blower unit)	R	More frequently	C, E, G
Propeller shaft	I	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 heavy dust condition

F - Driving in heavy traffic area

G - Driving on uphill, downhill, or mountain road repeatedly

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 vehicle is being driven in severe conditions, more frequent oil and filter changes are required.

Drive belts

Inspect all drive belts for evidence of cuts, cracks, excessive wear or oil saturation and replace if necessary. Drive belts should be checked periodically for proper tension and adjusted as necessary.

Fuel filter (for gasoline)

This gasoline powered vehicle is equipped with a lifetime fuel filter that is integrated with the fuel tank. Regular maintenance or replacement is not needed however, the quality of fuel used may impact the frequency of maintenance needed. If there are any fuel related problems like fuel flow restriction, surging, loss of power, hard starting problem etc, fuel filter inspection or replacement may be needed.

The fuel filter can be inspected or replaced by an authorized K900 Kia dealer.

Fuel lines, fuel hoses and connections

Check the fuel lines, fuel hoses and connections for leakage and damage. Have an authorized K900 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 the intervals specified in the maintenance schedule. Make sure that a new vapor hose or fuel filler cap is installed correctly.

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.

Pay particular attention to the 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 (if equipped)

Inspect for excessive valve noise and/or engine vibration and adjust if necessary. An authorized K900 Kia dealer should perform this procedure.

Cooling system

Check the cooling system components, such as the radiator, coolant reservoir, hoses and connections for leakage and damage. Replace any damaged parts.

Coolant

The coolant should be changed at the intervals specified in the maintenance schedule.

Automatic transmission fluid

Automatic transmission fluid should not be checked under normal usage conditions.

But in severe conditions, the fluid should be changed at an authorized K900 Kia dealer in accordance to the scheduled maintenance at the beginning of this chapter.

✻ NOTICE

Automatic transmission fluid color is usually red.
As the vehicle is driven, the automatic transmission fluid will begin to look darker.
This is normal, and you should not judge the need to replace the fluid based upon the changed color.

⚠ CAUTION

Use only specified automatic transmission fluid. The use of a non-specified fluid could result in a transmission malfunction and failure. (Refer to "Recommended lubricants and capacities" in chapter 8.)

Brake hoses and lines

Visually check for proper installation, chafing, cracks, deterioration and any leakage. Replace any deteriorated or damaged parts immediately.

✻ NOTICE - NHTSA Safety Corrosion Alert

NHTSA has warned all vehicle owners of all brands that they must maintain their vehicles in a manner which will prevent brake hose and brake line failures due to corrosion when such vehicles are exposed to winter road salt and related chemicals. While serious corrosion conditions typically only manifest themselves as safety issues after 7 years of vehicle use, the corrosion process starts immediately and thus underbody cleaning maintenance must commence from your vehicle's first exposure to road salts and chemicals. NHTSA urges vehicle owners to take the following steps to prevent corrosion:

(Continued)

(Continued)

1. **Wash the undercarriage of your vehicle regularly throughout the winter and do a thorough washing in the spring to remove road salt and other de-icing chemicals.**
2. **Monitor the brake system for signs of corrosion by having regular professional inspections and watching for signs of problems, including loss of brake fluid, unusual leaks and soft or spongy feel in the brake pedal.**
3. **Replace the entire brake pipe assembly if you find severe corrosion that causes scaling or flaking of brake components.**

Brake fluid

Check the brake fluid level in the brake fluid reservoir. The level should be between “MIN” and “MAX” marks on the side of the reservoir. Use only hydraulic brake fluid conforming to DOT 3 or DOT 4 specification.

Parking brake

Inspect the parking brake system including the parking brake pedal and cables.

Brake discs, pads, calipers and rotors

Check the pads and discs for excessive wear and calipers for fluid leakage.

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.

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.

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.

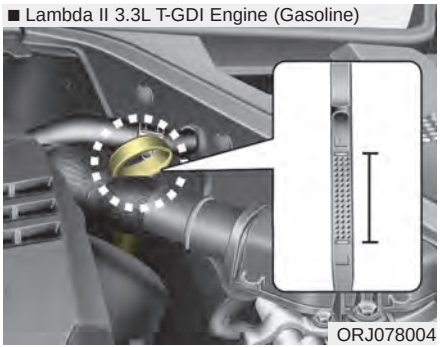
CHECKING FLUID LEVELS

When checking engine oil, engine coolant, brake fluid, and washer fluid, always be sure to clean the area around any filler plug, drain plug, or dipstick before checking or draining any lubricant or fluid. 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

Checking the engine oil level

■ Lambda II 3.3L T-GDI Engine (Gasoline)



ORJ078004

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

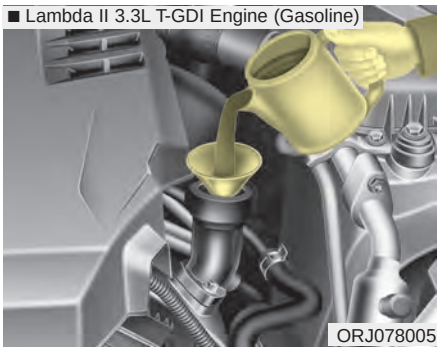
Be very careful not to touch the radiator hose when checking or adding the engine oil as it may be hot enough to burn you.

5. Pull the dipstick out again and check the level. The level should be between F and L.

⚠ CAUTION - Replacing engine oil

Do not overfill the engine oil. It may damage the engine.

■ Lambda II 3.3L T-GDI Engine (Gasoline)



ORJ078005

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 chapter 8.)

Changing the engine oil and filter

Have engine oil and filter changed by an authorized K900 Kia dealer according to the Maintenance Schedule at the beginning of this chapter.

⚠ WARNING - Used engine oil

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.

Checking the coolant level

⚠ WARNING



Removing radiator cap

Never attempt to remove the radiator cap while the engine is operating or hot. Doing so might lead to cooling system and engine damage and could result in serious bodily injury from escaping hot coolant or steam.

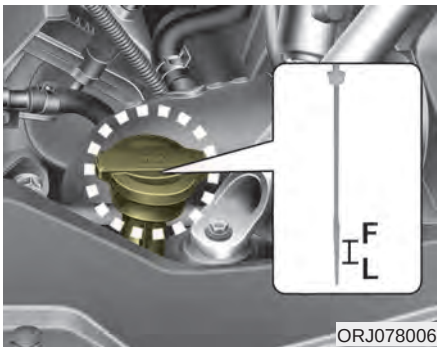
- Turn the engine off and wait until it cools down. Use extreme care when removing the radiator cap. Wrap a thick towel around it, and turn it counterclockwise slowly to the first stop. Step back while the pressure is released from the cooling system.

  When you are sure all the pressure has been released, press down on the cap, using a thick towel, and continue turning counterclockwise to remove it.
- Even if the engine is not operating, do not remove the radiator cap or the drain plug while the engine and radiator are hot. Hot coolant and steam may still blow out under pressure, causing serious injury.

⚠ WARNING - 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.



Check the condition and connections of all cooling system hoses and heater hoses. Replace any swollen or deteriorated hoses.

The coolant level should be filled between F and L marks on the side of the coolant reservoir when the engine is cool.

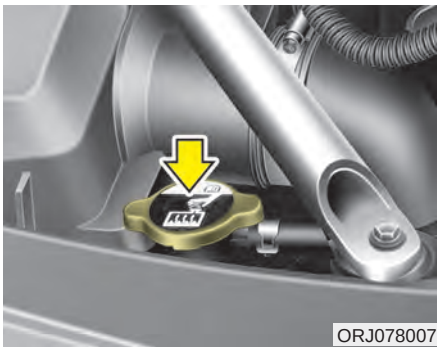
If the coolant level is low, add enough specified coolant to provide protection against freezing and corrosion. Bring the level to F, but do not overfill. If frequent additions are required, see an authorized K900 Kia dealer for a cooling system inspection.

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 with phosphate based coolant to prevent corrosion and freezing.
- Do not use alcohol or methanol coolant or mix them with the specified coolant.
- Do not use a solution that contains more than 60% antifreeze or less than 35% antifreeze. This 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


ORJ078007

⚠ 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 which may result in serious injury.

Changing the coolant

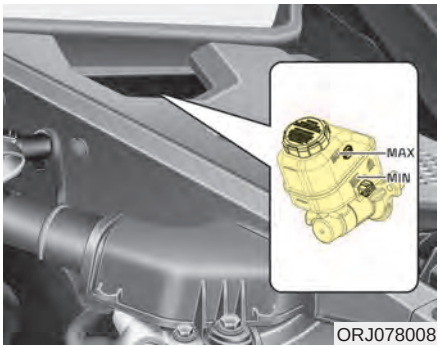
Have the coolant changed by an authorized K900 Kia dealer according to the Maintenance Schedule at the beginning of this chapter.

⚠ CAUTION

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 K900 Kia dealer.

Use only the specified brake fluid. (Refer to "Recommended lubricants and capacities" in chapter 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 K900 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.

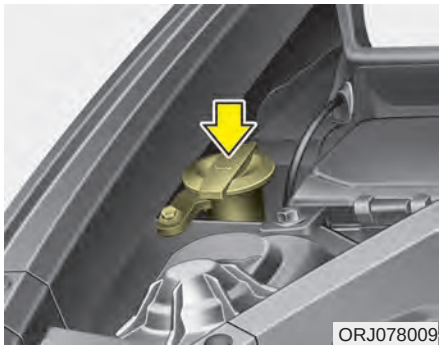
⚠ CAUTION - Brake fluid

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



The reservoir is translucent so that you can check the level with a quick visual inspection.

Check the fluid level in the washer fluid reservoir and add fluid if necessary. In warm climate, plain water may be used if washer fluid is not available; however, in cold climates washer fluid with anti-freezing characteristics is required to prevent freezing.

