2019 OWNER'S MANUAL



SORENTO

The Power to Surprise

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 Kia dealer knows your vehicle best. Your dealer has factory-trained technicians, recommended special tools and genuine Kia replacement parts. It is dedicated to your complete customer satisfaction.

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

This manual will familiarize you with operational, maintenance and safety information about your new vehicle. It is supplemented by a Warranty and Consumer Information manual that provides important information on all warranties regarding your vehicle.

We urge you to read these publications carefully and follow the recommendations to help assure enjoyable and safe operation of your new vehicle.

Kia offers a great variety of options, components and features for its various models. Therefore, some of the equipment described in this manual, along with the various illustrations, may not be applicable to your particular vehicle.

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

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

© 2018 Kia MOTORS AMERICA, Inc.

All rights reserved. May not be reproduced or translated in whole or in part without the written consent of Kia Motors America, Inc.

Printed in U.S.A.

TABLE OF CONTENTS

Introduction	1
Your vehicle at a glance	2
Safety features of your vehicle	3
Features of your vehicle	4
Driving your vehicle	5
What to do in an emergency	6
Maintenance	7
Specifications, Consumer information and Reporting safety defects	8
Index	I

Introduction

How to use this manual 1-2
Fuel requirements 1-2
- **Gasoline containing alcohol and methanol 1-3**
- **Other fuels 1-4**
- **Gasoline containing MMT 1-4**
- **Do not use methanol 1-4**
- **Fuel Additives 1-4**
- **Operation in foreign countries. 1-5**

Vehicle handling instructions 1-5
Vehicle break-in process 1-5
Vehicle data collection and event data recorders. . 1-6

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

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

⚠ WARNING

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

⚠ CAUTION

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

✻ NOTICE

A NOTICE indicates interesting or helpful information is being provided.

FUEL REQUIREMENTS

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

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

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

- 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% 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 you can buy 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 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 HANDLING INSTRUCTIONS

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

Specific design characteristics (higher ground clearance, track, etc.) give this vehicle a higher center of gravity than other types of vehicles. In other words they are not designed for cornering at the same speeds as conventional 2-wheel drive vehicles. Avoid sharp turns or abrupt maneuvers. Again, failure to operate this vehicle correctly may result in loss of control, an accident or vehicle rollover. **Be sure to read the "Reducing the risk of a rollover" driving guidelines, in section 5 of this manual.**

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.**

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

Exterior overview 2-2
Interior overview 2-4
Instrument panel overview 2-5
Engine compartment 2-6

EXTERIOR OVERVIEW

■ Front view



1. Hood 4-44
2. Head lamp 4-123, 7-72
3. Fog lamp 4-129, 7-72
4. Wheel and tire 7-39, 8-5
5. Outside rearview mirror 4-70
6. Panoramic sunroof 4-50
7. Front windshield wiper blades 4-131, 7-33
8. Windows 4-39
9. Parking assist system 4-115
10. Forward collision-avoidance assist 5-49
    Smart cruise control system 5-67

❈ The actual shape may differ from the illustration.

OUMA018001

■ Rear view



1. Door locks 4-21
2. Fuel filler lid 4-46
3. Rear combination lamp 7-72
4. High mounted stop lamp 7-72
5. Rear window wiper blade.....4-134, 7-33
6. Liftgate 4-27, 4-29
7. Rearview camera 4-120
8. Parking assist system 4-115
   Rear parking assist system.....4-111
9. Antenna 4-188

❈ The actual shape may differ from the illustration.

OUMA018002

INTERIOR OVERVIEW

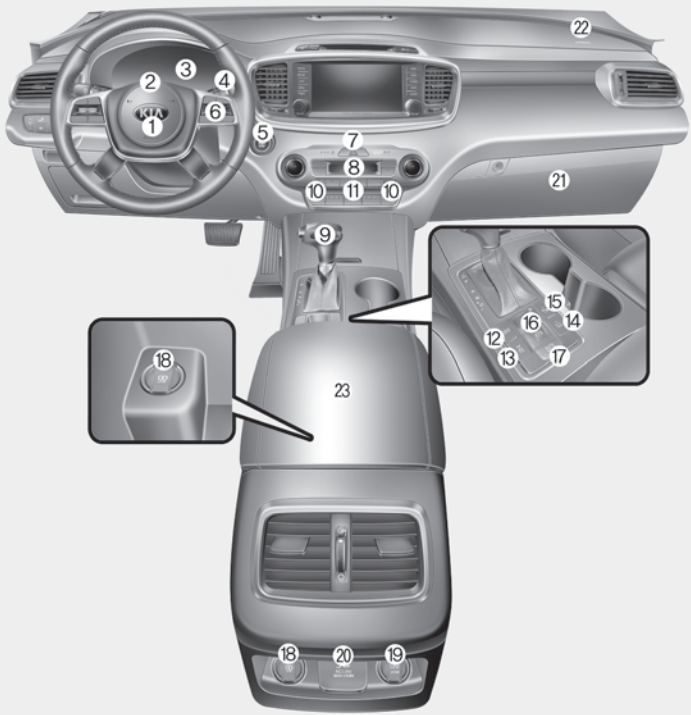


1. Inside door handle 4-22
2. Power window switch....4-39
3. Central door lock switch 4-23
4. Power window lock button 4-42
5. Outside rearview mirror control 4-71
6. Outside rearview mirror folding 4-72
7. Driver position memory system....3-10
8. Fuel filler lid open button 4-46
9. Power liftgate open/close button 4-27
10. Instrument panel illumination control 4-75
11. BCW On/Off button 5-101
12. LKA On/Off button 5-91
13. AC inverter button....4-178
14. ESC off button 5-41
15. Steering wheel....4-56
16. Tilt and telescopic steering control lever..4-57
17. Inner fuse panel....7-53
18. Brake pedal....5-27
19. Hood release lever....4-44
20. Seat....3-2

❊ The actual shape may differ from the illustration.

OUMA018003

INSTRUMENT PANEL OVERVIEW



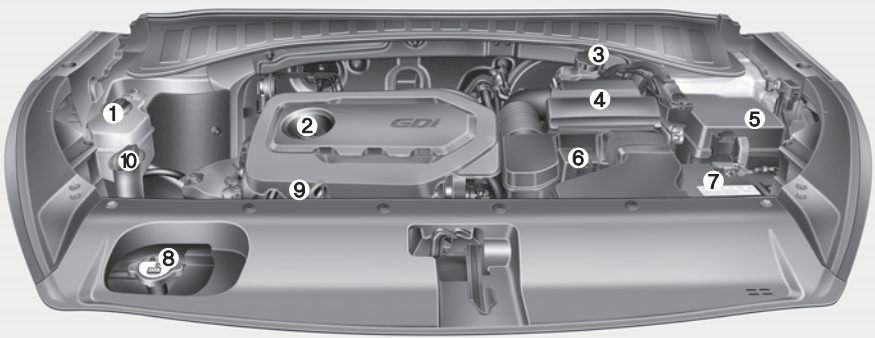
❉ The actual shape may differ from the illustration.

1. Driver's front air bag 3-59
2. Horn.....4-59
3. Instrument cluster.....4-75
4. Wiper and washer control lever.....4-131
5. Ignition switch or Engine start/stop button.....5-7, 5-10
6. Cruise control/ Smart cruise control.....5-63, 5-67
7. Hazard warning flasher 6-2
8. Climate control system.....4-141, 4-153
9. Shift lever.....5-14
10. Front seat warmer/ Seat cooler.....4-175, 4-176
11. Heated steering wheel button 4-58
12. Drive mode button.....5-86
13. AWD Lock button.....5-21
14. Surround view monitoring system On/Off button.....4-121
15. Parking assist system On/Off button.....4-115
16. Electronic parking brake (EPB) button.....5-30
17. AUTO HOLD button.....5-36
18. USB charger.....4-180
19. Power outlet.....4-177
20. AC inverter 4-178
21. Glove box 4-171
22. Passenger's front air bag 3-59
23. Center console storage box 4-171

OUMA018004

ENGINE COMPARTMENT

■ **Gasoline Engine (Theta II 2.4L) - GDI**

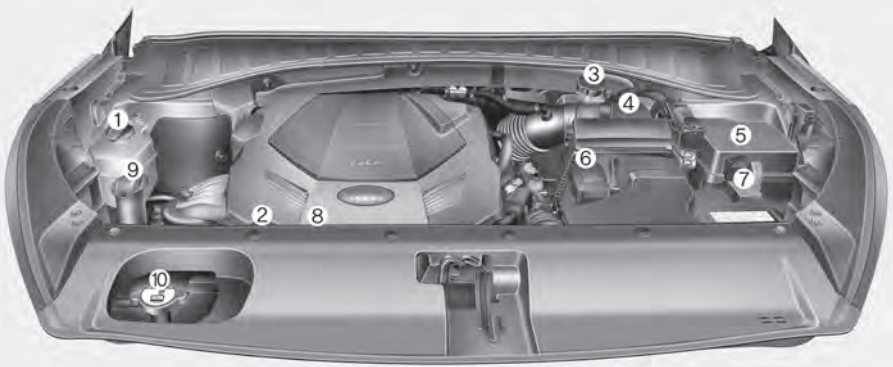


1. Engine coolant reservoir 7-23
2. Engine oil filler cap 7-21
3. Brake fluid reservoir 7-26
4. Air cleaner 7-29
5. Fuse box 7-53
6. Positive battery terminal 7-36
7. Negative battery terminal 7-36
8. Radiator cap 7-23
9. Engine oil dipstick 7-21
10. Windshield washer fluid reservoir ...7-27

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

OUM074100L

■ **Gasoline Engine (Lambda 3.3L) - GDI**



1. Engine coolant reservoir 7-23
2. Engine oil filler cap 7-21
3. Brake fluid reservoir 7-26
4. Air cleaner 7-29
5. Fuse box 7-53
6. Positive battery terminal 7-36
7. Negative battery terminal 7-36
8. Engine oil dipstick 7-21
9. Windshield washer fluid reservoir 7-27
10. Radiator cap 7-23

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

OUMA078255

Safety features of your vehicle

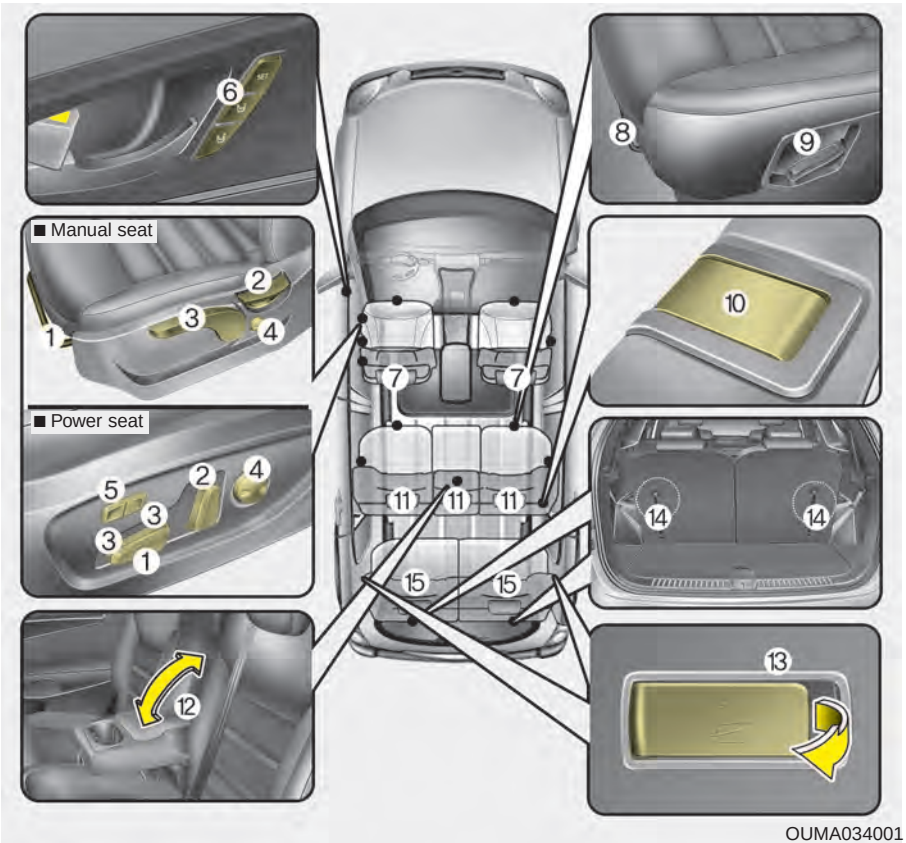
Seats 3-2
- Front seat adjustment - manual. 3-5
- Front seat adjustment - power. 3-7
- Driver position memory system (for power seat). . . 3-10
- Headrest (for front seat) 3-11
- Seatback pocket. 3-15
- Rear seat adjustment 3-16
- Headrest (for rear seat). 3-22

Seat belts 3-26
- Seat belt restraint system 3-26
- Pre-tensioner seat belt. 3-33
- Seat belt precautions 3-35
- Care of seat belts 3-37

Child restraint system 3-38
- Using a child restraint system 3-39

Air bag - Advanced supplemental restraint system 3-46
- How does the air bag system operate 3-47
- Air bag warning light 3-49
- SRS components and functions 3-50
- Occupant Detection System (ODS) 3-53
- Driver's and passenger's front air bag 3-59
- Side air bag 3-61
- Curtain air bag 3-63
- SRS Care 3-70
- Adding equipment to or modifying your air bag-equipped vehicle. 3-71
- Air bag warning label 3-71

SEATS



Front seat

(1) Forward and backward
(2) Seatback angle
(3) Seat cushion height
(4) Lumbar support*
(5) Cushion extension (Driver's seat)*
(6) Driver position memory system*
(7) Headrest

2nd row seat

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

3rd row seat*

(14) Seatback folding
(15) Headrest

* : if equipped

⚠ WARNING - Loose objects

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

⚠ WARNING - Uprighting seat

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

⚠ WARNING - Driver responsibility for passengers



The driver must advise the passenger to keep the seatback in an upright position whenever the vehicle is in motion. If a seat is reclined during an accident, the occupant's hips may slide under the lap portion of the seat belt, applying great force to the unprotected abdomen.

⚠ 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 and seatback adjustment.**
- **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 - Unexpected Seat Movement

After adjusting a manual seat, always check that it is locked by shifting your weight to the front and back. Sudden or unexpected movement of the driver's seat could cause you to lose control of the vehicle.

⚠ 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 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 Seat Leather

- 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 material to improve comfort.
- The parts contacting the body are curved and the side supporting area is high which provides driving comfort and stability.
- Wrinkles may appear naturally from usage. It is not a fault of the product.

⚠ CAUTION

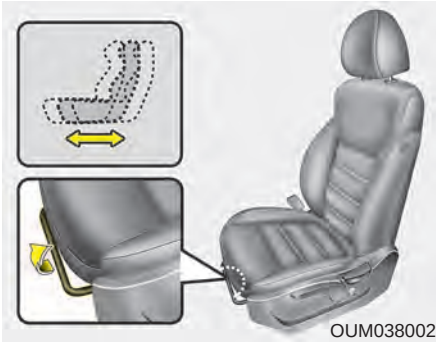
- ***Belts with metallic accessories, zippers or keys inside the back pocket may damage the seat fabric.***
- ***Make sure not to wet the seat. It may change the nature of natural leather.***
- ***Jeans or clothes which could bleach may contaminate the surface of the seat covering fabric.***

✻ NOTICE

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

Front seat adjustment - manual

Forward and backward

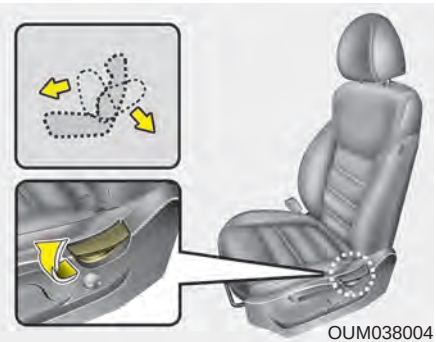

OUM038002

To move the seat forward or backward:

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

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

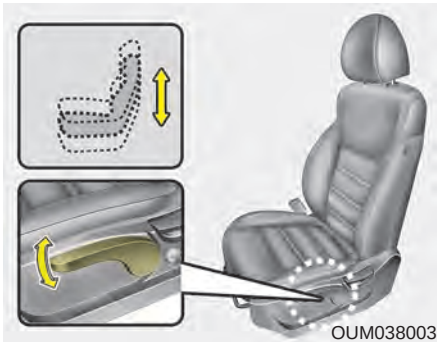
Seatback angle



To recline the seatback:

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

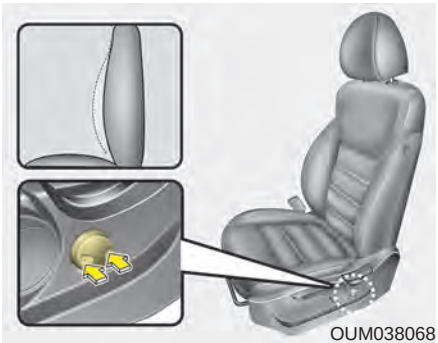
Seat height (if equipped)



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

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

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

Front seat adjustment - power (if equipped)

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

⚠ WARNING - 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.

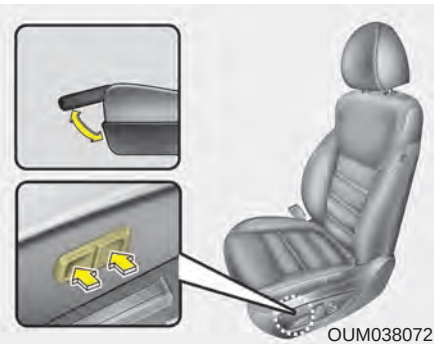
When in operation, the power seat-consumes a large amount of electrical power. To prevent unnecessary charging system drain, don't adjust the power seat longer than necessary while the engine is not running.

Forward and backward



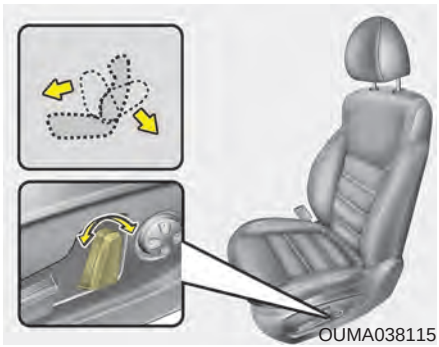
Push the control switch forward or backward to move the seat to the desired position. Release the switch once the seat reaches the desired position.

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



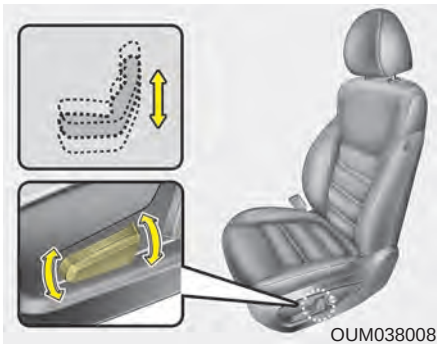
Press the front portion of the switch to raise the cushion extension, or the rear portion of the switch to lower it. Release the switch once the cushion extension reaches the desired position.

Seatback angle



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

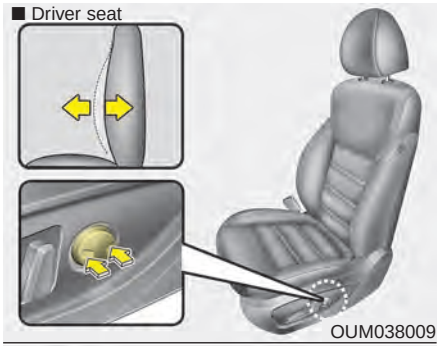
Seat height (if equipped)



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

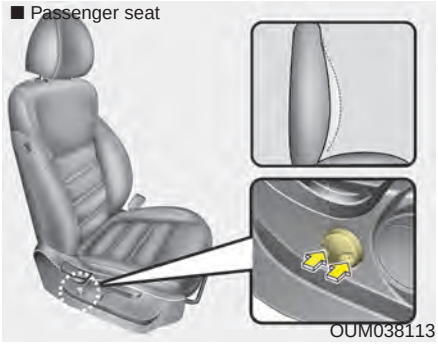
Lumbar support (if equipped)

■ Driver seat



OUM038009

■ Passenger seat



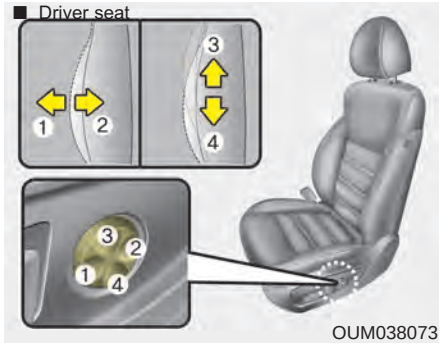
OUM038113

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

Type A (for Driver and Passenger seat)

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

■ Driver seat

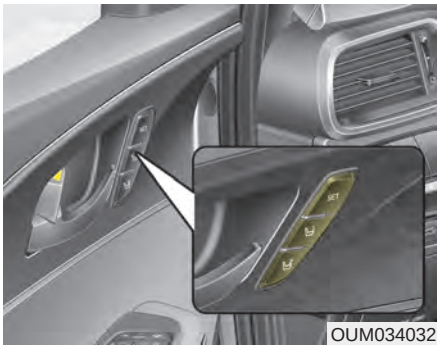


OUM038073

Type B (for Driver seat)

1. Press the front portion of the switch (1) to increase support, or the rear portion of the switch (2), to decrease support.
2. Move the support position up and down by pressing the switch (3) or (4).
3. Release the switch once the seat reaches the desired position.

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



A driver position memory system is provided to store and recall the driver seat and outside rearview mirror position with a simple button operation. By saving the desired position into the system memory, different drivers can reposition the driver seat based upon their driving preference. If the battery is disconnected, the desired seat position memory will need to be re-saved.

⚠ 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.

Storing positions into memory using the buttons on the door

Storing driver's seat positions

1. Shift the shift lever into P while the engine start/stop button is ON or ignition switch ON.
2. Adjust the driver's seat and outside rearview mirror comfortable for the driver.
3. Press SET button on the control panel. The system will beep once.
4. Press one of the memory buttons (1 or 2) within 5 seconds after pressing the SET button. The system will beep twice when memory has been successfully stored.

When recalling an adjustment memory button while sitting in the vehicle, you can be surprised by the setting chosen if the memory has been adjusted by someone else. If that occurs, immediately push the seat position control knob in the direction of the desired position to stop further undesired movement.

Recalling positions from memory

1. Shift the shift lever into P while the engine start/stop button is ON or ignition switch ON.
2. To recall the position in the memory, press the desired memory button (1 or 2). The system will beep once, then the driver's seat will automatically adjust to the stored position.

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

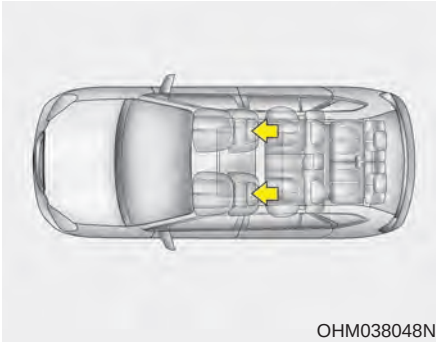
Easy access function (if equipped)

The system will move the driver's seat automatically as follows:

- Without smart key system
  - It will move the driver's seat rearward when the ignition key is removed.
  - It will move the driver's seat forward when the ignition key is inserted.
- With smart key system
  - It will move the driver's seat rearward when the engine start/stop button is changed to the OFF position.
  - It will move the driver's seat forward when the engine start/stop button is changed to the ACC or START position.

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

Headrest (for front seat)



OHM038048N

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.

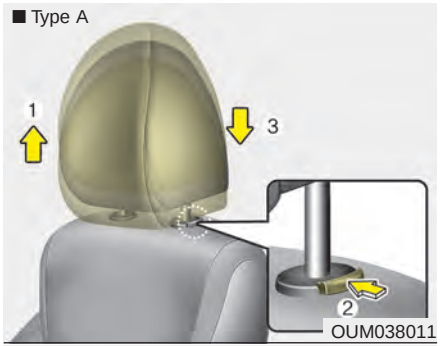
For maximum effectiveness in case of an accident, the headrest should be adjusted so the middle of the headrest is at the same height of the center of gravity of an occupant's head. Generally, the center of gravity of most people's head is similar with the height of the top of their eyes. Also, adjust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

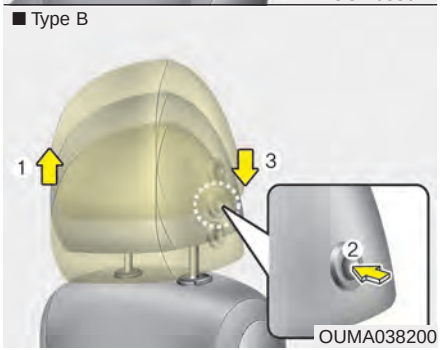
- **Do not operate the vehicle with the headrests removed. Headrests can provide critical neck and head support in a crash.**
- **Do not adjust the headrest height while the vehicle is in motion. Driver may lose control of the vehicle.**

Adjusting the height up and down

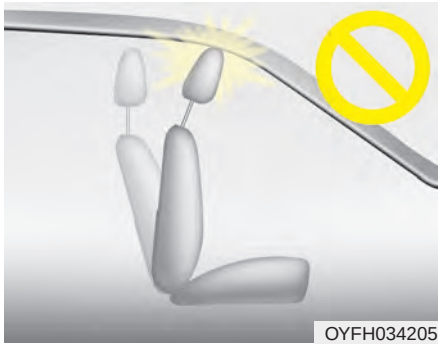
■ Type A



■ Type B



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).

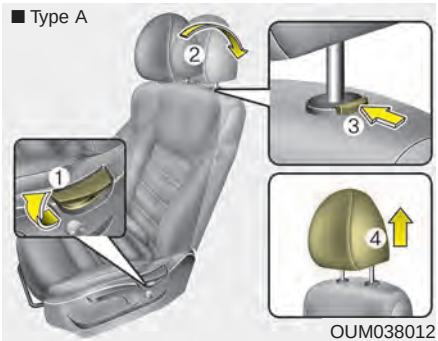

OYFH034205

✻ 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.

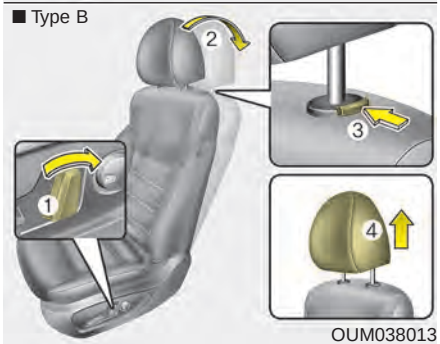
Removal and reinstallation

■ Type A



OUM038012

■ Type B

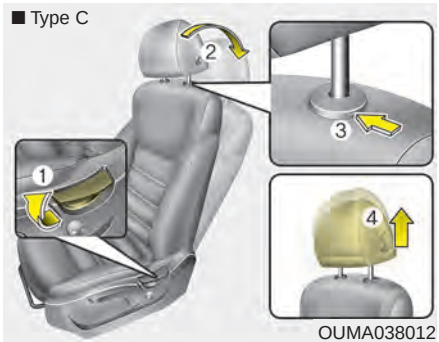


OUM038013

To remove the headrest:

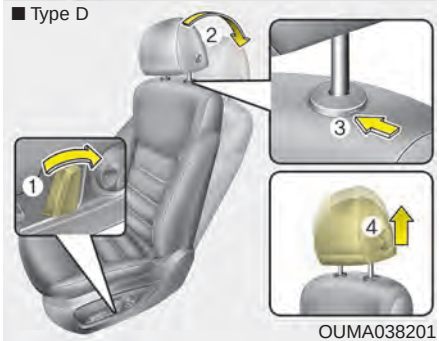
1. Recline the seatback (2) with the recline lever or switch (1).

■ Type C



OUMA038012

■ Type D



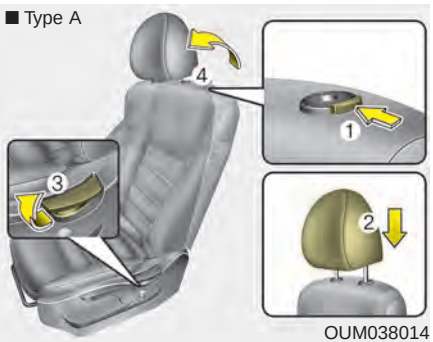
OUMA038201

2. Raise headrest as far as it can go.
3. Press the headrest release button (3) or press the release button with slim tool (3) (for Type C and Type D) while pulling the headrest up.

⚠ WARNING

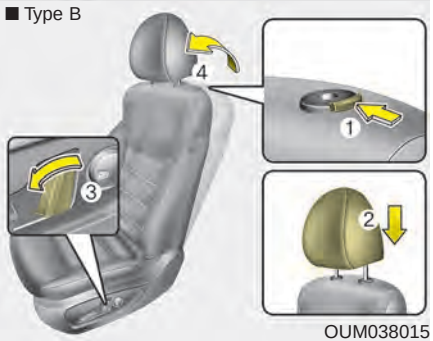
NEVER allow anyone to ride in a seat with the headrest removed.

■ Type A



OUM038014

■ Type B

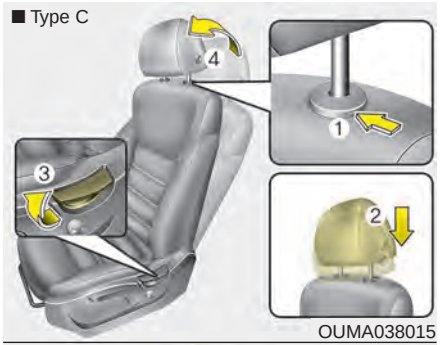


OUM038015

To reinstall the headrest :

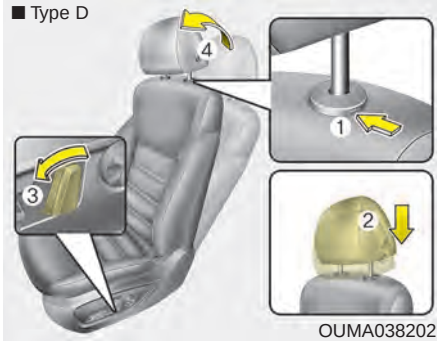
1. Put the headrest poles (2) into the holes while pressing the release button (1) or pressing the release button with slim tool (1,for Type C and D).

■ Type C



OUMA038015

■ Type D



OUMA038202

2. Recline the seatback (4) with the recline lever or switch (3).
3. Adjust the headrest to the appropriate height.

⚠ WARNING - Headrest Reinstallation

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

Seatback pocket (if equipped)



OUMA038116

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

⚠ WARNING - Seatback pockets

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

Rear seat adjustment

Forward and backward (2nd row seat)

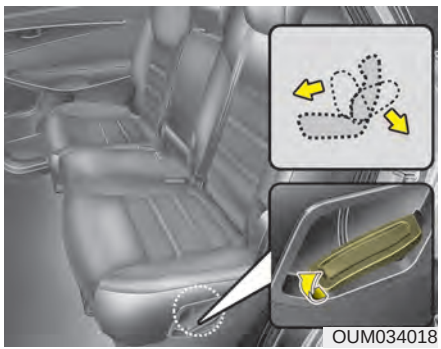


To move the seat forward or backward:

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

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

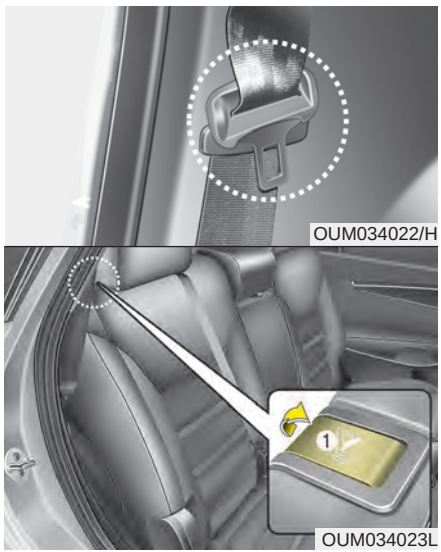
Seatback angle (2nd row seat)



To recline the seatback:

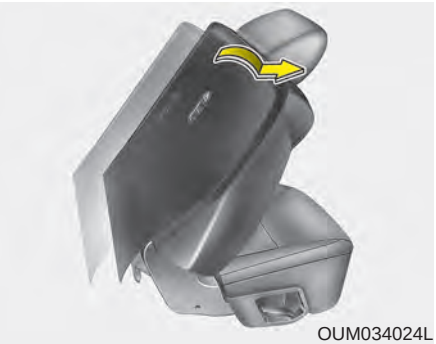
1. Pull up the seatback recline lever (for 2nd row outboard seat).
2. Hold the lever and adjust the seatback of the seat to the position you desire.
3. Release the lever and make sure the seatback is locked in place. (The lever MUST return to its original position for the seatback to lock.)

Walk-in seat (2nd row passenger side, for 7 passenger vehicle)



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

1. Route the seat belt webbing through the rear seat belt guide clip. After inserting the seat belt, tighten the belt webbing by pulling it up.
2. Pull up the walk-in lever (1) on the 2nd row seatback of the right side seat.


OUM034024L

3. Fold the 2nd row seatback and push the seat to the farthest forward position.

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

⚠ WARNING

Never attempt to adjust the 2nd row seat while the vehicle is moving or the seat is occupied as the seat may suddenly move and cause the passenger on the seat to be injured.

Folding the rear seat

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

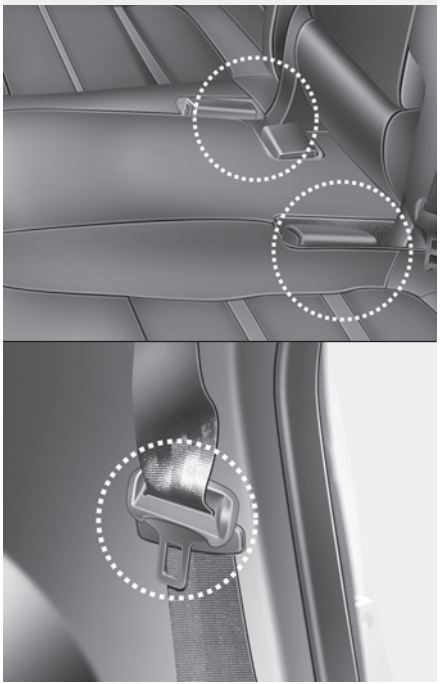
⚠ WARNING - Objects

Objects carried on the folded down seatback should not extend higher than the top of the front seatbacks. This could allow cargo to slide forward and cause injury or damage during sudden stops.

⚠ WARNING

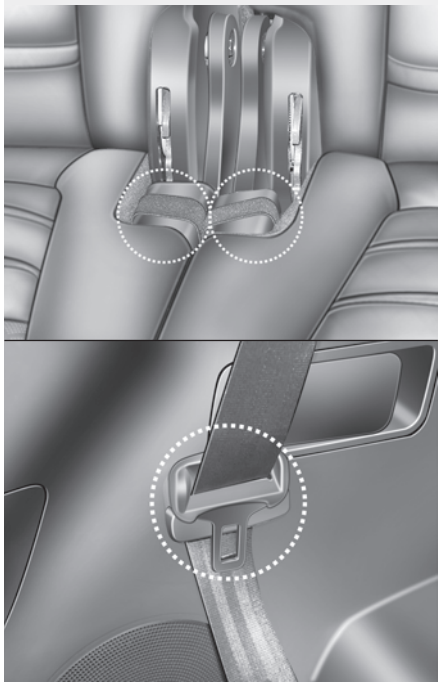
Never allow passengers to sit on top of the folded down seatback while the vehicle is moving. This is not a proper seating position and no seat belts are available for use. This could result in serious injury or death in case of an accident or sudden stop.

■ 2nd row seat



OUM034036/OUM034022

■ 3rd row seat (if equipped)

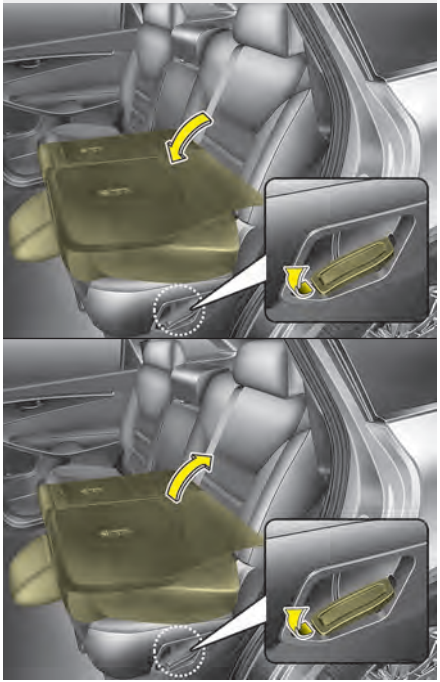


OUM034037/OUM034035

To fold down the rear seatback

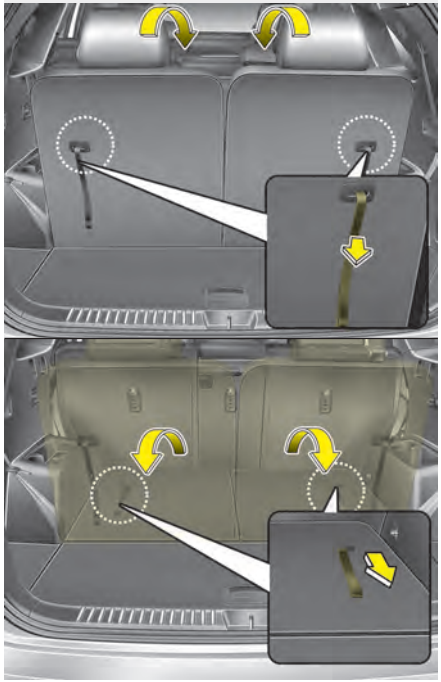
1. Insert the rear seat belt buckle in the pocket between the rear seatback and cushion, and insert the rear seat belt webbing in the guide to prevent the seat belt from being damaged.
2. Set the front seatback to the upright position and if necessary, slide the front seat forward.
3. Lower the rear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

■ 2nd row seat



OUM034025L/OUM034026L

■ 3rd row seat (if equipped)



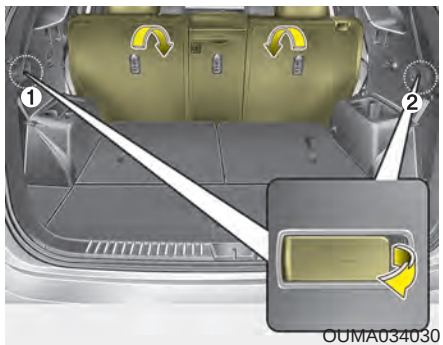
OUMA034027/OUMA034028

4. Pull on the seatback folding lever for 2nd row seat or strap for 3rd row seat, then fold the seat toward the front of the vehicle. When you return the seatback to its upright position, always be sure it has locked into position by pushing on the top of the seatback.
5. To use the rear seat, lift and pull the seatback backward by pulling on the folding lever or strap.

   Pull the seatback firmly until it clicks into place.

   Make sure the seatback is locked in place.
6. Return the rear seat belt to the proper position.

2nd row seat folding (from outside, if equipped)



Pull the 2nd row seat back folding lever out.

The 2nd row seat back will be folded.

If you pull the left side lever (1) out, left side seat back and center seat back will be folded.

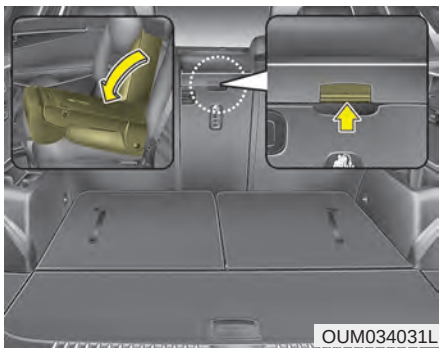
If you pull the right side lever (2) out, right side seat back will be folded.

⚠ WARNING - Rear seat folding

Do not fold the rear seats (2nd & 3rd row seats), if passengers, pets or luggage are in the rear seats.

It may cause injury or damage to passengers, pets or luggage.

To fold down the rear center seat-back (for 2nd row seat)



1. Lower the rear headrests to the lowest position.
2. Push the center seatback folding lever up, then fold the seat toward the front of the vehicle.

When you return the seatback to its upright position, always be sure it has locked into position by pushing on the top of the seatback.

Remember to return the rear shoulder belts to their proper position. Routing the seat belt webbing through the rear seat belt guides will help keep the belts from being trapped behind or under the seats.