⚠ 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

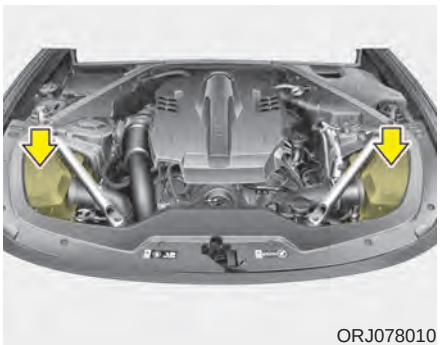
- **Do not use radiator coolant or antifreeze in the washer fluid reservoir.**
- **Radiator coolant can severely obscure visibility when sprayed on the windshield and may cause loss of vehicle control.**

⚠ WARNING - Windshield fluid

Do not drink the windshield washer fluid. The windshield washer fluid is poisonous to humans and animals.

AIR CLEANER

Replace the filter according to the Maintenance Schedule.



ORJ078010

The air filter must be replaced when necessary according to the Maintenance Schedule, and should not be washed.

Have the air cleaner filter inspected or replaced by an authorized K900 Kia dealer.

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 chapter.)

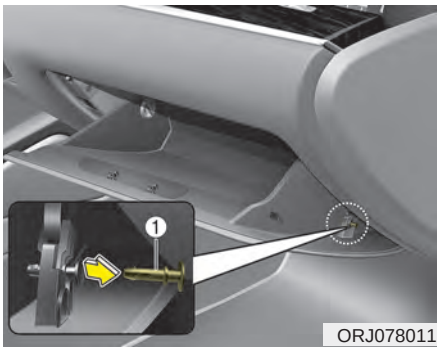
⚠ CAUTION - Air filter maintenance

- ***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 a non-genuine part could damage the air flow sensor.***

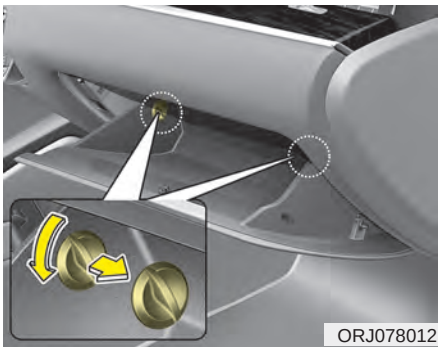
CLIMATE CONTROL AIR FILTER (IF EQUIPPED)

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.



1. With the glove box open, remove the pin(1) from the support strap.



2. Open the glove box and remove the stoppers on both sides.


ORJ078013

3. Remove the climate control air filter cover while pressing the lock on the left side of the cover.

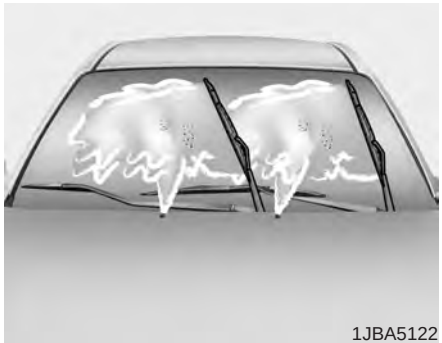

OCK077029

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.

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.

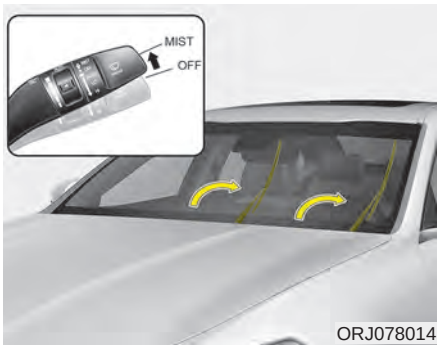
Blade replacement

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.

Aftermarket wiper blades may result in wiper malfunction and/or failure. It is recommended to use certified Kia parts.

Front windshield wiper blade

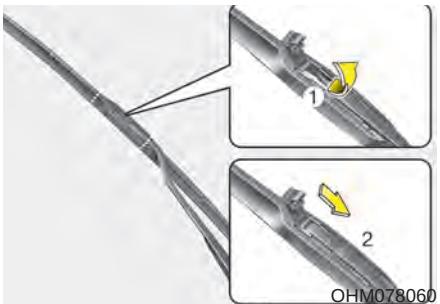


To inspect or replace the windshield wiper blades and to prevent damaging the hood, move the windshield wiper blades to the service position as follows :

After turning off the engine, move the wiper switch to the single wiping (MIST) position within 20 seconds and hold the switch more than 2 seconds until the wiper blade is in the fully up position.

⚠ CAUTION - Wiper arms

- ***Do not allow the wiper arm to fall against the windshield, since it may chip or crack the windshield.***
- ***Do not pull wiper arm forward, since arm could chip hood paint.***





1. Raise the wiper arm.
2. Lift up the wiper blade clip. Then pull down the blade assembly and remove it.
3. Install the new blade assembly.

4. Return the wiper arm on the windshield.
5. Turn ignition to the ON position and wiper arms will return to the normal operating position.

BATTERY

Battery replacement



The battery is in the trunk. When replacing the battery, disconnect the negative (-) cable (1) and remove the positive (+) battery fuse box (2).

Remove the battery mounting bracket (3).

⚠ WARNING

Turn the engine off and wait until it cools down, or trunk floor surface may be hot. Wear gloves when removing the battery from the trunk.

For best battery service

- Keep the battery securely mounted.
- Keep the battery top clean and dry.
- Keep the terminals and connections clean, tight, and coated with petroleum jelly or terminal grease.
- Rinse any spilled electrolyte from the battery immediately with a solution of water and baking soda.
- If the vehicle is not going to be used for an extended time, disconnect the battery cables.

⚠ 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.



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 K900 Kia dealer to be recycled.

Never attempt to recharge the battery when the battery cables are connected.

⚠ WARNING - Risk of electrocution

Never touch the electrical ignition system while the vehicle is running. This system works with high voltage which can shock you.

⚠ WARNING - Recharging Battery

Never attempt to recharge the battery when the battery cables are connected.

⚠ WARNING - Battery lead compound

Battery posts, terminals, and related accessories contain lead and lead compounds.

Wash hands after handling.

✻ NOTICE

If you connect unauthorized electronic devices to the battery, the battery may be discharged. Never use unauthorized devices.

Recharging the battery

Your vehicle has a maintenance-free, calcium-based battery.

- If the battery becomes discharged in a short time (because, for example, the headlamps or interior lamps 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.
- Do not allow cigarettes, sparks, or flame near the battery.
- Watch the battery during charging, and stop or reduce the charging rate if the battery cells begin gassing (boiling) violently or if the temperature of the electrolyte of any cell exceeds 120°F (49°C).
- Wear eye protection when checking the battery during charging.
- Disconnect the battery charger in the following order.

1. Turn off the battery charger main switch.
2. Unhook the negative clamp from the negative battery terminal.
3. Unhook the positive clamp from the positive battery terminal.

- 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 chapter 4)
- Sunroof (See chapter 4)
- Trip computer (See chapter 4)
- Climate control system (See chapter 4)
- Driver position memory system (See chapter 3)
- Audio (See chapter 4)

TIRES AND WHEELS

Tire care

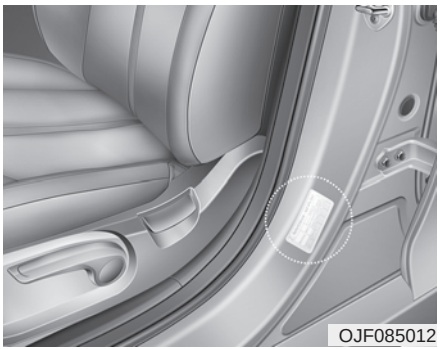
For proper maintenance, safety, and maximum fuel economy, you must always maintain recommended tire inflation pressures and stay within the load limits and weight distribution recommended for your vehicle.

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, top vehicle handling, and minimum tire wear.

For recommended inflation pressure refer to “Tire and wheels” in chapter 8.



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.

Failure to maintain specified pressure may result in excessive wear, poor handling, reduced fuel economy, deformation of tire and/or wheel, harsh ride conditions, possibility for additional damage from road hazards, or result in tire failure.

Tire pressure

Always observe the following:

- Check tire pressure when the tires are cold. (After vehicle has been parked for at least three hours or hasn't been driven more than 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.
- 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.

⚠ 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.

Checking tire inflation pressure

Check your tires once a month or more.

Also, check the tire pressure of the spare tire.

How to check

Use a good quality gauge to check tire pressure. You can not tell if your tires are properly inflated simply by looking at them. Radial tires may look properly inflated even when they're underinflated. Check the tire's inflation pressure old. - "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.

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.

- 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

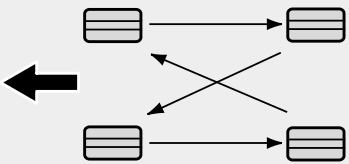
To equalize tread wear, it is recommended that the tires be rotated every 7,500 miles (12,000 km) or sooner if irregular wear develops.

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.

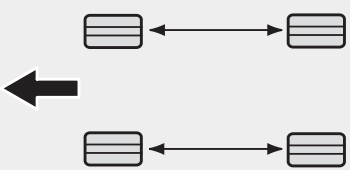
Refer to “Tire and wheels” in chapter 8.

Without a spare tire



S2BLA790A

Directional tires (if equipped)



CBGQ0707A

Disc brake pads should be inspected for wear whenever tires are rotated.

Rotate radial tires that have an asymmetric tread pattern only from front to rear and not from right to left.

⚠ WARNING - Mixing tires

- **Do not use the compact spare tire (if equipped) for tire rotation.**
- **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 (A) 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

- **In order to maintain optimal driving performance, we recommend replacing tires with the same specification and type as originally installed in your vehicle. If not, driving performance could be altered.**
- **When replacing tires (or wheels), it is recommended to replace the two front or two rear tires (or wheels) as a pair.**
  Replacing just one tire can seriously affect your vehicle's handling.