⚠ WARNING - 2nd row center seat folding

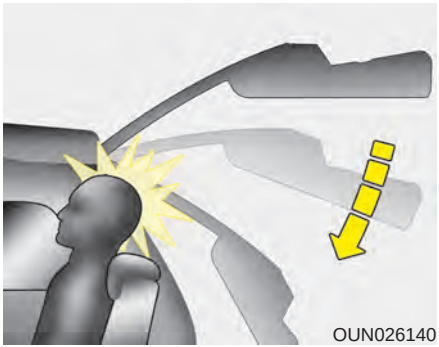
- **Do not fold the 2nd row center seat, if there are occupants in the 3rd row seats, as this may result in injury to occupants if the seat moves during a collision. If occupants in the 3rd row seats, fix the 2nd row center seat in its upright and locked position.**
- **The 2nd row center seat back does not lock into position when it is folded toward the front of the vehicle. If you use the 2nd row center seat back folding function to carry long objects, you should fix the long object to prevent it from being thrown about the vehicle in a collision and causing injury to vehicle occupants.**

⚠ CAUTION - Damaging rear seat belt buckles

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

⚠ WARNING - Cargo

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

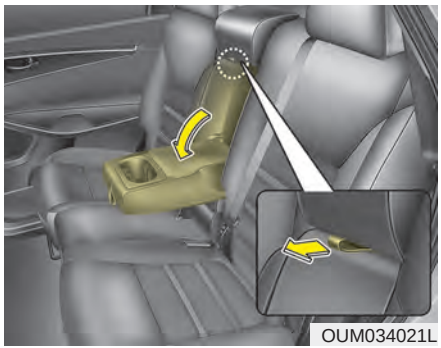

OUN026140

⚠ WARNING - 3rd row seat

3rd row occupants should always remain in the center of the seat cushion so the occupants head is protected by the headrest.

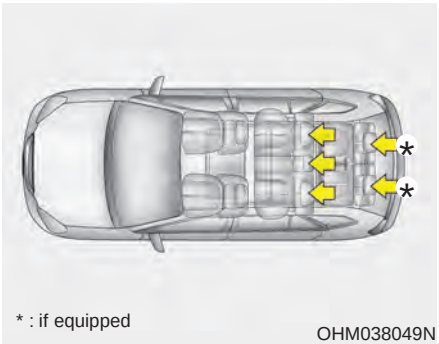
If not, the tailgate may hit the occupant's head, which could cause injury.

Armrest (2nd row seat)


OUM034021L

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

Headrest (for rear seat)



* : if equipped

OHM038049N

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

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

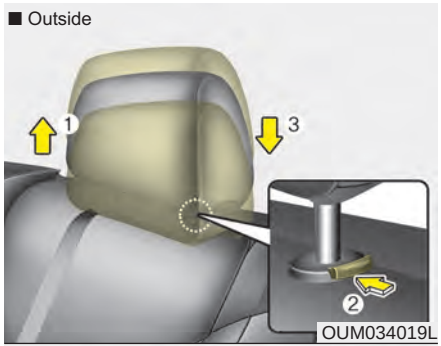
For maximum effectiveness in case of an accident, the headrest should be adjusted so the middle of the headrest is at the same height as the center of gravity of an occupant's head.

Generally, the center of gravity of most people's head is similar with the height of the top of their eyes.

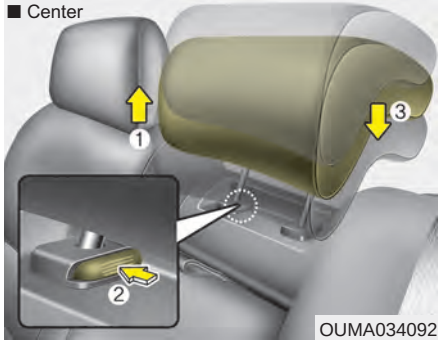
Also adjust the headrest as close to your head as possible. For this reason, the use of a cushion that holds the body away from the seatback is not recommended.

Adjusting the height up and down (for 2nd row seats)

■ Outside



■ Center



To raise the headrest :

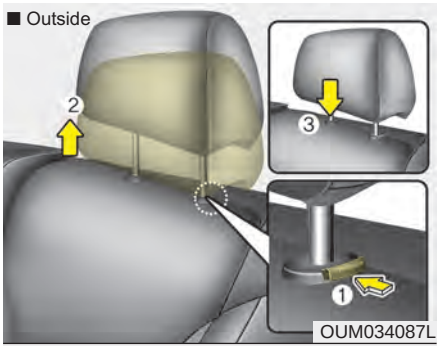
1. Pull it up to the desired position (1).

To lower the headrest :

1. Push and hold the release button (2) on the headrest support
2. Lower the headrest to the desired position (3).

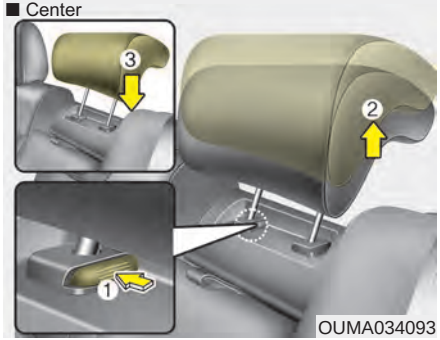
Removal and reinstallation (for 2nd row seats)

■ Outside



OUM034087L

■ Center



OUMA034093

To remove the headrest :

1. Raise it as far as it can go then press the release button (1) while pulling the headrest up (2).

To reinstall the headrest :

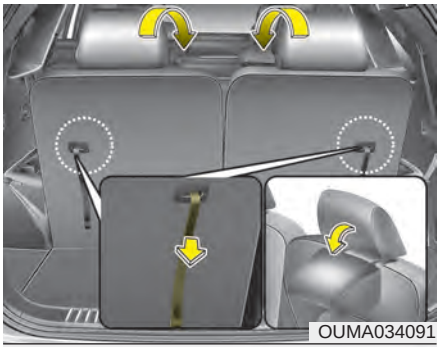
1. Put the headrest poles (3) into the holes while pressing the release button (1).
2. Adjust it to the appropriate height.

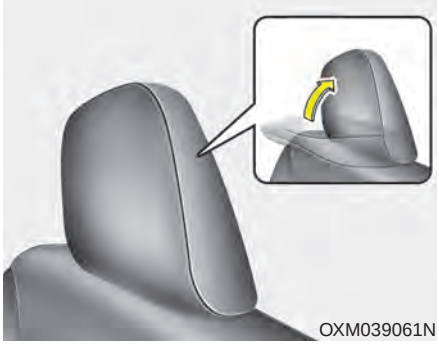
⚠ WARNING

- **Make sure the headrest locks in position after adjusting it to properly protect the occupants.**
- **After installing the headrest, make sure that it is installed in the right direction.**

  A headrest installed reversely could increase whiplash injury during rear impact.

3rd row headrest (if equipped)





The headrest will fold down automatically when folding the seatback.

To fold the headrest manually :
Pull the strap.

To unfold the headrest :
Raise the headrest manually.

Always be sure the headrest has locked into position after you return the seatback.

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 damage as you can no longer be sure that a damage 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 will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.
- When you fasten the seat belt, be careful not to latch the seat belt in buckles of other seat. It's very dangerous and you may not be protected by the seat belt properly.
- Do not unfasten the seat belt and do not fasten and unfasten the seat belt repeatedly while driving. This could result in loss of control, and an accident causing death, serious injury, or property damage.
- 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 (for driver's seat)



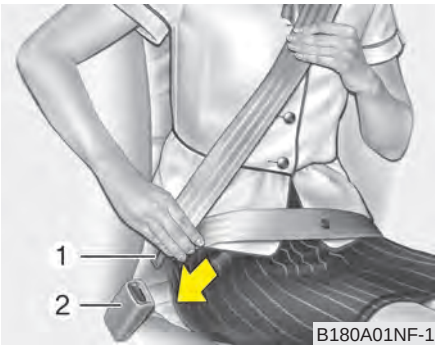
The driver's seat belt warning light and chime will activate according to the following table when the ignition switch is in “ON” position.

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

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

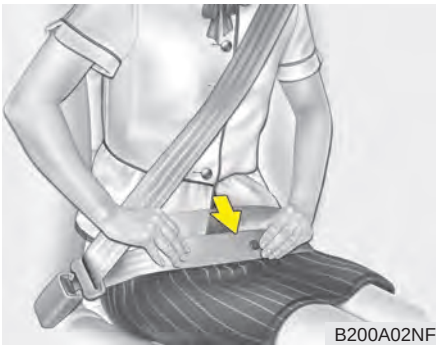
*2 The light will stop within 6 seconds and chime will stop immediately.

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



To fasten your seat belt:

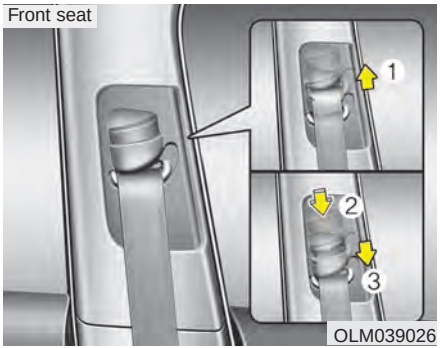
To fasten your seat belt, pull it out of the retractor and insert the metal tab (1) into the buckle (2). There will be an audible "click" when the tab locks into the buckle.



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

✻ NOTICE

If you are 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.



Height adjustment

You can adjust the height of the shoulder belt anchor to one of the 3 positions for maximum comfort and safety.

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

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

To fasten your seat belt:

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

This type of seat belt combines the features of both an emergency locking retractor seat belt and an automatic locking retractor seat belt. To fasten your seat belt, pull it out of the retractor and insert the metal tab into the buckle. There will be an audible "click" when the tab locks into the buckle. When not securing a child restraint, the seat belt operates in the same way as the driver's seat belt (Emergency Locking Retractor Type).

It automatically adjusts to the proper length only after the lap belt portion of the seat belt is adjusted manually so that it fits snugly around your hips.

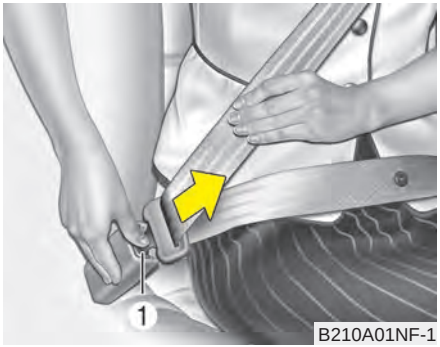
When the seat belt is fully extended from the retractor to allow the installation of a child restraint system, the seat belt operation changes to allow the belt to retract, but not to extend (Automatic Locking Retractor Type). Refer to “Using a child restraint system” in this section.

✻ NOTICE

Although the combination retractor provides the same level of protection for seated passengers in either emergency or automatic locking modes, have the seated passengers use the emergency locking feature for improved convenience. The automatic locking function is intended to facilitate child restraint installation. To convert from the automatic locking feature to the emergency locking operation mode, allow the unbuckled seat belt to fully retract.

⚠ CAUTION

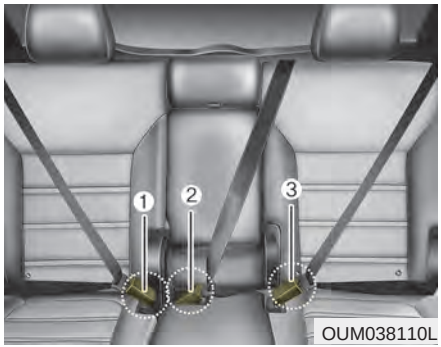
Do NOT fold down the left portion of the rear seat back when the rear center seat belt is buckled. ALWAYS UNBUCKLE the rear center seat belt before folding down the left portion of the rear seat back. If the rear center seat belt is buckled when the left portion of the rear seat back is folded down, distortion and damage to the top portion of the seat back and seat belt garnish may result, causing the seat back to lock into the folded down position.



To release the seat belt:

The seat belt is released by pressing the release button (1) on 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.



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



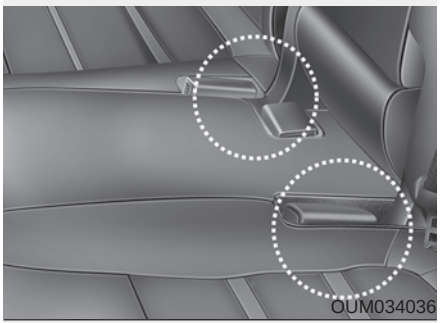
When using the rear center seat belt, the buckle with the “CENTER” mark must be used.

⚠ WARNING

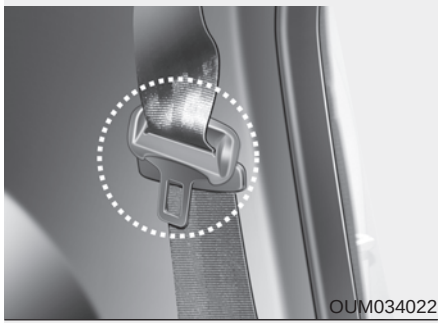
Prior to fastening the rear seat belts, ensure the latch matches the seat belt buckle. Forcefully fastening the left or right seat belt to the center buckle can result in an improper fastening scenario that will not protect you in an accident.

Stowing the rear seat belt

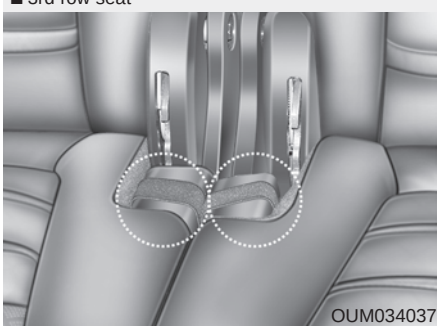
■ 2nd row seat



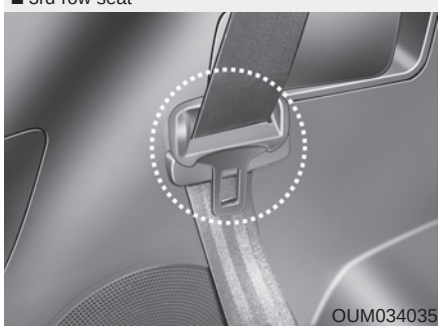
■ 2nd row seat



■ 3rd row seat



■ 3rd row seat



The rear seat belt buckles can be stowed in the pocket between the rear seatback and cushion when not in use.

Routing the seat belt webbing through the rear seat belt guides will help keep the belts from being trapped behind or under the seats.

After inserting the seat belt, tighten the belt webbing by pulling it up.

⚠ CAUTION - Seatbelt Guide

Remove the seat belt from the guides before using. If you pull on the seat belt when it is stored in the guides, it may damage the guides and/or belt webbing.

Pre-tensioner seat belt



OXMA033101

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.

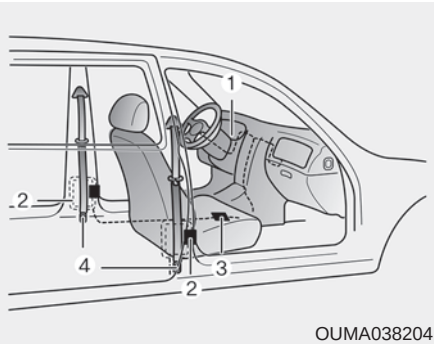
(1) Retractor Pretensioner

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.



OUMA038204

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

(1) SRS air bag warning light

(2) Retractor pre-tensioner assembly

(3) SRS control module

(4) Emergency fastening device (EFD)

⚠ 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 collision 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 ignition switch has been turned to the ON position, and then it should turn off.**

If the pre-tensioner seat belt system are 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 ignition switch is turned ON, or if it remains illuminated after illuminating for approximately 6 seconds, or if it illuminates while the vehicle is being driven, have an authorized Kia dealer inspect the pre-tensioner seat belt and SRS air bag system as soon as possible.

⚠ 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 Kia dealer.

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

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

⚠ WARNING - 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. Bleach, dye, strong detergents or abrasives should not be used because they may damage and weaken the fabric.

When to replace seat belts

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

CHILD RESTRAINT SYSTEM

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

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

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

Children could be injured or killed in a crash if their restraints are not properly secured. For small children and babies, a child seat or infant seat must be used. Before buying a particular child restraint system, make sure it fits your vehicle seat and seat belts, and fits your child.

Follow all the instructions provided by the manufacturer when installing the child restraint system.

⚠ WARNING - Restraint location

Never install a child or infant seat on the front passenger's seat. A child riding in the front passenger seat can be forcefully struck by an inflating airbag.

⚠ WARNING - Hot child restraint

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

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

⚠ WARNING - Holding children

Never hold a child in your arms or lap when riding in a vehicle. The violent forces created during a crash will tear the child from your arms and throw the child against the car's interior. Always use a child restraint system which is appropriate for your child's height and weight.

⚠ WARNING - Unattended Children

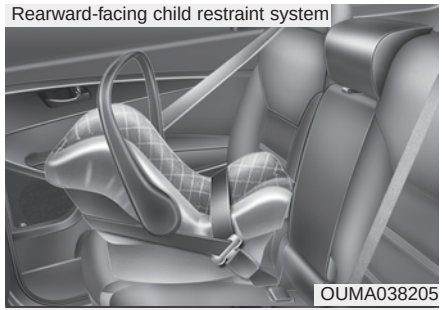
Never leave children unattended in a vehicle. The car can heat up very quickly, resulting in serious bodily injury or death to the child in the vehicle.

⚠ WARNING - Seat belt use

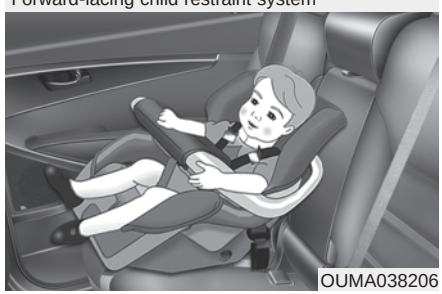
Do not use one seat belt for two occupants at the same time. This will eliminate any safety benefit provided by the seat belt to the occupants.

Using a child restraint system

Rearward-facing child restraint system



Forward-facing child restraint system



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

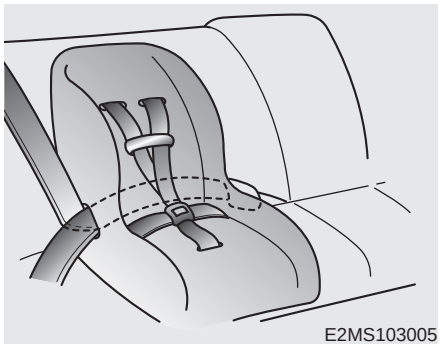
For safety reasons, we recommend that the child restraint system be used in the rear seats.

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

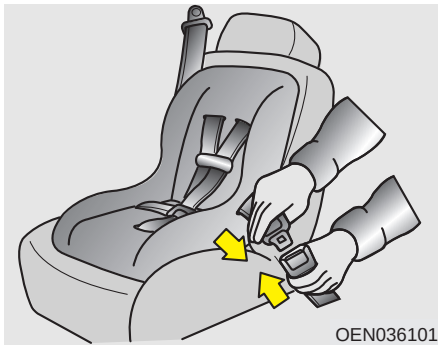
Since all passenger seat belts move freely under normal conditions and only lock under extreme or emergency conditions (emergency lock mode), you must manually change these seat belts to the auto lock mode to secure a child restraint.

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

Placing a passenger seat belt into the auto lock mode


E2MS103005

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

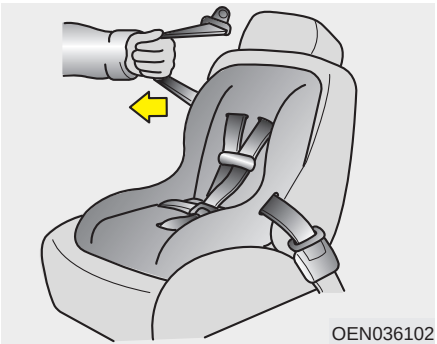

OEN036101

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

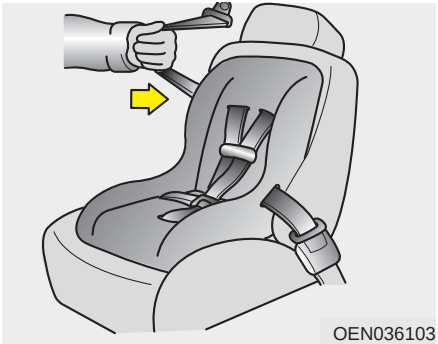
1. Place the child restraint system in the seat and route the lap/shoulder belt around or through the restraint, following the restraint manufacturer's instructions. Be sure the seat belt webbing is not twisted.
2. Fasten the lap/shoulder belt latch into the buckle. Listen for the distinct "click" sound.

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

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



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



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


OEN036104

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

The lap/shoulder belt automatically returns to the “emergency lock mode” whenever the belt is allowed to retract fully. Therefore, the preceding seven steps must be followed each time a child restraint is installed.

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

⚠ WARNING - Auto lock mode

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

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

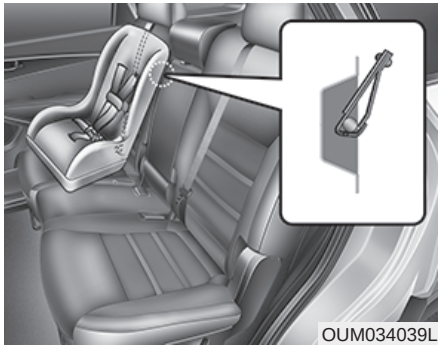
Securing a child restraint seat with tether anchor system

■ 2nd row seat



OUM034038

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



OUM034039L

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

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

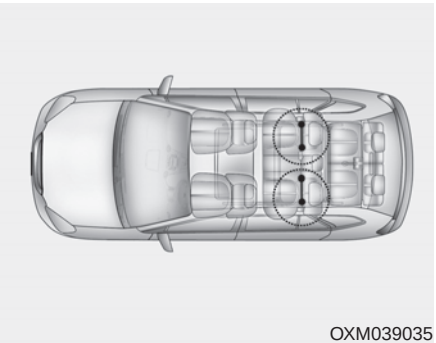
2. Connect the tether strap hook to the appropriate child restraint hook holder and tighten to secure the child restraint seat.

⚠ WARNING - Tether strap

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

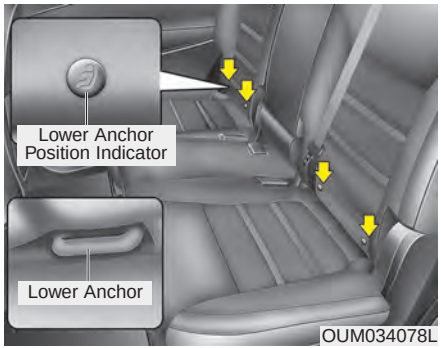
Check that the child restraint system is secure by pushing and pulling it in different directions. Incorrectly fitted child restraints may swing, twist, tip or separate causing death or serious injury.

Securing a child restraint seat with child seat lower anchor system



OXM039035

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



OUM034078L

Child restraint symbols are located on the left and right 2nd row seat backs to indicate the position of the lower anchors for child restraints.

⚠ WARNING - Unused rear seatbelts

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

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

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

The LATCH anchors are located between the seatback and the seat cushion of the 2nd row seat left and right outboard seating positions.

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

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

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

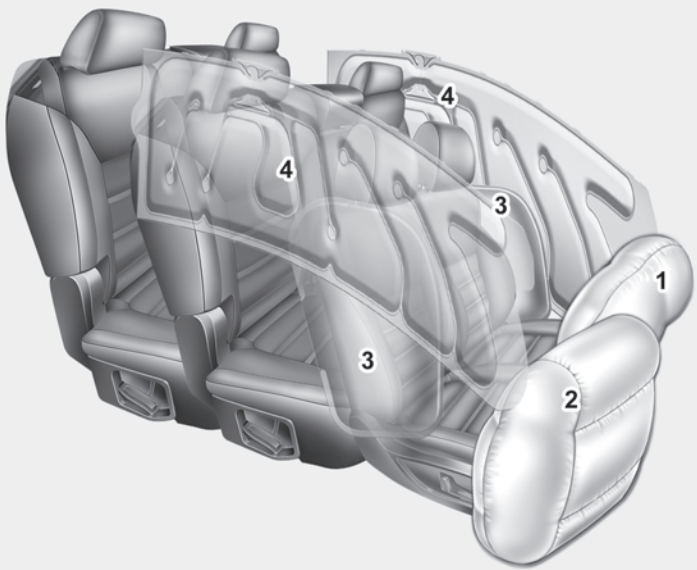
⚠ WARNING - LATCH lower anchors

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

✻ NOTICE

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

AIR BAG - ADVANCED SUPPLEMENTAL RESTRAINT SYSTEM



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

OUMA038203

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

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

How does the air bag system operate?

- Air bags are activated (able to inflate if necessary) only when the ignition switch is turned to the ON or START position.
- 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. Such objects may become dangerous projectiles if the side airbag inflates.

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



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 either. If the front passenger air bag inflates, it could cause serious or fatal injuries to the child.

⚠ WARNING - Air bag deployment

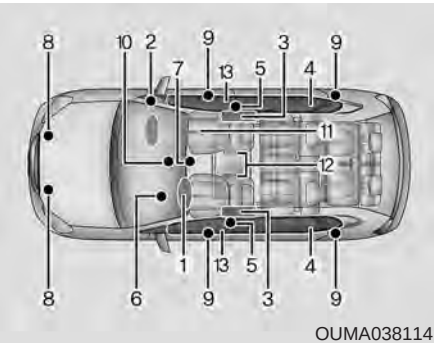
When children are seated in the rear outboard seats of a vehicle equipped with side and/or curtain air bags, install the child restraint system as far away from the door side as possible. Inflation of the side and/or curtain air bags could impact the child.

Air bag warning light



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



OUMA038114

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) Driver's and front passenger's seat belt buckle sensors
(13) Emergency fastening device (EFD)

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


W7-147

If the air bag warning light is illuminated for more than 6 seconds after the ignition 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 Kia dealer.

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

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

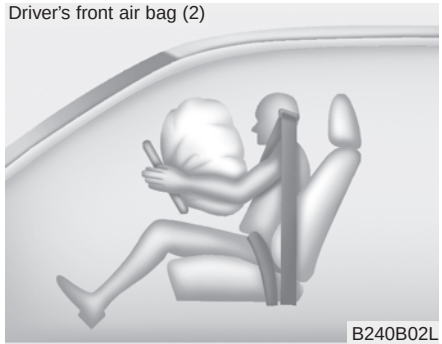
Driver's front air bag (1)



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.

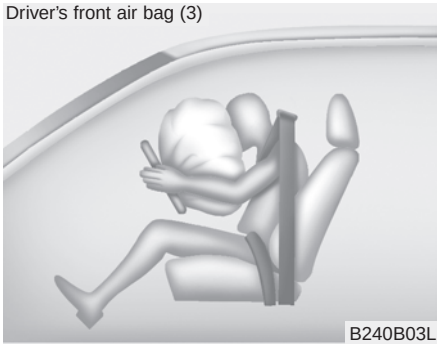
Driver's front air bag (2)



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)

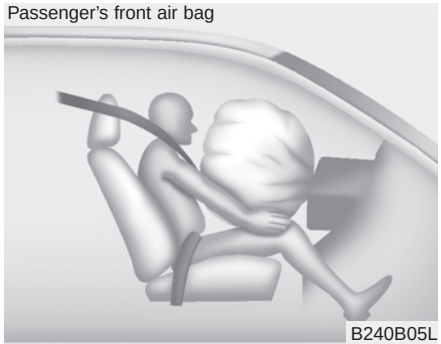


B240B03L

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.

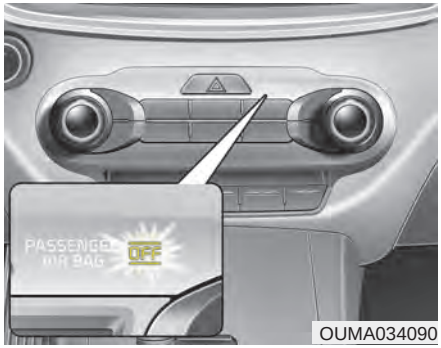
- If an air bag deploys, there may be a loud noise followed by a fine dust released in the vehicle. These conditions are normal and are not hazardous - the air bags are packed in this fine powder. The dust generated during air bag deployment may cause skin or eye irritation as well as aggravate asthma 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 ignition switch 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 Kia dealer.

✻ NOTICE

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

Occupant Detection System (ODS)



OUMA034090

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

- A 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.
- A indicator light located on the instrument panel which illuminates the words PASSENGER AIR BAG “OFF” indicating the front passenger air bag system is deactivated.
- The instrument panel air bag warning light is interconnected with the occupant detection system.

If the front passenger seat is occupied by a person that the system determines to be of 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 detection system	Indicator/Warning light		Devices
	"PASSENGER AIR BAG OFF" indicator light	SRS warning light	Front passenger air bag
1. Adult or child*1	Off	Off	Activated
2. Child restraint system*2	On	Off	Deactivated
3. Unoccupied	On	Off	Deactivated
4. There is a malfunction in the system	Off	On	Activated

*1 : The ODS system uses a field to evaluate a person's size to determine whether the air bag should deploy. It is possible for a child to be detected and activate the ODS, thus allowing the air bag to deploy. To maximize safety, do not allow children to ride in the front passenger seat.

*2 : Never install a child restraint system on the front passenger seat.

✻ NOTICE

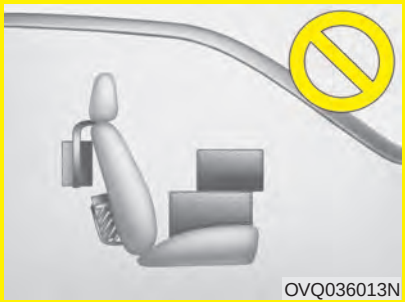
Do not modify or replace the front passenger seat. Don't place anything on or attach anything such as a blanket, front seat cover or after market seat heater to the front passenger seat. This can adversely affect the occupant detection system.

⚠ 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.

(Continued)

(Continued)


OVQ036013N

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


1KMN3663

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


1KMN3665

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


OVQ036014N

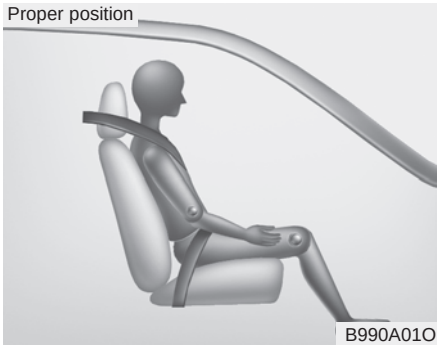
- **Never place feet on the front passenger seatback.**


1KMN3662

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


1KMN3664

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



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

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

⚠ WARNING - “AIR BAG OFF” light

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

✻ NOTICE

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

- 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.

⚠ WARNING
- Replacement/modifications

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

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.

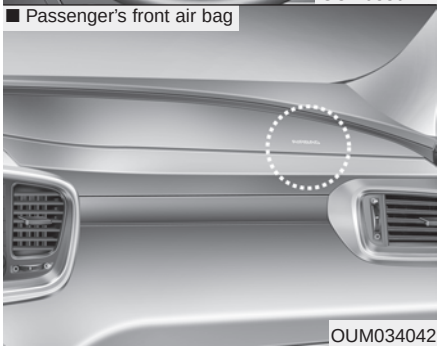
Driver's and passenger's front air bag

■ Driver's front air bag



OUM038041L

■ Passenger's front air bag



OUM034042

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.

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.

✻ NOTICE

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

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

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.

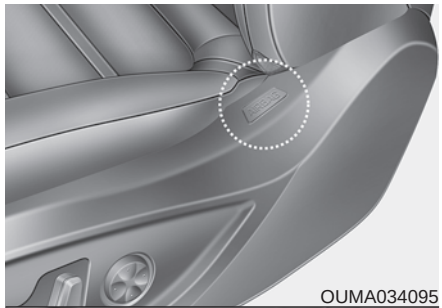
⚠ WARNING - No attaching objects

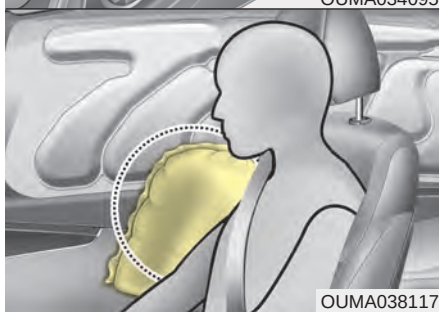
- **No objects (such as crash pad cover, cellular phone holder, cup holder, perfume or stickers) should be placed over or near the air bag modules on the steering wheel, instrument panel, windshield glass, and the front passenger's panel above the glove box. Such objects could cause harm if the vehicle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





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

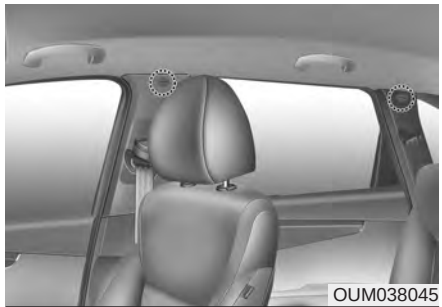
⚠ WARNING - Flying objects

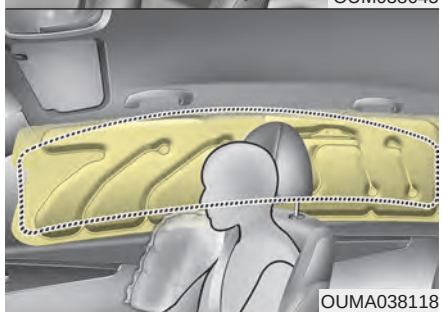
Do not place any objects (an umbrella, bag, etc.) between the front door and the front seat. Such objects may become dangerous projectiles if the side airbag inflates.

⚠ 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


OUM038045


OUMA038118

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 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



OUMA038047/OUM034048/OUMA038208/OUM034050/OUM034051

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

⚠ WARNING - Air bag sensors

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

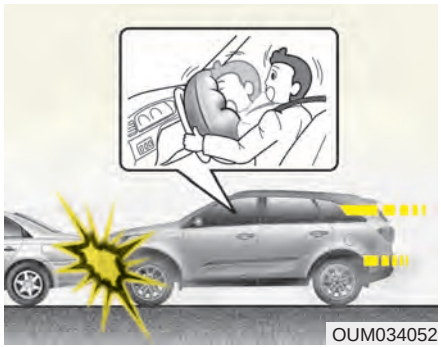
  This may cause unexpected air bag deployment, which could result in serious personal injury or death.
- **If the installation location or angle of the sensors is altered in any way, the air bags may deploy when they should not or they may not deploy when they should.**

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

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

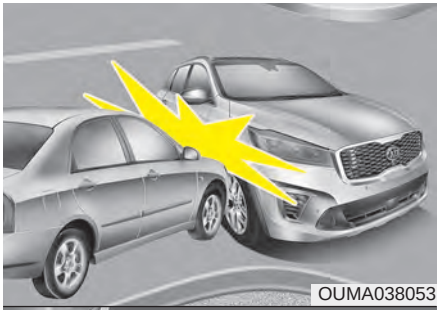
Installing bumper guards (or side step or running board) or replacing a bumper (or front door module) with non-genuine parts may adversely affect your vehicle's collision and air bag deployment performance.

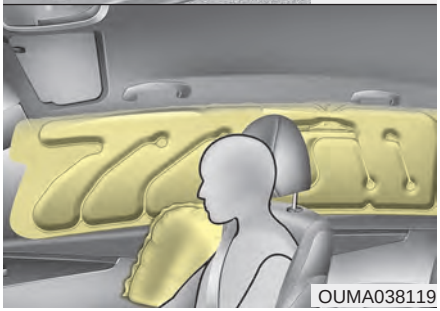
Air bag inflation conditions



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.


OUMA038053


OUMA038119

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. sides 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.

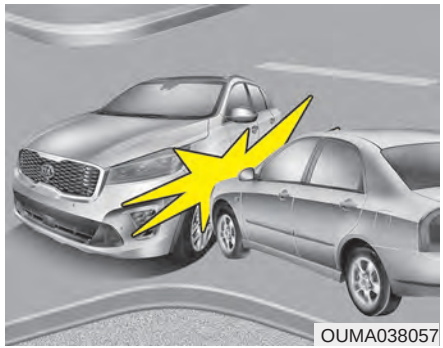
Air bag non-inflation conditions



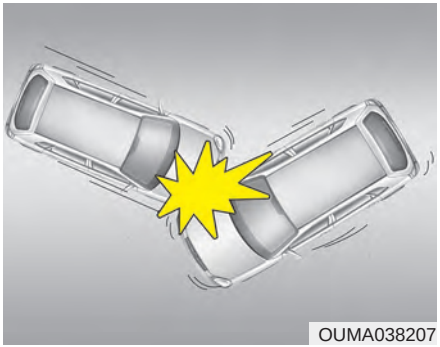
- In certain low-speed collisions the air bags may not deploy. The air bags are designed not to deploy in such cases because they may not provide benefits beyond the protection of the seat belts in such collisions.



- 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.



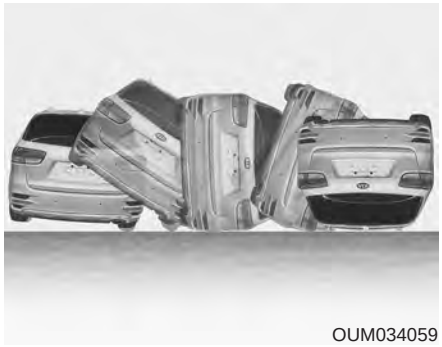
- Front air bags may not inflate in side impact collisions, because occupants move to the direction of the collision, and thus in side impacts, frontal air bag deployment would not provide additional occupant protection.


OUMA038207

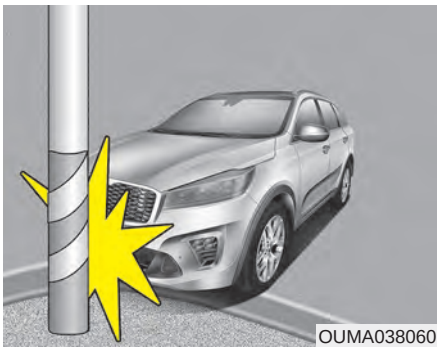
- In an angled collision, the force of impact may direct the occupants in a direction where the air bags would not be able to provide any additional benefit, and thus the sensors may not deploy any air bags.


OUM034058

- 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.


OUM034059

- 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.


OUMA038060

- 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 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 Kia dealer. Improper handling of the SRS system may result in serious personal injury.

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

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

⚠ WARNING - Tampering with SRS

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

⚠ WARNING - Towing Vehicle

Always have the ignition off 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



OUMA034094

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.