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

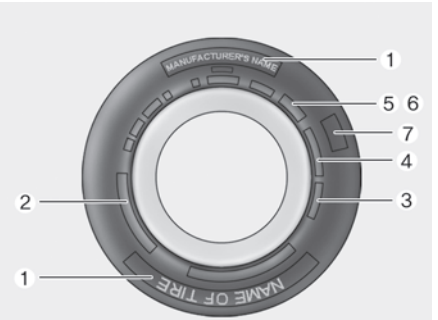
Tire traction can be reduced if you drive on worn tires, tires that are improperly inflated or on slippery road surfaces. Tires should be replaced when tread wear indicators appear. Slow down whenever there is rain, snow or ice on the road, to reduce the possibility of losing control of the vehicle.

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



OJF085008L

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 car. 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.)

P205/55R16 89H

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).

205 - Tire width in millimeters.

55 - Aspect ratio. The tire's section height as a percentage of its width.

R - Tire construction code (Radial).

16 - Rim diameter in inches.

89 - Load Index, a numerical code associated with the maximum load the tire can carry.

H - Speed Rating Symbol. See the speed rating chart in this section for additional information.

Wheel size designation

Wheels are also marked with important information that you need if you ever have to replace one. The following explains what the letters and numbers in the wheel size designation mean.

Example wheel size designation:

6.0JX16

6.0 - Rim width in inches.

J - Rim contour designation.

16 - Rim diameter in inches.

Tire speed ratings

The chart below lists many of the different speed ratings currently being used for passenger vehicles. 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 1618 represents that the tire was produced in the 16th week of 2018.

⚠ 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 440

TRACTION A

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.

Tires degrade over time, even when they are not being used. Regardless of the remaining tread, we recommend that tires be replaced after approximately six (6) years of normal service. Heat caused by hot climates or frequent high loading conditions can accelerate the aging process.

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 tires ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

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 car 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 kilopascal (kPa) or pounds per square inch (psi).

Accessory Weight: This means the combined weight of optional accessories. Some examples of optional accessories are, automatic transmission, 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 kilopascals (kPa) or pounds per square inch (psi) 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 Index: An assigned number ranging from 1 to 279 that corresponds to the load carrying capacity of a tire.

Load ratings: The maximum load that a tire is rated to carry for a given inflation pressure.

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 lbs. (68kg).

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 1/16 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. (68kg) 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 car 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.

⚠ WARNING

Do not use summer tires at temperatures below 45°F (7°C) or when driving on snow or ice. At temperatures below 45°F (7°C), summer tires can lose elasticity, and therefore traction and braking power as well. Change the tires on your vehicle to winter or all-weather tires of the same size as the standard tires of the vehicle. Both types of tires are identified by the M+S (Mud and Snow) marking. Using summer tires at very cold temperatures could cause cracks to form, thereby damaging the tires permanently.

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 circumstances, use a wire type chain.
- Use wire chains less than 0.47 inches (12 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 K900 Kia dealer.

- To prevent damage to the tire, inspect the tire condition and pressure every 1,900 miles (3,000 km).

- Tire damage can be difficult to identify; therefore, in the event that the tire is impacted it is recommended to have the tire checked or replaced to prevent potential air leakage.
- If the tire is damaged by driving on a rough road, off road, pothole, manhole, or curb stone, it will not be covered by the warranty.
- You can find out the tire information on the tire sidewall.

FUSES

■ Blade type



■ Cartridge type



■ Multi fuse



■ BFT



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❉ Left side : Normal , Right side : Blown

A vehicle's electrical system is protected from electrical overload damage by fuses.

This vehicle has 4 (or 5) 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.

If the replacement fuse blows, this indicates an electrical problem. Avoid using the system involved and immediately consult an authorized K900 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

- When replacing a fuse, turn the ignition "OFF" and turn off switches of all electrical devices then remove battery (-) terminal.
- The actual fuse/relay panel label may differ from equipped items.

⚠ WARNING - Electrical Fire

Always ensure replacements 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

- *Do not input any other objects except fuses or relays into fuse/relay terminals such as a screwdriver or wiring. It may cause contact failure and system malfunction.*
- *Do not plug in screwdrivers or aftermarket wiring into the terminal originally designed for fuse and relays only. The electrical system and wiring of the vehicle interior may be damaged or burned due to contact failure.*
- *If you directly connect the wire on the taillight or replace the bulb which is over the regulated capacity to install trailers etc., the inner junction block can get burned.*

⚠ 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.

⚠ WARNING - Electrical wiring repairs

All electrical repairs should be performed by authorized Kia dealerships using approved Kia parts. Using other wiring components, especially when retrofitting the audio display or theft alarm system, remote engine control, car phone or radio may cause vehicle damage and increase the risk of a vehicle fire.

✻ NOTICE - Remodeling Prohibited

Do not rewire your vehicle in any way as doing so may affect the performance of several safety features in your vehicle. Rewiring your vehicle may also void your warranty and cause you to be responsible for any subsequent vehicle damage which may result.

✻ NOTICE - Window tinting precaution

Window tint (especially metallic film) might cause communication errors or poor radio reception, and malfunctioning automatic lighting system due to reflections from the mirror tint inside the vehicle. The solution used might also leak into the electronic components, causing malfunctions or damage.

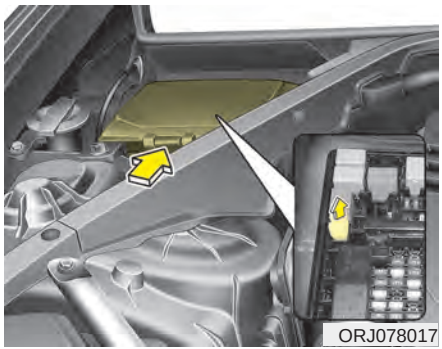
Inner panel fuse replacement



1. Turn the ignition switch and all other switches off.
2. Open the fuse panel cover.

If the switch is located in the “OFF” position, a caution indicator will be displayed in the cluster.

To identify the location of a specific fuse, please refer to the inside of the fuse panel cover and the description list in this section.


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3. Pull the suspected fuse straight out. Use the removal tool provided on the engine compartment fuse panel cover.
4. Check the removed fuse; replace it if it is blown.

   Spare fuses are provided in the engine compartment fuse panel.
5. Push in a new fuse of the same rating, and make sure it fits tightly in the clips.

If it fits loosely, consult an authorized K900 Kia dealer.

If you do not have a spare, use a fuse of the same rating from a circuit you may not need for operating the vehicle, such as the cigarette lighter fuse.

If the headlights or taillights, stoplights, courtesy lamp, day time running lights (D.R.L) do not work and the fuses are not blown, check the fuse panel in the engine compartment. If a fuse is blown, it must be replaced.

✻ NOTICE

If the headlamp, turn signal lamp, or tail lamp malfunction even without any problem to the lamps, have the vehicle checked by an authorized K900 Kia dealer for assistance.

Fuse switch


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Always set the fuse switch to the ON position before using the vehicle.

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. When the switch is Off, the caution indicator will be displayed on the instrument cluster.

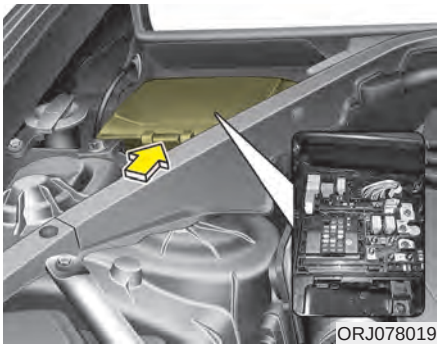
⚠ CAUTION - Fuse Panel Covers

The contact points of the switches may wear out with excessive use. Please refrain from excessive use of the switches (except for long-term parking for over 1 month).

✻ NOTICE

- **If the vehicle is going to be unused for over 1 month, set all switches to OFF to prevent the batteries from draining.**

Engine compartment fuse replacement

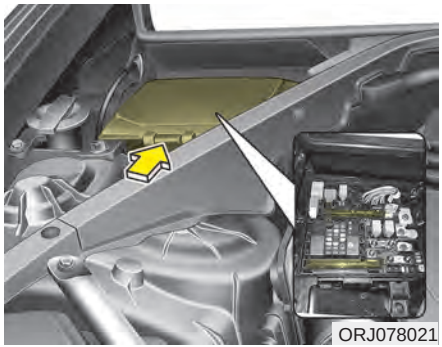


1. Turn the ignition switch and all other switches off.
2. Remove the fuse panel cover by pressing the tab and pulling the cover up. When the blade type fuse is disconnected, remove it by using the clip designed for changing fuses located in the engine room fuse box. Upon removal, securely insert reserve fuse of the same rating.
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 K900 Kia dealer.

⚠ CAUTION

Always securely install the fuse panel cover in the engine compartment to protect against electrical failure which may occur from water contact. Listen for the audible clicking sound to ensure fuse panel cover is securely fastened.

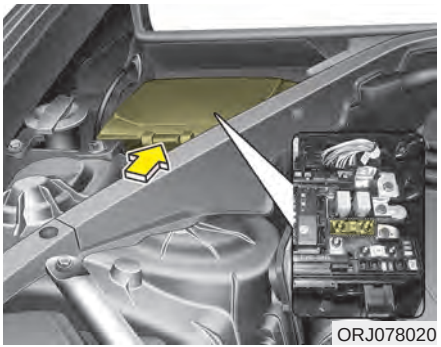
Multi fuse



✻ NOTICE

Do not disassemble nor assemble the multi fuse when it is secured with nuts and bolts. Incorrect or partial assembly torque may cause a fire. Have the vehicle checked by an authorized K900 Kia dealer.

Main fuse



✻ NOTICE

Do not disassemble nor assemble the multi fuse when it is secured with nuts and bolts. Incorrect or partial assembly torque may cause a fire. Have the vehicle checked by an authorized K900 Kia dealer.

✻ NOTICE

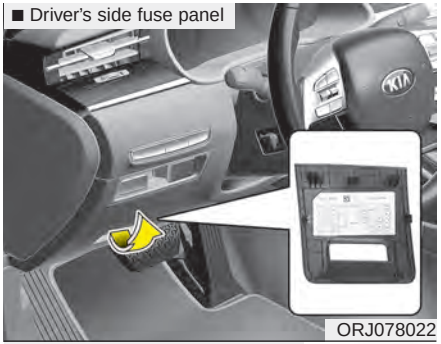
The electronic system may not function correctly even when the engine compartment and internal fuse box's individual fuses are not disconnected. In such case the cause of the problem may be disconnection of the main fuse, which is located inside the engine compartment fuse panel.
Since the main fuse is designed more intricately than other parts, have the vehicle checked by an authorized K900 Kia dealer.

⚠ 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.

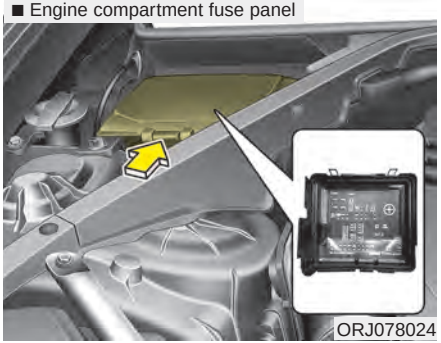
Fuse/relay panel description

■ Driver's side fuse panel



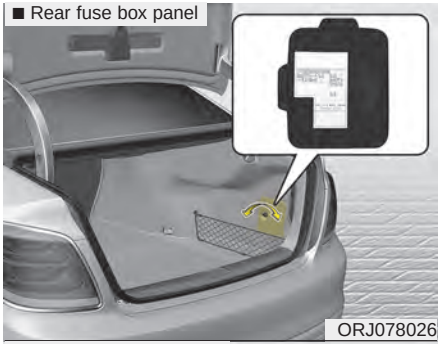
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■ Engine compartment fuse panel



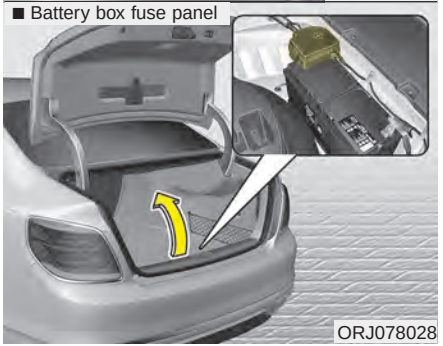
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■ Rear fuse box panel



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■ Battery box fuse panel



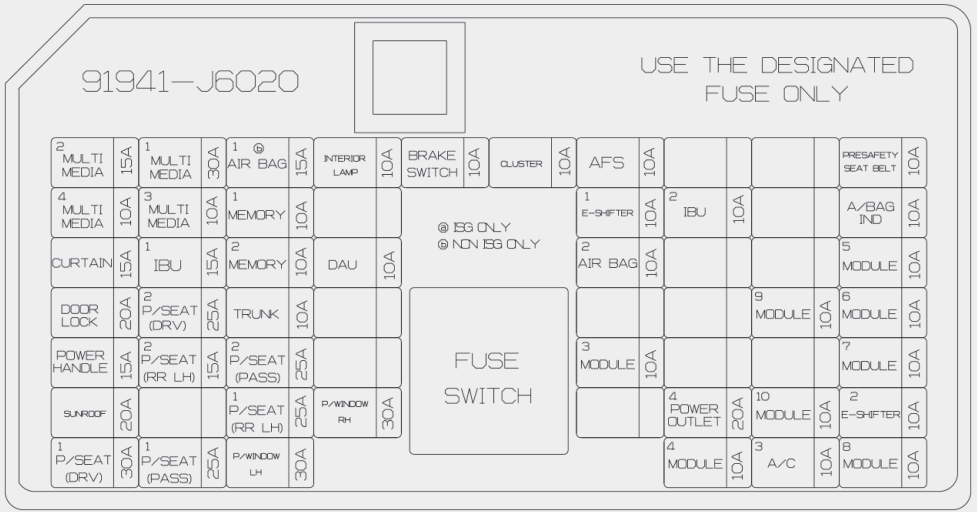
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Inside the fuse/relay panel covers, you can find the fuse/relay label describing fuse/relay name and capacity.

✻ NOTICE

Not all fuse panel descriptions in this manual may be applicable to your vehicle. It is accurate at the time of printing. When you inspect the fuse panel in your vehicle, refer to the fuse panel label on the inside of the fuse cover. This diagram will provide you with the specific information for your vehicles.

Driver's side fuse panel



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Instrument panel (Driver's side fuse panel)

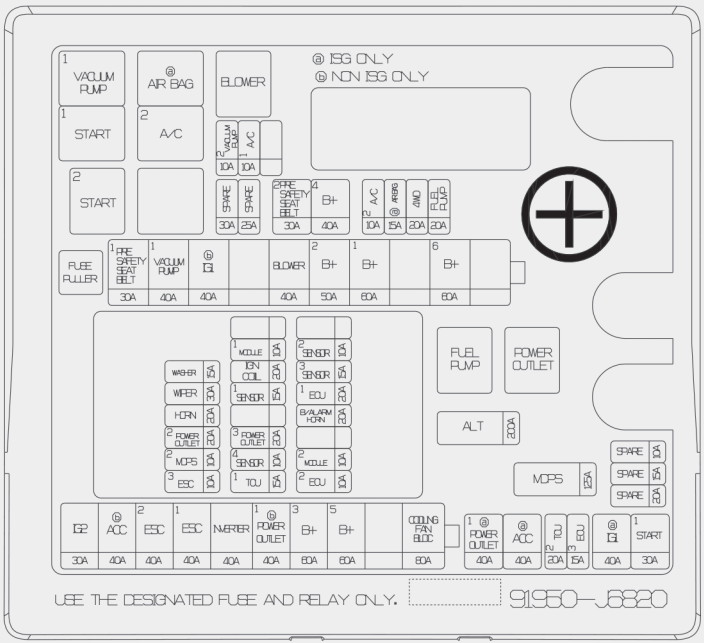
Fuse Name	Fuse rating	Circuit Protected
MULTI MEDIA2	15A	Audio/Video & Navigation Head Unit
MULTI MEDIA1	30A	Fuse - MULTI MEDIA2, MULTI MEDIA4, MULTI MEDIA3
AIR BAG1	15A	SRS (Supplemental Restraint System) Control Module
INTERIOR LAMP	10A	Overhead Console Lamp, Room Lamp, Glove Box Lamp, Front Foot Lamp Left Handle side/Right Handle side, Luggage Lamp Left Handle side/Right Handle side, Driver/Passenger Door Foot Lamp, Rear Door Foot Lamp Left Handle side/Right Handle side, Driver/Passenger Seat Foot Lamp
BRAKE SWITCH	10A	IBU (Integrated Body Control Unit), Stop Lamp Switch
CLUSTER	10A	Instrument Cluster, Head-Up Display
AFS	10A	[Auto Dynamic] AFS (Adaptive Front Lighting System) Control Unit, Head Lamp Left Handle side/Right Handle side
PRESAFETY SEAT BELT	10A	Pre-Safe Seat Belt Control Unit
MULTI MEDIA4	10A	Rear Seat USB Jack, Instrument Cluster
MULTI MEDIA3	10A	DIS (Driver Information System)

Fuse Name	Fuse rating	Circuit Protected
MEMORY1	10A	Power Trunk Module, Driver/Passenger Seat Relay Module, Front Air Conditioner Controller, Driver/Passenger Power Seat Module, Air Conditioner Control Module, Driver/Passenger Power Seat Switch, Instrument Cluster, Rear Seat Relay Module Left Handle side/Right Handle side, Security Indicator, Rear Power Seat Switch Left Handle side/Right Handle side, Analog Clock, Head-Up Display, Rear LCD
E-SHIFTER1	10A	Electronic Auto Transmission Shift Lever (B+)
IBU2	10A	IBU (Integrated Body Control Unit) (IG1)
AIR BAG IINDICATOR	10A	Instrument Cluster, Front Air Conditioner Controller
CURTAIN	15A	IBU (Integrated Body Control Unit) (B+)
IBU1	15A	IBU (Integrated Body Control Unit) (B+)
MEMORY2	10A	Driver/Passenger Power Outside Mirror
DOOR AREA POWER CONTROL UNIT	10A	Door Area power control Unit
AIR BAG2	10A	SRS (Supplemental Restraint System) Control Module
MODULE5	10A	Door Area power control Unit, Stop Lamp Switch
DOOR LOCK	20A	Door Lock Relay, Door Unlock Relay

Fuse Name	Fuse rating	Circuit Protected
DRIVER POWER SEAT2	25A	Driver Power Seat Module, Driver Seat Relay Module, Driver Lumbar Support Unit
TRUNK LID	10A	Trunk Lid Relay, Fuel Lid Relay, Fuel Filler Door & Trunk Lid Switch
MODULE9	10A	Multifunction Switch, Cooling Fan Controller (BLDC (Brushless Direct Current) Type), Surround View Monitor Unit, Rear Seat Armrest Console Switch
MODULE6	10A	IBU (Integrated Body Control Unit), 4WD (4 Wheel Drive) ECM (Electronic Control Module), ESC (Electronic Stability Control) Unit, Lane Keeping Assist Unit (Line), Crash Pad Switch, Steering Tilt & Telescopic Module
POWER HANDLE	15A	Steering Tilt & Telescopic Module
REAR LH POWER SEAT2	15A	Rear Seat Relay Module Left Handle side (8WAY)
PASSENGER POWER SEAT2	25A	Passenger Power Seat Module, Passenger Seat Relay Module, Passenger Lumbar Support Unit
MODULE3	10A	Data Link Connector, Front Console Switch, Rain Sensor, Blind-Spot Collision Warning Unit Left Handle side/Right Handle side, Rear Seat Armrest Console Switch, Rain Sensor
MODULE7	10A	Multipurpose Check Connector, Multifunction Switch, Keyboard, Audio/Video & Navigation Head Unit, MTS (Mozen Telematics System) E-Call Module, Air Quality Sensor, AMP (Amplifier), Air Conditioner Control Module, Electro Chromic Mirror, Front Air Conditioner Controller, Driver/Passenger Seat Relay Module, Driver/Passenger Seat Warmer Control Module, Rear Seat Warmer Control Module Left Handle side/Right Handle side, Driver/Passenger Power Seat Module, Driver/Passenger CCS (Climate Control Seat) Module, Rear Seat CCS (Climate Control Seat) Module Left Handle side/Right Handle side, Rear Seat Armrest Console Switch
SUNROOF	20A	Sunroof Control Unit (Glass)