Folding key 4-5
- Record your key number 4-5
- Key operations 4-5
- Transmitter precautions 4-7
- Battery replacement 4-8
- Immobilizer system 4-9

Smart key 4-11
- Record your key number 4-11
- Smart key function 4-11
- Loss of the smart key 4-15
- Smart key precautions 4-15
- Battery replacement 4-16
- Smart key immobilizer system 4-16

Theft-alarm system 4-18
- Armed stage 4-18
- Theft-alarm stage 4-19
- Disarmed stage 4-19

Door locks 4-21
- Operating door locks from outside the vehicle 4-21
- Operating door locks from inside the vehicle 4-22
- Door lock/unlock features 4-24
- Child-protector rear door lock 4-24

Liftgate (for manual liftgate) 4-25
- Opening the liftgate 4-25
- Closing the liftgate 4-25
- Emergency liftgate safety release 4-26

Power liftgate 4-27
- Opening the liftgate 4-28
- Closing the liftgate 4-29
- Smart power liftgate 4-33
- Emergency liftgate safety release 4-37

Windows 4-39
- Power windows 4-40

Hood 4-44
- Opening the hood 4-44
- Hood open warning 4-44
- Closing the hood 4-45

Fuel filler lid 4-46
- Opening the fuel filler lid 4-46
- Closing the fuel filler lid 4-46
- Emergency fuel filler lid release 4-49

Panoramic sunroof 4-50
- Sunroof open warning 4-51
- Sunshade 4-52
- Sliding the sunroof 4-52

- Tilting the sunroof 4-54
- Closing the sunroof 4-54
- Resetting the sunroof 4-55

Steering wheel 4-56
- Electric Power Steering (EPS) 4-56
- Tilt and telescopic steering 4-57
- Heated steering wheel 4-58
- Horn 4-59

Mirrors 4-60
- Inside rearview mirror 4-60
- Outside rearview mirror 4-70

Instrument cluster 4-74
- Instrument cluster control 4-75
- LCD display control 4-75
- Gauges 4-76
- Transmission shift indicator 4-79

LCD display 4-81
- LCD modes 4-81

Trip modes (Trip computer) 4-82
- Trip modes 4-82
- Fuel economy 4-82
- Accumulated driving information mode 4-84
- One time driving information mode 4-84
- Digital speedometer 4-85
- Smart shift 4-85
- Turn by turn mode 4-85
- Assist mode 4-86
- Distance to empty 4-88
- User settings mode 4-88
- Warning messages 4-93

Warning and indicator lights 4-98
- Warning lights 4-98
- Indicator lights 4-106

Rear parking assist system 4-111
- Operation of the rear parking assist system 4-111
- Non-operational conditions of rear parking assist system 4-112
- Rear parking assist system precautions 4-113

Parking assist system 4-115
- Operation of the parking assist system 4-115
- Non-operational conditions of parking assist system 4-117

Rearview camera 4-120

Surround view monitoring system (SVM) 4-121
- Automatic car wash entry support guidelines 4-122

Lighting 4-123
- Battery saver function 4-123
- Daytime running light 4-123
- Lighting control 4-123
- High beam operation 4-125

- High beam assist 4-126
- Turn signals and lane change signals 4-128
- Front fog light 4-129
- Check headlight 4-129
- Headlight leveling device 4-129
- Dynamic Bending Light (DBL) 4-130

Wipers and washers 4-131
- Windshield wipers 4-131
- Front windshield washers 4-133
- Rear window wiper and washer switch 4-134

Interior lights 4-136
- Automatic turn off function 4-136
- Room lamp 4-136
- Map lamp 4-137
- Luggage lamp 4-138
- Vanity mirror lamp 4-138
- Glove box lamp 4-138

Welcome system 4-139
- Headlight (Headlamp) escort function 4-139
- Interior light 4-139
- Pocket lamp 4-139

Defroster 4-140
- Rear window defroster 4-140

Manual climate control system 4-141
- Heating and air conditioning 4-142
- 3rd row air conditioning 4-147
- System operation 4-148
- Climate control air filter 4-150
- Air conditioning refrigerant label 4-151
- Checking the amount of air conditioner refrigerant and compressor lubricant 4-151

Automatic climate control system 4-153
- Automatic heating and air conditioning 4-154
- Manual heating and air conditioning 4-155
- To cancel or reset the automatic ventilation 4-160
- 3rd row air conditioning 4-161
- System operation 4-161
- Climate control air filter 4-163
- Checking the amount of air conditioner refrigerant and compressor lubricant 4-164
- Air conditioning refrigerant label 4-165

Windshield defrosting and defogging 4-166
- Manual climate control system 4-166
- Automatic climate control system 4-167
- Defogging logic 4-168

Storage compartments 4-171
- Center console storage 4-171
- Glove box 4-171
- Sunglass holder 4-172
- Luggage box 4-173

Interior features 4-174
- Cup holder 4-174
- Bottle holder 4-175
- Seat warmer 4-175
- Seat cooler (Air ventilation seat) 4-176
- Sunvisor 4-177
- Power outlet 4-177
- AC inverter 4-178
- USB charger 4-180
- Wireless smart phone charging system 4-181
- Coat hook 4-184
- Floor mat anchor (s) 4-184
- Side curtain 4-185
- Luggage net holder 4-185

Exterior features 4-187
- Roof rack 4-187

Audio system 4-188
- Antenna 4-188
- Pole antenna 4-188
- Steering wheel remote controller 4-189
- AUX, USB port 4-190

4

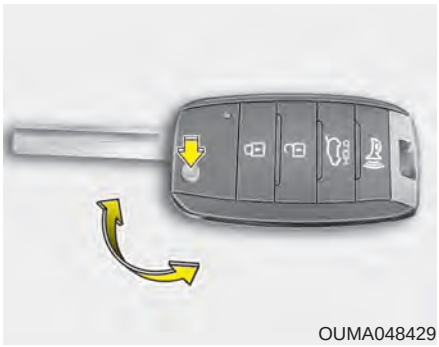
FOLDING KEY (IF EQUIPPED)

Record your key number



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

Key operations



OUMA048429

- Used to start the engine.
- Used to lock and unlock the doors.
- Used to lock and unlock the glove box.
- To unfold the key, press the release button then the key will unfold automatically. To fold the key, fold the key manually while pressing the release button.

⚠ CAUTION

Do not fold the key without pressing the release button. This may damage the key.

⚠ WARNING - Aftermarket key

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

⚠ WARNING - Ignition key (smart key)

Never leave the keys in your vehicle with unsupervised children. Leaving children unattended in a vehicle with a manual ignition key or a smart key is dangerous. Children copy adults and they could place the key in the ignition switch or 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.

Door Lock (1)



OXMA043317

1. Close all doors, engine hood and liftgate.
2. Press the lock button(1).
3. All doors and liftgate will lock. The hazard warning lights will blink once.
4. If the lock button is pressed once more within 4 seconds, the hazard warning lights will blink and the beep will sound once.
5. Make sure that doors are locked by checking the door lock button inside or pulling the outside door handle.

Door Unlock (2)

1. Press the unlock button(2).
2. The driver's door will unlock. The hazard warning lights will blink two times.
3. Press the unlock button(2) twice within 4 seconds and all doors and liftgate will unlock. The hazard warning lights will blink two times.

✻ NOTICE

You can activate or deactivate the Two Turn Unlock function. Refer to "User settings" in this chapter.

Liftgate unlock (3)

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

Also, once the liftgate is opened and then closed, the liftgate will be locked automatically.

• For Power Liftgate Only:

The Power Liftgate will open if the button is pressed for more than 1 second. Also, once the liftgate is opened and then closed, the liftgate will be locked again automatically.

If the power liftgate is switched 'Off' using the button in the overhead console, the liftgate unlock button will operate to unlock the liftgate as described above.

❈ For detailed information refer to the "Power liftgate" in this chapter.

Panic (4)

The horn sounds and hazard warning lights flash for about 27 seconds if this button is pressed for more than 0.5 second. To stop the horn and lights, press any button on the transmitter.

Transmitter precautions

- The transmitter will not work if any of following occur:
  - The ignition key is in the ignition switch.
  - You exceed the operating distance limit (about 30 feet [10 m]).
  - The battery in the transmitter is weak.
  - Other vehicles or objects may be blocking the signal.
  - The weather is extremely cold.
  - The transmitter is close to a radio transmitter such as a radio substation or an airport which can interfere with normal operation of the transmitter.

- When the transmitter does not work correctly, open and close the door with the ignition key. If you have a problem with the transmitter, contact an authorized Kia dealer.
- If the transmitter is in close proximity to your mobile phone, the signal could be blocked by your mobile phones normal operational signals. This is especially important when the phone is active such as making and receiving calls, text messaging, and/or sending/receiving emails. Avoid placing the transmitter and your mobile phone in the same pants or jacket pocket and always try to maintain an adequate distance between the two devices.

⚠ CAUTION

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

✻ 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.

Battery replacement



OYDDCO2005

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

1. Insert a slim tool into the slot and gently pry open the transmitter center cover.
2. Replace the battery with a new battery (CR2032). When replacing the battery, make sure the battery is positioned correctly.
3. Install the battery in the reverse order of removal.

For replacement transmitters, see an authorized Kia dealer for transmitter reprogramming.

- The transmitter is designed to give you years of trouble-free use, however it can malfunction if exposed to moisture or static electricity. If you are unsure how to use your transmitter or replace the battery, contact an authorized Kia dealer.
- Using the wrong battery can cause the transmitter to malfunction. Be sure to use the correct battery.
- To avoid damaging the transmitter, don't drop it, get it wet, or expose it to heat or sunlight.
-  An inappropriately disposed battery can be harmful to the environment and may cause harm to human health. Dispose of the battery according to your local law(s) or regulation.

⚠ CAUTION - Transmitter damage

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

Immobilizer system (if equipped)

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

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

With the immobilizer system, whenever you insert your ignition key into the ignition switch and turn it to ON, the system verifies if the ignition key is valid.

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

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

To activate the immobilizer system:

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

To deactivate the immobilizer system:

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

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

✻ NOTICE

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

Do not put metal accessories near the ignition switch.

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

✻ NOTICE

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

⚠ CAUTION - Immobilizer damage

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

⚠ CAUTION - Immobilizer alterations

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

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 approved by the party responsible for compliance, it will not be covered by your manufacturer's vehicle warranty.

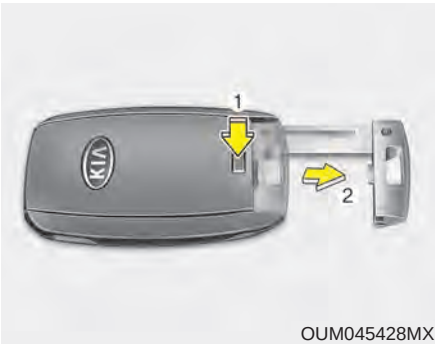
SMART KEY (IF EQUIPPED)

Record your key number



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

Smart key function



OUM045428MX

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

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

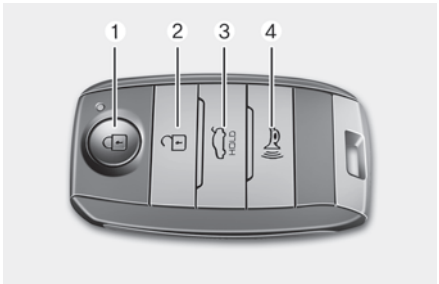
With a smart key, you can lock or unlock a door (and Liftgate) and start the engine.

Refer to the following for more details.

⚠ WARNING - Ignition key (smart key)

Never leave the keys in your vehicle with unsupervised children. Leaving children unattended in a vehicle with a manual ignition key or a smart key is dangerous. Children copy adults and they could place the key in the ignition switch or 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.

Door Lock



OYDDCO2004



OUM044001

Using the door handle button

- Carry the smart key.
- Close all doors, engine hood and liftgate.
- Press the button of the outside door handle.
- The hazard warning lights will blink and the chime will sound once.
- Make sure that doors are locked by pulling the outside door handle.

✻ NOTICE

- **The button will only operate when the smart key is within 28~40in. (0.7~1m) from the outside door handle.**
- **Even though you press the outside door handle button, the doors will not lock and the chime will sound for 3 seconds if any of following occur:**
  - **The smart key is in the vehicle.**
  - **The engine start/stop button is in ACC or ON position.**
  - **Any door except the liftgate is open.**

Using the button on the smart key

- Close all doors, engine hood and liftgate.
- Press the lock button(1).
- The hazard warning lights will blink and the chime will sound once.
- Make sure that doors are locked by pulling the outside door handle.

Unlocking

Using the door handle button

1. Carry the smart key.
2. Press the button of the driver's outside door handle.
3. The driver's door will unlock. The hazard warning lights will blink and the chime will sound two times.
4. Press the button twice within 4 seconds and all doors and the liftgate will unlock and the hazard warning lights will blink and the chime will sound two times.

✻ NOTICE

- **The button will only operate when the smart key is within 28~40in. (0.7~1m) from the outside door handle.**
- **When the smart key is recognized in the area of 28~40in. (0.7~1m) from the front outside door handle, other people can also open the doors.**
- **After unlocking the driver's door or all doors, the door(s) will lock automatically unless the door is opened.**

Using the button on the smart key

1. Press the unlock button(2) of the smart key.
2. The driver's door will unlock. The hazard warning lights will blink and the chime will sound two times.
3. Press the unlock button(2) twice within 4 seconds and all doors and the liftgate will unlock. The hazard warning lights will blink and the chime will sound two times.

✻ NOTICE

After pressing the button, the doors will lock automatically unless any door is opened within 30 seconds.

✻ NOTICE

You can activate or deactivate the Two Turn Unlock function. Refer to "User settings" in this chapter.

Liftgate unlocking

Using the liftgate handle button

1. Carry the smart key.
2. Press the liftgate handle button.
3. When all doors are locked, the hazard warning lights will blink two times.

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

✻ NOTICE

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

Using the button on the smart key

1. Press the liftgate unlock button (3) for more than 1 second.
2. When all doors are locked, the hazard warning lights will blink two times.

• For Power Liftgate Only:

The Power Liftgate will open if the button is pressed for more than 1 second. Also, once the liftgate is opened and then closed, the liftgate will be locked again automatically.

❈For detailed information refer to the "Power liftgate" in this chapter.

Panic

1. Press the panic button (4) for more than 1 second.
2. The horn sounds and hazard warning light flash for about 27 seconds.

✻ NOTICE

To stop the horn and lights, press any button on the smart key.

Start-up

You can start the engine without inserting the key. For detailed information refer to the "Engine start/stop button" in chapter 5.

Loss of the smart key

A maximum of 2 smart keys can be registered to a single vehicle.

If you happen to lose your smart key, you will not be able to start the engine. You should immediately take the vehicle and remaining key to your authorized Kia dealer(tow the vehicle, if necessary) to protect it from potential theft.

Smart key precautions

- The smart key will not work if any of the following occur:
  - 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.
- When the smart key does not work correctly, open and close the door with the mechanical key and contact an authorized Kia dealer.
- If the smart key is in close proximity to your cell phone or smart phone, the signal from the smart key could be blocked by normal operation of your cell phone or smart phone. This is especially important when the phone is active such as making a call, receiving calls, text messaging, and/or sending/receiving emails. Avoid placing the smart key and your cell phone or smart phone in the same pants or jacket pocket and maintain adequate distance between the two devices.

⚠ CAUTION - Transmitter

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

✻ 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.

Battery replacement



A smart key 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 your smart key or replace the battery, contact an authorized Kia dealer.

1. Remove the mechanical key.
2. Pry open the rear cover.
3. Replace the battery with a new battery (CR2032). When replacing the battery, make sure the battery is in the correct position.
4. Install the battery in the reverse order of removal.

- The smart key is designed to give you years of trouble-free use, however it can malfunction if exposed to moisture or static electricity. If you are unsure how to use or replace the battery, contact an authorized Kia dealer.
- Using the wrong battery can cause the smart key to malfunction. Be sure to use the correct battery.
- To avoid damaging the smart key, don't drop it, get it wet, or expose it to heat or sunlight.
-  An inappropriately disposed battery can be harmful to the environment and human health. Dispose the battery according to your local law(s) or regulation.

⚠ CAUTION - Smart key damage

Do not drop, get wet or expose the smart key to heat or sunlight, or it will be damaged.

Smart key immobilizer system

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

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

With the immobilizer system, whenever you turn the engine start/stop button to the ON position by pressing the button while carrying the smart key, it verifies if the smart key is valid or not.

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

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

To deactivate the immobilizer system:

Turn the engine start/stop button to the ON position by pressing the button while carrying the smart key.

In order to prevent theft of your vehicle, do not leave spare keys anywhere in your vehicle.

To activate the immobilizer system:

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

✻ NOTICE

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

✻ NOTICE

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

This device complies with Part 15 of the FCC rules.

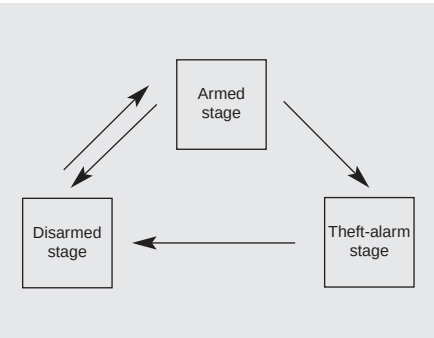
Operation is subject to the following two conditions:

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.

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. Remove the ignition key from the ignition switch and exit the vehicle.
2. Make sure that all doors (and liftgate) and engine hood are closed and latched.
3. Lock the doors using the transmitter of the keyless entry system (or smart key) or ignition 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 liftgate) 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 liftgate 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 Kia dealer. If you want this feature, consult an authorized Kia dealer.

Do not arm the system until all passengers have left the vehicle. If the system is armed while a passenger(s) remains in the vehicle, the alarm may be activated when the remaining passenger(s) leave the vehicle. If any door (or liftgate) 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 ignition key or transmitter (or smart key).
- The liftgate is opened without using the transmitter (or smart key).
- The engine hood is opened.

The horn will sound and the hazard warning lights will blink continuously for approximately 27 seconds, and repeat the horn 2 times unless the system is disarmed. To turn off the system, unlock the doors with the ignition key or transmitter (or smart key).

Disarmed stage

The system will be disarmed when

- The doors (and liftgate) are unlocked with the transmitter (or smart key) or the ignition 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 liftgate) is not opened within 30 seconds, the system will be rearmed.

✻ NOTICE

- **Avoid trying to start the engine while the alarm is activated. The vehicle starting motor is disabled during the theft-alarm stage.**
  - **If the system is not disarmed with the transmitter, insert the key into the ignition switch, turn the ignition switch to the ON position and wait for 30 seconds. Then the system will be disarmed.**
  - **If the system is not disarmed with the smart key, press the engine start/stop button with smart key. The side with the lock button should contact the engine start/stop button directly.**
- **If you lose your keys, consult your authorized Kia dealer.**

⚠ CAUTION - Adjusting alarm system

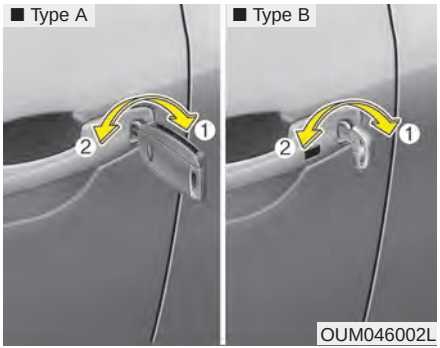
Do not change, alter or adjust the theft-alarm system because it could cause the theft-alarm system to malfunction and should only be serviced by an authorized Kia dealer.

✻ 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



- Turn the key toward the rear of the vehicle to unlock (1) and toward the front of the vehicle to lock (2).
- If you lock the driver's door with a key, all vehicle doors will lock automatically.
- From the driver's door, turn the key to the right once to unlock the door and once more within 4 seconds to unlock all doors.
- Doors can also be locked and unlocked with the transmitter.
- Once the doors are unlocked, they may be opened by pulling the door handle.
- When closing the door, push the door by hand. Make sure the doors are closed securely.

✻ NOTICE

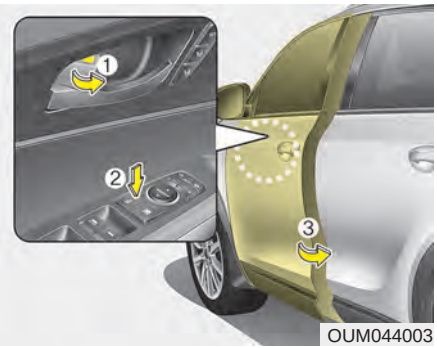
- **In cold and wet climates, door lock and door mechanisms may not work properly due to freezing conditions.**
- **If the door is locked/unlocked multiple times in rapid succession with either the vehicle key or door lock switch, the system may stop operating temporarily in order to protect the circuit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

⚠ WARNING

- **Securely close your door before you begin driving. Failure to fully close your door may cause it to open during vehicle operation.**
- **Keep your body out of the way of the closing door to prevent injuries.**

⚠ CAUTION

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



OUM044003

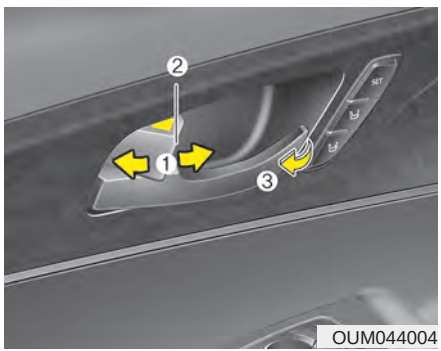
- To lock a door without the key, push the inside door lock button (1) or central door lock switch (2) to the “Lock” position when the ignition switch is OFF position and close the door (3).
- If you lock the door with the central door lock switch (2), all vehicle doors will lock automatically.

✻ NOTICE

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

Operating door locks from inside the vehicle

With the door lock button



OUM044004

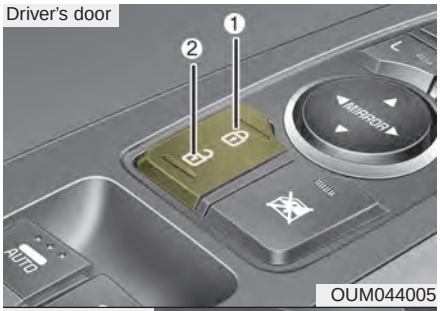
- To unlock a door, push the door lock button (1) to the “Unlock” position. The red mark (2) on the button will be visible.
- To lock a door, push the door lock button (1) to the “Lock” position. If the door is locked properly, the red mark (2) on the door lock button will not be visible.
- To open a door, pull the door handle (3) 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 ignition key is in the ignition switch and any front door is opened.

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

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

With central door lock switch

Driver's door



Passenger's door



Operate by pressing the central door lock switch.

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

⚠ WARNING - Doors

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

⚠ WARNING - 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

Impact sensing door unlock system

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

Speed sensing door lock system

All doors will automatically lock after the vehicle speed exceeds 10 mph (15 km/h).

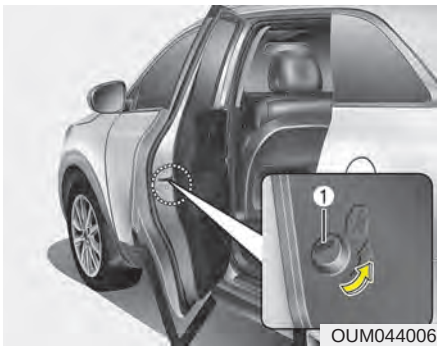
Shift lever door lock/unlock system

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

✻ NOTICE

You can select some auto door lock/unlock features in "User Settings" For more information, refer to "User Settings" in this chapter.

Child-protector rear door lock



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

1. Open the rear door.
2. 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.

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.

LIFTGATE (for manual liftgate)

Opening the liftgate


OUMA048007

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

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

✻ NOTICE

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

⚠ CAUTION - Liftgate lift

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

Closing the liftgate


OUMA048008

To close the liftgate, lower and push down the liftgate firmly. Make sure that the liftgate is securely latched.

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

⚠ WARNING - Exhaust fumes

If you drive with the liftgate open, you will draw dangerous exhaust fumes into your vehicle which can cause serious injury or death to vehicle occupants. If you must drive with the liftgate open, keep the air vents and all windows open so that additional outside air comes into the vehicle.

⚠ WARNING - Rear cargo area

Occupants should never ride in the rear cargo area where no restraints are available. Occupants should always be properly restrained.

Emergency liftgate safety release

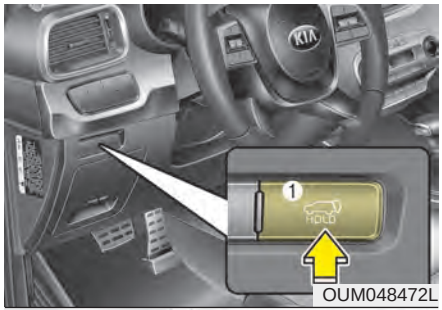


Your vehicle is equipped with an emergency liftgate safety release lever located on the bottom of the liftgate. When someone is inadvertently locked in the cargo area, the liftgate can be opened by pushing the release lever and pushing open the liftgate.

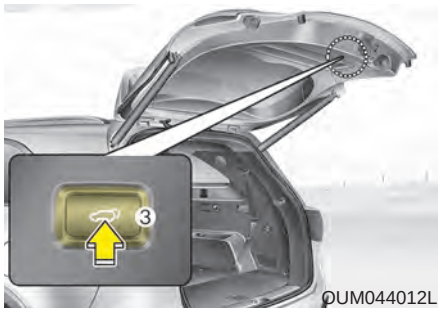
⚠ WARNING

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

POWER LIFTGATE (IF EQUIPPED)







(1) Power liftgate open / close button
(2) Power liftgate handle switch
(3) Power liftgate close button

✻ NOTICE

If ignition switch is ON position, the power liftgate can operate when the shift lever is in P (Park).

⚠ WARNING - Unattended children/pets

Never leave children or animals unattended in your vehicle. Children or animals might operate the power liftgate in such a way that could result in injury to themselves or others or damage to the vehicle.

✻ NOTICE

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

✻ NOTICE

Do not attach heavy objects to the power liftgate when you operate the power liftgate. Additional weight on liftgate could cause damage to the system.

⚠ WARNING



OUMA048014

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

⚠ CAUTION

Do not close or open the power liftgate manually during automatic operation. This may cause damage to the power liftgate or to the vehicle.

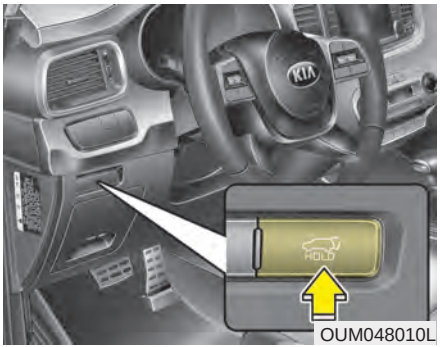
If it is necessary to close or open the power liftgate manually when the battery is discharged or disconnected, make sure the liftgate is not in operation. Switch the power liftgate to the off position. Do not apply excessive force.

Opening the liftgate


OUMA048300

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

- Press and hold the liftgate unlock button on the transmitter or smart key until power liftgate operates.
- While power liftgate operating, you can stop it if you shortly press the unlock button on the transmitter or smart key.



OUM048010L

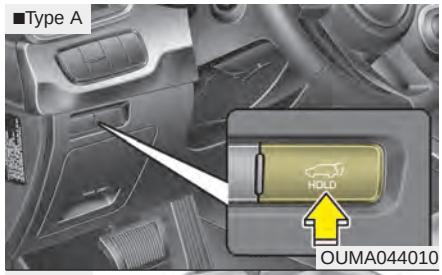
- Press the power liftgate open/close button for approximately one second.
- For emergency stop while power liftgate operating, press the power liftgate open/close button shortly.


OUMA048011

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

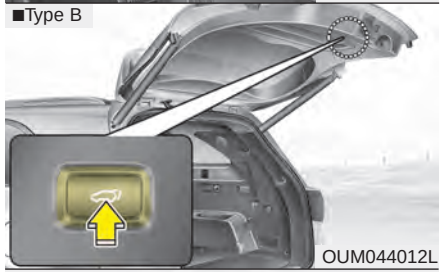
Closing the liftgate

■Type A



OUMA044010

■Type B


OUM044012L

■Type C


OUMA048300

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

  The liftgate will close and lock automatically.
- For emergency stop while power liftgate operating, press the power liftgate open/close button shortly.

⚠ WARNING

Make sure there are no people or objects around the liftgate before opening or closing the power liftgate. Wait until the liftgate is open fully and stopped before loading or unloading cargo from the vehicle.

Power liftgate non-opening conditions

The power liftgate will not open automatically, when the vehicle is moving more than 2mph (3km/h) or the automatic shift lever is not in P(Park) position. The power liftgate will not open automatically, when the automatic shift lever is not in P(Park) position.

✻ NOTICE

The chime will sound continuously if you drive over 2mph (3km/h) with the liftgate opened. Stop your vehicle at a safe place as soon as possible to check if your liftgate is opened.

⚠ CAUTION

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

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

✻ NOTICE

- **The power liftgate can be operated when the engine is not running. However the power liftgate operation consumes large amounts of vehicle electric power. To prevent the battery from being discharged, do not operate it excessively.**
- **To prevent the battery from being discharged, do not leave the power liftgate in the open position for a long time.**
- **Do not modify or repair any part of the power liftgate 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 liftgate. This could cause the power liftgate to operate improperly.**

(Continued)

(Continued)

- **In cold and wet climates, the power liftgate may not work properly due to freezing conditions.**
- **It is recommended to wait until the power liftgate is fully closed before starting the vehicle. The power liftgate may not close fully if the vehicle is started during automatic closing.**

⚠ CAUTION

Never operate the power lift gate with any heavy objects attached (e.g. bicycles) as it could become damaged.

Automatic reversal



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

- If the resistance is detected while opening the liftgate, it will stop and move in the opposite direction.
- If the resistance is detected while closing the liftgate, 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 liftgate 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 liftgate may stop at that position. At this time, close the liftgate manually and operate the liftgate automatically again.

⚠ WARNING

Never place any object or part of your body in the path of the power liftgate as it is operating. Doing so could result in personal injury.

How to reset the power liftgate

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

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

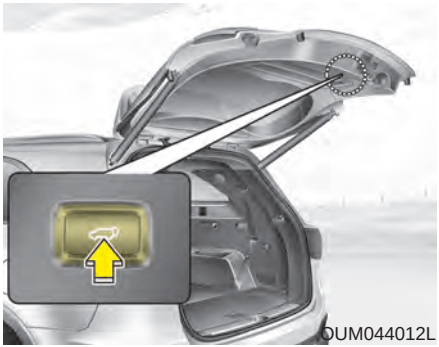
If the power liftgate does not work properly after the above procedure, have the system checked by an authorized Kia dealer.

✻ NOTICE

If the power liftgate does not operate normally, first check the following condition before using the power liftgate.

Make sure the automatic shift lever is in P (Park) or the manual shift lever is in N (Neutral).

Power liftgate opening height user setting


OUM044012L

The driver may set the height of a fully opened liftgate by following the below instruction.

1. Position the liftgate manually to the height you prefer.
2. Press the liftgate close button for more than 3 seconds.
3. You will hear the system beep twice indicating height has been set up.

The liftgate will open to the height the driver has set up.

Smart Power Liftgate (if equipped)


OUMA048015

On a vehicle equipped with a smart key, the liftgate can be opened using the Smart Power Liftgate system.

How to use the Smart Power Liftgate

The liftgate can be opened with no-touch activation satisfying all the conditions below.

- After 15 seconds when all doors are closed and locked
- Positioned in the detecting area for more than 3 seconds.

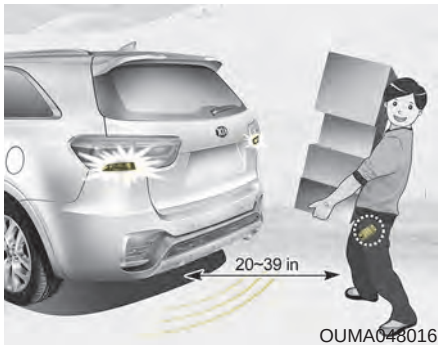
✻ NOTICE

- **The Smart Power Liftgate 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 within 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 Power Liftgate, go to User Settings Mode and select Smart Power Liftgate on the LCD display.

❋ **For more information, refer to the “LCD Display” section in this chapter.**



2. Detect and Alert

If you are positioned in the detecting area (20 ~ 39 inches (50 ~ 100 cm) behind the vehicle) carrying a smart key, the hazard warning lights will blink and chime will sound for about 3 seconds to alert you the smart key has been detected and the liftgate will open.

✻ NOTICE

Do not approach the detecting area if you do not want the liftgate 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 liftgate will stay closed.



3. Automatic opening

The hazard warning lights will blink and chime will sound 2 times and then the liftgate will open.

Make sure you close the liftgate before driving your vehicle.

Make sure there are no people or objects around the liftgate before opening or closing the liftgate. Make sure objects in the liftgate do not come out when opening the liftgate on a slope. It may cause serious injury. Make sure to deactivate the Smart Power Liftgate when washing your vehicle. Otherwise, the liftgate may open inadvertently. The key should be kept out of reach of children. Children may inadvertently open the Smart Power Liftgate while playing around the rear area of the vehicle.

⚠ CAUTION - Liftgate lift

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

How to deactivate the Smart Power Liftgate function using the smart key



OUMA048520

1. Door lock
2. Door unlock
3. Liftgate open and close
4. Panic

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

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

✻ NOTICE

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

Detecting area



OUMA044019

- The Smart Power Liftgate operates with a welcome alert if the smart key is detected within 20 ~ 39 inches (50 ~ 100 cm) from the liftgate.
- The alert stops once the smart key is positioned outside the detecting area during the Detect and Alert stage.

✻ NOTICE

- **The Smart Power Liftgate 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 tire is raised to replace a tire or to inspect the vehicle.**
  - **The vehicle is parked on a slope or unpaved road, etc.**

Emergency liftgate safety release

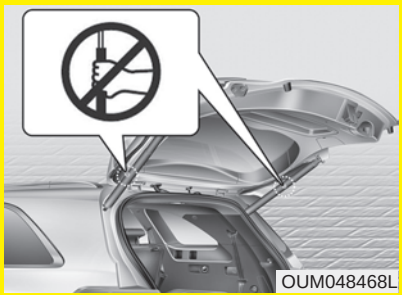

OUMA044009

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

⚠ WARNING

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

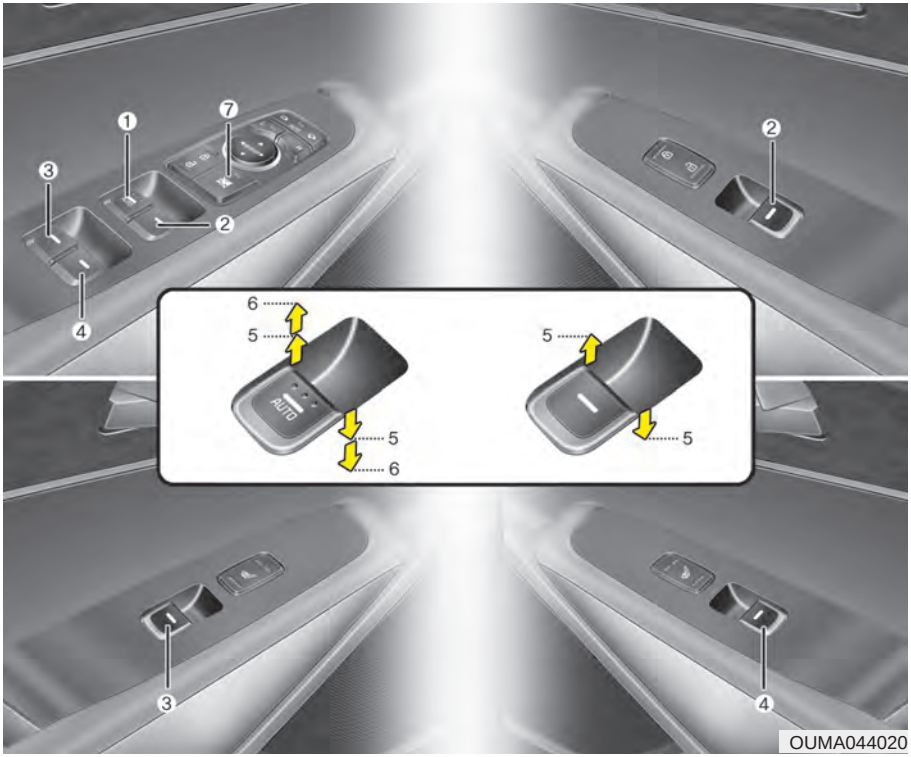
⚠ WARNING



Do not grab the power liftgate struts while the liftgate is open.

- **This may cause the liftgate to unexpectedly collapse on top of you causing serious injury.**
- **The strut may be hot which can cause injury.**

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* (Driver's and Passenger's window)
(7) Power window and rear sunroof* lock switch

* if equipped

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

Power windows

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

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

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 section.

Window opening and closing



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

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

⚠ 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.

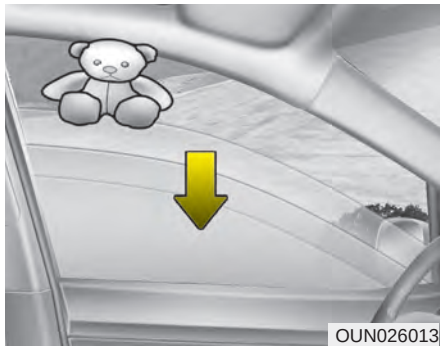
Auto up/down window (if equipped)



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

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

1. Turn the ignition switch to the ON position.
2. Close the driver's and 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 (for Auto up/down window)

If the upward movement of the window is blocked by an object or part of the body, the window will detect the resistance and will stop upward movement. The window will then lower approximately 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).

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

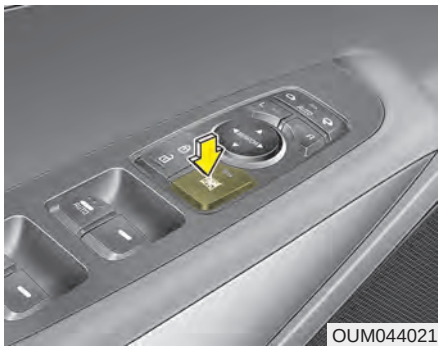
The automatic reverse feature for the driver's window is only active when the "auto up" feature is used by fully pulling up the switch. The automatic reverse feature will not operate if the window is raised using the halfway position on the power window switch.

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

⚠ WARNING

The automatic reverse feature doesn't 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.

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 switch 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.

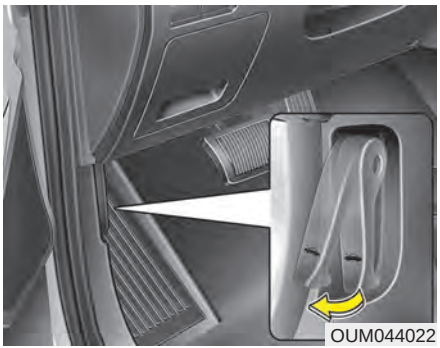
Always double check to make sure all arms, hands, head and other obstructions are safely out of the way before closing a window.

⚠ 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.**

HOOD

Opening the hood


OUM044022

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

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



OUMA048023

2. Go to the front of the vehicle, raise the hood slightly, pull the secondary latch (1) inside 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


OUMA048522

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

The warning chime will operate when the vehicle is being driven above 3 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. Return the support rod to its clip to prevent it from rattling.
3. Lower the hood until it is about 30 cm above the closed position and let it drop. Make sure that it locks into place.
4. 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.

⚠ WARNING - 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 severe personal injury.

⚠ WARNING - Fire risk

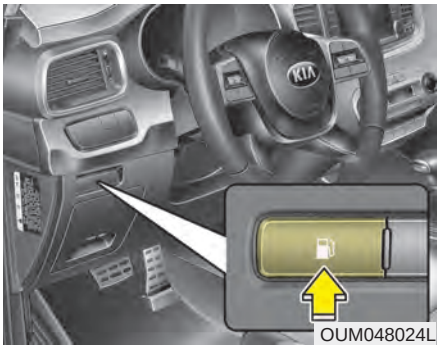
Do not leave gloves, rags or any other combustible material in the engine compartment. Doing so may cause a heat-induced fire.

⚠ 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.

⚠ 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 a fire or explosion.

⚠ WARNING - Static electricity

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

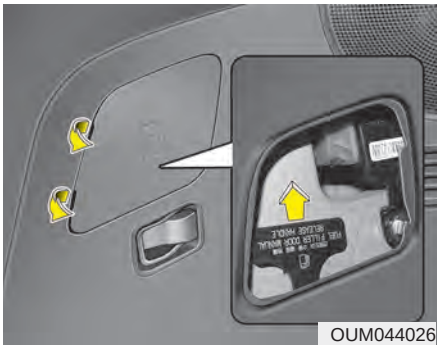
Make sure to refuel your vehicle according to the “Fuel requirements” suggested in chapter 1.

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.

Emergency fuel filler lid release



If the fuel filler lid does not open using the remote fuel filler lid release, you can open it manually. 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.

PANORAMIC SUNROOF (IF EQUIPPED)


OUM044027

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 ignition key is removed or turned to the ACC or LOCK (or OFF) position.

However, if the front 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.**
- **Do not allow children to operate the sunroof.**

⚠ CAUTION

Do not extend any luggage out side the sunroof while driving.

⚠ WARNING

To avoid accidental injury, do not let children operate the sunroof without adult supervision.

Sunroof open warning (if equipped)



OUMA048523

If the driver removes the ignition key (smart key: turns off the engine) when the sunroof is not fully closed, the warning chime will sound for a few seconds and a message 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.

Sunshade


OUM044028

To open the sunshade

Pull the sunroof control lever backward to the 1st detent position.

To close the sunshade when the sunroof glass is closed

Push the sunroof control lever forward or pull it down to the 1st detent position.

To stop the sliding at any point, press the sunshade control switch momentarily.

✻ 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.***

✻ NOTICE

Only the front glass of the panorama sunroof opens and closes.

Sliding the sunroof


OUM044029

When the sunshade is closed

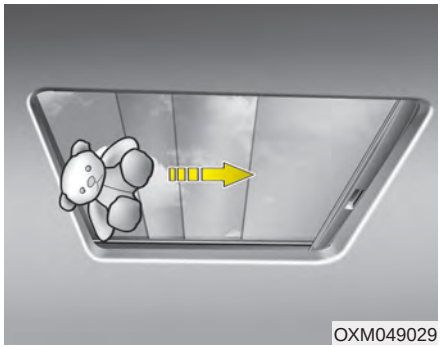
Pull the sunroof control lever backward to the 2nd detent position, both the sunshade and sunroof glass will slide all the way open. To stop the sunroof movement at any point, pull or push the sunroof control glass lever momentarily.

When the sunshade is opened

Pull the sunroof glass control lever backward to the 1st or 2nd detent position, the sunroof glass will be opened.

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

Automatic reversal



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

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

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

- **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 avoid damage to the sunroof periodically remove any dirt that may accumulate on the guide rail.***
- ***If you drive with the sunroof opened right after a vehicle wash or rain, water may get inside the vehicle and cause damage to the interior.***

⚠ 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



When the sunshade is closed

Push the sunroof control lever upward, the sunshade will slide halfway open then the sunroof glass will tilt.

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

When the sunshade is opened

Push the sunroof control lever upward, the sunroof glass will tilt.

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

Closing the sunroof

To close the sunroof glass with the sunshade

Push the sunroof control lever forward or downward to the 2nd detent position. The sunroof glass and sunshade will close automatically.

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

To close the sunroof glass only

Push the sunroof control lever forward or downward to the 1st detent position. The sunroof glass will close automatically.

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

Resetting the sunroof

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

1. Turn the ignition switch to the ON position.
2. 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 for about (5 ~10 seconds) until the sunroof operates as follows: SUNSHADE OPENS → GLASS TILTS UP → SOUND OF MOTOR'S 'CLICK' and then release the button. [Do not release the button on movement. (initialization of reset will fail)]
5. Push the sunroof control lever forward in the direction of close for about (1 ~2 seconds), until the sunroof operates as follows: GLASS OPEN → GLASS/SUNSHADE CLOSE and then release the button. [Do not release the button on movement. (initialization failed)]

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

✻ NOTICE

If you do not reset the sunroof, it may not work 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 Kia dealer.

- If the Electric Power Steering System does not operate normally, the warning light will illuminate on the instrument cluster. The steering wheel may require increased steering effort. Take your vehicle to an authorized Kia dealer and have the vehicle checked as soon as possible.
- 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 ignition switch is turned to the ON or LOCK (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 steering wheel may become difficult to control or operate abnormally. Take your vehicle to an authorized Kia dealer and have the vehicle checked as soon as possible.**

(Continued)

(Continued)

- **When you operate the steering wheel in low temperature, abnormal noise may occur. If temperature rises, the noise will likely disappear. This is a normal condition.**
- **When the charging system warning light comes on due to the low voltage (When the alternator or battery) does not operate normally or malfunctions), the steering wheel may require increased steering effort.**

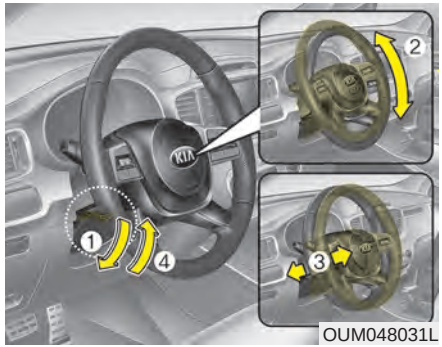
Tilt and telescopic steering

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.



To change the steering wheel angle, pull down the lock-release lever (1), adjust the steering wheel to the desired angle (2) and height (3) then pull up the lock-release lever to lock (4) the steering wheel in place. Be sure to adjust the steering wheel to the desired position before driving.

✻ NOTICE

After adjustment, sometimes the lock release lever may not lock the steering wheel. It is not a malfunction. This occurs when two gears are not engaged correctly. In this case, adjust the steering wheel again and then lock the steering wheel.

Heated steering wheel (if equipped)



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

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

⚠ 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.

✻ NOTICE

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

⚠ CAUTION

- ***Do not install any 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 steering wheel is damaged by sharp object, damage to the heated steering wheel components could occur.***

Horn



OUM048033L

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.

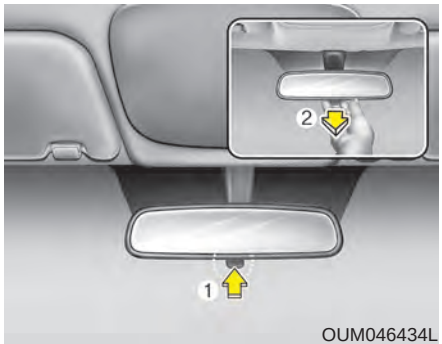
⚠ WARNING - Mirror adjustment

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.

Day/night rearview mirror (if equipped)



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

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

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

Electric chromatic mirror (ECM) (if equipped)

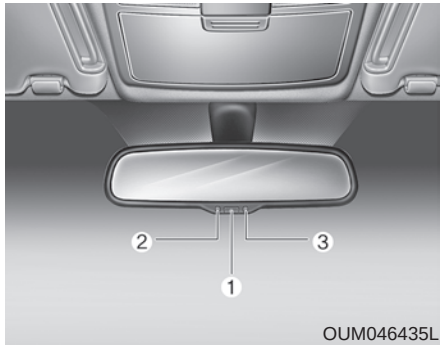
The electric rearview mirror automatically controls the glare from the headlights of the vehicles behind you in nighttime or low light driving conditions. The sensor (3) mounted in the mirror senses the light level around the vehicle, and automatically controls the headlight glare from the vehicles behind you.

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

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

⚠ CAUTION - Cleaning mirror

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



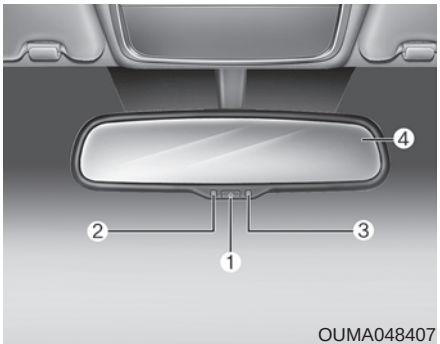
OUM046435L

To operate the electric rearview mirror:

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

  Press the ON/OFF button (1) to turn the automatic dimming function on. The mirror indicator light (2) will illuminate.

Electric chromatic mirror (ECM) with compass (if equipped)



1. Feature Control Button
2. Status Indicator LED
3. Rear Light Sensor
4. Compass Display Window

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

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

www.gentex.com

✻ NOTICE

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 would obstruct either light sensor will degrade the automatic dimming control feature.

Automatic-dimming function

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

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

✻ NOTICE

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

Z-Nav™ Compass Display

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

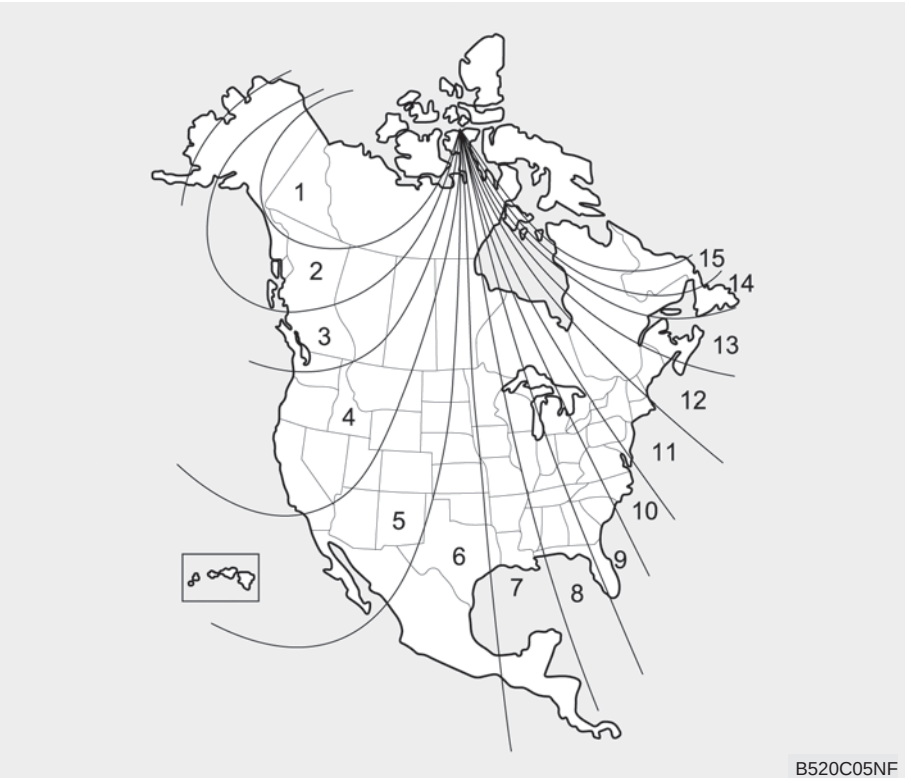
Compass function

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

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

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

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



To adjust the Zone setting:

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

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

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

Electro chromic mirror with HomeLink system (if equipped)

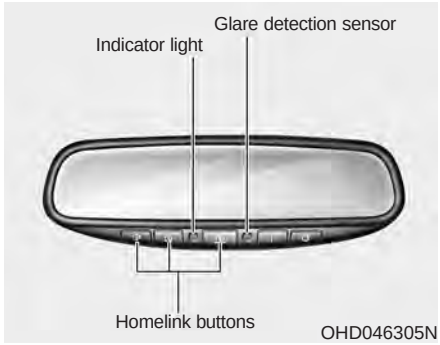


OUMA048521

To operate the electric rearview mirror

Press the I button (1) to turn the automatic- dimming function on. The mirror indicator light will illuminate.

Press the O button (2) to turn the automatic- dimming function off. The mirror indicator light will turn off.



OHD046305N

HomeLink® Wireless Control System

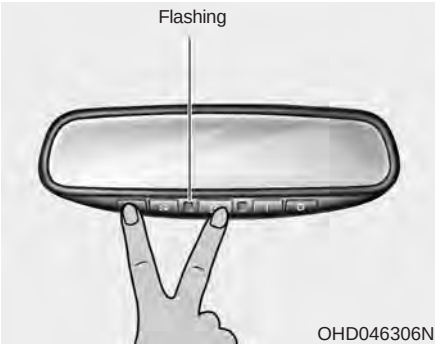
Your new mirror comes with an integrated HomeLink Universal Transceiver, which allows you to program the mirror to activate your garage door(s), estate gate, home lighting, etc. The mirror actually learns the codes from your various existing transmitters.

Retain the original transmitter for future programming procedures (i.e., new vehicle purchase). It is also suggested that upon the sale of the vehicle, the programmed HomeLink buttons be erased for security purposes (follow step 1 in the “Programming” portion of this text).

Programming

Your vehicle may require the ignition switch to be turned to the ACC position for programming and/or operation of HomeLink. It is also recommended that a new battery be replaced in the hand-held transmitter of the device being programmed to HomeLink for quicker training and accurate transmission of the radio-frequency.

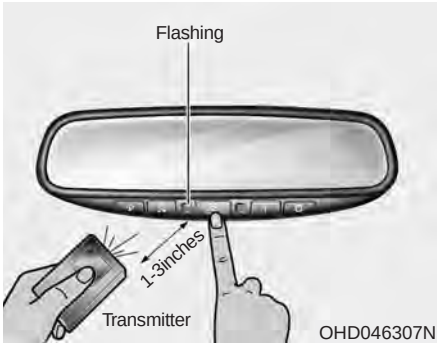
Follow these steps to train your HomeLink mirror:



1. When programming the buttons for the first time, press and hold the left and center buttons (,) simultaneously until the indicator light begins to flash after approximately 20 seconds. (This procedure erases the factory-set default codes. Do not perform this step when programming the additional HomeLink buttons.)

✻ NOTICE

For non rolling code garage door openers, follow steps 2 - 3.
For rolling code garage door openers, follow steps 2 - 6.
For Canadian Programming, please follow the Canadian Programming section.
For help with determining whether your garage door opener is non-rolling code or rolling code, please refer to the garage door openers owner's manual or contact HomeLink customer service at 1-800-355-3515.



2. Press and hold the button on the HomeLink system you wish to train and the button on the transmitter while the transmitter is approximately 2-8 cm (1 to 3 inches) away from the mirror. Do not release the buttons until step 3 has been completed.
3. The HomeLink indicator light will flash, first slowly and then rapidly. When the indicator light flashes rapidly, both buttons may be released. (The rapid flashing light indicates successful programming of the new frequency signal.)

✻ NOTICE

Some gate and garage door openers may require you to replace step #3 with the "cycling" procedure noted in the "Canadian Programming" section of this document.

Rolling code programming

To train a garage door opener (or other rolling code equipped devices) with the rolling code feature, follow these instructions after completing the "Programming" portion of this text. (A second person may make the following training procedures quicker & easier.)

4. Locate the "learn" or "smart" button on the device's motor head unit. Exact location and color of the button may vary by product brand. If there is difficulty locating the "learn" or "smart" button, reference the device's owner's manual or contact HomeLink at 1-800-355-3515 or on the internet at www.homelink.com.
5. Press and release the "learn" or "smart" button on the device's motor head unit. You have 30 seconds to complete step number 6.

6. Return to the vehicle and firmly press and release the programmed HomeLink button up to three times. The rolling code equipped device should now recognize the HomeLink signal and activate when the HomeLink button is pressed. The remaining two buttons may now be programmed if this has not previously been done. Refer to the “Programming” portion of this text.

Operating HomeLink

To operate, simply press the programmed HomeLink button. Activation will now occur for the trained product (garage door, security system, entry door lock, estate gate, or home or office lighting). For convenience, the hand-held transmitter of the device may also be used at any time. The HomeLink Wireless Controls System (once programmed) or the original hand-held transmitter may be used to activate the device (e.g. garage door, entry door lock, etc.). In the event that there are still programming difficulties, contact HomeLink at 1-800-355-3515 or on the internet at www.homelink.com.

Erasing programmed HomeLink buttons



To erase the three programmed buttons (individual buttons cannot be erased):

- Press and hold the left and center buttons simultaneously, until the indicator light begins to flash (approximately 20 seconds). Release both buttons. Do not hold for longer than 30 seconds.

HomeLink is now in the train (or learning) mode and can be programmed at any time.

Reprogramming a single HomeLink button

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

1. Press and hold the desired HomeLink button. Do NOT release until step 4 has been completed.
2. When the indicator light begins to flash slowly (after 20 seconds), position the hand-held transmitter 2-8 cm (1 to 3 inches) away from the HomeLink surface.
3. Press and hold the hand-held transmitter button (or press and “cycle” - as described in “Canadian Programming”).
4. The HomeLink indicator light will flash, first slowly and then rapidly. When the indicator light begins to flash rapidly, release both buttons.

The previous device has now been erased and the new device can be activated by pushing the HomeLink button that has just been programmed. This procedure will not affect any other programmed HomeLink buttons.

Canadian Programming Garage & gate openers

During programming, your hand-held transmitter may automatically stop transmitting. Continue to press and hold the HomeLink button (note steps 2 through 4 in the “Programming” portion of this text) 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.

Accessories

If you would like additional information on the HomeLink Wireless Control System, HomeLink compatible products, or to purchase other accessories such as the HomeLink® Lighting Package, please contact HomeLink at 1-800-355-3515 or on the internet at www.homelink.com.

FCC ID: NZLZTVHL3

IC: 4112A-ZTVHL3

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

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

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

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

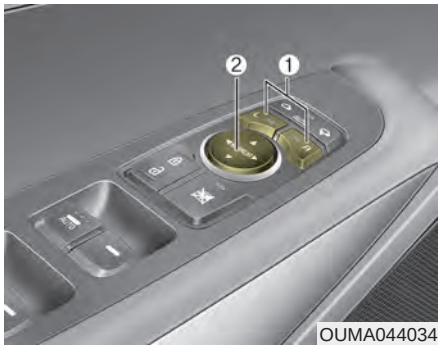
Do not scrape ice off the mirror face; this may damage the surface of the glass. If ice should restrict the movement of the mirror, do not force the mirror for adjustment. To remove ice, use a deicer spray, or a sponge or soft cloth with very warm water.

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



Adjusting the rearview mirrors:

Press either the L (driver's side) or R (passenger's side) button (1) to select the rearview mirror you would like to adjust when the ignition switch is ACC or ON position.

Use the mirror adjustment control (2) to position the selected mirror up, down, left or right.

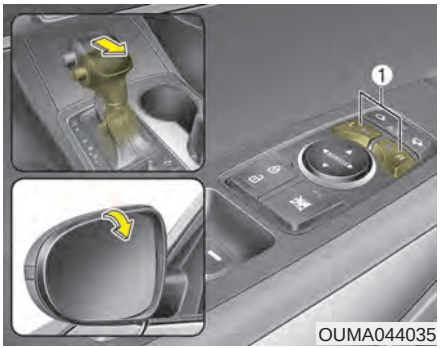
After adjustment, press the L or R button (1) again to prevent inadvertent adjustment.

⚠ CAUTION - Outside mirror

- ***The mirrors stop moving when they reach the maximum adjusting angles, but the motor continues to operate while the switch is pressed.***

  Do not press the switch longer than necessary, the motor may be damaged.
- ***Do not attempt to adjust the outside rearview mirror by hand. Doing so may damage the parts.***

Reverse parking aid function (if equipped)



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

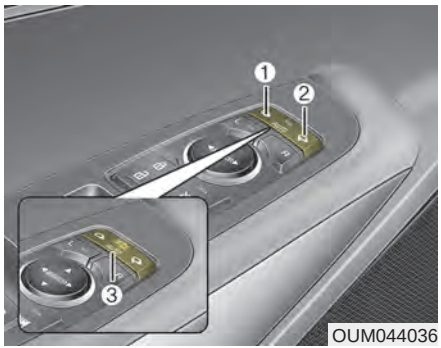
L/R : When the remote control outside rearview mirror switch is selected to the L (left) or R (right) position, both outside rearview mirrors will move downward.

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

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

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

Folding the outside rearview mirror



Electric type (if equipped)

The outside rearview mirror can be folded or unfolded by pressing the switch when the ignition switch is ACC or ON position as below.

Left (1) : The mirror will unfold.

Right (2) : The mirror will fold.

Center (AUTO, 3) :

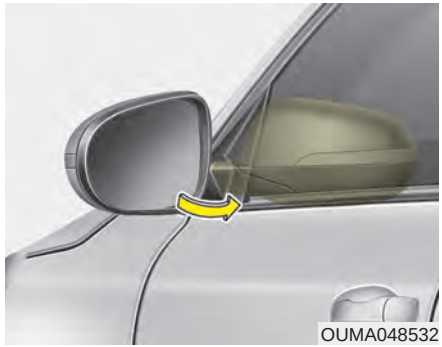
The mirror will fold or unfold automatically as follows:

- The mirror will fold or unfold when the door is locked or unlocked by the folding key or 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.

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



Manual type

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

INSTRUMENT CLUSTER

■ **Type A**



■ **Type B**



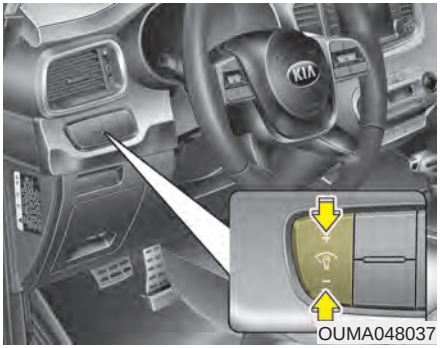
1. Tachometer
2. Speedometer
3. Engine coolant temperature gauge
4. Fuel gauge
5. LCD display
6. Warning and indicator lights

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

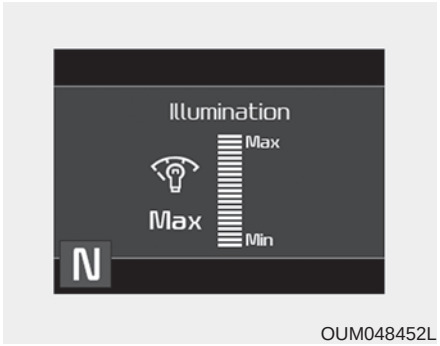
OUMA048100/OUMA048101

Instrument Cluster Control

Adjusting Instrument Cluster Illumination

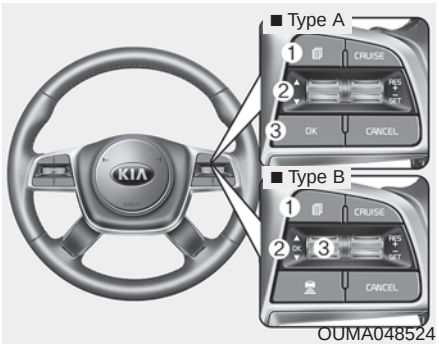


The brightness of the instrument panel illumination is changed by pressing the illumination control button (“+” or “-”) when the ignition switch or Engine Start/Stop button is ON, or the tale lights are turned on.



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

LCD Display Control



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

(1) : MODE button for changing the LCD modes

(2) ▲ / ▼ : MOVE move scroll switch to select the items

(3) OK : SET/RESET button for set the items or reset the items (Push scroll wheel switch : for Type B)

Gauges

Speedometer

■ Type A



OUM044202L

■ Type B

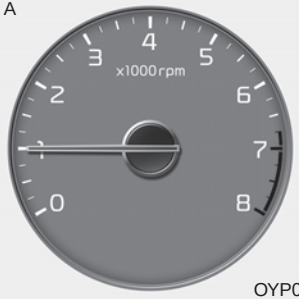


OUM044116

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



OYP044103N

■ Type B



OUMA048533

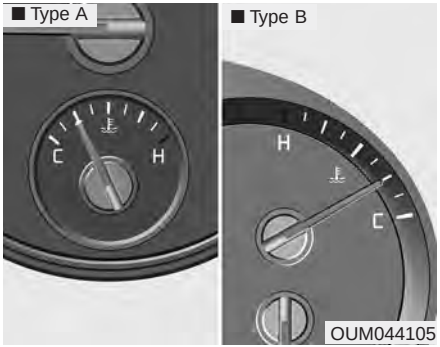
The tachometer indicates the approximate number of engine revolutions per minute (rpm).

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



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

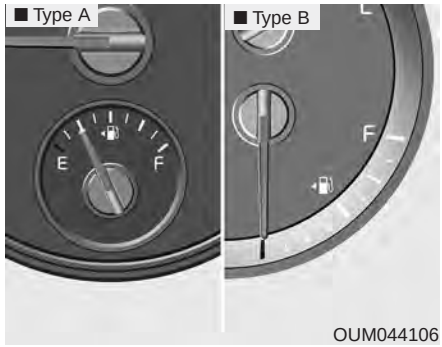
If the gauge pointer moves beyond the normal range area toward the “H” position, it indicates overheating that may damage the engine.

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

⚠ 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



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.**

⚠ WARNING - Fuel gauge

Stop and obtain additional fuel as soon as possible after the warning light comes on or when the gauge indicator comes close to the E level. Running out of fuel can expose vehicle occupants to danger.

⚠ 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

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

Odometer

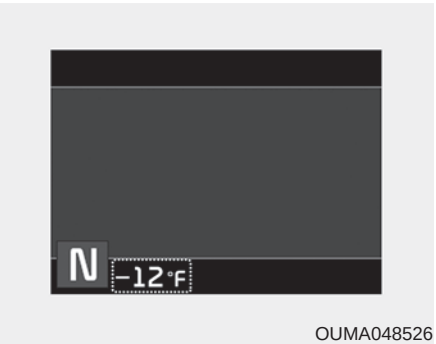


OUMA048525

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 ~ 999,999 miles or 1,599,999 kilometers.

Outside Temperature Gauge



OUMA048526

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

- Temperature range : -40°F ~ 211°F (-40°C ~ 85°C)

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

To change the temperature unit (from °C to °F or from °F to °C)

The temperature unit can be changed by using the “User Settings” mode of the LCD display.

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

Transmission Shift Indicator

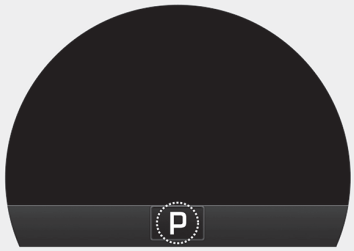
Automatic Transmission Shift Indicator

■ Type A



OUM048455L

■ Type B



OUM044116

This indicator displays which automatic transmission shift lever is selected.

- Park : P
- Reverse : R
- Neutral : N
- Drive : D
- Sports Mode :
  - Type A : 1, 2, 3, 4, 5, 6
  - Type B : 1, 2, 3, 4, 5, 6, 7, 8

Icy Road Warning (if equipped)



OCK047152N

This warning message and light is to warn the driver the road may be icy.

When the following conditions occur, the warning message displays for 4 seconds and light(including Outside Temperature Gauge) blinks 5 times and then illuminates.

- The temperature on the Outside Temperature Gauge is below approximately 39°F (4°C).

When the Outside Temperature Gauge reaches 42.8°F (6°C), the warning light is turned off.

LCD DISPLAY

LCD Modes

Modes	Symbol	Explanation
Trip Computer		This mode displays driving information like the tripmeter, fuel economy, and so on. ❈ For more details, refer to “Trip Computer” in this chapter
Turn by Turn mode (if equipped)		This mode displays the state of the navigation.
Assist mode (if equipped)		This mode displays the state of below systems. - SCC with S&G(Refer to “Smart Cruise Control with Stop & Go System” in chapter 5) - Lane keeping Assist (Refer to “Lane Keeping Assist System” in chapter 5) - In AWD AUTO MODE, the cluster displays the traction force distribution status of front-wheels and rear-wheels, but in AWD LOCK MODE, the cluster doesn’t display the status. (Refer to “All Wheel Drive (AWD) transfer mode selection” in chapter 5) ❈ For more details, refer to chapter 5 and 6.
User Settings		On this mode, you can change settings of the doors, lamps and etc.
Master warning mode		This mode informs of warning messages related to Low tire pressure or malfunction of Blind-spot Collision Warning and etc.

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

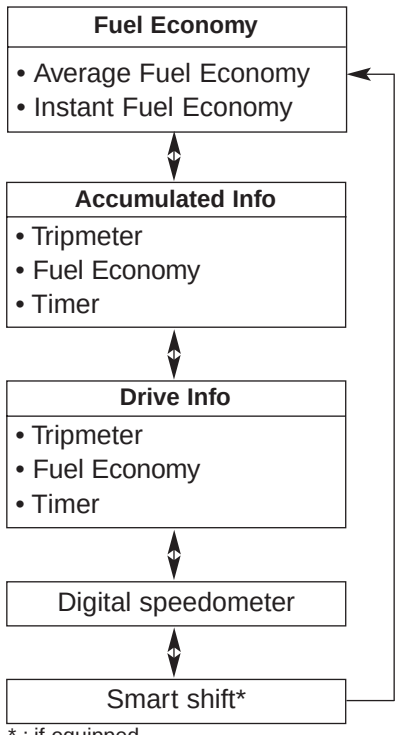
TRIP MODES (TRIP COMPUTER)

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

✻ NOTICE

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

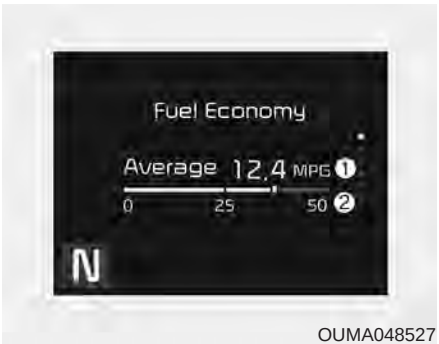
Trip Modes



* : if equipped

To change the trip mode, scroll the MOVE scroll switch (▲/▼) in the trip computer mode.

Fuel Economy



OUMA048527

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 km/L, L/100km
- The average fuel economy can be reset both manually and automatically.

Manual reset

To reset 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 “Auto Reset” mode in User Setting menu of the LCD display (Refer to “LCD Display”).

- OFF - You may set to default manually by using the trip switch reset button.
- When driving - The vehicle will automatically set to default once 4 hours pass after the Engine Start/Stop Button or ignition switch is in the ACC or OFF position.
- When refueling - After refueling more than 1.6 gallons (6 liters) and driving over 1 mph (1 km/h), the vehicle will reset to default automatically.

✻ NOTICE

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

Instant Fuel Economy (2)

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

Accumulated driving information mode



OUMA048528

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

- Accumulated information is calculated after the vehicle has run for more than 0.2 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



OUMA048529

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

- Fuel efficiency is calculated after the vehicle has run for more than 0.2 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



OUMA048530

This mode displays the current speed of the vehicle.

Smart Shift (if equipped)



OCK047145L

This mode displays the currently selected drive mode.

Turn By Turn Mode (if equipped)

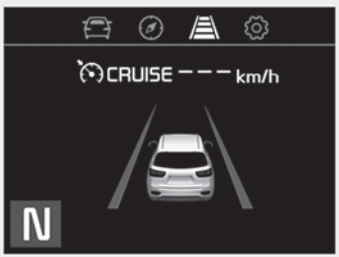


OUMA048531

This mode displays the state of the navigation.

Assist mode (if equipped)

■ SCC with S&G



OUM068041L

■ AWD AUTO



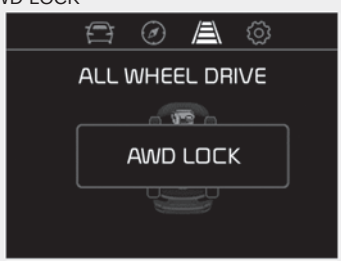
OUMA048493

■ LKA



OUM068042L

■ AWD LOCK



OUMA048505

Assist mode displays the state of below systems.

- Smart Cruise Control with Stop & Go (if equipped)
- Lane keeping Assist(if equipped)
- In AWD AUTO MODE (if equipped), the cluster displays the traction force distribution status of front-wheels and rear-wheels, but in AWD LOCK MODE (if equipped), the cluster doesn't display the status.

Service mode



OCK047117N

When Service Required is set, the remaining distance/period to drive 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 period amounts to 3 days, Service Required message automatically displays and remained on LCD screen for a number of seconds every time the engine start/stop button is ON.

With Service Required in place, 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.

❊See User Settings

Mode in this chapter for further information about Service Required Setting.

❊Service Required Setting

Battery Cable Disconnection, Fuse Switch OFF, or Service Required Setting values (an amount of miles/time driven) can be randomly changed. In such cases, re-enter Service Required Setting values.

Master Warning Mode

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

The Master Warning Light illuminates when more than one of the above warning situations occur.

If the warning situation is solved, the master warning light will be turned off.

Distance to empty



OCK047143N

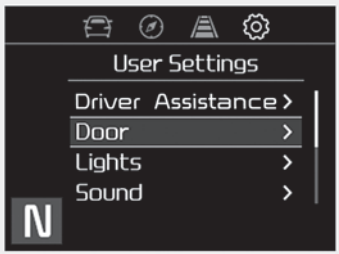
- The distance to empty is the estimated distance the vehicle can be driven with the remaining fuel.
  - Distance range : 1 ~ 9,999 mi. (1 ~ 9,999 km)
- If the estimated distance is below 1 mi. (1 km), the trip computer will display “---” as distance to empty.

✻ 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.**

User Settings Mode

Description



OUMA048467

In this mode, you can change setting of the doors, lights, and so on.

Shift to P to edit settings



OCK047142L

This warning message appears if you try to adjust the User Settings while driving.

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

Driver Assistance (if equipped)

- Lane Safety (if equipped) :
  - Lane Departure Warning : To activate the lane departure warning function.
  - Standard LKA : To activate the standard LKA mode.
  - Active LKA : To activate the active LKA mode.

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

- Driver Attention Warning : Cloose the alert stage (Off/Normal/Early stage) of the Driver Attention Warning.
- Smart Cruise Control with Stop & Go Reaction (if equipped) :
  - Choose the sensitivity (Slow/Normal/Fast) of the smart cruise control.

❈For more details, refer to “Smart Cruise Control with Stop & Go” in chapter 5.

- Forward Collision-Avoidance Assist (FCA, if equipped) :
  - To activate or deactivate the FCA system.

❈For more details, refer to “Forward Collision-Avoidance Assist(FCA)” in chapter 5.

- Forward Collision Warning (FCW, if equipped)
  - Choose the sensitivity of the forward collision warning.

    (Late/Normal/Early)

❈For more details, refer to “Forward Collision-Avoidance Assist(FCA)” in chapter 5.

- Blind Spot Collision Warning Sound (if equipped)
  - If this item is checked, the blind spot collision warning sound function will be activated.

❈For more details, refer to “Blind-spot Collision Warning” in chapter 5.

- Rear Cross-Traffic Collision Warning Sound (if equipped)
  - If this item is checked, the rear cross traffic collision warning sound will be activated.

❈For more details, refer to “Blind-spot Collision Warning” in chapter 5.

Door/Liftgate

- Automatically Lock :
  - Enable on Speed : All doors will be automatically locked when the vehicle speed exceeds 9.3 mph (15 km/h).
  - Enable on Shift : All doors will be automatically locked if the automatic transmission shift lever is shifted from the P (Park) position to the R (Reverse), N (Neutral), or D (Drive) position.
- Automatically Unlock :
  - Disable : The auto door unlock operation will be canceled.
  - Vehicle Off : All doors will be automatically unlocked when the Engine Star/Stop Button or ignition switch is set to the OFF position.
  - On Shift to P : All doors will be automatically unlocked if the automatic transmission shift lever is shifted to the P (Park) position.
- Two Press Unlock (if equipped)

If this item checked, the two press unlock function will be activated. (Only the driver’s door will unlock when unlock button is pressed once and all doors will unlock when the same button is pressed again within 4 seconds.)

- Power Liftgate (if equipped)
  - If this item is checked, the power liftgate function will be activated.

❈For more details, refer to “Power Liftgate” in this chapter.

- Smart Liftgate (if equipped)
  - If this item is checked, the smart liftgate function will be activated.
  - If the power liftgate function is not activated, you cannot activate this function.

❈For more details, refer to “Smart Liftgate” in this chapter.

Lights

- One Touch Turn Signal :
  - Off : The one touch turn signal function will be deactivated.
  - 3, 5, 7 Flashes : The lane change signals will blink 3, 5 or 7 times when the turn signal lever is moved slightly.

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

- Head Lamp Delay :
  - If this item checked, the head lamp delay function will be activated.

Sound

- Parking Distance Warning Volume (if equipped) :
  - Adjust the Park Assist System volume. (Level 1 ~ 3)

❈For more details, refer to “Parking Assist System” in this chapter.

- Welcome Sound (if equipped) :
  - If this item checked, the welcome sound function will be activated.

Convenience

- Seat Easy Access (if equipped)
  - Off : The seat easy access function will be deactivated.
  - Normal/Extended : When you turn off the engine, the driver’s seat will automatically move rear 3 in. (7.6 cm) (Enhanced) for you to enter or exit the vehicle more comfortably.
  - If you change the Engine Start/Stop Button from OFF position to the AC function, the driver’s seat will return to the original position.

❈For more details, refer to “Driver Position Memory System” in chapter 3.

- Welcome Mirror/Light (if equipped) :
  - If this item checked, the welcome Mirror/light function will be activated.
- Wireless Charging System (if equipped) :
  - If this item checked, the wireless charging system function will be activated.
- Wiper/Light Display (if equipped) :
  - If this item checked, the Wiper/Light Display will be activated.
- Gear Position Pop-up (if equipped) :
  - If this item checked, the gear position pop-up display will be activated.

Service interval

- Enable Service Interval

  To activate or deactivate the service interval function.
- Adjust Interval

  To adjust the interval by mileage- and period.
- Reset

  To reset the service interval function.

Other features

- Fuel Economy Auto Reset
  - Off : The average fuel economy will not reset automatically whenever refueling.
  - After Ignition : The average fuel economy will reset automatically whenever it has passed 4 hours after turning OFF the engine.
  - After Refueling : The average fuel economy will reset automatically when refueling.

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

- Speedometer subscale (for Type B cluster) : If this item checked, speedometer subscale will be displayed.
- Fuel Economy Unit
  - Choose the fuel economy unit. (US gallon/UK gallon)
- Temperature Unit
  - Choose the temperature u (°C,°F)
- Tire Pressure Unit (if equipped)
  - Choose the tire pressure u (psi, kPa, bar)

Language

Choose the language

Reset

You can reset the menus in the User Settings Mode. All menus in the User Settings Mode are initialized, except language and service interval.

Warning Messages

Shift to P position (for smart key system)

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

Low Key Battery (for smart key system)

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

Press start button while turn steering (for smart key system)

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

Steering wheel unlocked (for smart key system)

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

Press brake pedal to start engine (for smart key system)

- 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.

Check steering wheel lock system (for smart key system)

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

Key not in vehicle (for smart key system)

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

Key not detected (for smart key system)

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

Press start button again (for smart key system)

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

Press start button with key (for smart key system)

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

Check fuse BRAKE SWITCH (for smart key system)

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

Shift to P or N to start engine (for smart key system)

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

✻ NOTICE

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

Door / Hood / Liftgate Open



OUM048133

- It means that any door, hood, or liftgate is open.

Sunroof Open (if equipped)



OUM048135

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

Align steering wheel

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

Low Washer Fluid

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

Turn on FUSE SWITCH

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

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

Low Fuel

This warning message illuminates if the fuel tank is nearly empty.

- When the low fuel level warning light is illuminated.
- When the trip computer displays "--- mile (or km)" as range.

Add fuel as soon as possible.

Check high beam assist system (if equipped)

This warning message illuminates if there is a malfunction (burned-out bulb or circuit malfunction) with the headlamp. In this case, have your vehicle inspected by an authorized Kia dealer.

Check headlight

This warning message illuminates if there is a malfunction (burned-out bulb except LED lamp or circuit malfunction) with the headlamp. In this case, have your vehicle inspected by an authorized Kia dealer.

✻ NOTICE

When replacing the bulb, use the same wattage bulb.

❋ For more information, refer to "BULB WATTAGE" in chapter 8.

Check Forward Collision Avoidance Assist system (if equipped)

- This warning message illuminates if there is a malfunction with the Forward Collision Avoidance Assist (FCA) system. In this case, have your vehicle inspected by an authorized Kia dealer.

❋For more details, refer to "Forward Collision Avoidance Assist(FCA) system" in chapter 5.

WARNING AND INDICATOR LIGHTS

Warning lights

✻ NOTICE - Warning lights

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

Air bag Warning Light



This warning light illuminates:

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

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

Seat Belt Warning Light



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

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

Parking Brake & Brake Fluid Warning Light



This warning light illuminates:

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

If the brake fluid level in the reservoir is low:

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

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

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

Dual-diagonal braking system

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

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

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

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

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

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

Anti-lock Brake System (ABS) Warning Light



This warning light illuminates:

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

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

Electronic Brake force Distribution (EBD) System Warning Light



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

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

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

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

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

In this case, avoid high speed driving and abrupt braking. Have your vehicle inspected by an authorized Kia dealer as soon as possible thereby increasing the risk of a crash and injury.

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

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

Electronic Power Steering (EPS) Warning Light



This warning light illuminates:

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

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

Malfunction Indicator Lamp (MIL)



This warning light illuminates:

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

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

⚠ CAUTION - Malfunction Indicator Lamp (MIL)

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

⚠ CAUTION - Catalytic Converter Damage

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

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

Charging System Warning Light



This warning light illuminates:

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

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

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

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

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

Engine Oil Pressure Warning Light



This warning light illuminates:

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

If the engine oil pressure is low:

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

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

⚠ CAUTION - Engine damage

If the engine 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.

If the warning light stays on while the engine is running, it indicates that there may be serious engine damage or malfunction. In this case,

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

Low Tire Pressure Warning Light



This warning light illuminates:

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

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

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

- When there is a malfunction with the TPMS.

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

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

⚠ WARNING - Low tire pressure

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

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

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 Kia dealer.

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 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 Kia dealer.

✻ NOTICE

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

Low Fuel Level Warning Light



This warning light illuminates:
When the fuel tank is nearly empty.

If the fuel tank is nearly empty:
Add fuel as soon as possible.

⚠ CAUTION - Low Fuel Level

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

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



This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the EPB.
  In this case, have your vehicle inspected by an authorized 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).

Master Warning light (if equipped)

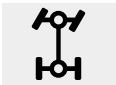


- This warning light informs the driver of the following situations
  - LED head lamp malfunction (if equipped)
  - Smart Cruise Control with Stop & Go malfunction (if equipped)
  - Forward Collision-Avoidance
  - Assist malfunction (if equipped)
  - Blind-Spot Collision Warning radar blind (if equipped)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

The Master Warning Light illumi nates when more than one of the above warning situations occur.

If the warning situation is solved, the master warning light will be turned off.

All Wheel Drive (AWD) Warning Light (if equipped)



This warning light illuminates:

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

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

Forward Collision-avoidance Assist Warning light (FCA, if equipped)



This indicator light illuminates:

- When there is a malfunction with the FCA.

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

Indicator Lights

Electronic Stability Control (ESC) Indicator Light



This indicator light illuminates:

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

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

This indicator light blinks:

While the ESC is operating.

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

Electronic Stability Control (ESC) OFF Indicator Light



This indicator light illuminates:

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

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

Immobilizer Indicator Light (Without Smart Key) (if equipped)



This indicator light illuminates:

- When the vehicle detects the immobilizer in your key properly while the ignition switch is ON.
  - At this time, you can start the engine.
  - The indicator light goes off after starting the engine.

This indicator light blinks:

- When there is a malfunction with the immobilizer system.

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

Immobilizer Indicator Light (With Smart Key) (if equipped)



This indicator light illuminates for up to 30 seconds:

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

This indicator light blinks for a few seconds:

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

This indicator light illuminates for 2 seconds and goes off:

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

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

This indicator light blinks:

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

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

Turn Signal Indicator Light



This indicator light blinks:

- When you turn the turn signal light on.