Fuse Name	Fuse rating	Circuit Protected
REAR LH POWER SEAT1	25A	Rear Seat Relay Module Left Handle side
PASSENGER POWER WINDOW	30A	Passenger Power Window Module, Rear Power Window Module Right Handle side
POWER OUTLET4	20A	Rear Seat Power Outlet
MODULE10	10A	IBU (Integrated Body Control Unit) (IG2)
E-SHIFTER2	10A	Electronic Auto Transmission Shift Lever Switch
DRIVER POWER SEAT1	30A	Driver Power Seat Module, Driver Seat Relay Module
PASSENGER POWER SEAT1	25A	Passenger Power Seat Module, Passenger Seat Relay Module
DRIVER POWER WINDOW	30A	Driver Power Window Module, Rear Power Window Module Left Handle side
MODULE4	10A	Rear Seat Wireless Charger, Rear Seat Console Lamp, Keyboard, IBU (Integrated Body Control Unit), AMP (Amplifier), Rear Seat Audio Switch, Rear Seat USB Charger, MTS (Mozen Telematics System) E-Call Module, Audio/Video & Navigation Head Unit, Analog Clock, Front Tray Lamp, Surround View Monitor Unit, Front USB Charger, Front Wireless Charger, DIS (Driver Information System), Front Console Lamp, Electronic Auto Transmission Shift Lever Switch, Engine Room Junction Block (Power Outlet Relay)
AIR CONDITIONER3	10A	Engine Room Junction Block (Front Blower Relay), Rear LCD, Rear Sub Junction Block (Rear Blower Relay), Ionizer, Air Conditioner Control Module, Front Air Conditioner Controller
MODULE8	10A	[Auto Static] Auto Head Lamp Leveling Device Module, Head Lamp Left Handle side/Right Handle side

Engine compartment fuse panel



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Engine room compartment fuse panel

Fuse Name	Fuse rating	Circuit Protected
ALT	200A	Alternator, Fuse - R-MDPS, Multi Fuse #1 - COOLING FAN (BLDC)/COOLING FAN (DC)/B+5/B+3/POWER OUTLET1/ESC1/ESC2/ACC/IG2
R-MDPS	125A	Rack-MDPS (Motor Driven Power Steering) Unit
COOLING FAN (BLDC)	80A	[BLDC (Brushless Direct Current) Type - Middle East] Cooling Fan Controller
B+5	60A	Instrument Panel Junction Block (Fuse - BRAKE SWITCH/MULTI MEDIA2/MULTI MEDIA1/INTERIOR LAMP/MULTI MEDIA4/MULTI MEDIA3/MEMORY1/E-CALL/MEMORY2/Door Area power control Unit)
B+3	60A	Instrument Panel Junction Block (Fuse - DRIVER POWER SEAT2/TRUNK LID/REAR LH POWER SEAT2/PASSENGER POWER SEAT2/REAR LH POWER SEAT1/PASSENGER POWER WINDOW/DRIVER POWER WINDOW)
POWER OUTLET1	40A	Power Outlet Relay
ESC1	40A	ESC (Electronic Stability Control) Control Module, Multipurpose Check Connector
ESC2	40A	ESC (Electronic Stability Control) Control Module
ACC	40A	ACC Relay
IG2	30A	IG2 Relay
B+6	60A	Engine Control Relay, Fuse - HORN/WIPER/MODULE1/BURGLAR ALARM

Fuse Name	Fuse rating	Circuit Protected
B+1	60A	Instrument Panel Junction Block (Fuse - IBU1)
B+2	50A	Instrument Panel Junction Block (Fuse - E-SHIFTER1/AIR BAG2/MODULE3)
BLOWER	40A	Front Blower Relay
IG1	40A	IG1 Relay
PRESAFETY SEAT BELT1	30A	Pre-Safe Seat Belt Control Unit
PRESAFETY SEAT BELT2	30A	Pre-Safe Seat Belt Control Unit
B+4	40A	Instrument Panel Junction Block (Fuse - CURTAIN/DOOR LOCK/POWER HANDLE/SUNROOF/DRIVER POWER SEAT1/PASSENGER POWER SEAT1)
AIR CONDITIONER2	10A	A/C2 Relay
4WD	20A	4WD (4 Wheel Drive) ECM (Electronic Control Module)
FUEL PUMP	20A	Fuel Pump Relay
AIR CONDITIONER1	10A	Air Conditioner Control Module
TCU2	20A	TCM (Transmission Control Module)

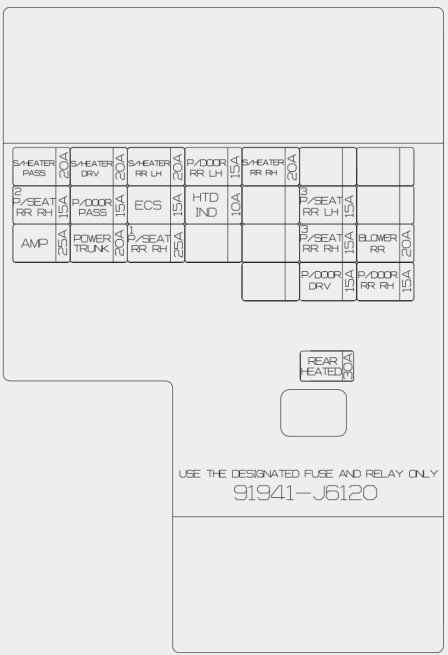
Fuse Name	Fuse rating	Circuit Protected
ECU3	15A	ECM (Engine Control Module)
START1	30A	Start1 Relay
ESC3	10A	ESC (Electronic Stability Control) Control Module
R-MDPS2	10A	Rack-MDPS (Motor Driven Power Steering) Unit
POWER OUTLET2	20A	Front Tray Power Outlet
HORN	20A	Horn Relay
WIPER	30A	Wiper Motor
WASHER	15A	Washer Relay
TCU1	15A	TCM (Transmission Control Module), Start2 Relay
POWER OUTLET3	20A	Front Power Outlet
SENSOR1	15A	Fuel Pump Relay
IGNITION COIL	20A	[Lambda II 3.3L/3.8L GDI Engine] Ignition Coil #1/#2/#3/#4/#5/#6

Fuse Name	Fuse rating	Circuit Protected
MODULE1	10A	Active Air Flap
ECU2	10A	ECM (Engine Control Module)
MODULE2	10A	Active Air Flap, Smart Cruise Control Radar
BURGLAR ALARM	10A	Burglar Alarm Horn Relay
ECU1	20A	ECM (Engine Control Module)
SENSOR3	15A	[Lambda II 3.3L Engine] Oxygen Sensor #1 (B1/S1), Oxygen Sensor #2 (B2/S1), Oxygen Sensor #3 (B1/S2), Oxygen Sensor #4 (B2/S2)
WIPER	10A	[Lambda II 3.3L/3.8L GDI Engine] Oil Control Valve #1/#2/#3/#4 (Intake/Exhaust), Oil Pressure Solenoid Valve, Electronic Thermostat, Purge Control Solenoid Valve, Variable Intake Solenoid Valve #1/#2, A/C2 Relay

Relay

Relay Name	Type
Start1 Relay	H/C
Start2 Relay	MICRO
A/C2 Relay	MICRO
Front Blower Relay	H/C
Fuel Pump Relay	H/C
Power Outlet Relay	H/C
Vacuum Pump	H/C
Air Bag (ISG Only)	MICRO

Rear fuse box panel



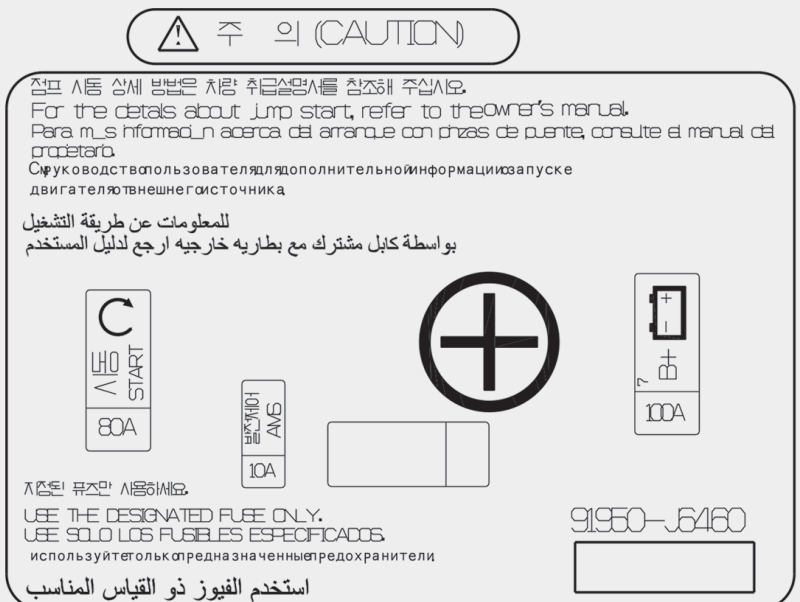
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Rear fuse box panel