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

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

High Beam Indicator Light



This indicator light illuminates:

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

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 this chapter.

Light ON Indicator Light



This indicator light illuminates:

- When the tail lights or headlights are on.

Front Fog Indicator Light (if equipped)



This indicator light illuminates:

- When the front fog lights are on.

Low Beam Indicator Light (if equipped)



This indicator light illuminates:

- When the headlights are on.

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 your vehicle inspected by an authorized Kia dealer.

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

All Wheel Drive (AWD) LOCK Indicator Light (if equipped)



This indicator light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When you select AWD Lock mode by pressing the AWD LOCK button.
  - The AWD LOCK mode is to increase the drive power when driving on wet pavement, snow covered roads and/or off-road.

⚠ CAUTION - AWD Lock Mode

Do not use AWD LOCK mode on dry paved roads or highway, it can cause noise, vibration or damage of AWD related parts.

LKA(Lane Keeping Assist) indicator (if equipped)



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.

REAR PARKING ASSIST SYSTEM (IF EQUIPPED)



The rear parking assist system assists the driver during backward movement of the vehicle by chiming if any object is sensed within a distance of 47 in. (120 cm) behind the vehicle.

This system is a supplemental system and it is not intended to nor does it replace the need for extreme care and attention of the driver. The sensing range and objects detectable by the back sensors (1) are limited. Whenever backing-up, pay as much attention to what is behind you as you would in a vehicle without a rear parking assist system.

⚠ WARNING - Rear parking assist system

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

Operation of the rear parking assist system

Operating condition

- This system will activate when the indicator on the rear parking assist OFF button is not illuminated. If you desire to deactivate the rear parking assist system, press the rear parking assist OFF button again. (The indicator on the button will illuminate.) To turn the system on, press the button again. (The indicator on the button will go off.)

  If the vehicle is moving at a speed over 3 mph (5 km/h), the system may not be activated correctly.

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

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

Types of warning sound

- When an object is 47 in. to 24 in. (120 cm to 61 cm) from the rear bumper: Buzzer beeps intermittently.
- When an object is 24 in. to 12 in. (60 cm to 31 cm) from the rear bumper: Buzzer beeps more frequently.
- When an object is within 12 in. (30 cm) of the rear bumper:

  Buzzer sounds continuously.

Non-operational conditions of rear parking assist system

The rear parking assist system may not operate properly when:

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

The detecting range may decrease when:

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

The following objects may not be recognized by the sensor:

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

Rear parking assist system precautions

- The rear parking assist system may not sound consistently depending on the speed and shapes of the objects detected.
- The rear parking assist system may malfunction if the vehicle bumper height or sensor installation has been modified or damaged. Any non-factory installed equipment or accessories may also interfere with the sensor performance.
- The sensor may not recognize objects less than 15 in. (40 cm) from the sensor, or it may sense an incorrect distance. Use caution.
- When the sensor is frozen or covered with snow, dirt, or water, the sensor may be inoperative until the material is removed using a soft cloth.
- Do not push, scratch or strike the sensor. Sensor damage could occur.

✻ NOTICE

This system can only sense objects within the range and location of the sensors. It cannot 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.

✻ NOTICE

If you don't hear an audible warning sound or if the buzzer sounds intermittently when shifting the gear to the R (Reverse) position, this may indicate a malfunction in the rear parking assist system. If this occurs, have your vehicle checked by an authorized Kia dealer as soon as possible.

✻ NOTICE

Your new vehicle warranty does not cover any accidents or damage to the vehicle or injuries to its occupants due to a rear parking assist system malfunction. Always drive safely and cautiously.

PARKING ASSIST SYSTEM (IF EQUIPPED)

■ Rear



OUMA048046

■ Front



OUMA048047

The parking assist system 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 assist system.

⚠ WARNING

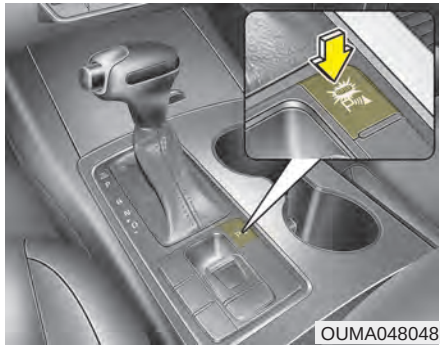
The parking assist system is a supplementary function only.

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

It is the responsibility of the driver to always check the front and rear views before and while parking.

Operation of the parking assist system

Operating condition



OUMA048048

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

It may not operate if it's distance from the object is already less than approximately 10 in. (25 cm) when the system is ON.

Type of warning indicator and sound

■ : with Warning sound

Distance from object		Warning indicator		Warning sound
		When driving forward	When driving rearward	
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 assist system

Parking assist system may not operate normally when:

1. Moisture is frozen to the sensor. (It will operate normally when moisture melts.)
2. Sensor is covered with foreign matter, such as snow or water, or the sensor cover is blocked. (It will operate normally when the material is removed or the sensor is no longer blocked.)
3. Sensor is stained with foreign matter such as snow or water. (Sensing range will return to normal when removed.)
4. The parking assist button is off.

There is a possibility of parking assist system malfunction when:

1. Driving on uneven road surfaces such as unpaved roads, gravel, bumps, or gradient.
2. Objects generating excessive noise such as vehicle horns, loud motorcycle engines, or truck air brakes can interfere with the sensor.
3. Heavy rain or water spray.
4. Wireless transmitters or mobile phones present near the sensor.
5. Sensor is covered with snow.

Detecting range may decrease when:

1. Outside air temperature is extremely hot or cold.
2. Undetectable objects smaller than 4 in. (1 m) and narrower than 5.5 in. (14 cm) in diameter.

The following objects may not be recognized by the sensor:

1. Sharp or slim objects such as ropes, chains or small poles.
2. Objects, which tend to absorb sensor frequency such as clothes, spongy material or snow.

✻ NOTICE

1. The warning may not sound sequentially depending on the speed and shapes of the objects detected.
2. The parking assist system may malfunction if the vehicle bumper height or sensor installation has been modified. Any non-factory installed equipment or accessories may also interfere with the sensor performance.
3. Sensor may not recognize objects less than 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 systems 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.

✻ NOTICE

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

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

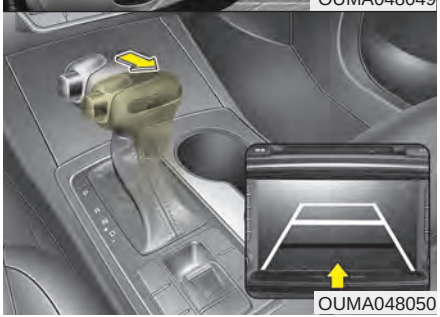
If this occurs, we recommend that the system be checked by an authorized Kia dealer.

✻ NOTICE

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

REARVIEW CAMERA (IF EQUIPPED)


OUMA048049


OUMA048050

The rearview camera will activate with the ignition switch ON and the shift lever in the R (Reverse) position.

This system is a supplemental system that shows behind the vehicle through the rearview display mirror while backing up unless equipped with system that can be displayed rear view, then will display on the screen.

The rearview camera may be turned off by pressing the ON/OFF button when the rearview camera is activated.

To turn the camera on again, press the ON/OFF button again when the ignition switch is on and the shift lever in R (Reverse). Also, the camera will turn on automatically whenever the ignition switch is turned off and on again.

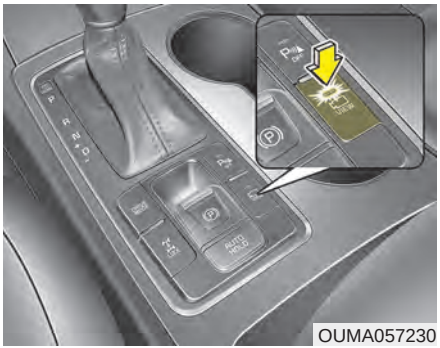
- This system is a supplementary function only. It is the responsibility of the driver to always check the inside/outside rearview mirrors and the area behind the vehicle before and while backing up because there is a dead zone that can't be seen by the camera.
- Always keep the camera lens clean. If lens is covered with foreign matter, the camera may not operate normally.

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

⚠ WARNING - Backing & using camera

Never rely solely on the rear view camera when backing. 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 slowly and stop immediately if you even suspect that a person, and especially a child, might be behind you.

SURROUND VIEW MONITORING SYSTEM (SVM) (IF EQUIPPED)



The Surround View Monitoring System (SVM) is not a substitute for proper and safe parking procedures. The Surround View Monitoring System (SVM) may not detect every object surrounding the vehicle. Always drive safely and use caution when parking.

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

To cancel the system, push the button again.

Operating conditions

- When the Engine Start/Stop Button is ON position
- When the transmission is on D, N or R
- When the vehicle speed is not over 9.3 mph (15 km/h)

• When the vehicle speed is over 9.3 mph (15 km/h), the SVM system is turned off. If the vehicle speed is not over 9.3 mph (15 km/h) after turning off the SVM by over speed, the SVM is not turned on. To operate again, push the button.

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

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

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

• When the vehicle moves over 10km/h forward after moving backward, the SVM screen will be turned off.

⚠ WARNING

This system is for assistance to the driver only.

It is the responsibility of the driver to always check the area around the vehicle before and while moving.

Automatic car wash entry support guidelines



OUMA048552

Automatic car wash entry support guidelines provides the convenience when the vehicle steers into Automatic Car Wash Entry. The feature displays the tire trajectory in the front around view mode of the Surround View Monitoring System (SVM). The tire trajectory, however, can be displayed only when following conditions are met.

It is operated when the outside mirror folding and the Surround View Monitoring System (SVM) are in operation by pushing the buttons. It is released when outside mirror folding or the Surround View Monitoring System (SVM) are not in operation.

⚠ CAUTION

Automatic car wash entry support guidelines are an add-on feature of the SVM designed to assist car wash entry. Caution is required since the display (1) on the screen may differ from the actual location.

If the surface of the front camera lens is dirty, the camera can not function properly, so keep it clean.

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 (if equipped)

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

The DRL system will turn the dedicated lamp OFF when :

1. The headlight 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



OUM044055

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 (if equipped)

(3) Parking & Tail light

(4) Headlight position

Parking & Tail light ( )



OUMA046054

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

Headlight position ( )



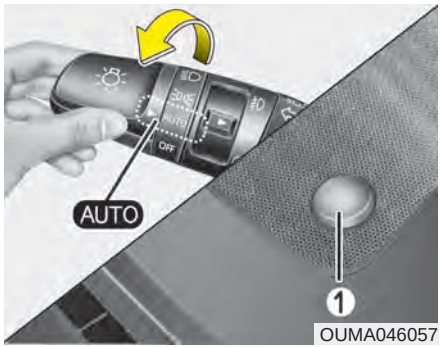
OUMA046056

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 position (if equipped)



OUMA046057

When the lights are in the “Auto” position, It will operate when the ignition is in “ON” or the engine is running. To change to the Auto function, Select the light switch to “AUTO”, and the light will turn on or off depending on the ambient light detected by the sensor (1). Once the light switch is positioned to the auto light position, at first, the wiper will turn on and then, after 5 seconds the head lamp will turn on automatically. If headlights came on due to windshield wipers coming on the head lamp will turn off 60 seconds after the wipers are turned off.

High beam operation



OUM044059

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 from draining the battery, 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. Using high beam could obstruct the other driver's vision.



OUM044058

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

High Beam Assist (if equipped)



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

Operating condition

1. Place the light switch in the AUTO position.
2. Turn on the high beam by pushing the lever away from you.

   The High Beam Assist (AUTO) indicator will illuminate.
3. The High Beam Assist will turn on when vehicle speed is above 25 mph (40 km/h).
   - If the lever is pushed away when the High Beam Assist is operating, the High Beam Assist will turn off and the high beam will be on continuously. The High Beam Assist (AUTO) indicator will turn off.
   - If the lever is pulled towards you when the High Beam Assist is operating, the High Beam Assist will turn off.
4. If the light switch is placed to the headlamp position, the High Beam Assist will turn off and the low beam will be on continuously.

The high beam switches to low beam in the below conditions.

- When the High Beam Assist is off.
- When the light switch is not in the AUTO position.
- When the headlamp is detected from the on-coming vehicle.
- When the tail lamp is detected from the front vehicle.
- When the surrounding is bright enough high beams are not needed.
- When streetlights or other lights are detected.
- When vehicle speed is below 15 mph (24 km/h).
- When headlamp / taillamp of bicycle/motorcycle is detected

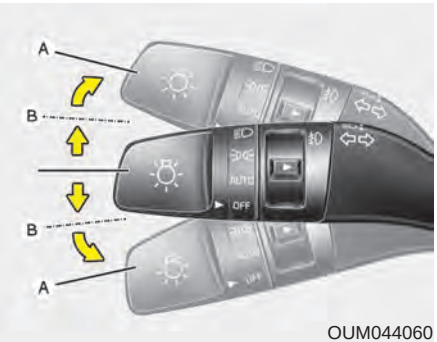
The system may not operate normally in the below conditions.

- When the light from the on-coming or front vehicle is not detected because of lamp damage, hidden from sight, etc.
- When the lamp of the on-coming or front vehicle is covered with dust, snow or water.
- When the light from the on-coming or front vehicle is not detected because of exhaust fume, smoke, fog, snow, etc.
- When the front window is covered with foreign matters such as ice, dust, fog, or is damaged.
- When there is a similar shape lamp with the front vehicle's lamps.
- When it is hard to see because of fog, heavy rain or snow.
- When the headlamp is not repaired or replaced at an authorized dealer.
- When headlamp aiming is not properly adjusted.
- When driving on a narrow curved road or rough road.
- When driving downhill or uphill.
- When only part of the vehicle in front is visible on a crossroad or curved road.
- When there is a traffic light, reflecting sign, flashing sign or mirror.
- When the road conditions are bad such as being wet or covered with snow.
- When the front vehicle's headlamps are off but the fog lamps on.
- When a vehicle suddenly appears from a curve.
- When the vehicle is tilted from a flat tire or being towed.
- When the LKA (Lane Keeping Assist) system warning light illuminates. (if equipped)

✻ NOTICE

- **Do not place any accessories, stickers or tint the windshield.**
- **Have the windshield glass replaced from an authorized dealer.**
- **Do not remove or damage related parts of the High Beam Assist system.**
- **Be careful that water doesn't get into the High Beam Assist unit.**
- **Do not place objects on the dashboard that reflect light such as mirrors, white paper, etc. The system may malfunction if sunlight is reflected.**
- **At times, the High Beam Assist system may not work properly, always check the road conditions for your safety. When the system does not operate normally, manually change between the high beam and low beam.**

Turn signals and lane change signals



The ignition switch must be on for the turn signals to function. To turn on the turn signals, move the lever up or down (A). The green arrow indicators on the instrument panel indicate which turn signal is operating. They will self-cancel after a turn is completed. If the indicator continues to flash after a turn, manually return the lever to the OFF position.

To signal a lane change, move the turn signal lever slightly and hold it in position (B). The lever will return to the OFF position when released.
If an indicator stays on and does not flash or if it flashes abnormally, one of the turn signal bulbs may be burned out and will require replacement.

One touch turn signal

When changing lanes, move the lane change switch to the direction you want briefly. The lane change switch will move back to the original position but the turn signal will flash three times. This function assists the driver when changing lanes without pressing down on the lane change signal.

Depending on the vehicle, the driver may select or deselect the one touch turn signal function. For more details, please refer to "vehicle settings" in chapter 4.

✻ NOTICE

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

Front fog light (if equipped)



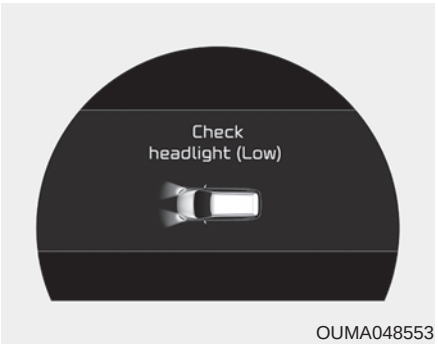
ODE046458N

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

To turn off the fog lights, turn the fog light switch (1) to the OFF position.

When in operation, the fog lights consume large amounts of vehicle electrical power. Only use the fog lights when visibility is poor.

Check headlight



OUMA048553

This warning message illuminates if there is a malfunction (burned-out bulb except LED lamp or circuit malfunction) with the headlamp. In this case, have your vehicle inspected by an authorized Kia dealer.

✻ NOTICE

When replacing the bulb, use the same wattage bulb.

❋ For more information, refer to "BULB WATTAGE" in chapter 8.

Headlight leveling device (if equipped)

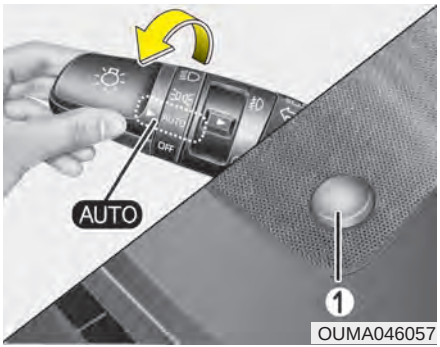
Automatic type

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 Kia dealer.
Do not attempt to inspect or replace the wiring yourself.

Dynamic Bending Light (DBL) (if equipped)



Dynamic bending light uses the steering angle and vehicle speed, to keep your field of vision wide by swiveling the headlamp.

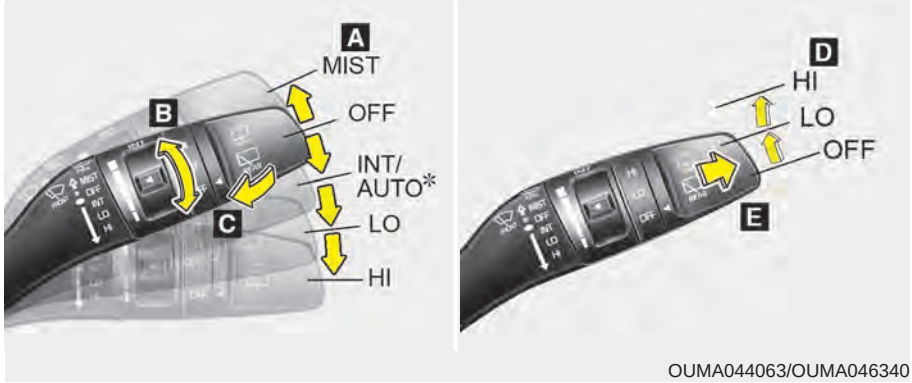
Change the switch to the AUTO position when the engine is running. The dynamic bending light will operate when the headlamp is ON. To turn off the DBL, change the switch to other positions. After turning the DBL off, headlamp swiveling no longer occurs.

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 system be checked by an authorized Kia dealer.

WIPERS AND WASHERS

Windshield wiper/washer

Rear window wiper/washer



OUMA044063/OUMA046340

A : Wiper speed control (front)

- MIST – Single wipe
- OFF – Off
- INT – Intermittent wipe
- LO – Low wiper speed
- HI – High wiper speed

B : Intermittent control wipe time adjustment

C : Wash with brief wipes (front)*

D : Rear wiper/washer control

- HI – Continuous wipe
- LO – Intermittent wipe
- OFF – Off

E : Wash with brief wipes (rear)

* 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.

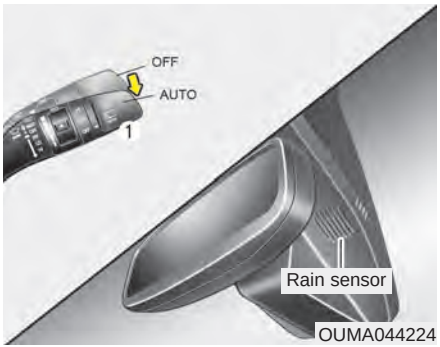
LO : Normal wiper speed

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 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 wipers stop.

To vary the speed setting, turn the speed control knob (1).

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

⚠ CAUTION

When the ignition switch is ON and the windshield wiper switch is placed in the AUTO mode, use caution in the following situations to avoid 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

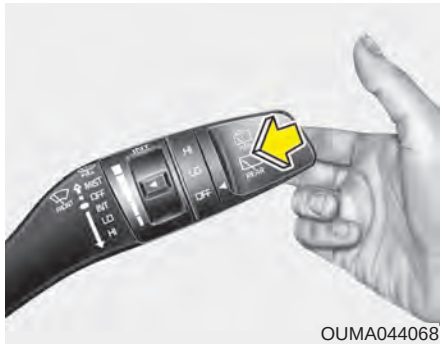
- ***When washing the vehicle, set the wiper switch in the OFF position to stop the auto wiper operation.***
- ***The wiper may operate and be damaged if the switch is set in the AUTO mode while washing the vehicle.***
- ***Do not remove the sensor cover located on the upper end of the passenger side windshield glass. Damage to system parts could occur and may not be covered by your vehicle warranty.***

(Continued)

(Continued)

- ***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.***
- ***When tinting the windshield, be careful of any fluid getting into the sensor located in the top center of the front windshield. It may damage the related parts.***

Front windshield washers



OUMA044068

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.***

Rear window wiper and washer switch



OUMA044067

The rear window wiper and washer switch is located at the end of the wiper and washer switch lever. Turn the switch to the desired position to operate the rear wiper and washer.

HI : Continuous wipe

LO : Intermittent wipe

OFF : OFF



OUMA044069

Push the lever away from you to spray rear washer fluid and to run the rear wipers 1~3 cycles. The spray and wiper operation will continue until you release the lever

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.

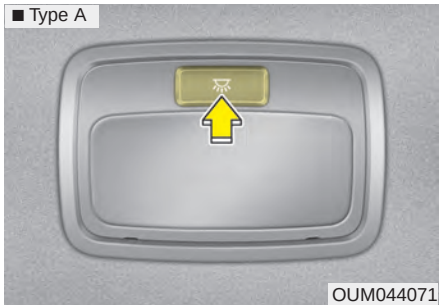
Automatic turn off function (if equipped)

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 enters armed stage.

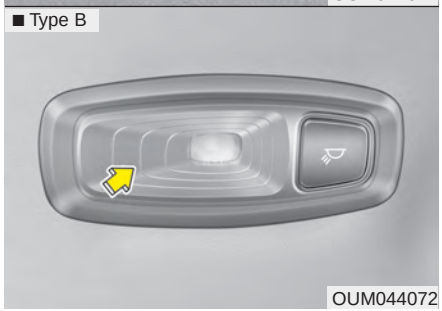
Room lamp

■ Type A



OUM044071

■ Type B

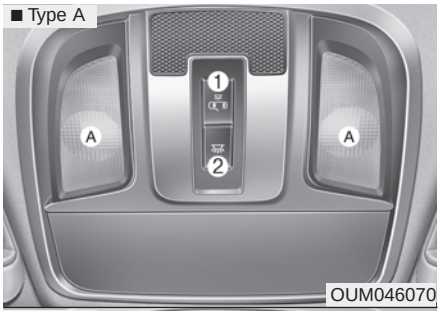


OUM044072

• : The light stays on at all times.

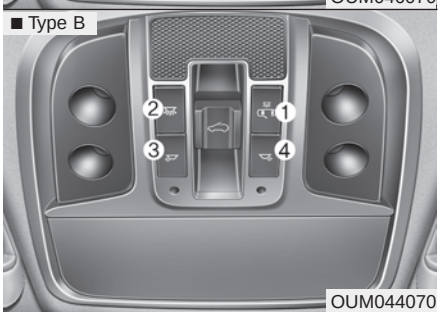
Map lamp

■ Type A



OUM046070

■ Type B



OUM044070

- Press the lens (A) to turn the map lamp on.

  To turn the map lamp off, press the lens (A) again.

- (1) :

- The map lamp and room lamp come on when a door is opened. The lamps go out after approximately 30 seconds.
- The map lamp and room lamp come on for approximately 30 seconds when doors are unlocked with a transmitter or smart key as long as the doors are not opened.
- The map lamp and room lamp will stay on for approximately 20 minutes if a door is opened with the ignition switch in the ACC or LOCK/OFF position.
- The map lamp and room lamp will stay on continuously if the door is opened with the ignition switch in the ON position.
- The map lamp and room lamp will go out immediately if the ignition switch is changed to the ON position or all doors are locked.
- To turn off the DOOR mode, press the DOOR button (1) once again (not pressed).

✻ NOTICE

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

- (2):

The map lamp stays on at all times.

- (3):

The map lamp of driver's side stays on at all times.

- (4):

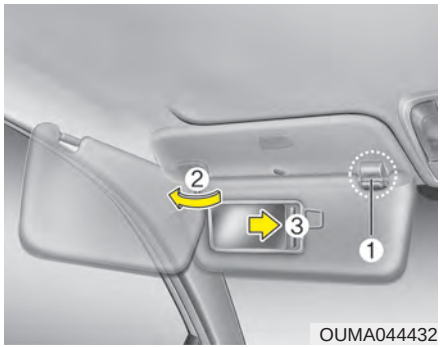
The map lamp of passenger's side stays on at all times.

Luggage lamp (if equipped)


OUMA048074

- : The light comes on when the liftgate is opened.
- : The light stays off at all times.
- : The light stays on at all times.

Vanity mirror lamp (if equipped)



OUMA044432

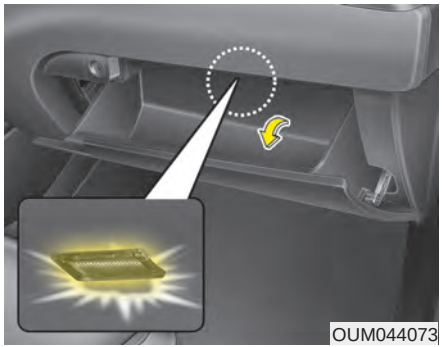
Opening the lid of the vanity mirror will automatically turn on the mirror light.

* The actual sunvisor lamp in the vehicle may differ from the illustration.

⚠ CAUTION - Vanity mirror lamp

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.

Glove box lamp


OUM044073

The glove box lamp comes on when the glove box is opened.

To prevent unnecessary charging system drain, close the glove box securely after using the glove box.

WELCOME SYSTEM (IF EQUIPPED)

Headlight (Headlamp) escort function

The headlights (and/or taillights) remain on for approximately 5 minutes after the ignition key is removed or turned to the ACC or LOCK position. However, if the driver's door is opened and closed, the headlights are turned off after 15 seconds.

The headlights can be turned off by pressing the lock button on the transmitter or smart key twice or turning off the light switch from the headlight or Auto light position.

Interior light

When the interior light switch is in the DOOR position and all doors (and liftgate) are locked and closed, the room lamp will come on for 30 seconds if any of the below is performed.

- Without smart key system
  - When the door unlock button is pressed on the transmitter.
- With the smart key system
  - When the door unlock button is pressed on the smart key.
  - When the button of the outside door handle is pressed.

At this time, if you press the door lock button, the lamps will turn off immediately.

Pocket lamp (if equipped)

When all doors are locked and closed, the pocket lamp 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.
  - When the button of the outside door handle is pressed.

At this time, if you press the door lock button, the lamps will turn off immediately.

DEFROSTER

⚠ CAUTION - 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 equipped)

If your vehicle is equipped with the outside rearview mirror defrosters, they will operate at the same time you turn on the rear window defroster.

MANUAL CLIMATE CONTROL SYSTEM (IF EQUIPPED)

■ Type A



■ Type B



■ Type C



1. Fan speed control knob
2. Front windshield defroster button
3. Rear window defroster button
4. Air conditioning button
5. MAX A/C button
6. Mode selection button
7. Air intake control button
8. Temperature control knob
9. 3rd row seat Air conditioning ON/OFF button*
10. 3rd row seat Air conditioning Fan speed control knob*

* If equipped

✻ NOTICE

Operating the blower when the ignition switch is in the ACC position could cause the battery to discharge. Only operate the blower when the ignition switch is in the ON position with the engine running.

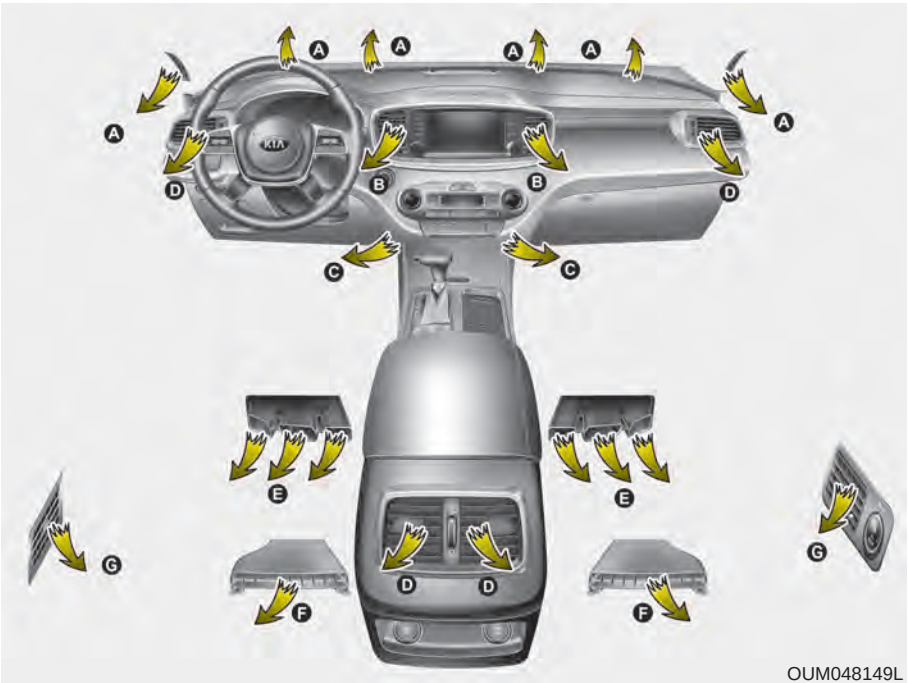
OUMA044147/OUMA044146/OUM044177

Heating and air conditioning

1. Start the engine.
2. Set the mode to the desired position.

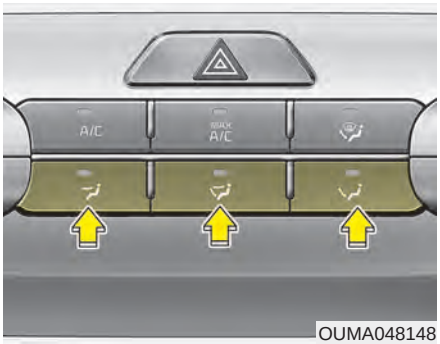
   For improving the effectiveness of heating and cooling;

   - Heating:
   - Cooling:
3. Set the temperature control to the desired position.
4. Set the air intake control to the outside (fresh) air position (if equipped).
5. Set the fan speed control to the desired speed.
6. If air conditioning is desired, turn the air conditioning system (if equipped) on.



OUM048149L

Mode selection



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

Air can be directed to the floor, dashboard outlets, or windshield. Five symbols are used to represent MAX A/C, Face, Bi-Level, Floor, Floor-Defrost and Defrost air position.

The MAX A/C mode is used to cool the inside of the vehicle faster.

Face-Level (B, D)

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

Bi-Level (B, C, D, E, F)

Air flow is directed towards the face and the floor.

Floor-Level (A, C, D, E, F)

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, F)

Most of the air flow is directed to the floor and the windshield with a small amount directed to the side window defrosters.

Defrost-Level (A, D)

Most of the air flow is directed to the windshield with a small amount of air directed to the side window defrosters.

MAX A/C selection



OUMA048233

To select the MAX A/C, turn the fan speed control knob to the right then press the MAX A/C button.

Air flow is directed toward the upper body and face.

In this mode, the air conditioning and the recirculated air position will be selected automatically.

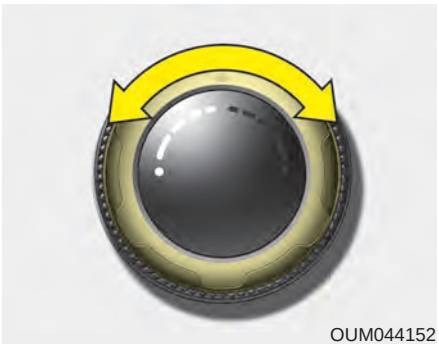

OUM048151L

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.

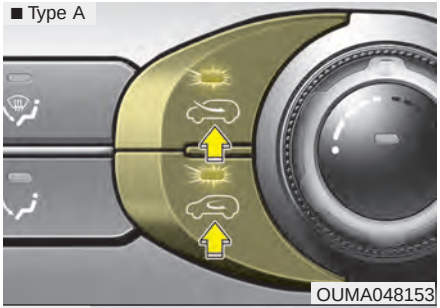
Temperature control


OUM044152

The temperature control knob allows you to control the temperature of the air flowing from the ventilation system. To change the air temperature in the passenger compartment, turn the knob to the right position for warm and hot air or left position for cooler air.

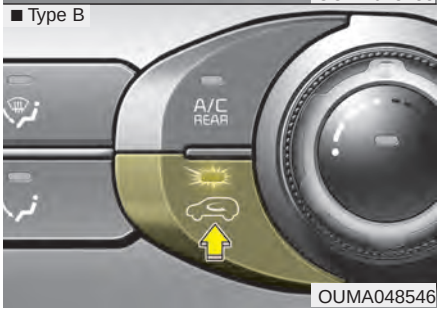
Air intake control

■ Type A



OUMA048153

■ Type B



OUMA048546

The air intake control is used to select the outside (fresh) air position or recirculated air position.

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

Recirculated air position



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

Outside (fresh) air position



With the outside (fresh) air position selected, air enters the vehicle from outside and is heated or cooled according to the function selected.

✻ NOTICE

Prolonged operation of the heater in the recirculated air position (without air conditioning selected) may cause fogging of the windshield and side windows and the air within the passenger compartment may become stale. In addition, prolonged use of the air conditioning with the recirculated air position selected will result in excessively dry air in the passenger compartment.

Sunroof inside air recirculation (if equipped)

If the sunroof opens while the heater or Air Conditioning system is operating, 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.

⚠ WARNING - Reduced visibility

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

⚠ WARNING - Sleeping with AC on

Do not sleep in a vehicle with the air conditioning or heating system on as this may cause serious harm or death due to a drop in the oxygen level and/or body temperature.

⚠ WARNING - Recirculated air

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.

Fan speed control



OUM044154

The ignition switch must be in the ON position for fan operation.

The fan speed control knob allows you to control the fan speed of the air flowing from the ventilation system. To change the fan speed, turn the knob to the right for higher speed or left for lower speed.

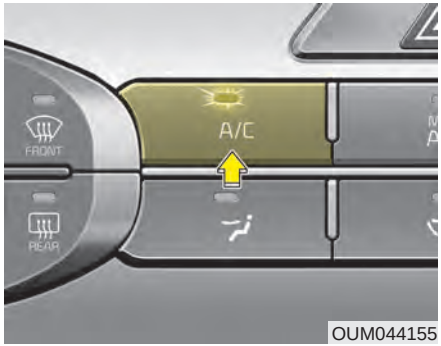
To turn off the blowers



OUMA044341

To turn off the blowers, turn the fan speed control knob to the "0" position.

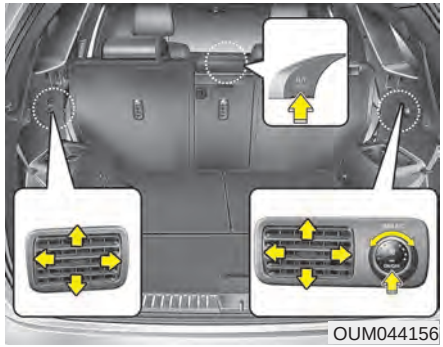
Air conditioning



OUM044155

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.

3rd row air conditioning (if equipped)


OUM044156

To turn on the third row air conditioning control system

1. You can operate the third row air conditioning system from the first row control panel. Changing the front row's fan speed by turning the control knob will automatically change the third row's fan speed as well.

   When the front row air conditioning has been turned off and you want to stop the A/C in the third row, press the third row air conditioning select button one more time. Then, the third row's A/C will also turn off.

2. The third row A/C system can be separately controlled by the control buttons in the third row. When the A/C is ON or OFF, the third row A/C control button in the front row will turn ON or OFF, informing the front passengers of the situation.
3. The fan speed of the third row air conditioning can also be separately controlled by turning the fan speed control knob.

System operation

Ventilation

1. Set the mode to the position.
2. Set the air intake control to the outside (fresh) air position.
3. Set the temperature control to the desired position.
4. Set the fan speed control to the desired speed.

Heating

1. Set the mode to the position.
2. Set the air intake control to the outside (fresh) air position.
3. Set the temperature control to the desired position.
4. Set the fan speed control to the desired speed.
5. If dehumidified heating is desired, turn the air conditioning system (if equipped) on.

- If the windshield fogs up, set the mode to the or position.

Operation Tips

- To keep dust or unpleasant fumes from entering the vehicle through the ventilation system, temporarily set the air intake control to the recirculated air position. Be sure to return the control to the fresh air position when the irritation has passed to keep fresh air in the vehicle. This will help keep the driver alert and comfortable.
- Air for the heating/cooling system is drawn in through the grilles just ahead of the windshield. Care should be taken that these are not blocked by leaves, snow, ice or other obstructions.
- To prevent interior fog on the windshield, set the air intake control to the fresh air position and fan speed to the desired position, turn on the air conditioning system, and adjust the temperature control to desired temperature.

Air conditioning

Kia Air Conditioning Systems are filled with refrigerant*.

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

- The refrigerant system should only be serviced by trained and certified technicians to insure proper and safe operation.
- The refrigerant system should be serviced in a well-ventilated place.
- The air conditioning evaporator (cooling coil) shall never be repaired or replaced with one removed from a used or salvaged vehicle and new replacement MAC evaporators shall be certified (and labeled) as meeting SAE Standard J2842.

⚠ CAUTION - Excessive AC

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

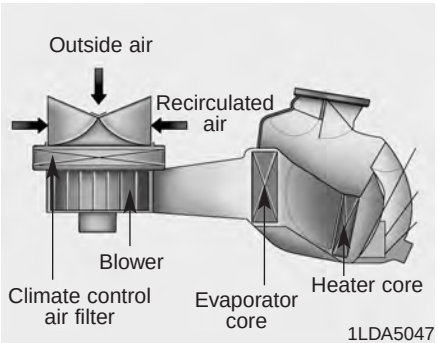
When opening the windows in humid weather air conditioning may create water droplets inside the vehicle. Since excessive water droplets may cause damage to electrical equipment, air conditioning should only be used with the windows closed.

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 on the insied surface 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)



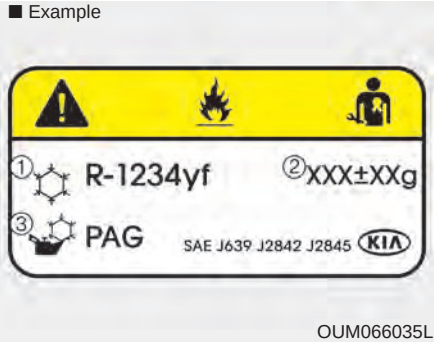
The climate control air filter installed behind the glove box filters the dust or other pollutants that come into the vehicle from the outside through the heating and air conditioning system. If dust or other pollutants accumulate in the filter over a period of time, the air flow from the air vents may decrease, resulting in moisture accumulation on the inside of the windshield even when the outside (fresh) air position is selected. If this happens, we recommend that the climate control air filter be replaced by an authorized Kia dealer.

✻ NOTICE

- **Replace the filter according to the Maintenance Schedule.**
  If the vehicle is being driven in severe conditions such as dusty or rough roads, more frequent climate control air filter inspections and changes are required.
- **When the air flow rate suddenly decreases, we recommend that the system should be checked at an authorized Kia dealer.**

Air Conditioning refrigerant label

■ Example



❈ 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

You can find out which air conditioning refrigerant is applied to your vehicle on the label inside of the engine room.

Refer to section 8 for more detail on the location of air conditioning refrigerant label.

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 influence on the air conditioning system.

Therefore, if abnormal operation is found, have the system inspected by an authorized Kia dealer.

⚠ WARNING - Vehicles equipped with R-1234yf





Because the refrigerant is mildly inflammable and at very high pressure, the air conditioning system should only be serviced by trained and certified technicians. It is important that the correct type and amount of oil and refrigerant is used.

Otherwise, it may cause damage to the vehicle and personal injury.

⚠ CAUTION - AC Repair

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.

AUTOMATIC CLIMATE CONTROL SYSTEM (IF EQUIPPED)

■ **Front climate control (Type A)**



■ **Front climate control (Type B)**



■ **3rd row air conditioning control**



1. Driver`s temperature control knob
2. Air conditioning button
3. Blower OFF button
4. Front windshield defroster button
5. Rear window defroster button
6. Fan speed control button
7. Mode selection button
8. Air intake control button
9. Passenger`s temperature control knob
10. SYNC button
11. A/C display
12. 3rd row air conditioning ON/OFF button*
13. 3rd row air conditioning fan speed control knob*

* if equipped

✻ NOTICE

Operating the blower when the ignition switch is in the ACC position could cause the battery to discharge. Only operate the blower when the ignition switch is in the ON position with the engine running.