Fuse Name	Fuse rating	Circuit Protected
PASSENGER SEAT HEAT	20A	Passenger CCS (Climate Control Seat) Module, Passenger Seat Warmer Control Module
DRIVER SEAT HEAT	20A	Driver CCS (Climate Control Seat) Module, Driver Seat Warmer Control Module
REAR LH SEAT HEAT	20A	Rear Seat CCS (Climate Control Seat) Module Left Handle side, Rear Seat Warmer Control Module Left Handle side
POWER DOOR RR LH	15A	Rear Power Door Latch Left Handle side
REAR RH SEAT HEAT	20A	Rear Seat CCS (Climate Control Seat) Module Right Handle side, Rear Seat Warmer Control Module Right Handle side
REAR RH POWER SEAT2	15A	Rear Seat Relay Module Right Handle side
POWER DOOR PASSENGER	15A	Passenger Power Door Latch
ECS	15A	ECS (Electronic Control Suspension) Unit
HEATED INDICATOR	10A	Front Air Conditioner Controller
REAR LH POWER SEAT3	15A	Rear Seat Lumbar Support Unit Left Handle side
AMP	25A	AMP (Amplifier) (Premium/Premium High)
POWER TRUNK	20A	Power Trunk Module

Fuse Name	Fuse rating	Circuit Protected
REAR RH POWER SEAT1	25A	Rear Seat Relay Module Right Handle side
REAR RH POWER SEAT3	15A	Rear Seat Lumbar Support Unit Right Handle side
REAR BLOWER	20A	Rear Blower Relay
POWER DOOR DRIVER	15A	Driver Power Door Latch
POWER DOOR REAR RH	15A	Rear Power Door Latch Right Handle side
REAR HEATED	30A	Rear Heated Relay

Battery box fuse panel



ORJ078029

Battery box fuse panel

Fuse Name	Fuse rating	Circuit Protected
START	80A	Engine Room Junction Block (a) NON ISG : FUSE-TCU2/ECU3/START1 (b) ISG : FUSE-TCU2/ECU3/START1/POWER OUT-LET1/ACC/IG1
B+7	100A	Rear fuse box panel
AMS	10A	Battery Sensor

LIGHT BULBS

Lamp (LED type) bulb replacement

Only LED lamps are used in this vehicle.

If the LED lamp does not operate, have the vehicle checked by an authorized K900 Kia dealer.

The LED lamp cannot be replaced as a single component because it is an integrated unit.The LED lamp has to be replaced with the unit.

A skilled technician should check or repair the license plate lamp (LED), for it may damage related parts of the vehicle.

⚠ CAUTION - Headlamp Lens

To prevent damage, do not clean the headlamp lens with chemical solvents or strong detergents.

• Lamp part malfunction due to net-work failure

The headlamp, taillight, and fog light may light up when the head lamp switch is turned ON, and not light up when the taillight or for light switch is turned ON. This may be cause by network failure or vehicle electrical control system malfunction. If there is a problem, we recommend the system be serviced by an authorized K900 Kia dealer.

• Lamp part malfunction due to electrical control system stabilization

A normally functioning lamp may flicker momentarily. This momentary occurrence is due to the stabilization function of the vehicle's electrical control system. If the lamp stops flickering after a few moments, the vehicle does not require service.

However, if the lamp goes out after the momentary flickering, or the flickering continues, we recommend the system be serviced by an authorized K900 Kia dealer.

✻ NOTICE

- **If the light bulb or lamp connector is removed while the lamp is still on, the fuse box's electronic system may log it as a malfunction. Therefore, a lamp malfunction incident may be recorded as a Diagnostic Trouble Code (DTC) in the fuse box.**
- **It is normal for an operating lamp to flicker momentarily. This is due to a stabilization function of the vehicle's electronic control device. If the lamp lights up normally after momentarily blinking, then it is functioning as normal. However, if the lamp continues to flicker several times or turns off completely, there may be an error in the vehicle's electronic control device. Please have the vehicle checked by an authorized K900 Kia dealer immediately.**

✻ NOTICE

We recommend that the headlight aiming be adjusted after an accident or after the headlight assembly is reinstalled at an authorized K900 Kia dealer.

✻ NOTICE

After driving in heavy rain or washing, headlamp and taillight lenses could appear foggy. This condition is caused by the temperature difference between the lamp inside and outside. This is similar to the condensation on your windows inside your vehicle during the rain and doesn't indicate a problem with your vehicle. If the water leaks into the lamp bulb circuitry, we recommend that you have the vehicle checked by an authorized K900 Kia dealer.

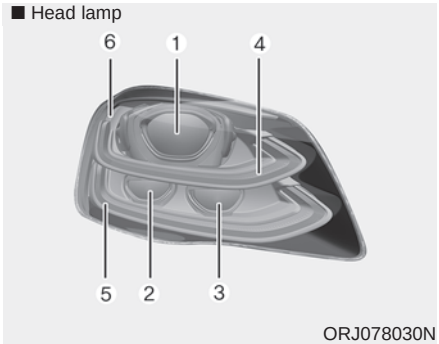
If you don't have the necessary tools, the correct bulbs and the expertise, consult an authorized K900 Kia dealer. In many cases, it is difficult to replace vehicle light bulbs because other parts of the vehicle must be removed before you can get to the bulb. This is especially true if you have to remove the headlamp assembly to get to the bulb(s).

Removing/installing the headlamp assembly can result in damage to the vehicle.

If non-genuine parts or substandard bulbs are used, it may lead to blowing a fuse or other wiring damages.

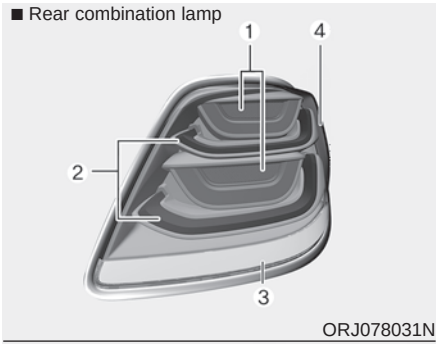
Do not install extra lamps or LEDs to the vehicle. If additional lights are installed, it may lead to lamp malfunctions and flickering. Additionally, the fuse box and other writing may be damaged.

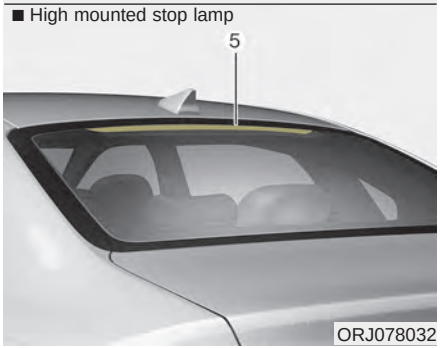
Light bulb position (Front)



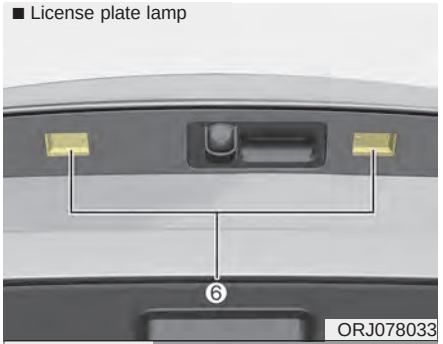
(1) Headlamp (Low) (LED type)
(2,3) Headlamp (High/Low) (LED type)
(4) Day time running lamp / Position lamp (LED type)
(5) Day time running lamp / Position lamp / Front turn signal lamp (LED type)
(6) Side marker (LED type)

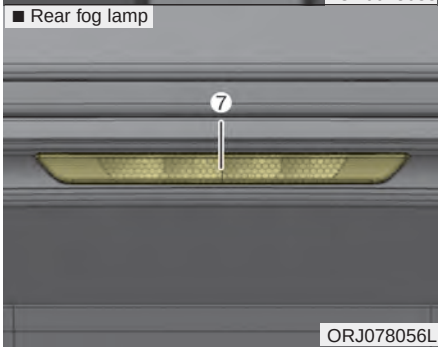
Light bulb position (Rear)





(1,2) Stop and tail lamp (LED type)
(3) Rear turn signal lamp (LED type)
(4) Side marker (LED type)





(5) High mounted stop lamp (LED type)
(6) License plate lamp (LED type)
(7) Back up lamp (LED type)

Light bulb position (Side)

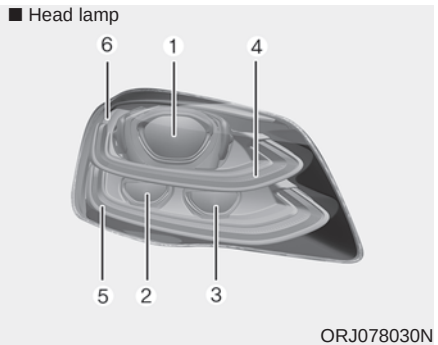
■ Side repeater lamp



(1) Side repeater lamp (LED type)

Headlamp (LED type) bulb replacement

■ Head lamp



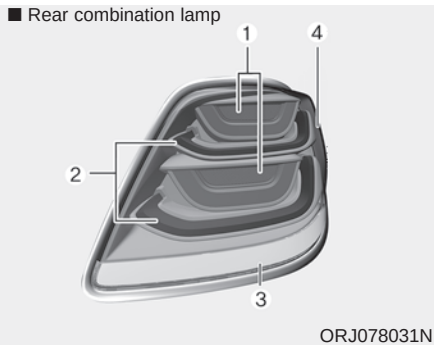
If the Low/High beam lamp, day time running lamp, position lamp, front turn signal lamp and side marker (1,2,3,4,5,6) do not operate, have the vehicle checked by an authorized K900 Kia dealer.

The LED lamp cannot be replaced as a single component because it is part of an integrated unit. The LED lamp has to be replaced with the unit.

A skilled technician should check or repair the head lamp (LED), for it may damage related parts of the vehicle.

Rear combination lamp (LED type) bulb replacement

■ Rear combination lamp



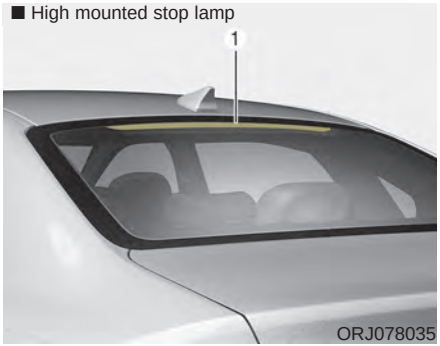
If the Low/High beam lamp, day time running lamp, position lamp, front turn signal lamp and side marker (1,2,3,4,5,6) do not operate, have the vehicle checked by an authorized K900 Kia dealer.