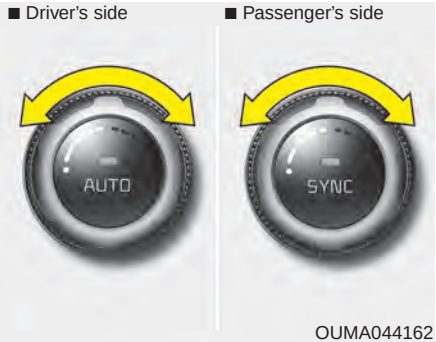
OUMA048540/OUMA048158/OUMA048346

Automatic heating and air conditioning



OUMA044159

1. Press the AUTO button. The modes, fan speeds, air intake and air-conditioning will be controlled automatically by setting the temperature.



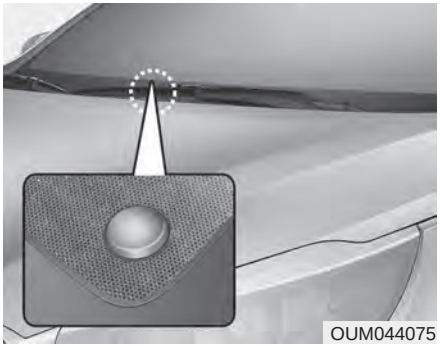
OUMA044162

2. Turn the temperature control knob to the desired temperature.

✻ NOTICE

- **To turn the automatic operation off, select any button or switch of the following:**
  - **Mode selection button**
  - **Air conditioning button**
  - **Front windshield defroster button (Press the button one more time to deselect the front windshield defroster function. The 'AUTO' sign will illuminate on the information display once again.)**
  - **Air intake control button**
  - **Fan speed control 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 73°F (23°C).**


OUM044075

✻ NOTICE

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

Manual heating and air conditioning

The heating and cooling system can be controlled manually by pressing buttons or turning knob(s) other than the AUTO button. In this case, the system works sequentially according to the order of buttons or knob(s) selected.

1. Start the engine.
2. Set the mode to the desired position.

   For improving the effectiveness of heating and cooling;

   - Heating:
   - Cooling:
3. Set the temperature control to the desired position.
4. Set the air intake control to the outside (fresh) air position.
5. Set the fan speed control to the desired speed.
6. If air conditioning is desired, turn the air conditioning system on.

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

Mode selection


OUMA048160

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

The air flow outlet port is converted as follows:

- VENT → B/L → FLOOR → MIX



Face-Level

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

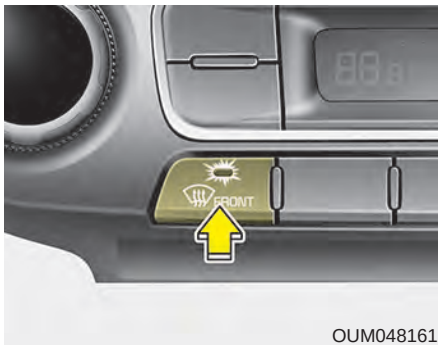
Air flow is directed towards the face and the floor.

Floor-Level

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

Most of the air flow is directed to the floor and the windshield with a small amount directed to the side window defrosters.



OUM048161

Defrost-Level

Most of the air flow is directed to the windshield with a small amount of air directed to the side window defrosters.

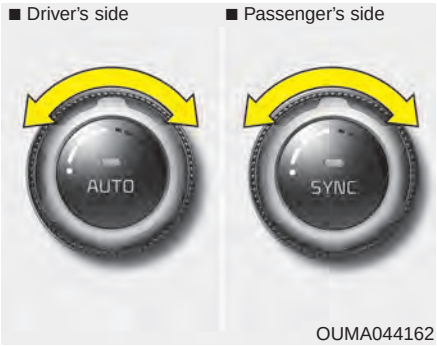


Instrument panel vents

The outlet vents can be opened or closed separately using the thumb-wheel (if equipped).

Also, you can adjust the direction of air delivery from these vents using the vent control lever as shown.

Temperature control



The temperature will increase to the maximum (HI) by turning the knob to the extreme right.

The temperature will decrease to the minimum (Lo) by turning the knob to the extreme left.

When turning the knob, the temperature will increase or decrease by 1°F/0.5°C. When set to the lowest temperature setting, the air conditioning will operate continuously.



Adjusting the driver and passenger side temperature equally

- Press the "SYNC" button to adjust the driver and passenger side temperature equally.

  The passenger side temperature will be set to the same temperature as the driver side temperature.
- Turn the driver side temperature control knob. The driver and passenger side temperature will be adjusted equally.
- When the third row's seat heater button is turned ON, the third row's climate and fan speed setting will automatically follow the first row settings.

Adjusting the driver and passenger side temperature individually

- Press the “SYNC” button again to adjust the driver and passenger side temperature individually. The illumination of button turns off.
- Operate the driver side temperature control knob to adjust the driver side temperature.
- Operate the passenger side temperature control knob to adjust the passenger side temperature.

Temperature conversion

You can switch the temperature mode from Centigrade to Fahrenheit as follows:

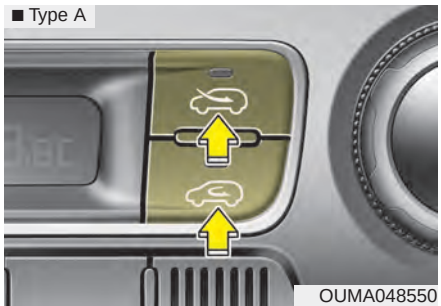
While pressing the OFF button, press the AUTO button for 3 seconds or more.

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.

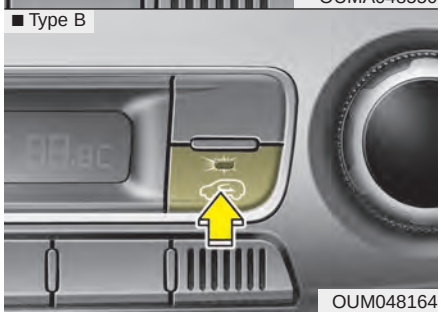
Air intake control

■ Type A



OUMA048550

■ Type B



OUM048164

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

■ Type A



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

■ Type B



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.

✻ NOTICE

Prolonged operation of the heater in the recirculated air position (without air conditioning selected) may cause fogging of the windshield and side windows and the air within the passenger compartment may become stale.

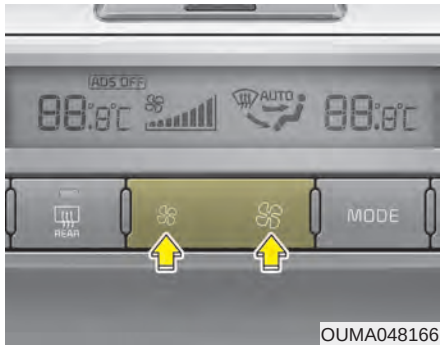
In addition, prolonged use of the air conditioning with the recirculated air position selected will result in excessively dry air in the passenger compartment.

Sunroof inside air recirculation (if equipped)

If the sunroof opens while the heater or Air Conditioning system is operating, 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

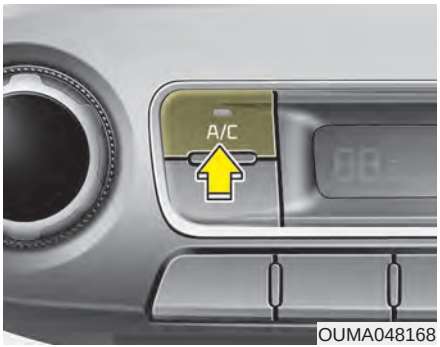


The fan speed can be set to the desired speed by operating the fan speed control button.

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



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

Press the button again to turn the air conditioning system off.

OFF mode



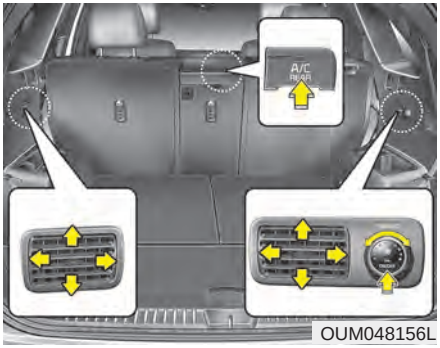
Press the front blower OFF button to turn off the front air climate control system. However, you can still operate the mode and air intake buttons as long as the ignition switch is in the ON position.

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 air intake control button 5 times within 3 seconds. When the automatic ventilation function is canceled, the indicator light blinks 3 times at an interval of 0.5 seconds. The air intake will be automatically controlled to the fresh air position, and the air flow and air conditioning will be automatically controlled. When the automatic ventilation function is selected, the indicator blinks 6 times at an interval of 0.25 seconds. The air intake will be automatically controlled to the fresh air position, and the air flow and air conditioning will be automatically controlled.

After the battery has been discharged or separated, the automatic ventilation function will be reset, so please select according to your preference.

3rd row air conditioning (if equipped)



To turn on the third row air conditioning control system

1. You can operate the third row air conditioning system from the first row control panel. Changing the front row's fan speed by pressing the control button will automatically change the third row's fan speed as well.

   When the front row air conditioning has been turned off and you want to stop the A/C in the third row, press the third row air conditioning select button one more time. Then, the third row's A/C will also turn off.
2. The third row A/C system can be separately controlled by the control buttons in the third row. When the A/C is ON or OFF, the third row A/C control button in the front row will turn ON or OFF, informing the front passengers of the situation.
3. The fan speed of the third row air conditioning can also be separately controlled by turning the fan speed control knob.

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 (if equipped)

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, set the mode control to the MAX A/C position, then set the fan speed control to the highest speed.

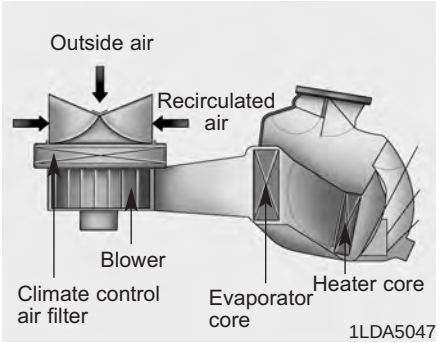
⚠ CAUTION

- ***When using the air conditioning system, monitor the temperature gauge closely while driving up hills or in heavy traffic when outside temperatures are high. Air conditioning system operation may cause engine overheating. Continue to use the blower fan but turn the air conditioning system off if the temperature gauge indicates engine overheating.***
- ***When opening the windows in humid weather air conditioning may create water droplets inside the vehicle. Since excessive water droplets may cause damage to electrical equipment, air conditioning should only be used with the windows closed.***

Air conditioning system operation tips

- If the vehicle has been parked in direct sunlight during hot weather, open the windows for a short time to let the hot air inside the vehicle escape.
- To help reduce moisture inside of the windows on rainy or humid days, decrease the humidity inside the vehicle by operating the air conditioning system.
- During air conditioning system operation, you may occasionally notice a slight change in engine speed as the air conditioning compressor cycles. This is a normal system operation characteristic.
- Use the air conditioning system every month only for a few minutes to ensure maximum system performance.
- When using the air conditioning system, you may notice clear water dripping (or even puddling) on the ground under the passenger side of the vehicle. This is a normal system operation characteristic.
- Operating the air conditioning system in the recirculated air position provides maximum cooling, however, continual operation in this mode may cause the air inside the vehicle to become stale.
- During cooling operation, you may occasionally notice a misty air flow because of rapid cooling and humid air intake. This is a normal system operation characteristic.

Climate control air filter (if equipped)



The climate control air filter installed behind the glove box filters the dust or other pollutants that come into the vehicle from the outside through the heating and air conditioning system. If dust or other pollutants accumulate in the filter over a period of time, the air flow from the air vents may decrease, resulting in moisture accumulation on the inside of the windshield even when the outside (fresh) air position is selected. If this happens, have the climate control air filter replaced by an authorized 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 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 Kia dealer.

⚠ WARNING - Vehicles equipped with R-1234yf





Because the refrigerant is mildly inflammable and at very high pressure, the air conditioning system should only be serviced by trained and certified technicians.

It is important that the correct type and amount of oil and refrigerant is used.

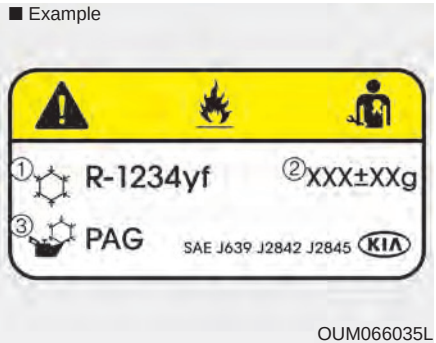
Otherwise, it may cause damage to the vehicle and personal injury.

⚠ 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



❈ 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

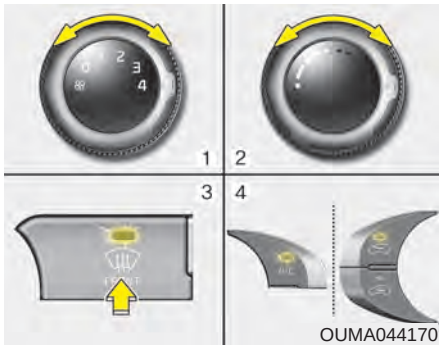
⚠ WARNING - Windshield heating

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.

Manual climate control system

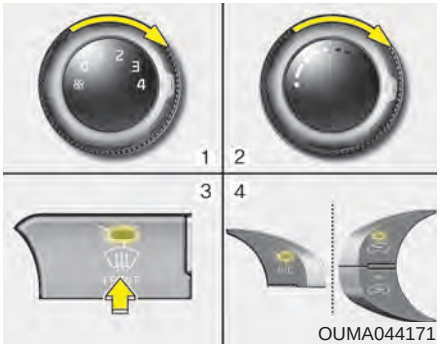
To defog inside windshield



1. Set the fan speed to the desired position.
2. Select desired temperature.
3. Select the or position.
4. The outside (fresh) air and air conditioning will be selected automatically.

If the air conditioning and/or outside (fresh) air position are not selected automatically, press the corresponding button manually.

To defrost outside windshield

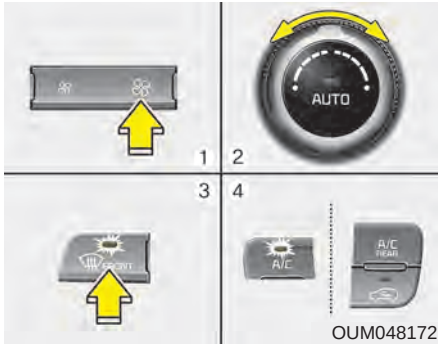


1. Set the fan speed to the highest position.
2. Set the temperature to the extreme hot position.
3. Select the position.
4. The outside (fresh) air and air conditioning will be selected automatically.

If the air conditioning is not selected automatically press the corresponding button manually.

Automatic climate control system

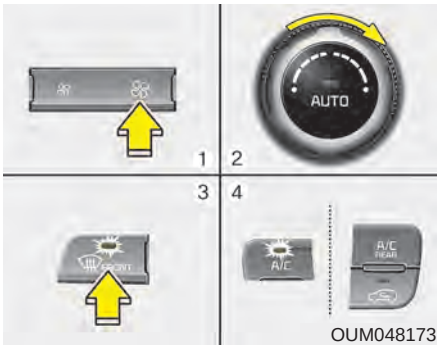
To defog inside windshield



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



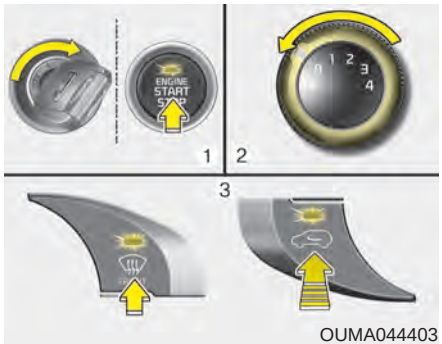
OUM048173

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 or return to the defogging logic, do the following.

Manual climate control system



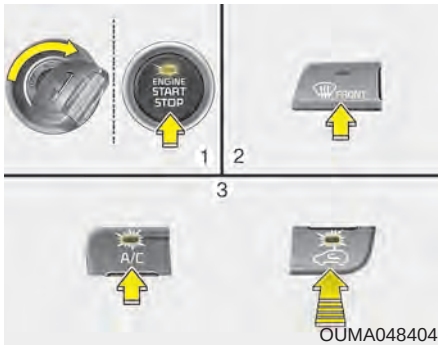
OUMA044403

1. Turn the ignition switch to the ON position.
2. Turn the fan speed control knob to the OFF (0) position.
3. Turn the mode selection knob to the defrost position ( ).
4. Within 10 seconds after selecting the front windshield defroster button, please 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.

Automatic climate control system

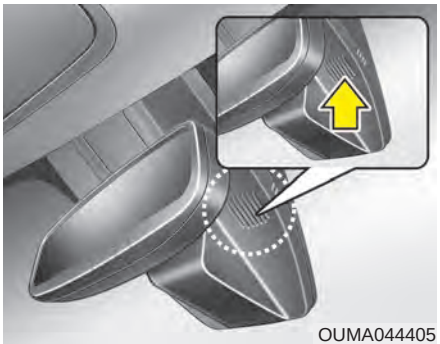


1. Turn the ignition switch to the ON position.
2. Select the defroster position pressing the defroster button ().
3. While pressing the air conditioning button (A/C), press the air intake control button at least 5 times within 3 seconds.

The 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)


OUMA044405

Auto defogging reduces the probability of fogging up the inside of the windshield by automatically sensing the moisture of inside the windshield.

The auto defogging system operates when the heater or air conditioning is on.



This indicator illuminates when the auto defogging system senses the moisture on the inside of the windshield and operates.

If more moisture is in the vehicle, higher steps operate as follow. For example if auto defogging does not defog inside the windshield at step 1 Outside air position, it tries to defog again at step 2 Blowing air toward the windshield.

Step 1 : Outside air position
Step 2 : Blowing air toward the windshield
Step 3 : Increasing air flow toward the windshield
Step 4 : Operating the air conditioning
Step 5 : Maximizing the air conditioning

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 Auto Defogging System is canceled, ADS OFF symbol will blink 3 times and the ADS OFF will be displayed on the climate control information screen.

When the Auto Defogging System is reset, ADS OFF symbol will blink 6 times without a signal.

✻ NOTICE

If the A/C off or recirculated air position is manually selected while the auto defogging system is on, the auto defogging indicator will blink 3 times to give notice that manual operation is canceled.

Do not remove the sensor cover located on the upper end of the passenger side windshield glass. Damage to the system parts could occur and may not be covered by your vehicle warranty.

STORAGE COMPARTMENTS

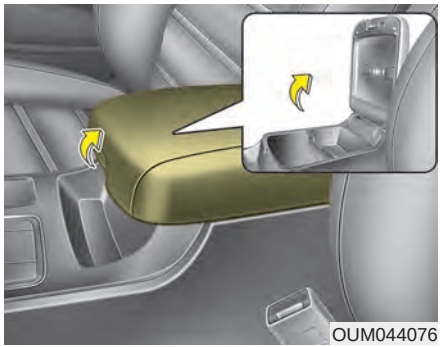
These compartments can be used to store small items required by the driver or passengers.

- 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

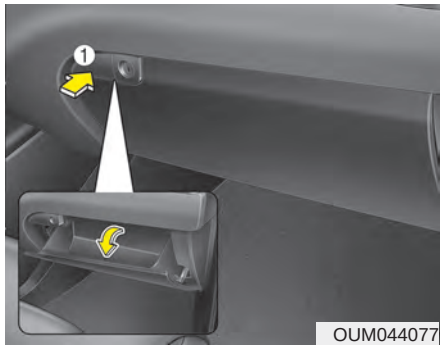
Do not store, propane cylinders or other flammable/explosive materials in the vehicle. These items may catch fire and/or explode if the vehicle is exposed to hot temperatures for extended periods.

Center console storage



To open the center console storage, pull up the lever.

Glove box



The glove box can be locked and unlocked with a master key. (if equipped) To open the glove box, push the button and the glove box will automatically open. Close the glove box after use.

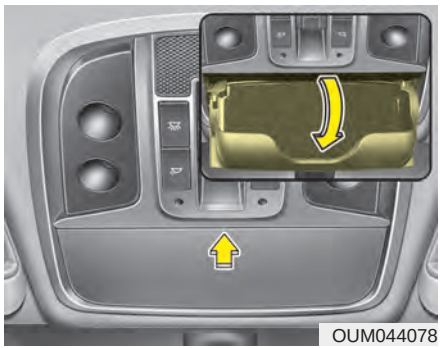
⚠ WARNING

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

✻ 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.

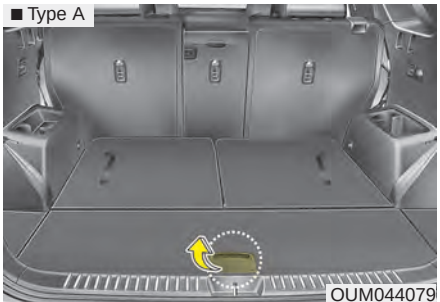
To close the sunglass holder push it up.

⚠ 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.

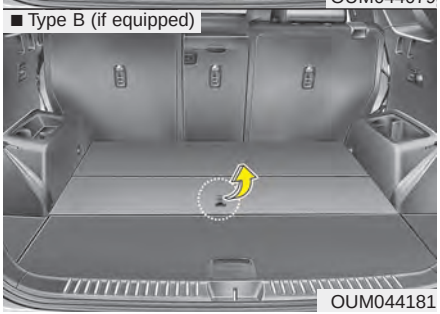
Luggage box

■ Type A



OUM044079

■ Type B (if equipped)



OUM044181

You can place a first aid kit, a reflector triangle, tools, etc. in the box for easy access.

Grasp the handle on the edge of the cover and lift it.

INTERIOR FEATURES

Cup holder

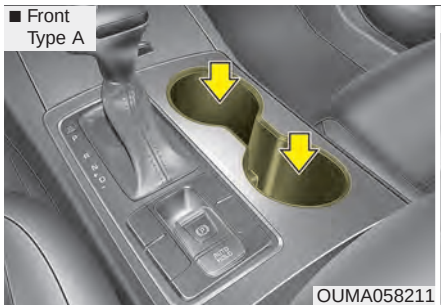
⚠ WARNING - Hot liquids

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

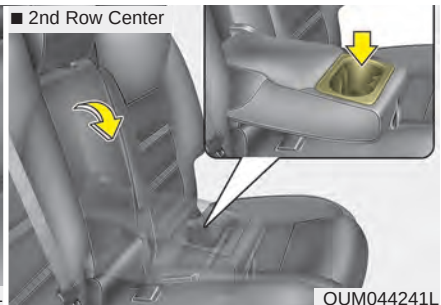
When cleaning spilled liquids, do not dry the cup holder at high temperature. This may damage the cup holder.

■ Front Type A



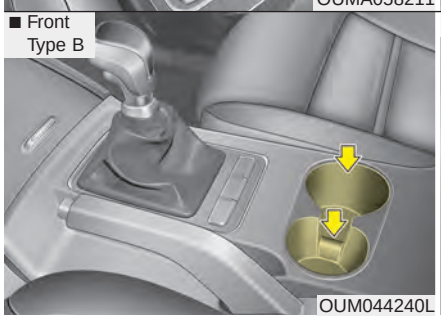
OUMA058211

■ 2nd Row Center



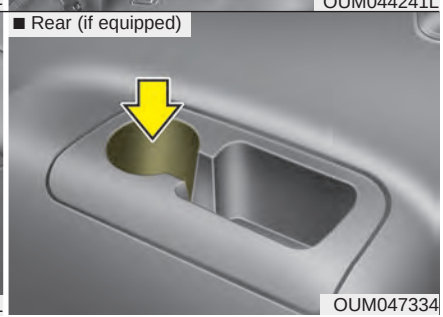
OUM044241L

■ Front Type B



OUM044240L

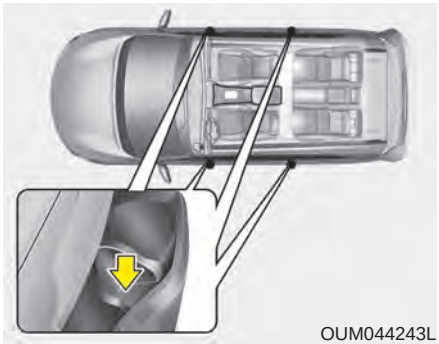
■ Rear (if equipped)



OUM047334

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

Bottle holder

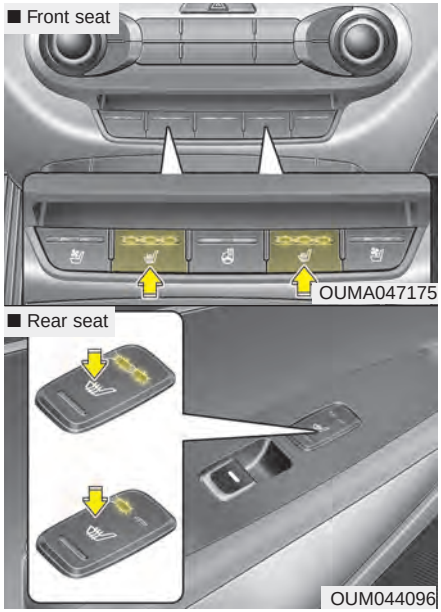


Bottles may be placed in the holder.

✻ NOTICE

Only bottles should be placed in the holder labeled “Bottles Only”.

Seat warmer (if equipped)



The seat warmer is provided to warm the front seats during cold weather. With the ignition switch in the ON position, push either of the switches to warm the driver's seat or the front passenger's seat.

During mild weather or under conditions where the operation of the seat warmer is not needed, keep the switches in the “OFF” position.

- Each time you press the switch, the temperature setting of the seat will change as follows :

OFF→HIGH( )→MIDDLE( )→LOW( )

- The seat warmer defaults to the OFF position whenever the ignition switch is turned on.

✻ NOTICE

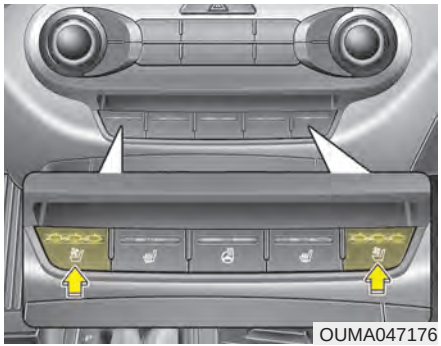
With the seat warmer switch in the ON position, the heating system in the seat turns off or on automatically depending on the seat temperature.

⚠ WARNING - Seat heater 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.)**

Seat cooler (Air ventilation seat) (if equipped)


OUMA047176

The temperature setting of the seat changes according to the switch position.

- If you want to cool your seat cushion, press the switch (blue color).
- Each time you press the button, the airflow will change as follows:

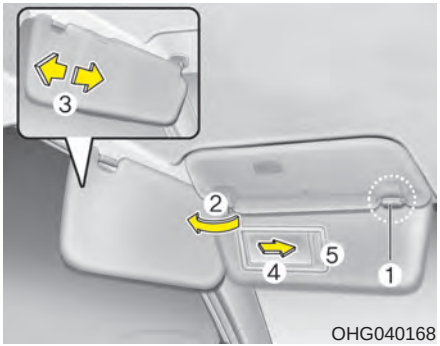
OFF→HIGH( )→MIDDLE( )→LOW( )

- The seat warmer (with air ventilation) defaults to the OFF position whenever the ignition switch is turned on.

⚠ 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.***

Sunvisor



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

To use the sunvisor, pull it downward.

To use the sunvisor for the side window, pull it downward, unsnap it from the bracket (1) and swing it to the side (2).

Adjust the sunvisor extension forward or backward (3).

To use the vanity mirror, pull down the visor and slide the mirror cover (4).

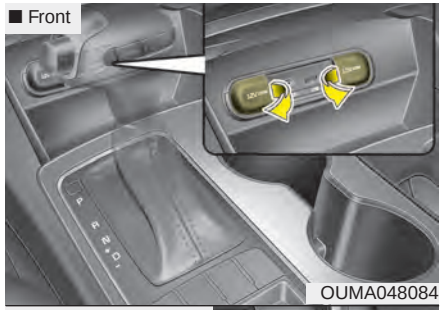
The ticket holder (5) is provided for holding a tollgate ticket. (if equipped)

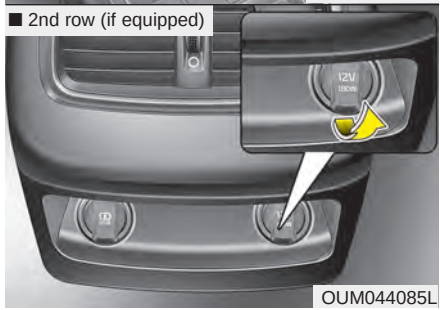
* The actual sunvisor lamp in the vehicle may differ from the illustration.

⚠ 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





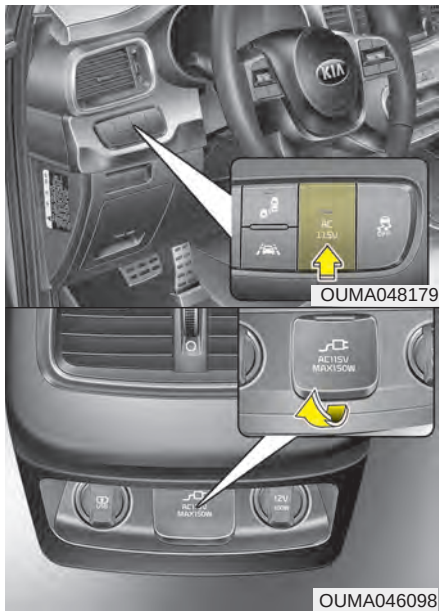
The power outlet is designed to provide power for mobile telephones or other devices designed to operate with vehicle electrical systems. The devices should draw less than 10 amps with the engine running.

- Use the power outlet only when the engine is running and remove the accessory plug after use. Using the accessory plug for prolonged periods of time with the engine off could cause the battery to discharge.
- Only use 12V electric accessories which are less than 10A in electric capacity.
- Adjust the air-conditioner or heater to the lowest operating level when using the power outlet.
- Close the cover when not in use.
- Some electronic devices can cause electronic interference when plugged into a vehicle's power outlet. These devices may cause excessive audio static and malfunctions in other electronic systems or devices used in your vehicle.
- 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 electrical/electronic devices with reverse current protection. The current from the battery may flow into the vehicle's electrical / electronic system and cause system malfunction.

⚠ WARNING - Electric shock

Do not put a finger or a foreign element (pen, etc.) into a power outlet and do not touch with a wet hand. You may get an electric shock.

AC inverter (if equipped)



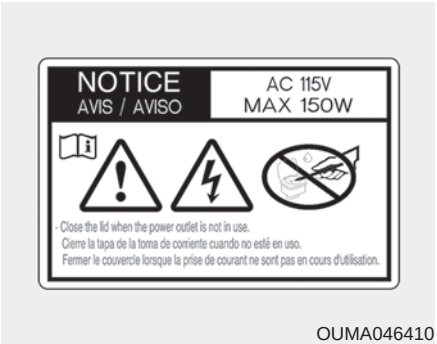
The AC inverter supplies 115V/150W electric power to operate electric accessories or equipment.

If you wish to use the AC inverter, press the AC inverter button while the engine is running. The light on the AC inverter button will illuminate.

If you press the AC inverter button again, the AC inverter will be deactivated and the light on the AC inverter button will turn off.

✻ NOTICE

After pressing the AC inverter button ON, the indicator lamp illumination will be delayed, while the system conducts a self-check.



OUMA046410

✻ NOTICE

- **Rated voltage : AC 115V**
- **Maximum electric power : 150W**
- **In order to avoid an electrical system failure, electric shock, etc., be sure to read owner's manual before use.**
- **Be sure to close the cover except for when in use.**

- To prevent the battery from being discharged, do not use the AC inverter while the engine is not running.
- When not using the AC inverter, make sure to turn off the AC inverter (the indicator on the button does not illuminate) and close the AC inverter cover.
- After using an electric accessory or equipment, pull the plug out. Leaving the accessory or equipment plugged in for a long time may cause battery discharge.
- Do not use an electric accessory or equipment the power consumption of which is greater than 150W (115V).
- When the AC inverter input voltage is less than 11.3V , the LED light will blink and automatically turn off the power.

  AC inverter will operate as normal when the voltage is increased.
- When the AC inverter input voltage is less than 10.7V, the LED light and power will turn off. The AC inverter will operate as normal when the voltage is increased after pressing AC inverter button again.

- While the power consumption of some electrical devices/appliances may be within the AC inverter's electric power range, it may malfunction in below cases.

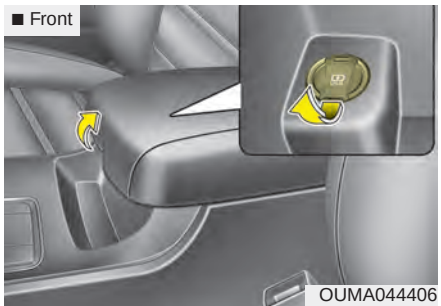
  - If the device/appliance requires high electric power for initial start up
  - If the device/appliance processes precise/very accurate data
  - If the device/appliance requires very stable supply of electricity

⚠ CAUTION - Electric accessory devices

- ***Do not use broken electric accessories which may damage the AC inverter and electrical systems of the vehicle.***
- ***Do not use two or more electric accessories at the same time. It may cause damage to the electrical systems of the vehicle.***

USB charger (if equipped)

■ Front



OUMA044406

■ Rear



OUM044178L

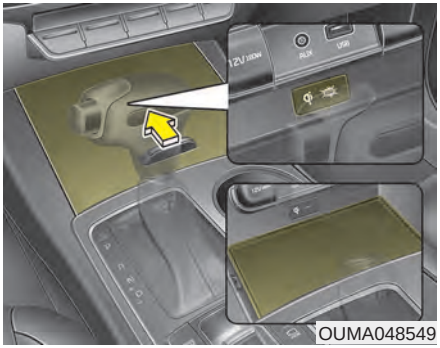
The USB charger is designed to recharge batteries of small size electrical devices using a USB cable. The electrical devices can be recharged when the Engine Start/Stop button is in ACC/ON/START position.

The battery charging state may be monitored on the electrical device.

Disconnect the USB cable from the USB port after use.

- Some devices are not supported for fast charging but will be charged with normal speed.
- Use the USB charger when the engine is running to prevent battery discharge.
- Only devices that fit the USB port can be used.
- The USB charger can be used only for battery charging purposes.
- Battery chargers cannot be charged.

Wireless smart phone charging system (if equipped)



A wireless smart phone charging system 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 per single usage only. Please refer to the smart phone accessory cover or the smart phone manufacturer homepage to check whether your smart phone supports QI function.

⚠ CAUTION

- Metal in Wireless Charging System

If any metallic object such as coins is located 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.

⚠ 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.

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 the USM on the instrument cluster. (Please refer to “Instrument Cluster” for details).

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).

✻ NOTICE

- **Securely close the tray cover when using the wireless smart phone charge function.**
- **Close the tray cover when the smart phone is placed in it at all times. If the vehicle is in motion without the tray cover closed, it is more likely that the driver may use the smart phone. The use of smart phones while driving may lead to possible injuries and accidents.**
- **If it is not possible to close the tray cover due to the size of the smart phone, do not use the wireless smart phone charging function at all.**
- **When the tray cover is broken, do not use the wireless charging function before the tray cover is repaired.**

(Continued)

(Continued)

- **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.**
  The wireless charging will stop when the smart phone is not in complete contact with the wireless charging pad.
- **The smart key detection feature in operation could temporarily stop charging.**
  (When turning on ignition, opening doors, or closing doors)
- **The wireless charging will stop when the vehicle is turned OFF.**

(Continued)

(Continued)

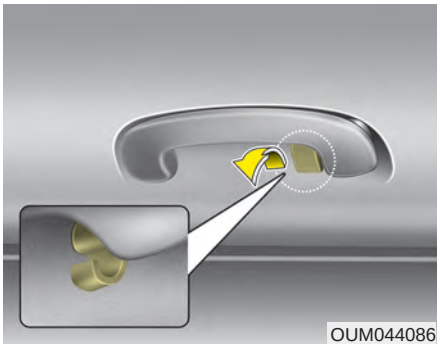
- **Items equipped with magnetic components such as credit card, telephone card, bankbook, any transportation ticket and such may become damaged during wireless charging.**
- **Place the smart phone on the center of the charge pad for best results. The smart phone may not charge when placed near the rim of the charging pad. When the smart phone does get charged, it may heat up excessively.**
- **For smart phones without built-in wireless charging system, an appropriate accessory has to be equipped.**
- **Cellphones without the certification for wireless charging ( ) could fail to charge.**
- **The self-protection feature equipped in some mobile phones could slow down or stop charging.**

(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.**
- **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.**

Coat hook



❈ This actual feature may differ from the illustration.

To use the coat hook, pull down the upper portion of hook.

⚠ CAUTION - Hanging clothing

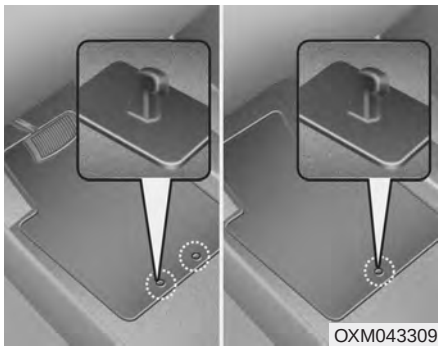
Do not hang heavy clothes, since those may damage the hook.

⚠ WARNING



The coat hook should only be used to hang clothing. Do not hang any other items on the hook as they may become injury producing objects in the event of a crash.

Floor mat anchor (s) (if equipped)



When using a floor mat on the front floor carpet, make sure it attaches to the floor mat anchor(s) in your vehicle. This keeps the floor mat from sliding forward.

⚠ WARNING - After market floor mat

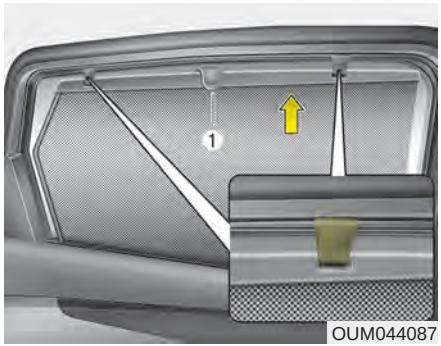
Do not install aftermarket floor mats that are not capable of being securely attached to the vehicle's floor mat anchors. Unsecured floor mats can interfere with pedal operation.

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.

IMPORTANT – Your vehicle was manufactured with driver's side floor mat anchors that are designed to securely hold the floor mat in place. To avoid any interference with pedal operation, Kia recommends that only the Kia floor mat designed for use in your vehicle be installed.

Side curtain (if equipped)



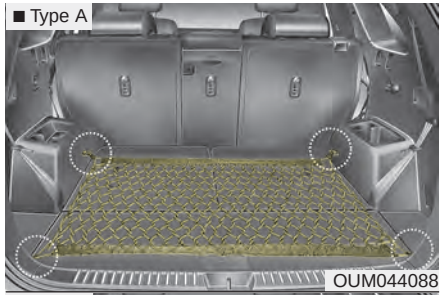
To use the side curtain:

1. Lift the curtain by the handle (1).
2. Hang the curtain on the hooks on both sides of the handle.

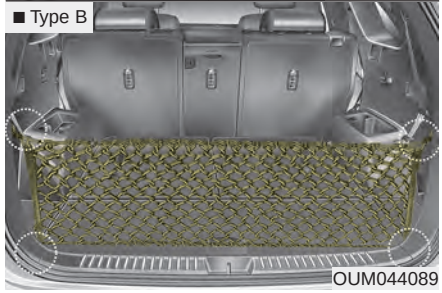
To avoid injury or damage to the side curtain and door moldings, lower side curtain by the handle all the way back to the stowed position. Do not release handle after disengaging from the hooks on the door.

Luggage net holder (if equipped)

■ Type A



■ Type B



To keep items from shifting in the cargo area, you can use the holders located in the cargo area to attach the luggage net.

If necessary, we recommend that you contact an authorized Kia dealer.

⚠ CAUTION

To prevent damage to the vehicle, care should be taken when carrying fragile or bulky objects in the luggage compartment.

⚠ WARNING - Luggage net

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.

EXTERIOR FEATURES

Roof rack (if equipped)



If the vehicle has a roof rack, you can load cargo on top of your vehicle.

✻ NOTICE

If the vehicle is equipped with a sunroof, be sure not to position cargo onto the roof rack in such a way that it could interfere with sunroof operation.