The LED lamp cannot be replaced as a single component because it is part of an integrated unit. The LED lamp has to be replaced with the unit.

A skilled technician should check or repair the head lamp (LED), for it may damage related parts of the vehicle.

High mounted stop lamp (LED type) bulb replacement

■ High mounted stop lamp



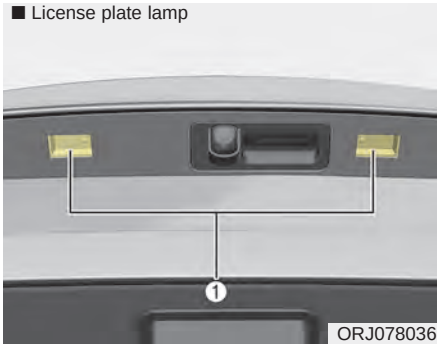
If the high mounted stop lamp (1) does not operate, have the vehicle checked by an authorized K900 Kia dealer.

The LED lamp cannot be replaced part of an a single component because it is an integrated unit. The LED lamp has to be replaced with the unit.

A skilled technician should check or repair the high mounted stop lamp (LED), for it may damage related parts of the vehicle.

License plate lamp (LED type) bulb replacement

■ License plate lamp



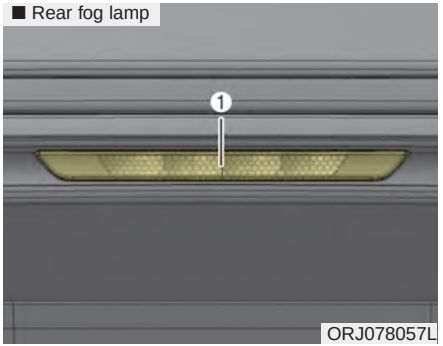
If the license plate lamp (1) does not operate, have the vehicle checked by an authorized K900 Kia dealer.

The LED lamp cannot be replaced as a single component because it is part of an integrated unit. The LED lamp has to be replaced with the unit.

A skilled technician should check or repair the license plate lamp (LED), for it may damage related parts of the vehicle.

Rear fog lamp (LED type) bulb replacement

■ Rear fog lamp



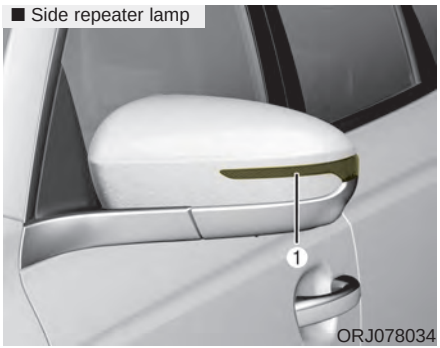
If the back up lamp (1) does not operate, have the vehicle checked by an authorized K900 Kia dealer.

The LED lamp cannot be replaced as a single component because it is part of an integrated unit. The LED lamp has to be replaced with the unit.

A skilled technician should check or repair the back up lamp (LED), for it may damage related parts of the vehicle.

Side repeater lamp (LED type) bulb replacement

■ Side repeater lamp



If the side repeater lamp (1) does not operate, have the vehicle checked by an authorized K900 Kia dealer.

The LED lamp cannot be replaced as a single component because it is part of an integrated unit. The LED lamp has to be replaced with the unit.

A skilled technician should check or repair the side repeater lamp (LED), for it may damage related parts of the vehicle.

Map lamp (LED type) bulb replacement



If the map lamp (1) / mood lamp (2) do not operate, have the vehicle checked by an authorized K900 Kia dealer.

The LED lamp cannot be replaced as a single component because it is part of an integrated unit. The LED lamp has to be replaced with the unit.

A skilled technician should check or repair the map lamp and mood lamp (LED), for it may damage related parts of the vehicle.

Vanity mirror lamp (front) (LED type) bulb replacement

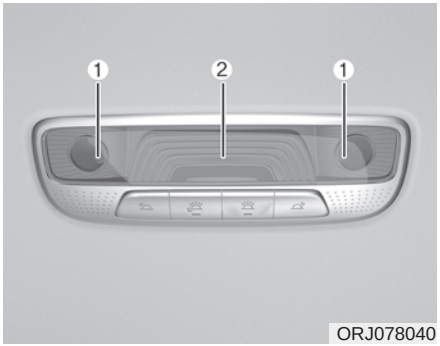


If the vanity mirror lamp (1) does not operate, have the vehicle checked by an authorized K900 Kia dealer.

The LED lamp cannot be replaced as a single component because it is part of an integrated unit. The LED lamp has to be replaced with the unit.

A skilled technician should check or repair the vanity mirror lamp (LED), for it may damage related parts of the vehicle.

Room lamp (LED type) bulb replacement

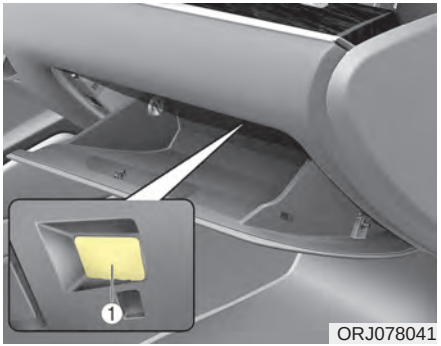


If the map lamp (1) / mood lamp (2) do not operate, have the vehicle checked by an authorized K900 Kia dealer.

The LED lamp cannot be replaced as a single component because it is part of an integrated unit. The LED lamp has to be replaced with the unit.

A skilled technician should check or repair the map lamp and mood lamp (LED), for it may damage related parts of the vehicle.

Glove box lamp (LED type) bulb replacement



If the glove box lamp (1) does not operate, have the vehicle checked by an authorized K900 Kia dealer.

The LED lamp cannot be replaced as a single component because it is part of an integrated unit. The LED lamp has to be replaced with the unit.

A skilled technician should check or repair the glove box lamp (LED), for it may damage related parts of the vehicle.

Trunk lamp (LED type) bulb replacement



If the trunk lamp (1) does not operate, have the vehicle checked by an authorized K900 Kia dealer.

The LED lamp cannot be replaced as a single component because it is part of an integrated unit. The LED lamp has to be replaced with the unit.

A skilled technician should check or repair the trunk lamp (LED), for it may damage related parts of the vehicle.

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.

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.


ORJ078045

⚠ CAUTION - Wet 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.***

⚠ CAUTION

After washing the vehicle, test the brakes while driving slowly to see if they have been affected by water. If braking performance is impaired, dry the brakes by applying them lightly while maintaining a slow forward speed.

Waxing

Wax the vehicle when water will no longer bead on the paint.

Always wash and dry the vehicle before waxing. Use a good quality liquid or paste wax, and follow the manufacturer's instructions. Wax all metal trim to protect it and to maintain its luster.

Removing oil, tar, and similar materials with a spot remover will usually strip the wax from the finish. Be sure to re-wax these areas even if the rest of the vehicle does not yet need waxing.

Do not apply wax on embossed unpainted unit, as it may tarnish the unit.

⚠ CAUTION - 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.

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

Road salt and other corrosive chemicals are used in cold weather states to melt snow and prevent ice accumulation. If these chemicals are not regularly removed, they will corrode the vehicle underbody and over time damage fuel lines, the fuel tank retention system, the vehicle suspension, the exhaust system, and even the body frame. The National Highway Traffic Safety Administration has warned all vehicle owners of all brands of the need to take the following steps:

- Wash the undercarriage of your vehicle regularly during the winter and whenever your vehicle has been exposed to such salts or chemicals.

- Do a thorough washing of the undercarriage at the end of the winter.
- Use professional service technicians or governmental inspection stations to annually inspect for corrosion.
- Immediately seek an inspection of your vehicle if you become visually aware of corrosion flaking or scaling or if you become aware of a change in vehicle performance, such as soft or spongey brakes, fluids leaking, impairment of directional control, suspension noises or rattling metal straps.

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 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.

Taking care of leather seats (if equipped)

- Vacuum the seat periodically to remove dust and sand on the seat. It will prevent abrasion or damage of the leather and maintain its quality.
- Wipe the natural leather seat cover often with dry or soft cloth.
- Sufficient use of a leather protective may prevent abrasion of the cover and helps maintain the color.

  Be sure to read the instructions and consult a specialist when using leather coating or protective agents.
- Leather with bright colors(beige, cream beige) is easily contaminated and clear in appearance. Clean the seats frequently.
- Avoid wiping with wet cloth. It may cause the surface to crack.

Cleaning the leather seats (if equipped)

- Remove all contaminations instantly. Refer to instructions below for removal of each contaminant.
- Cosmetic products(sunscreen, foundation, etc.)
  - Apply cleansing cream on a cloth and wipe the contaminated point. Wipe off the cream with a wet cloth and remove water with a dry cloth.
- Beverages(coffee, soft drink, etc.)
  - Apply a small amount of neutral detergent and wipe until contaminations do not smear.
- Oil
  - Remove oil instantly with absorbable cloth and wipe with stain remover for natural leather only.
- Chewing gum
  - Harden the gum with ice and remove gradually.

Fabric seat cover using precautions (if equipped)

Please clean the fabric seats regularly with a vacuum cleaner in consideration of fabric material characteristics. If they are heavily soiled with beverage stains, etc., use a suitable interior cleaner. To prevent damage to seat covers, wipe off the seat covers down to the seams with a large wiping motion and moderate pressure using a soft sponge or microfiber cloth.

Velcro closures on clothing or sharp objects may cause snagging or scratches on the surface of the seats. Make sure not to rub such objects against the surface.

EMISSION CONTROL SYSTEM

The emission control system of your vehicle is covered by a written limited warranty. Please see the warranty information contained in the Warranty & Consumer Information manual 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 K900 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.

- 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 K900 Kia dealer.
- Avoid driving with an extremely low fuel level. Running out of fuel could cause the engine to misfire, damaging the catalytic converter.