⚠ CAUTION - Loading Roof Rack

- ***When carrying large objects on the roof rack, make sure they do not exceed the overall roof length or width.***
- ***When you are carrying cargo on the roof rack, do not operate the sunroof (if equipped).***
- ***When carrying cargo on the roof rack, take the necessary precautions to make sure the cargo does not damage the roof of the vehicle.***

- The following specification is the maximum weight that can be loaded onto the roof rack. Distribute the load as evenly as possible on the roof rack and secure the load firmly.

ROOF RACK	**220 lbs. (100 kg) EVENLY DISTRIBUTED**

Loading cargo or luggage in excess of the specified weight limit on the roof rack may damage your vehicle.

⚠ WARNING - Driving with roof load

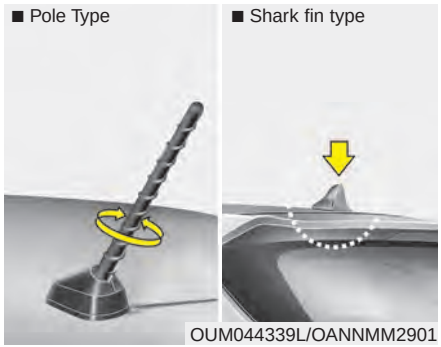
Always drive slow and turn corners carefully when carrying items on the roof rack. The vehicle center of gravity will be higher when items are loaded onto the roof rack.

- Always drive slowly and turn corners carefully when carrying items on the roof rack. Severe wind updrafts, caused by passing vehicles or natural causes, can cause sudden upward pressure on items loaded on the roof rack. This is especially true when carrying large, flat items such as wood panels or mattresses. This could cause the items to fall off the roof rack and cause damage to your vehicle or others around you.
- To prevent damage or loss of cargo while driving, check frequently before or while driving to make sure the items on the roof rack are securely fastened.

AUDIO SYSTEM

If you install aftermarket HID head lamps, your vehicle's audio and electronic devices may malfunction.

Antenna



Pole antenna

Your vehicle uses a roof antenna to receive AM or/and FM broadcast signals.

This antenna pole is removable. To remove the roof antenna pole, turn it counterclockwise. To install the roof antenna pole, turn it clockwise.

Shark fin antenna

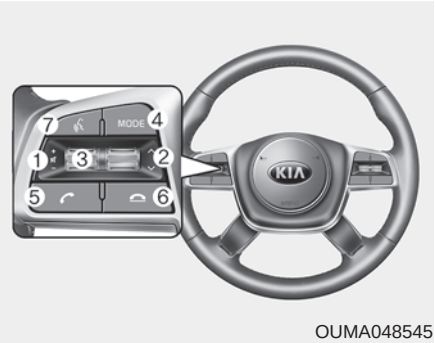
The shark fin antenna will receive the AM, FM broadcast signals and transmit data.

⚠ CAUTION - Antenna

Before entering a place with a low height clearance or a car wash, remove the antenna pole by rotating it counterclockwise. If not, the antenna may be damaged.

- When reinstalling your roof antenna, it is important that it is fully tightened and adjusted to the upright position to ensure proper reception.
- When cargo is loaded on the roof rack, do not place the cargo near the antenna pole to ensure proper reception.

Steering wheel remote controller (if equipped)



OUMA048545

(1) VOLUME

Used to control volume.

(2) SEEK

When pressed shortly (under 0.8 seconds).

- FM, AM mode : Searches broadcast frequencies saved to presets.
- CD, USB, iPod®, My Music, *Bluetooth*® Wireless Technology Audio mode : Changes the track, file.

When pressed and held (over 0.8 seconds).

- FM, AM mode : Automatically searches broadcast frequencies and channels.
- CD, USB, iPod®, My Music mode : Rewinds or fast forwards the track or file.

(3) MUTE

Mutes audio volume.

(4) MODE

Each time this key is pressed, the mode is changed in order of FM1, FM2, AM, CD, USB(iPod), AUX, My Music, BT Audio.

If the media is not connected or a disc is not inserted, corresponding modes will be disabled.

Press and hold the key (over 0.8 seconds) to turn the audio system on/off.

When power is off, press the key to turn power back on.

(5) (if equipped)

When pressed shortly.

- When pressed in the phone screen, displays call history screen.
- When pressed in the dial screen, makes a call.
- When pressed in the incoming call screen, answers the call.
- When pressed while another incoming call is waiting, switches to waiting call (Call Waiting).

When pressed and held (over 0.8 seconds).

- When pressed in the *Bluetooth*® Wireless Technology Handsfree wait mode, redials the last call.
- When pressed during a *Bluetooth*® Wireless Technology Handsfree call, switches call back to mobile phone (Private).
- When pressed while calling on the mobile phone, switches call back to *Bluetooth*® Wireless Technology Handsfree (Operates only when *Bluetooth*® Wireless Technology Handsfree is connected).

(6) (if equipped)

Ends phone call.

(7) (if equipped)

When pressed shortly.

- Starts voice recognition.
- When selected during a voice prompt, stops the prompt and converts to voice command waiting state.

When pressed and held (over 0.8 seconds).

- Ends voice recognition.

✻The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth® SIG, Inc. and any use of such marks by Kia is under license. Other trademarks and trade names are those of their respective owners. A compatible Bluetooth® enabled cell phone is required to use *Bluetooth*® Wireless Technology.

Refer to a separately supplied A VN manual for detailed information.

AUX, USB port



If your vehicle has an AUX and/or USB(universal serial bus) port, you can use the AUX port to connect audio devices and the USB port to plug in a USB device 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 Registered trademark of Apple Inc. iPod® mobile digital device sold separately. Connectivity may require use of the Kia accessory cable.

⚠ WARNING - Distracted driving

Driving while distracted can result in a loss of vehicle control that may lead to an accident, severe personal injury, and death. The driver's primary responsibility is in the safe and legal operation of a vehicle, and use of any handheld devices, other equipment, or vehicle systems which take the driver's eyes, attention and focus away from the safe operation of a vehicle or which are not permissible by law should never be used during operation of the vehicle.

- Be sure the exhaust system does not leak 5-4

Before driving 5-5
- Before entering vehicle 5-5
- Necessary inspections 5-5
- Before starting 5-5

Key positions 5-7
- Illuminated ignition switch 5-7
- Ignition switch position 5-7
- Starting the engine 5-8

Engine start/stop button 5-10
- Illuminated engine start/stop button 5-10
- Engine start/stop button position 5-10
- Starting the engine with a smart key 5-12

Automatic transmission 5-14
- Automatic transmission operation 5-14
- Good driving practices 5-20

All Wheel Drive (AWD) 5-21
- All Wheel Drive (AWD) transfer mode selection . . . 5-22
- For safe all wheel drive operation 5-23

Brake system 5-27
- Power brakes 5-27
- Parking brake - Foot type 5-29
- Electronic Parking Brake (EPB) 5-30
- Auto hold 5-36
- Anti-lock Brake System (ABS) 5-39
- Electronic Stability Control (ESC) 5-41
- Vehicle Stability Management (VSM) 5-45
- Hill-start Assist Control (HAC) 5-47
- Good braking practices 5-47

Forward Collision-avoidance Assist (FCA) 5-49
- System setting and activation 5-49
- FCA warning message and system control 5-52
- Brake operation 5-53
- FCA front radar/camera sensor 5-53
- System malfunction 5-55
- Limitation of the system 5-57

Cruise control system 5-63
- To set cruise control speed 5-63
- To increase cruise control set speed 5-64
- To decrease the cruising speed 5-65
- To temporarily accelerate with the cruise control on 5-65
- To cancel cruise control, do one of the following . . . 5-65
- To resume cruising speed at more than approximately 20 mph (30 km/h) 5-66
- To turn cruise control off, do one of the following . . . 5-66

Smart cruise control with stop & go system 5-67
- Smart cruise control switch 5-69
- Speed setting (Smart cruise control system) 5-69

- Vehicle to vehicle distance setting (Smart cruise control system) 5-74
- When the lane ahead is clear 5-75
- When there is a vehicle ahead of you in your lane . . . 5-75
- To adjust the sensitivity of smart cruise control system. 5-79
- To convert to cruise control mode 5-79
- Limitations of the system 5-80

Drive mode integrated control system 5-86

Lane Keeping Assist (LKA) system 5-91
- LKA system operation 5-93
- Driver's attention. 5-97
- LKA system malfunction 5-98
- LKA system function change 5-99

Blind-spot Collision Warning (BCW) 5-101
- BCW (Blind-Spot Collision Warning). 5-102
- RCCW (Rear Cross-Traffic Collision Warning). . . 5-104
- Driver's attention. 5-108

Driver Attention Warning (DAW). 5-110
- System setting and activation. 5-110
- Resetting the system 5-112
- System disabled 5-112
- System malfunction 5-113

Economical operation. 5-115

Special driving conditions 5-117
- Hazardous driving conditions 5-117
- Reducing the risk of a rollover. 5-117
- Rocking the vehicle 5-119
- Smooth cornering 5-119
- Driving at night 5-120
- Driving in the rain. 5-120
- Driving in flooded areas 5-121
- Driving off-road. 5-121
- Highway driving 5-121

Winter driving 5-123
- Snowy or icy conditions 5-123
- Use high quality ethylene glycol coolant. 5-125
- Check battery and cables 5-125
- Change to "winter weight" oil if necessary 5-125
- Check spark plugs and ignition system. 5-125
- To keep locks from freezing 5-126
- Use approved window washer anti-freeze in system 5-126
- Don’t let your parking brake freeze 5-126
- Don't let ice and snow accumulate underneath . . . 5-126
- Carry emergency equipment 5-126

Trailer towing 5-127
- Hitches 5-128
- Safety chains 5-128

• Trailer brakes 5-128
• Driving with a trailer 5-129
• Maintenance when trailer towing 5-132
• If you do decide to pull a trailer 5-133
Vehicle load limit 5-135
• Tire and loading information label 5-135
• Certification label 5-139
Vehicle weight glossary 5-141
• Base curb weight 5-141
• Vehicle curb weight 5-141
• Cargo weight 5-141
• GAW (Gross Axle Weight) 5-141
• GAWR (Gross Axle Weight Rating) 5-141
• GVW (Gross Vehicle Weight). 5-141
• GVWR (Gross Vehicle Weight Rating) 5-141

Be sure the exhaust system does not leak.

The exhaust system should be checked whenever the vehicle is raised to change the oil or for any other purpose. If you hear a change in the sound of the exhaust or if you drive over something that strikes the underneath side of the vehicle, have the exhaust system checked as soon as possible by an authorized Kia dealer.

⚠ WARNING - Engine exhaust

Do not inhale exhaust fumes or leave your engine running in 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 liftgate

Do not drive with the liftgate open. Poisonous exhaust gases can enter the passenger compartment. If you must drive with the liftgate 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.**

⚠ CALIFORNIA PROPOSITION 65 WARNING

Engine exhaust and a wide variety of automobile components and parts, including components found in the interior furnishings in a vehicle, contain or emit chemicals known to the State of California to cause cancer and birth defects and reproductive harm. In addition, certain fluids contained in vehicles and certain products of component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

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 drive 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 - 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.

KEY POSITIONS (IF EQUIPPED)

Illuminated ignition switch



OUM054001

Whenever a front door is opened, the ignition switch will illuminate for your convenience, provided the ignition switch is not in the ON position. The light will go off immediately when the ignition switch is turned on. It will also go off after about 30 seconds when the door is closed.

Ignition switch position

LOCK



OYP054029K

The steering wheel locks to protect against theft (if equipped). The ignition key can be removed only in the LOCK position.

ACC (Accessory)

The steering wheel is unlocked and electrical accessories are operative.

If difficulty is experienced turning the ignition switch to the ACC position, turn the key while turning the steering wheel right and left to release the tension.

ON

The warning lights can be checked before the engine is started. This is the normal running position after the engine is started.

Do not leave the ignition switch ON if the engine is not running to prevent battery discharge.

START

Turn the ignition switch to the START position to start the engine. The engine will crank until you release the key; then it returns to the ON position. The brake warning light can be checked in this position.

The anti-theft steering column lock (if equipped) is not a substitute for the parking brake. Before leaving the driver's seat, always make sure the shift lever is engaged in P (Park) for automatic transmission, set the parking brake fully and shut the engine off. Unexpected and sudden vehicle movement may occur if these precautions are not taken.

⚠ WARNING - Ignition switch

Never turn the ignition switch to LOCK or ACC while the vehicle is moving. This would result in loss of directional control and braking function, which could cause an accident.

Starting the engine

⚠ WARNING - Proper footwear

Always wear appropriate shoes when operating your vehicle. Unsuitable shoes (high heels, ski boots, sandals, etc.) may interfere with your ability to use the brake and accelerator pedal.

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

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

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

   It should be started without depressing the accelerator.

4. Do not wait for the engine to warm up while the vehicle remains stationary.

   Start driving at moderate engine speeds. (Steep accelerating and decelerating should be avoided.)

⚠ WARNING - Steering wheel

Never reach for any controls through the steering wheel while the vehicle is in motion. The presence of your hand or arm in this area could cause a loss of vehicle control.

If the engine stalls while you are in motion, do not attempt to move the shift lever to the P (Park) position. If traffic and road conditions permit, you may put the shift lever in the N (Neutral) position while the vehicle is still moving and turn the ignition switch to the START position in an attempt to restart the engine.

⚠ CAUTION - Starter

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

ENGINE START/STOP BUTTON (IF EQUIPPED)

Illuminated engine start/stop button



OUM054004

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 entrances are closed, if you lock the vehicle by using the transmitter or the smart key, the light will go off immediately.

Engine start/stop button position

OFF



Not illuminated

To turn off the engine (START/RUN position) or vehicle power (ON position), press the engine start/stop button with the shift lever in the P (Park) position. When you press the engine start/stop button without the shift lever in the P (Park) position, the engine start/stop button will not change to the OFF position but to the ACC position.

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)



Amber

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.

ON



Redish orange

Press the engine start/stop button while it is in the ACC position without depressing the brake pedal.

The warning lights can be checked before the engine is started. Do not leave the engine start/stop button in the ON position for a long time. The battery may discharge, because the engine is not running.

START/RUN



Not illuminated

To start the engine, depress the brake pedal and press the engine start/stop button with the shift lever in the P (Park) or the N (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 for automatic transmission vehicles, the engine will not start and the engine start/stop button changes as follow:

OFF ➔ ACC ➔ ON ➔ OFF or ACC

✻ NOTICE

If you leave the engine start/stop button in the ACC or ON position for a long time, the battery will discharge.

⚠ WARNING - 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 leave it inside the vehicle.
2. Make sure the parking brake is firmly applied
3. Place the transmission 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.

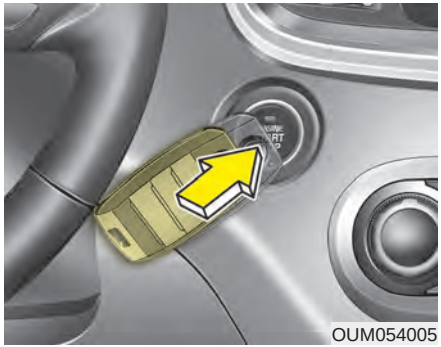
   It should be started without depressing the accelerator.
5. Do not wait for the engine to warm up while the vehicle remains stationary.

   Start driving at moderate engine speeds. (Rapid accelerating and decelerating should be avoided.)

- Even if the smart key is in the vehicle, if it is far away from you, the engine may not start.
- When the engine start/stop button is in the ACC position or above, if any door is opened, the system checks for the smart key. If the smart key is not in the vehicle, a message “key is not in the vehicle” will appear on the LCD display. And if all doors are closed, the chime will sound for 5 seconds. The indicator or warning will turn off while the vehicle is moving. Always have the smart key with you.

⚠ WARNING - 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.


OUM054005

- If the battery is weak or the smart key does not work correctly, you can start the engine by pressing the Engine Start/Stop Button with the smart key.

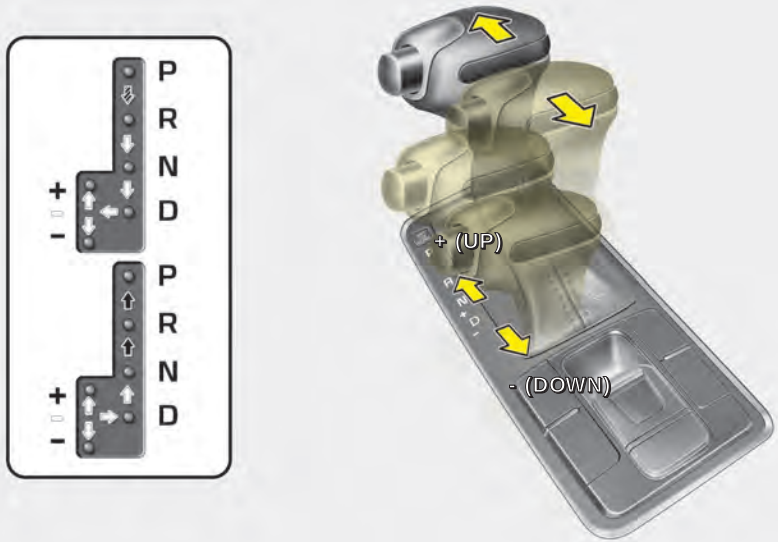
  The side with the lock button should contact the Engine Start/Stop Button directly.

  When you press the Engine Start/Stop Button directly with the smart key, the smart key should contact the button at a right angle.

- When the stop lamp fuse is blown, you can't start the engine normally. Replace the fuse with a new one. If it is not possible, you can start the engine by pressing the engine start/stop button for 10 seconds while it is in the ACC position. The engine can start without depressing the brake pedal. But for your safety always depress the brake pedal before starting the engine.

Do not press the engine start/stop button for more than 10 seconds except when the stop lamp fuse is blown

AUTOMATIC TRANSMISSION



Depress the brake pedal and the lock release button when shifting.
(If the shift lock system is not equipped, it is not necessary to depress the brake pedal. However, it is recommended to depress the brake pedal to avoid inadvertent movement of the vehicle.)

Press the lock release button when shifting.

The shift lever can be shifted freely.

OUMA058007

Automatic transmission operation

The automatic transmission has 6 or 8 forward speeds and one reverse speed. The individual speeds are selected automatically, depending on the position of the shift lever.

✻ NOTICE

The first few shifts on a new vehicle, if the battery has been disconnected, may be somewhat abrupt. This is a normal condition, and the shifting sequence will adjust after shifts are cycled a few times by the TCM (Transmission Control Module) or PCM (Powertrain Control Module).

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

⚠ WARNING - Leaving Vehicle

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

⚠ 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.

When stopped on an incline, do not hold the vehicle with the engine power. Use the service brake or the parking brake.

Transmission ranges

The indicator in the instrument cluster displays the shift lever position when the ignition switch is in the ON position.

P (Park)

Always come to a complete stop before shifting into P (Park). This position locks the transmission and prevents the drive wheels from rotating.

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

R (Reverse)

Use this position to drive the vehicle backward.

⚠ CAUTION - Shifting

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

N (Neutral)

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

- Parking in N (Neutral) gear

Follow below steps when parking and you want the vehicle to move when pushed.

1. After parking your vehicle, depress the brake pedal and move the transmission shift lever to [P] with the ignition button in [ON] or while the engine is running.
2. If the parking brake is applied release 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 reapply 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 should be turn off.
3. While pressing the brake pedal, turn the ignition button [OFF].
   - For smart key equipped vehicles, the ignition switch can be moved to [OFF] only when the shift lever is in [P].
4. Change the gear shift lever to [N] (Neutral) while pressing the brake pedal and pressing down a tool (e.g. flathead screw-driver) into the [SHIFT LOCK RELEASE] access hole at the same time. Then, the vehicle will move when external force is applied.

⚠ WARNING - Parking In Neutral

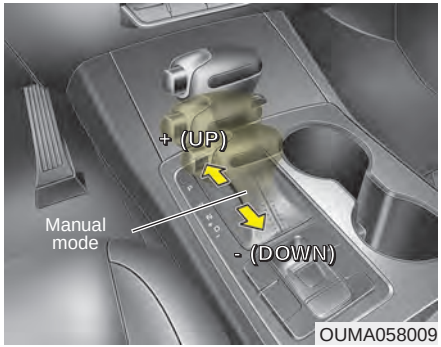
- **With the exception of parking in neutral gear, always park the vehicle in [P] (Park) for safety and apply the parking brake.**
- **Before parking in [N] (Neutral) gear, make sure the parking ground is level and flat. Do not park in [N] gear on any slopes or gradients. If parked and left in [N], the vehicle may move and cause serious damage or injury.**

- After the ignition switch has been turned off, the electronic parking brake cannot be disengaged.
- 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.

D (Drive)

This is the normal forward driving position. The transmission will automatically shift through a 6 or 8-gear sequence, providing the best fuel economy and power.

For extra power when passing another vehicle or climbing grades, depress the accelerator fully, at which time the transmission will automatically downshift to the next lower gear.



Manual mode

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

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

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

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

- In manual mode, the driver must execute upshifts in accordance with road conditions, taking care to keep the engine speed below the red zone.
- In manual mode, only the 6 or 8 forward gears can be selected. To reverse or park the vehicle, move the shift lever to the R (Reverse) or P (Park) position as required.
- In manual mode, downshifts are made automatically when the vehicle slows down. When the vehicle stops, 1st gear is automatically selected.
- In manual mode, when the engine rpm approaches the red zone shift points are varied to upshift automatically.
- To maintain the required levels of vehicle performance and safety, the system may not execute certain gearshifts when the shift lever is operated.
- When driving on a slippery road, push the shift lever forward into the +(up) position. This causes the transmission to shift into the 2nd gear which is better for smooth driving on a slippery road. Push the shift lever to the -(down) side to shift back to the 1st gear.

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) unless the brake pedal is depressed.

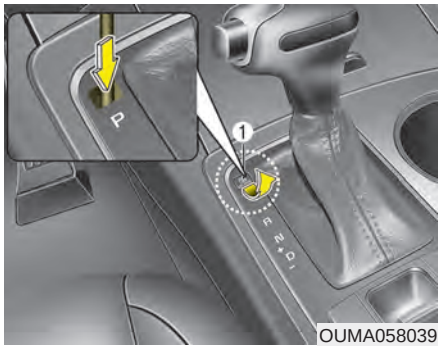
To shift the transmission from P (Park) into R (Reverse):

1. Depress and hold the brake pedal.
2. Start the engine or turn the ignition switch to the ON position.
3. Move the shift lever.

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

⚠ WARNING - Shifting from park

Always fully depress the brake pedal before and while shifting out of the P (Park) position into another position to avoid inadvertent motion of the vehicle which could injure persons in or around the vehicle.



Shift-lock override

If the shift lever cannot be moved from the P (Park) position into R (Reverse) position with the brake pedal depressed, continue depressing the brake, then do the following:

1. Carefully remove the cap covering the shift-lock access hole (1).
2. Insert a screwdriver into the access hole and press down on the screwdriver.
3. Move the shift lever.
4. Have your vehicle inspected by an authorized Kia dealer immediately.

Ignition key interlock system

The ignition key cannot be removed unless the shift lever is in the P (Park) position. Even if the ignition switch is in the LOCK position, the key also cannot be removed.

If your vehicle is equipped with engine start/stop button, the button will not change to the OFF position unless the shift lever is in the P (Park) position.

Good driving practices

- Never move the gear shift lever from P (Park) to any other position with the accelerator pedal depressed.
- Never move the gear shift lever into P (Park) when the vehicle is in motion.
- Slow down before shifting to a lower gear. Otherwise, the lower gear may not be engaged.
- Always use the parking brake. Do not depend on placing the transmission in P (Park) to keep the vehicle from moving.
- Optimum vehicle performance and economy is obtained by smoothly depressing and releasing the accelerator pedal.

Moving up a steep grade from a standing start

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

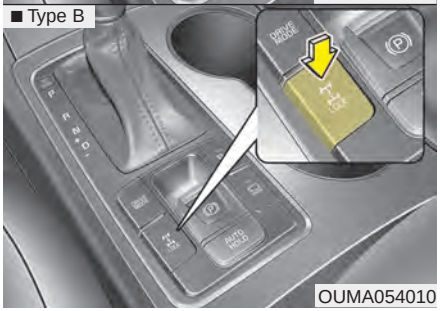
When accelerating from a stop on a steep hill, the vehicle may have a tendency to roll backwards. Shifting the shift lever into 2 (Second Gear) will help prevent the vehicle from rolling backwards.

ALL WHEEL DRIVE (AWD) (IF EQUIPPED)

■ Type A



■ Type B



Engine power can be delivered to all front and rear wheels for maximum traction. AWD is useful when extra traction is required, such as, when driving on slippery, muddy, wet, or snow-covered roads.

These vehicles are not designed for challenging off-road use. Occasional off-road use such as established unpaved roads and trails are OK. It is always important when traveling off-highway that the driver carefully reduces the speed to a level that does not exceed the safe operating speed for those conditions. In general, off-road conditions provide less traction and braking effectiveness than normal road conditions.

The driver must be especially alert to avoid driving on slopes which tilt the vehicle to either side.

These factors must be carefully considered when driving off-road. Keeping the vehicle in contact with the driving surface and under control in these conditions is always the driver's responsibility for the safety of him/herself and his or her passengers.

* AWD : All Wheel Drive
FWD : Front Wheel Drive

⚠ WARNING - Off road driving

Do not attempt to operate your vehicle under extreme or challenging off road driving conditions. Although this vehicle has off-road capabilities, it was not designed to be driven off road.

If the AWD system warning light ( ) illuminates, this indicates that there is a malfunction in the AWD system.

If this occurs, have your vehicle checked by an authorized Kia dealer as soon as possible.

All Wheel Drive (AWD) transfer mode selection

Transfer mode	Selection button	Indicator light	Description
AWD AUTO (AWD LOCK is deactivated)		LOCK (Indicator light is not illuminated)	• AWD Auto is used when driving on roads in normal conditions, roads in urban areas, and on highways. • All wheels are in operation when a vehicle travels at a constant speed. Required tractions applying on front and rear wheels vary depending on road driving conditions and driving conditions, which will be automatically controlled by the computing system. • When the cluster's AWD Auto display mode is selected, the cluster displays the status of how four wheels' traction forces are distributed.
AWD LOCK		LOCK (Indicator light is illuminated)	• The main goal of AWD Lock mode is to allow a driver to maximize the vehicle's traction under extreme driving conditions such as unpaved off-road, sandy roads, and muddy roads. • AWD Lock mode is in operation only when a vehicle travels at 40km/h or less. When travelling at 40km/h or faster, the mode will switch to AWD Auto. When travelling at 30 km/h or less, the mode will switch back to AWD Lock. • When AWD Lock mode illuminates, the cluster does not display the front/rear wheel traction force distribution status. • Press the AWD Lock mode switch again to switch back to AWD Auto.

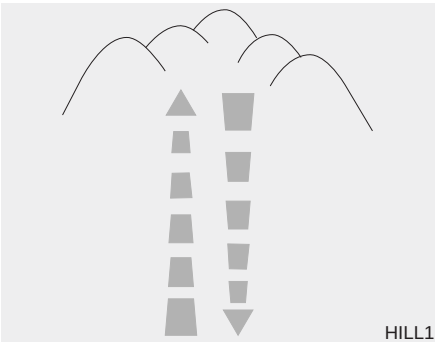
When the AWD LOCK mode is deactivated, a shock may be felt as the drive power is delivered entirely to the front wheels. This shock is not a mechanical failure.

✻ NOTICE - Normal road conditions

- **Maintain AWD Auto mode when driving on roads in normal conditions.**
- **When driving under normal road conditions (especially when cornering) in AWD Lock mode, a driver may find minor mechanical vibration or noise, which is extremely normal phenomenon, not a malfunction. When AWD Lock mode is released, such noise or vibration will be immediately gone.**

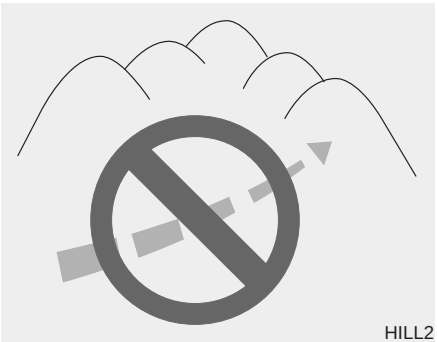
For safe all wheel drive operation

- Do not try to drive in deep standing water or mud since such conditions can stall your engine and clog your exhaust pipes. Do not drive down steep hills since it requires extreme skill to maintain control of the vehicle.


HILL1

- When you are driving up or down hills; drive as straight as possible.

  Use extreme caution going up or down steep hills, the grade, terrain and water/mud conditions may cause the vehicle to flip.


HILL2

⚠ WARNING - Hills

Proceed with extreme caution when driving down steep hills. A slight change in the wheel angle can destabilize the vehicle. This can cause your vehicle to suddenly roll without warning and without time for you to regain control of your vehicle.

- You must consciously take the effort to learn how to corner in a AWD vehicle. Do not rely on your experience in conventional FWD vehicles in choosing a safe cornering speed in AWD mode. For starters, you must drive more slowly in AWD.
- Drive carefully off-road because your vehicle may be damaged by rocks or roots of trees. Become familiar with the off-road conditions where you are going to drive before you begin driving.

⚠ WARNING - AWD

Reduce speed when you turn corners. The center of gravity of AWD vehicles is higher than that of conventional FWD vehicles, making them more likely to roll over when you turn corners too fast.



OUM058053L

⚠ WARNING - Steering wheel

Do not grab the inside of the steering wheel when you are driving off-road. You may hurt your arm by a sudden steering maneuver or from steering wheel rebound due to impact with objects on the ground.

- Always hold the steering wheel firmly when you are driving off-road.
- Make sure all passengers are wearing seat belts.

⚠ WARNING - Wind danger

Drive slowly in heavy winds. The vehicle's higher center of gravity decreases your steering control capacity.

- If you need to drive in the water, stop your vehicle, set your transfer to the AWD LOCK mode and drive at less than 5 mph (8 km/h).

⚠ WARNING - Driving through water

Drive slowly. If you are driving too fast in water, the water can get into the engine compartment and wet the ignition system, causing your vehicle to suddenly stop. If this happens and your vehicle is in a tilted position, your vehicle may roll over.

✻ NOTICE

- **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 section 7). Always wash your vehicle thoroughly after off-road use, especially cleaning the bottom of the vehicle.**
- **A full time all wheel drive vehicle cannot be towed by an ordinary tow truck. Make sure that the vehicle is placed on a flat bed truck for moving.**

⚠ WARNING - AWD driving

Do not attempt quick steering maneuvers or sharp turns in AWD mode. Such maneuvers increase the risk of rollover accidents. Rollover accidents are extremely violent and unpredictable.

⚠ CAUTION - Mud or snow

Do not run the engine continuously at high RPMs to free the vehicle from snow or mud. Doing so could damage the AWD system in your vehicle.

Do not use a tire and wheel package with a different size and type from the one originally installed on your vehicle. It can affect the safety and performance of your vehicle, which could lead to steering failure or rollover causing serious injury.

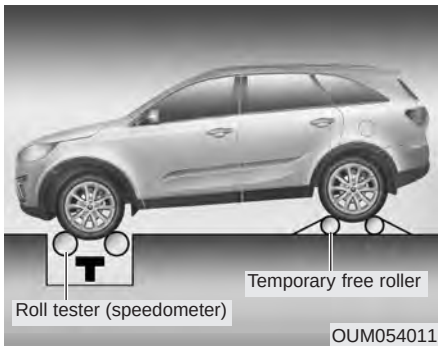
When replacing the tires, be sure to equip all four tires with the tire and wheel of the same size, type, tread, brand and load-carrying capacity. If you equip your vehicle with any tire/wheel combination not recommended by Kia for off-road driving, ou should not use thesetires for high way driving.

⚠ WARNING - Jacked vehicle

While the full-time AWD vehicle is being raised on a jack, never start the engine or cause the tires to rotate.

There is the danger that rotating tires touching the ground could cause the vehicle to go off the jack and to jump forward.

- Full-time AWD vehicles must be tested on a special four wheel chassis dynamometer.
- A full-time AWD vehicle should not be tested on a FWD roll tester. If a FWD roll tester must be used, perform the following:



1. Check the tire pressures recommended for your vehicle.
2. Place the front wheels on the roll tester for a speedometer test as shown in the illustration.
3. Release the parking brake.
4. Place the rear wheels on the temporary free roller as shown in the illustration.

⚠ WARNING - Replacement Tires

When replacing tires and wheels, be sure all four tires are the same size, type, tread and have the same load-carrying capacity as the original equipment tires. Installing replacement tires that vary from the original equipment tires can negatively effect vehicle handling and can increase the risk of an accident.

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

⚠ WARNING - Parking brake

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

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

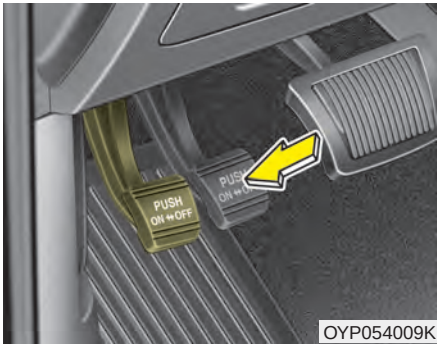
Do not continue to drive with worn brake pads. Continuing to drive with worn brake pads can damage the braking system and result in costly brake repairs.

⚠ 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.

Parking brake - Foot type (if equipped)

Applying the parking brake

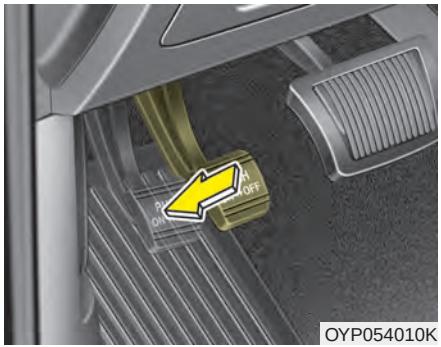


To engage the parking brake, first apply the foot brake and then depress the parking brake pedal down as far as possible.

⚠ CAUTION - Parking brake

Driving with the parking brake applied will cause excessive brake pad (or lining) and brake rotor wear.

Releasing the parking brake



To release the parking brake, depress the parking brake pedal a second time while applying the foot brake. The pedal will automatically extend to the fully released position.

⚠ WARNING - Parking brake use

All vehicles should always have the parking brake fully engaged when parking to avoid inadvertent movement of the vehicle which can injure occupants or pedestrians.



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.

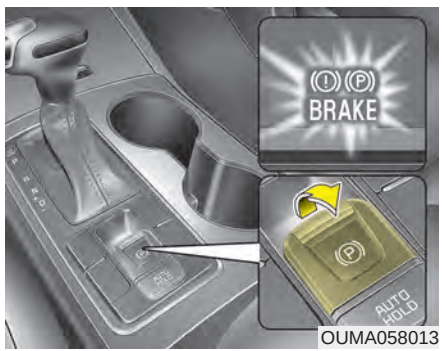
Before driving, be sure the parking brake is fully released and the brake warning light is off.

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) (if equipped)

Applying the parking brake



OUMA058013

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 press the EPB switch after the engine is turned off, the EPB will not be Applied.

✻ NOTICE

On a steep incline or when pulling a trailer, if the vehicle does not 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, but these conditions are normal and indicate that the EPB is functioning properly.

Releasing the parking brake



OUMA058014

To release the EPB (electronic parking brake), press the EPB switch in the following condition:

- Have the ignition switch or engine start/stop button in the ON position.
- Depress the brake pedal.

Make sure the brake warning light goes off.

To release EPB (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 vehicle

  1. Start the engine.
  2. Fasten the driver's seat belt.
  3. Close the driver's door, engine hood and trunk.
  4. Depress the accelerator pedal while the shift lever is in R (Rear), D (Drive) or Sports mode.

Make sure the brake warning light goes off.

✻ NOTICE

- **For your safety, you can engage the EPB even though the ignition switch or engine stop/start button is in the OFF position, but you cannot release it.**
- **For your safety, depress the brake pedal and release the parking brake manually with the EPB switch when you drive downhill or when backing up the vehicle.**

Do not follow the above procedure when driving on a flat level ground. The vehicle may suddenly move forward.

⚠ CAUTION

- ***If the parking brake warning light is still on even though the EPB has been released, have the system checked by an authorized Kia dealer.***
- ***Do not drive your vehicle with the EPB applied. It may cause excessive brake pad and brake rotor wear.***

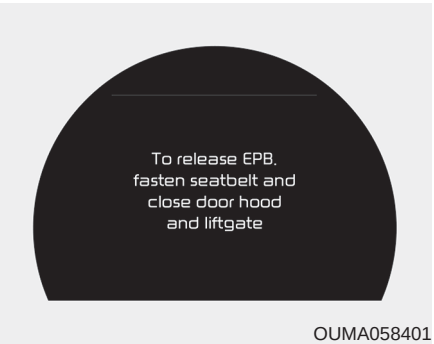
EPB (electronic parking brake) may be automatically applied when:

- The EPB is overheated
- Requested by other systems

✻ NOTICE

If the driver turns the engine off by mistake while Auto Hold is operating, EPB will be automatically applied. (Vehicles equipped with Auto Hold)

System warning



OUMA058401

- 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.

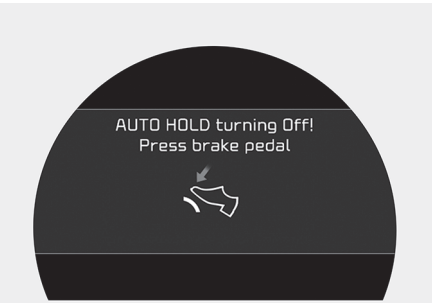
If the above situation occurs, depress the brake pedal and release EPB by pressing the EPB switch.

⚠ 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, but these conditions are normal and indicate that the EPB is functioning properly.
- When leaving your keys with a parking lot attendant or valet, make sure to inform him/her how to operate the EPB.
- The EPB may malfunction if you drive with the EPB applied.
- When you automatically release EPB by depressing the accelerator pedal, depress it slowly.

System warning



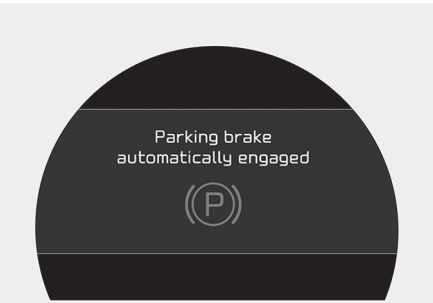
OUM058277L

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.

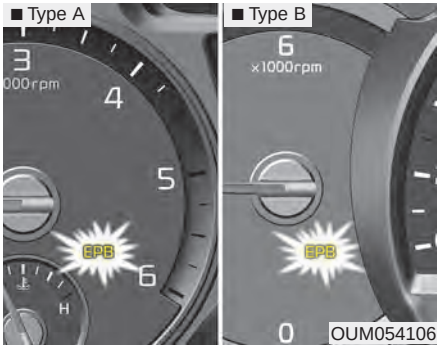
System warning



OUM058278L

If the EPB is applied while Auto Hold is activated because of ESC (Electronic Stability Control) signal, a warning will sound and a message will appear.

EPB malfunction indicator (if equipped)



This warning light illuminates if the engine start/stop button is changed to the ON position and goes off in approximately 3 seconds if the system is operation normally.

If the EPB malfunction indicator remains on, comes on while driving, or does not come on when the ignition switch or the engine start/stop button is changed to the ON position, this indicates that the EPB may have malfunctioned.

If this occurs, have your vehicle checked by an authorized Kia dealer as soon as possible.

The EPB malfunction indicator may illuminate when the ESC indicator comes on to indicate that the ESC is not working properly, but it does not indicate a malfunction of the EPB.

- The EPB warning light may illuminate if the EPB switch operates abnormally. Shut the engine off and turn it on again after a few minutes. The warning light will go off and the EPB switch will operate normally. However, if the EPB warning light is still on, have the system checked by an authorized Kia dealer.
- If the parking brake warning light does not illuminate or blinks even though the EPB switch was pulled up, the EPB is not applied.
- If the parking brake warning light blinks when the EPB warning light is on, press the switch, then pull it up. Once more press it back to its original position and pull it back up. If the EPB warning does not go off, have the system checked by an authorized Kia dealer.

Emergency braking

If there is a problem with the brake pedal while driving, emergency braking is possible by pulling up and holding the EPB switch. Braking is possible only while you are holding the EPB switch.

⚠ WARNING

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.

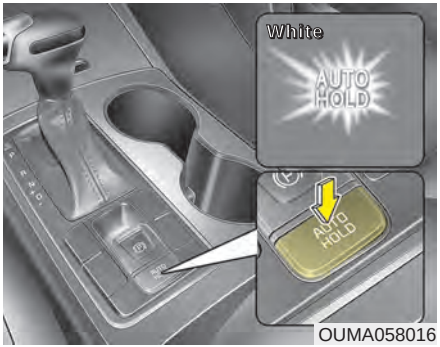
If you notice a continuous noise or burning smell when the EPB is used for emergency braking, have your vehicle checked by an authorized Kia dealer.