Failure to observe these precautions could result in damage to the catalytic converter and to your vehicle. Additionally, such actions could void your warranties.

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 Chapter 67384.10 (a).

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DIMENSIONS

Item			Length (mm)
Overall length			5,120
Overall width			1,915
Overall height			1,490
Tread	Front	245/45 R19	1,639
	Rear	275/40 R19	1,639
Wheelbase			3,105

ENGINE

Item	Gasoline Engine
	3.3 T-GDI
Displacement [cu.in (cc)]	203.94 (3,342)
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	6, V-type

BULB WATTAGE

Light Bulb		Wattage (W)	Bulb type
Front	Headlamps (Low/High)	LED	LED
	Front turn signal lamps	LED	LED
	Front position lamps	LED	LED
	Daytime running light	LED	LED
	Side Repeater lamps	LED	LED
Rear	Rear Stop/Tail lamps (outside)	LED	LED
	Rear tail lamps (Inside)	LED	LED
	Rear turn signal lamps	LED	LED
	Back-up lamps	LED	LED
	High mounted stop lamp	LED	LED
	License plate lamps	LED	LED
Interior	Map lamps	LED	LED
	Room lamps	LED	LED
	Personal lamps	LED	LED
	Vanity mirror lamps	LED	LED
	Glove box lamp	LED	LED
	Trunk lamp	LED	LED

TIRES AND WHEELS

Item	Tire size	Wheel size	Load Capacity		Speed capacity		Inflation pressure [bar(psi, kPa)]				Wheel lug nut torque lbf·ft (kgf·m, N·m)
							Normal load *3		Maximum load		
			LI *1	Kg	SS *2	Km/h	Front	Rear	Front	Rear	
Full size tire	245/45R19	8.5JX19	98	750	W	240	2.4 (35, 240)	-	2.4 (35, 240)	-	79 ~ 94 (11 ~ 13, 107 ~ 127)
	275/40R19	9.5JX19	101	825	W	240	-	2.4 (35, 240)	-	2.4 (35, 240)	
Compact spare tire	T155/70R19	4.0TX19	113	1150	M	130	4.2 (60, 420)	4.2 (60, 420)	4.2 (60, 420)	4.2 (60, 420)	

*1: Load Index

*2: Speed Symbol

*3: 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 them work irregularly.

✻ NOTICE

- **It is permissible to add 3 psi (21 kPa) to the standard tire pressure specification if colder temperatures are expected soon.**
  Tires typically loose 1 psi (7 kPa) for every 12°F (-11°C) temperature drop. If extreme temperature variations are expected, re-check your tire pressure as necessary to keep them properly inflated.
- **We recommend that when replacing tires, use the same originally supplied with the vehicles. If not, that affects driving performance.**
- **When driving in high altitude grades, it is natural for the atmospheric pressure to decrease. Therefore, please check the tire pressure and add more air when necessary.**
  Additionally required tire air pressure per km above sea level: 1.5 psi (10.5 kPa)/km

GROSS VEHICLE WEIGHT

ITEM		FOR RUSSIA
3.3 T-GDI	2WD	5,732 lb (2,600 kg)
	AWD	5,732 lb (2,600 kg)

LUGGAGE VOLUME

ITEM	Volume
SAE	15.3 cu ft (432 L)

AIR CONDITIONING SYSTEM

ITEM		Weight of volume	Classification
Refrigerant	R-1234yf oz. (g)	22.9 ± 0.9 (650 ± 25)	R-1234yf
Compressor lubricant oz. (g)		3.5 ± 0.4 (100 ± 10g)	FD46XG

We recommend that you contact an authorized K900 Kia dealer for more details.

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 *4 (drain and refill) Recommends TOTAL QUARTZ	Gasoline Engine	3.3 T-GDI	7.29 US qt. (6.9 *l*)	ACEA A5 or above API SM *5 or above, ILSAC GF-4 *6 or above
Automatic transaxle fluid	Gasoline Engine	3.3 T-GDI	9.71 US qt. (9.2 *l*)	GS ATF SP-IV-RR KIA genuine ATF SP-IV-RR
Coolant	Gasoline Engine	3.3 T-GDI	10.7 US qt. (10.1 *l*)	Mixture of antifreeze and distilled water (Ethylene glycol base coolant for aluminum radiator)
Brake fluid			Required amount	FMVSS116 DOT 3 or DOT 4

Lubricant		Volume	Classification
Rear differential oil		1.48 US qt. (1.4 *l*)	HYPOID GEAR OIL API GL-5 SAE 75W85 (SK HK SYN GEAR OIL 75W85)
Front differential oil *3 (AWD)		0.74 US qt. (0.7 *l*)	HYPOID GEAR OIL API GL-5 SAE 75W/85 (SK HK SYN GEAR OIL 75W85)
Transfer oil (AWD)	Gear/ Clutch	0.60 US qt. (0.57 *l*)	SHELL TF 0870B
	Actuator	0.26 US qt. (0.25 *l*)	
Fuel	Gasoline Engine	81.4 US qt. (77 *l*)	Refer to Fuel requirements in chapter 1

*1 : Refer to the recommended SAE viscosity numbers on the next page.

*2 : Engine oils labeled Energy Conserving Oil are now available. Along with other additional benefits, they contribute to fuel economy by reducing the amount of fuel necessary to overcome engine friction. Often, these improvements are difficult to measure in everyday driving, but in a year's time, they can offer significant cost and energy savings.

*3 : Regardless of oil change intervals, replace oil immediately if Rear-Differential or Front-Differential is submerged.

*4 : If the ACEA A5 oil is not available in your country , you are able to use API service SM/ILSAC GF-4 engine oil.

*5 : If the API SM engine oil is not available, you can use API SN or above.

*6 : If the ILSAC GF-4 engine oil is not available, you can use ILSAC GF-5 or above.

Recommended SAE viscosity number

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		10W-30								
		5W-30 *1								

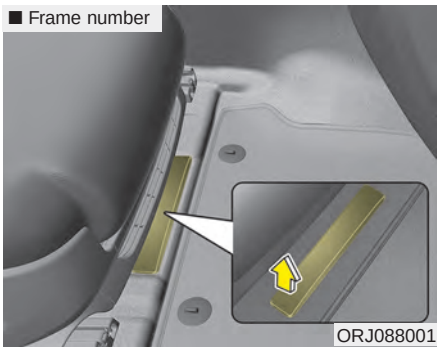


An engine oil displaying this API Certification Mark conforms to the international Lubricant Specification Advisory Committee (ILSAC). It is recommended to only use engine oils that uphold this API Certification Mark.

*1 : For better fuel economy, It is recommended to use the engine oil of a viscosity grade SAE 5W30. 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)

■ Frame number

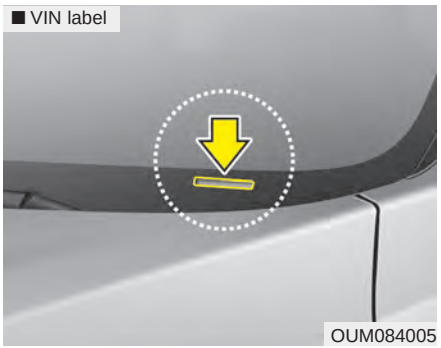


The vehicle identification number (VIN) is the number used in registering your vehicle and in all legal matters pertaining to its ownership, etc.

The number is punched under driver or front passenger seat.

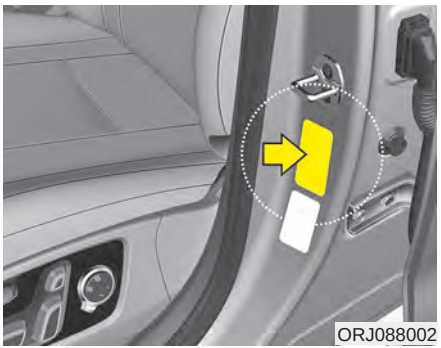
To check the number, open the cover.

■ VIN label



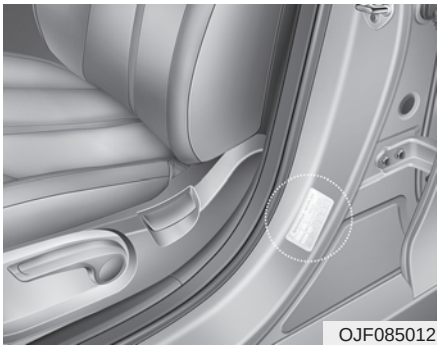
The VIN is also on a plate attached to the top of the dashboard. The number on the plate can easily be seen through the windshield from outside.

VEHICLE CERTIFICATION LABEL



The vehicle certification label attached on the driver's side center pillar gives the vehicle identification number (VIN).

TIRE SPECIFICATION AND PRESSURE LABEL

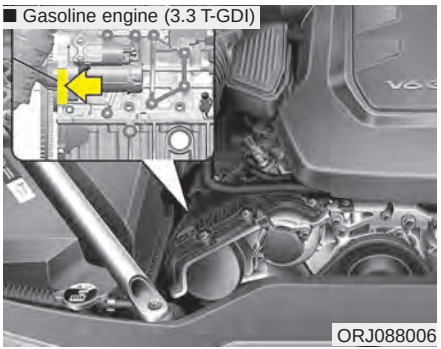


The tires supplied on your new vehicle are chosen to provide the best performance for normal driving.

The tire label located on the driver's side center pillar gives the tire pressures recommended for your vehicle.

ENGINE NUMBER

■ Gasoline engine (3.3 T-GDI)



The engine number is stamped on the engine block as shown in the drawing.

REFRIGERANT LABEL



The refrigerant label is located on the underside of the hood.

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 30,000 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 K900 Kia dealer or to an authorized Kia alternative service location.

Your vehicle must be accessible to our dispatch transport vehicle, as determined by our driver, to receive this service.

✻ 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 K900 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 K900 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 K900 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; download the SaferCar mobile application; or write to: Administrator, NHTSA, 1200 New Jersey Ave. SE., 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

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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