When the EPB (electronic parking brake) is not released

If the EPB does not release normally, take your vehicle to an authorized Kia dealer by loading the vehicle on a flatbed tow truck and have the system checked.

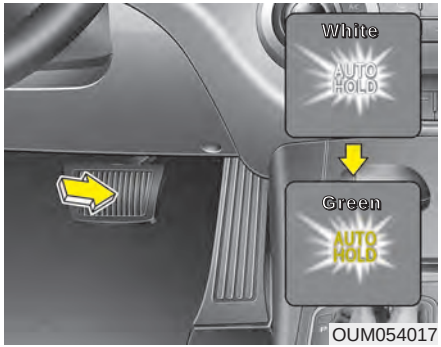
AUTO HOLD (if equipped)

The Auto Hold maintains the vehicle in a standstill even though the brake pedal is not depressed after the driver brings the vehicle to a complete stop by depressing the brake pedal.



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, engine hood and trunk 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 and EPB is applied. 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 R (Reverse), D (Drive) or sports mode, the Auto Hold will be released automatically and the vehicle will start to move. The indicator changes from green to white 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 trunk is opened**
  - **The shift lever is in P (Park)**
  - **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 trunk is opened**
  - **The vehicle is in a standstill for more than 10 minutes**
  - **The vehicle is standing on a steep slope**
  - **The vehicle moved several times**

(Continued)

(Continued)

In these cases, the brake warning light comes on, the AUTO HOLD indicator changes from green to white, and a warning sounds and a message will appear to inform you that EPB has been automatically engaged. Before driving off again, press foot brake pedal, check the surrounding area near your vehicle and release parking brake manually with the EPB switch.

- **If the AUTO HOLD indicator lights up yellow, the Auto Hold is not working properly. Take your vehicle to an authorized Kia dealer and have the system checked.**

⚠ WARNING

To reduce the risk of an accident, do not activate Auto Hold while driving downhill, backing up or parking your vehicle.

If there is a malfunction with the driver's door, engine hood or trunk open detection system, the Auto Hold may not work properly.

Take your vehicle to an authorized Kia dealer and have the system checked.

✻ 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.

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 increase the stopping distance for your vehicle.

The ABS continuously senses the speed of the wheels. If the wheels are going to lock, the ABS system repeatedly modulates the hydraulic brake pressure to the wheels.

When you apply your brakes under conditions which may lock the wheels, you may hear a "tik-tik" sound from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your ABS is active.

In order to obtain the maximum benefit from your ABS in an emergency situation, do not attempt to modulate your brake pressure and do not try to pump your brakes. Press your brake pedal as hard as possible or as hard as the situation allows the ABS to control the force being delivered to the brakes.

✻ NOTICE

A click sound may be heard in the engine compartment when the vehicle begins to move after the engine is started. These conditions are normal and indicate that the anti-lock brake system is functioning properly.

- Even with the anti-lock brake system, your vehicle still requires sufficient stopping distance. Always maintain a safe distance from the vehicle in front of you.
- Always slow down when cornering. The anti-lock brake system cannot prevent accidents resulting from excessive speeds.
- On loose or uneven road surfaces, operation of the anti-lock brake system may result in a longer stopping distance than for vehicles equipped with a conventional brake system.



W-78

The ABS warning light will stay on for approximately 3 seconds after the ignition switch is ON. During that time, the ABS will go through self-diagnosis and the light will go off if everything is normal. If the light stays on, you may have a problem with your ABS. Contact an authorized Kia dealer as soon as possible.

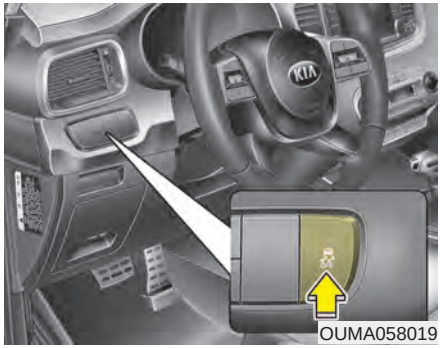
- When you drive on a road having poor traction, such as an icy road, and have operated your brakes continuously, the ABS will be active continuously and the ABS warning light may illuminate. Pull your vehicle over to a safe place and stop the engine.
- Restart the engine. If the ABS warning light goes off, then your ABS system is normal. Otherwise, you may have a problem with the ABS. Contact an authorized 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)



The Electronic Stability control (ESC) system is designed to stabilize the vehicle during cornering maneuvers. ESC checks where you are steering and where the vehicle is actually going. ESC applies the brakes on individual wheels and intervenes with the engine management system to stabilize the vehicle.

Electronic stability control (ESC) will not prevent accidents. Excessive speed in turns, abrupt maneuvers and hydroplaning on wet surfaces can still result in serious accidents. Only a safe and attentive driver can prevent accidents by avoiding maneuvers that cause the vehicle to lose traction. Even with ESC installed, always follow all the normal precautions for driving - including driving at safe speeds for the conditions.

The Electronic Stability Control (ESC) system is an electronic system designed to help the driver maintain vehicle control under adverse conditions. It is not a substitute for safe driving practices. Factors including speed, road conditions and driver steering input can all affect whether ESC will be effective in preventing a loss of control. It is still your responsibility to drive and corner at reasonable speeds and to leave a sufficient margin of safety.

When you apply your brakes under conditions which may lock the wheels, you may hear a “tik-tik” sound from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your ESC is active.

✻ NOTICE

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.

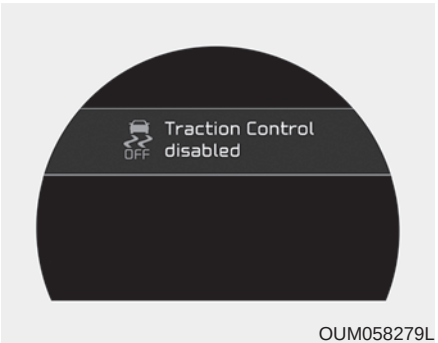
ESC operation off

ESC OFF state



This car has 2 kinds of ESC off states.

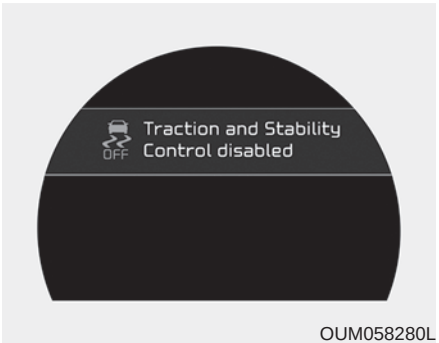
If the engine stops when ESC is off, ESC remains off. Upon restarting the engine, the ESC will automatically turn on again.



OUM058279L

• 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.

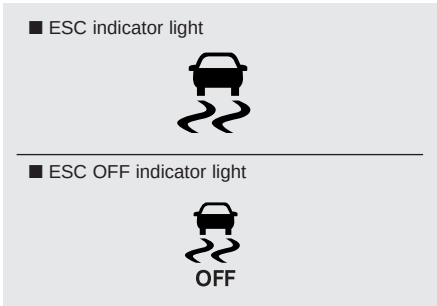


OUM058280L

• 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



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). This is only the effect of brake and EPS control and indicates nothing unusual.

The VSM does not operate when:

- Driving on bank road such as 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.

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 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 two surface road. The two surface road is made of surfaces which have different friction forces.**
- The Vehicle Stability Management system is not a substitute for safe driving practices but a supplementary function only. It is the responsibility of the driver to always check the speed and the distance to the vehicle ahead. Always hold the steering wheel firmly while driving.
- Your vehicle is designed to activate according to the driver's intention, even with installed VSM. Always follow all the normal precautions for driving at safe speeds for the conditions – including driving in clement weather and on a slippery road.

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 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 the upgrade with the accelerator pedal. This can cause the transmission to overheat. Always use the brake pedal or parking brake.

FORWARD COLLISION-AVOIDANCE ASSIST (FCA) (IF EQUIPPED)

The FCA system is designed to detect and monitor the vehicle ahead or detect a pedestrian (if equipped) 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 - Forward Collision-Avoidance assist (FCA) Limitations

The FCA system is a supplemental system and is not a substitute for safe driving practices. It is the responsibility of the driver to always check the speed and distance to the vehicle ahead to ensure it is safety to use the FCA system.

✻ NOTICE

Take the following precautions when using the forward collision-avoidance assist (FCA):

- **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. FCA does not stop the vehicle completely and does not avoid collisions.**

System setting and activation

System setting

The driver can activate the FCA by placing the ignition switch to the ON position and by selecting 'User Settings', 'Driver Assistance', and ‘Forward Collision-Avoidance Assist’. The FCA deactivates, when the driver cancels the system setting.



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 (Traction & Stability control disabled.). When the warning light remains ON with the FCA activated, have the system checked by an authorized Kia dealer.

The driver can select the initial warning activation time in the User Settings in the instrument cluster LCD display. The options for the initial Forward Collision Warning include the following:

- EARLY - When this condition is selected, the initial Forward Collision Warning is activated earlier than normal. This setting maximizes the amount of distance between the vehicle or pedestrian ahead before the initial warning occurs. If the 'EARLY' condition feels too sensitive, change it into 'NORMAL'. When the vehicle ahead suddenly stops, the warning may seem to activate later even if the 'EARLY' condition was selected.
- 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.
- LATE - 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 this condition only when traffic is light, and you are driving slowly.

Prerequisite for activation

The FCA will activate when the FCA is selected on the LCD display, and when the following prerequisites are satisfied:

- The ESC (Electronic Stability Control) is activated.
- The driving speed is over 6 mph. (The FCA only works within a certain range of vehicle speeds)
- When the FCA recognizes a vehicle or the pedestrian in front. (The FCA may not recognize every obstacle or provide warnings and braking in every situation, so do not rely on the FCA to stop the vehicle in instances where the driver sees an obstacle and has the ability to apply the brakes)

⚠ WARNING

To avoid driver distractions, do not attempt to set or cancel the FCA while operating the vehicle.

- The FCA automatically activates upon placing the ignition switch 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. When the ESC is cancelled, the FCA cannot be activated on the LCD display.

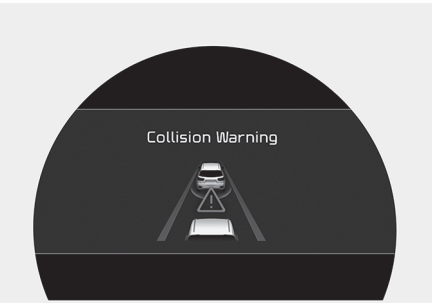
  The FCA warning light will illuminate, but it does not indicate a malfunction of the system.
- Set or cancel FCA with controlling switches on steering wheel after stopping the vehicle in the safe place for your safety.

FCA warning message and system control

The FCA produces warning messages and warning alarms in accordance with the collision risk levels of followings like vehicle's sudden braking in front or lack of vehicle to vehicle distance or collision to pedestrians.

Also, it controls the brakes in accordance with the collision risk levels.

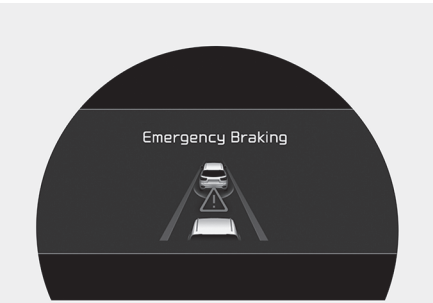
Collision Warning (1st warning)



OUM058281L

- The warning message appears on the LCD display with the warning alarms.
- The FCA controls the brakes within certain limit to release shock from the collision.

Emergency braking (2nd warning)



OUM058282L

- The warning message appears on the LCD display with the warning alarms.
- The FCA controls the brakes within certain limit to release shock from the collision.

  The FCA controls the maximum brakes just before the collision.

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 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 brake pedal, or when the driver abruptly turns the steering wheel.
- The braking control is automatically canceled, when risk factors disappear.

The driver should always exercise caution when operating the vehicle, even though there is no warning message or warning alarm.

⚠ WARNING

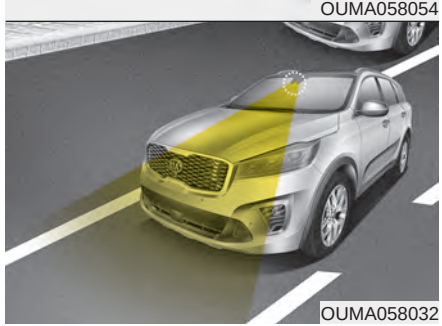
Never rely solely on the FCA to stop a collision the drive can It is the driver's responsibility to safely maneuver the vehicle under all conditions.

✻ NOTICE

The FCA operates in accordance with the risk levels, such as the distance from the vehicle/pedestrian in front, the speed of the vehicle/pedestrian in front, and the driver's vehicle operation. For the system to activate, do not attempt risky driving.

FCA front radar / camera sensor


OUMA058054


OUMA058032

In order for the FCA system to operate properly, always make sure the sensor or sensor cover 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

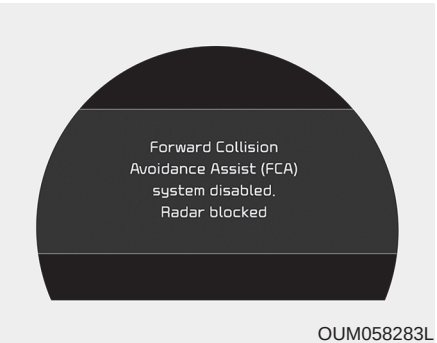
- **Do not install any accessories, such as a license plate bracket or bumper sticker near the sensor area. Do not replace the bumper by yourself. Doing so may adversely affect the sensing performance.**
- **Always keep the sensor/bumper area clean.**
- **Use only a soft cloth to wash the vehicle. Also, do not spray highly pressurized water on the sensor installed on the bumper.**
- **Be careful not to apply unnecessary force on the front sensor area. When the sensor moves out of the correct position due to external force, the system may not operate correctly even without the warning light or message. In this case, we recommend you to have the vehicle inspected by an authorized Kia dealer.**
- **Use only the genuine Kia sensor cover. Do not arbitrarily apply paint on the sensor cover.**

(Continued)

(Continued)

- **Do not tint the window or install stickers, accessories around the inside mirror where the camera is installed.**
- **Make sure the front camera installation point does not get wet.**
- **Do not impact or arbitrarily remove any radar/camera components.**
- **Do not place reflective objects(white paper or mirror etc.) on the crash pad. The system may activate unnecessarily due to reflect of the sunlight.**
- **Excessive audio volume may disturb the sound of the system warn ing alarm.**

Warning message and warning light



OUM058283L

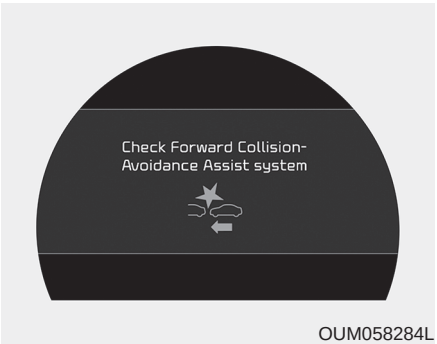
When the sensor cover or the sensor lens is smudged with the foreign substances, such as snow or rain, the FCA operation may temporarily stop. In this case, the warning message appears to warn the driver.

This is not a malfunction with the FCA. To operate the FCA again, remove the foreign substances.

Remove any dirt, snow, or debris and clean the radar sensor cover before operating the FCA system.

The FCA may not properly operate in an area (e.g. open terrain), where any substances are not detected after turning ON the engine.

System malfunction



OUM058284L

- 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 vehicle inspected by an authorized Kia dealer.
- The FCA warning message may appear along with the illumination of the ESC warning light.

⚠ WARNING

The FCA is only a supplemental system for the driver's convenience.

The driver still maintains responsibility to control the vehicle. Do not solely depend on the FCA system. Rather, maintain a safe braking distance, and, if necessary, depress the brake pedal to lower the driving speed.

- The FCA may unnecessarily produce warning messages and warning alarms. Due to the sensing limitation, the FCA may not produce warning messages or warning alarm at all.
- When there is a malfunction with the FCA, the braking control does not operate upon detecting a collision risk even with other braking systems normally operating.
- The FCA operates only for the vehicle / pedestrian in front, while driving forward. It does not operate for any animals or vehicles in the opposite direction.
- The FCA can not recognize cross-traffic or parked vehicles presenting a sideprofile.
- If the vehicle in front stops suddenly, you may have less control of the brake system.

  Therefore, always keep 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. And the load in the vehicle may endanger passengers.

  Therefore, always be mindful of the load volume in the vehicle.
- The FCA system may not activate if the driver applies the brake pedal to avoid risk of collision.
- The FCA system does not operate when the vehicle is in reverse. 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.
- The regular braking function will operate normally even if There is a problem with the FCA brake control system or other functions. In this case, the braking control will not operate in the risk of a collision.
- The FCA system may not activate according to driving condition, traffic on the road, weather, road condition, etc.
- The FCA system may not activate to all types of vehicles.

Limitation of the system

The FCA is an assistant system for a driver in a certain risky driving condition and it does not take every responsibility for all risks from driving condition.

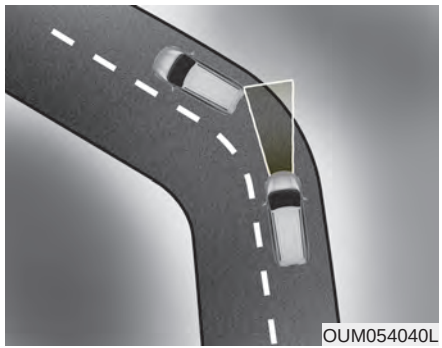
The FCA monitors the driving situations through the radar and the camera sensor. Thus, for a situation out of the sensing range, the FCA may not operate normally. The driver should use caution in the following situations. The FCA operation may be limited.

Recognizing vehicles

The sensor may be limited when:

- The radar or the camera is contaminated with foreign substances.
- It heavily rains or snows.
- There is interruption by electric waves.
- There is severe irregular reflection from the radar.
- The vehicle in front has a narrow body. (i.e. motor cycle and bicycle)
- The driver's view is unclear due to the backlight, the reflected light, or darkness.
- The camera cannot contain the full image of the vehicle in front.
- The vehicle in front is a special vehicle, such as a heavily-loaded truck or a trailer.
- The outside brightness is greatly changed, such as entering/exiting a tunnel.
- The vehicle driving is unstable.
- The radar/camera sensor recognition is limited.
- The driver'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)
- There is severe irregular reflection from the radar sensor
- The vehicle in front is driving erratically
- The vehicle is driven near areas containing metal substances such as a construction zone, railroad, etc.
- Backlight is reflected in the direction of the vehicle (including front light from the vehicle ahead)
- Moisture on the windshield is not completely removed or frozen.
- The weather is misty.
- The vehicle in front does not turn ON the rear lights, does not have rear lights, has asymmetric rear lights, or has rear lights out of angle.
- The vehicle is on unpaved or uneven rough surfaces, or roads with sudden gradient changes.

- The vehicle is moving under ground level or inside a building.
- If a sudden change in the sensor recognition takes place while driving over 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 direction 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



- Driving on a curve

The FCA performance decreases while driving on a curve. The FCA may not recognize the vehicle in front even in the same lane. It may unnecessarily produce the warning message and the warning alarm, or it may not produce the warning message and the warning alarm at all.

While driving on a curve, exercise caution, and, if necessary, depress the brake pedal.

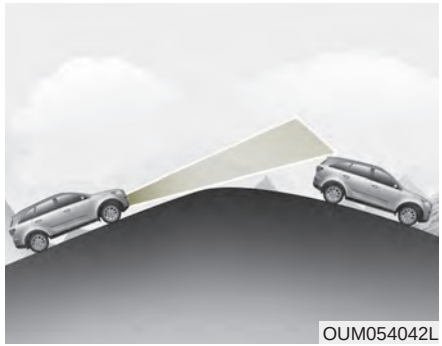

OUM054041L

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 take a look around the vehicle for your safety before activating the FCA system.

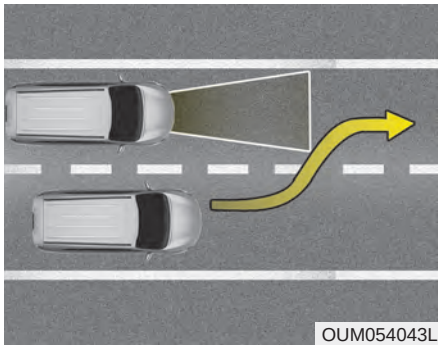

OUM054042L

- Driving on a slope

The FCA performance decreases while driving upward or downward on a slope, not recognizing the vehicle in front in the same lane. It may unnecessarily produce the warning message and the warning alarm, or it may not produce the warning message and the warning alarm at all.

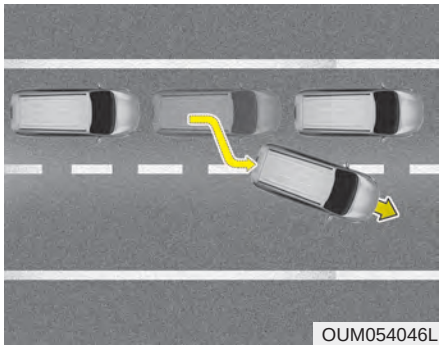
When the FCA suddenly recognizes the vehicle in front while passing over a slope, you may experience sharp deceleration.

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 distance.


OUM054043L

- 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.


OUM054046L

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.



- Recognizing the vehicle

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 sensor may be limited when:

- The pedestrian is not fully detected by the camera recognition system, for example, if the pedestrian is leaning over or is not fully walking upright
- The pedestrian is moving very quickly or appears abruptly in the camera detection area
- The pedestrian is wearing clothing that easily blends into the background, making it difficult to be detected by the camera recognition system
- The outside lighting is too bright (e.g. when driving in bright sunlight or in sun glare) or too dark (e.g. when driving on a dark rural road at night)
- There is an item similar to a person's body structure
- The pedestrian is small
- The pedestrian has impaired mobility
- The sensor recognition is limited
- It is difficult to detect and distinguish the pedestrian from other objects in the surroundings, for example, when there is a group of pedestrians or a large crowd
- If a sudden change in the sensor recognition takes place while driving over 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 moisture on the front windshield is not entirely removed or it is frozen
- The weather is foggy
- The radar/camera sensor recognition is limited.

⚠ WARNING - Testing the FCA

The FCA does not operate in certain situations. Thus, never test-operate the FCA against a person or an object. It may cause a severe injury or even death.

⚠ WARNING - FCA and Towing

Cancel the FCA in the User Settings on the LCD display, before towing another vehicle. While towing, the brake application may adversely affect your vehicle safety.

✻ NOTICE

The system may temporarily cancel due to the strong electric waves.

- Pay great caution to the vehicle in front, when it has heavy loading extended rearward, or when it has higher ground clearance.
- The FCA system is designed to detect and monitor the vehicle ahead or detect a pedestrian 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.
- The FCA does not operate in a certain situation. Thus, never test-operate the FCA against a person or an object. It may cause a severe injury or even death.
- When replacing or reinstalling the windshield, front bumper or radar/camera after removal, have the vehicle inspected by an authorized Kia dealer.

CRUISE CONTROL SYSTEM

The cruise control system allows you to program the vehicle to maintain a constant speed without depressing the accelerator pedal.

This system is designed to function above approximately 20 mph (30 km/h).

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

Use the cruise control system only when traveling on open highways in good weather.

Do not use the cruise control when driving in heavy or varying traffic, or on slippery (rainy, icy or snow-covered) or winding roads or over 6% up-hill or down-hill roads.

✻ NOTICE

- **During normal cruise control operation, when the SET switch is activated or reactivated after applying the brakes, the cruise control will energize after approximately 3 seconds. This delay is normal.**
- **To activate cruise control, depress the brake pedal at least once after turning the ignition switch to the ON position or starting the engine. This is to check if the brake switch which is important part to cancel cruise control is in normal condition.**

⚠ WARNING - Misuse of Cruise Control

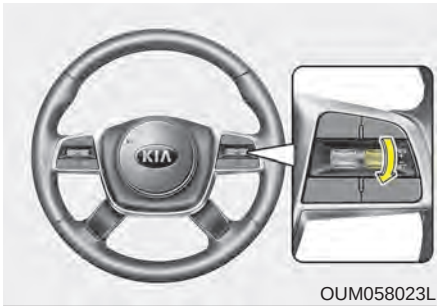
Do not use cruise control if the traffic situation does not allow you to drive safely at a constant speed and with sufficient distance to the vehicle in front.

To set cruise control speed:

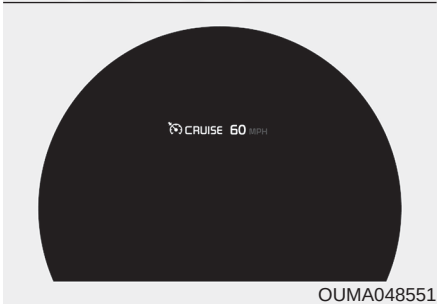


OUM058022CN

1. Press the CRUISE button on the steering wheel to turn the system on. The CRUISE indicator light in the instrument cluster will illuminate.
2. Accelerate to the desired speed, which must be more than 20 mph (30 km/h).



OUM058023L

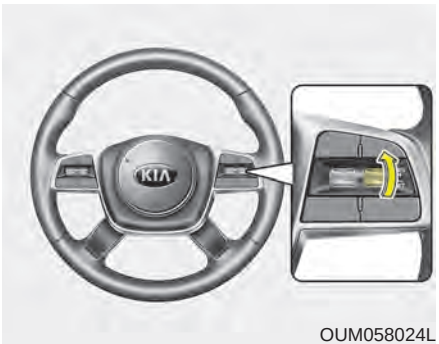


OUMA048551

3. Move the lever down (to SET-), and release it at the desired speed. The set speed in the instrument cluster will display. Release the accelerator at the same time. The desired speed will automatically be maintained.

On a steep grade, the vehicle may slow down or speed up slightly while going downhill.

To increase cruise control set speed:

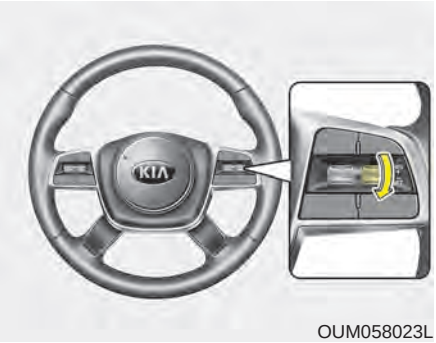


OUM058024L

Follow either of these procedures:

- Move the lever up (to RES+) and hold it. Your vehicle will accelerate. Release the lever at the speed you want.
- Move the lever up (to RES+) and release it immediately. The cruising speed will increase by 1.0 mph (2 km/h) each time the lever is operated in this manner.

To decrease the cruising speed:



OUM058023L

Follow either of these procedures:

- Move the lever down (to SET-) and hold it. Your vehicle will gradually slow down. Release the lever at the speed you want to maintain.
- Move the lever down (to SET-) and release it immediately. The cruising speed will decrease by 1.0 mph (2 km/h) each time the lever is operated in this manner.

To temporarily accelerate with the cruise control on:

If you want to speed up temporarily when the cruise control is on, depress the accelerator pedal. Increased speed will not interfere with the cruise control operation or change the set speed.

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

To cancel cruise control, do one of the following:



OUM058025CN

- Depress the brake pedal.
- Shift into N (Neutral) with an automatic transmission.
- Press the CANCEL switch.
- Decrease the vehicle speed lower than the memory speed by 12 mph (20 km/h).
- Decrease the vehicle speed to less than approximately 15 mph (25 km/h).

Each of these actions will cancel cruise control operation (The set speed in the instrument cluster will go off), but it will not turn the system off. If you wish to resume cruise control operation, move the lever up (to RES+). You will return to your previously preset speed.

To resume cruising speed at more than approximately 20 mph (30 km/h):



OUM058024L

If any method other than the CRUISE ON-OFF switch was used to cancel cruising speed and the system is still activated, the most recent set speed will automatically resume when you move the lever up.

It will not resume, however, if the vehicle speed has dropped below approximately 20 mph (30 km/h).

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

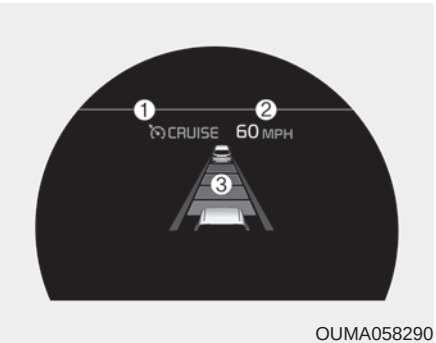


OUM058022CN

- Press the CRUISE button (the CRUISE indicator light in the instrument cluster will go off).
- Turn the ignition off.

Both of these actions will cancel the cruise control operation. If you want to resume the cruise control operation, repeat the steps provided in "To set cruise control speed" on the previous page.

SMART CRUISE CONTROL WITH STOP & GO SYSTEM (IF EQUIPPED)



OUMA058290

① Cruise indicator
② Set speed
③ Vehicle-to-vehicle distance

The smart cruise control system allows you to program the vehicle to maintain constant speed and distance detecting the vehicle ahead without depressing the accelerator or brake pedal.

⚠ WARNING

- Smart cruise control system Inadvertent Activation

- **If the smart cruise control systemis left on (CRUISE indicator in the instrument cluster illuminated), it can be activated inadvertently. Keep the smart cruise control system off (CRUISE indicator turn off) when the smart cruise control systemis not in use to avoid setting a speed which the driver is not aware of.**
- **The smart cruise control systemis a supplemental system and is not a substitute for safe driving practices. It is the responsibility of the driver to always check the speed and distance to the vehicle ahead.**

(Continued)

(Continued)

- **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 car at a constant speed. For instance.**
  - **Highway interchange and tollgate**
  - **Road surrounded by abnormally multiple steel constructions (subway construction, steel tunnel, etc)**
  - **Parking lot**
  - **Lanes beside guard rail on a road**
  - **Slippery road with rain, ice, or snow covered**
  - **Abrupt curved road**
  - **Steep hills**
  - **Windy roads**
  - **Off roads**

(Continued)

(Continued)

- **Roads under construction**
- **Rumble strip**
- **When driving near crash barriers**
- **When driving on a sharp curve**
- **When the vehicle sensing ability decreases due to vehicle modification resulting level difference of the vehicle's front and rear**
- **When driving in heavy traffic or when traffic conditions make it difficult to drive at a constant speed**
- **When driving on rainy, icy, or snow covered roads**
- **When driving with limited view (possibly due to bad weather, such as fog, snow, rain or sandstorm)**

(Continued)

(Continued)

- **The smart cruise control system cannot recognize a stopped vehicle, pedestrians or an oncoming vehicle. Always look ahead cautiously to prevent unexpected and sudden situations from occurring.**
- **Pay particular attention to the driving conditions whenever using the smart cruise control system.**
- **Be careful when driving downhill using the SCC.**
- **Limited visibility (rain, snow, smog, etc.)**
- **Cruise function should not be used when the vehicle is being towed to prevent any damage.**
- **Always set the vehicle speed under the speed limit in your country.**

(Continued)

(Continued)

- **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 switch

CANCEL : Cancels cruise control operation.

CRUISE : Turns cruise control system on or off.

RES + : Resumes or increases cruise control speed.

SET - : Sets or decreases cruise control speed.

: Sets vehicle-to-vehicle distance

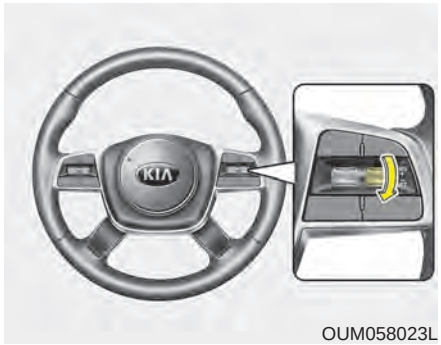
Speed setting (smart cruise control system)

To set Smart Cruise Control Speed:



OUM058022CN

1. Press the CRUISE button, to turn the system on. The CRUISE indicator in the instrument cluster will illuminate.
2. Accelerate to the desired speed.
   - 20 mph (30 km/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



OUM058023L

3. Move the lever down (to SET-), and release it at the desired speed. The set speed and vehicle to vehicle distance on the LCD screen 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.

Vehicle speed may decrease on an upward slope and increase on a ownward slope.

The speed will be set to 20 mph when there is a vehicle ahead and your vehicle speed is 0 ~ 20 mph.

To increase cruise control set speed:

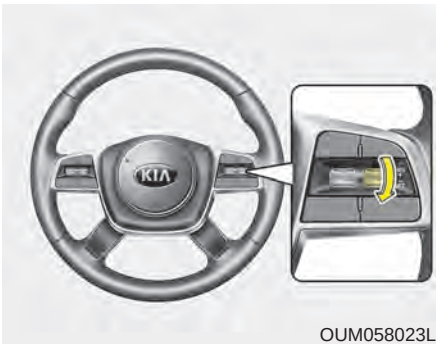


OUM058024L

Follow either of these procedures:

- Move the lever up (to RES+), and hold it. Your vehicle set speed will increase by 5 mph (10 km/h). Release the lever at the speed you want.
- Move the lever up (to RES+), and release it immediately. The cruising speed will increase by 1 mph (1.0 km/h) each time you move the lever up (to RES+) in this manner.
- Smart cruise control system will operate to a maximum setting of 120 mph (200 km/h). However all local speed limit laws must be followed.

To decrease the cruise control set speed:



OUM058023L

Follow either of these procedures:

- Move the lever down (to SET-), and hold it. Your vehicle set speed will decrease by 5 mph (10 km/h). Release the lever at the speed you want.
- Move the lever down (to SET-), and release it immediately. The cruising speed will decrease by 1 mph (1.0 km/h) each time you move the lever down (to SET-) in this manner.
- You can set the cruise control to above 20 mph (30 km/h).

To temporarily accelerate with the cruise control on:

If you want to speed up temporarily when the cruise control is on, depress the accelerator pedal. Increased speed will not interfere with cruise control operation or change the set speed.

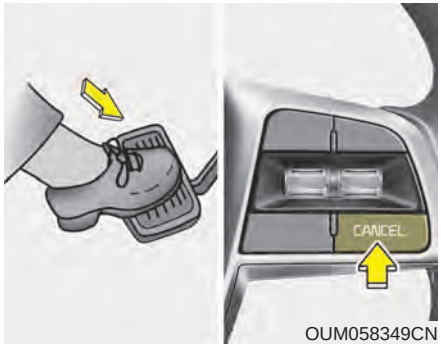
To return to the set speed, take your foot off the accelerator.

If you move the lever down (to SET-) at increased speed, the cruising speed will be set again.

✻ NOTICE

Be careful when accelerating temporarily, because the speed is not regulated automatically at this time even if there is a vehicle in front of you.

Smart cruise control system will be temporarily canceled when:



OUM058349CN

Cancelled manually

The smart cruise control system is temporarily canceled when the brake pedal is depressed or the CANCEL button is pressed. The speed and vehicle to vehicle distance indicator on the cluster will disappear and the CRUISE indicator is illuminated continuously.

Cancelled automatically

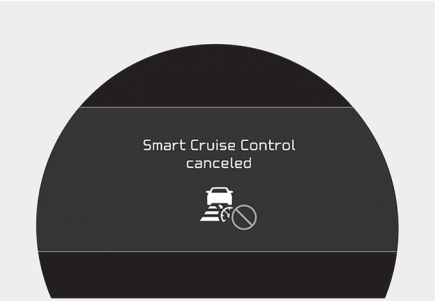
- The driver's door is opened.
- The shift lever is shifted to N (Neutral), R (Reverse) or P(Parking).
- The EPB (electronic parking brake) is applied.
- The vehicle speed is over 130 mph (210 km/h)
- The ESC, ABS or TCS is operating.
- The ESC is turned off.
- The sensor or the cover is dirty or blocked with foreign matter.
- When the vehicle is stopped for over 5 minutes.
- The driver starts driving by pushing the lever up (RES +) or down (SET -) or depressing the accelerator pedal approximately 3 seconds after the vehicle is stopped by the smart cruise control system with no other vehicle ahead or a vehicle stopped far away in front.
- The engine speed is in dangerous range.

- The smart cruise control system has malfunctioned.
- The accelerator pedal is continuously depressed for long time.
- When the braking control is operated for Forward Collision-Avoidance Assist(FCA)
- The vehicle is stopped for more than 5 minutes.
- 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 vehicle stops and goes repeatedly for a long period of time.
- When the parking brake is locked.
- Engine has some problems.

  Each of these actions will cancel the smart cruise control system operation. (The set speed and vehicle-to-vehicle distance on the LCD display will go off.)

  If the smart cruise control system is cancelled automatically, the smart cruise control system will not resume even though the RES+ or SET- lever is moved.

If the smart cruise control system is cancelled by a reason not mentioned, have the system checked by an authorized Kia dealer.

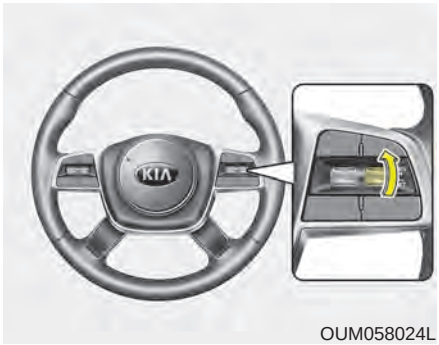


OUM058291L

✻ NOTICE

If the system is automatically cancelled, the warning chime will sound and a message will appear for a few seconds. You must adjust the vehicle speed by depressing the accelerator or brake pedal according to the road conditions ahead and driving condition. Always check the road conditions. Do not rely on the warning chime.

To resume cruise control set speed:



OUM058024L

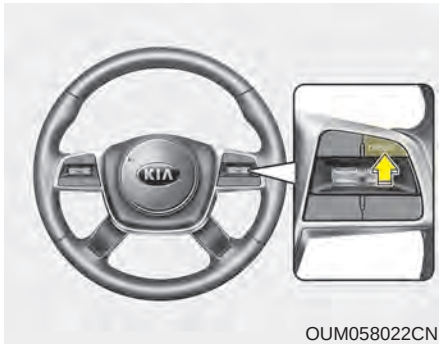
If any method other than the CRUISE button was used to cancel cruising speed and the system is still activated, the cruising speed will automatically resume when you move the lever up/down (to RES+ or SET-).

If you move the lever up (to RES+), the speed will resume to the recently set speed. It will only resume below approximately 20 mph (30 km/h) when a vehicle is in the front.

⚠ 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:



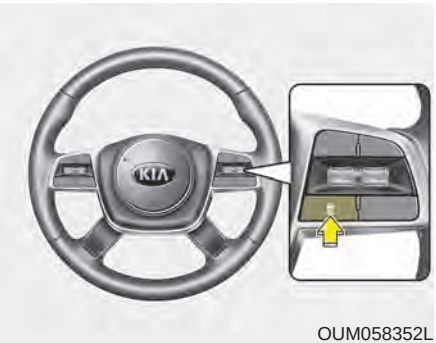
OUM058022CN

Press the CRUISE button. (the CRUISE indicator in the instrument cluster will go off).

When the Smart Cruise Control System is not needed, press the [CRUISE] switch and deactivate the system.

Vehicle to vehicle distance setting (Smart cruise control system)

To set vehicle to vehicle distance:



OUM058352L

This function allows you to program the vehicle to maintain relative distance to the vehicle ahead without depressing the accelerator pedal or brake pedal.

The vehicle to vehicle distance will automatically activate when the smart cruise control system is on.

Select the appropriate distance according to road conditions and vehicle speed.

Each time the button is pressed, the vehicle to vehicle distance changes as follows:

Distance 4 → Distance 3 → Distance 2 → Distance 1 → Distance 4

For example, if you drive at 56 mph (90 km/h), the distance is maintained as follows;

Distance 4 - approximately 172 feet (52.5 m)

Distance 3 - approximately 130 feet (40 m)

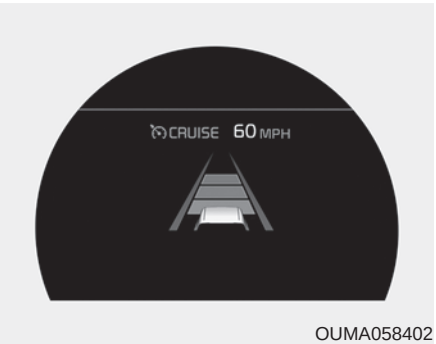
Distance 2 - approximately 106 feet (32.5 m)

Distance 1 - approximately 82 feet (25 m)

✻ NOTICE

The distance is set to the last set distance when the system is used for the first time after starting the engine.

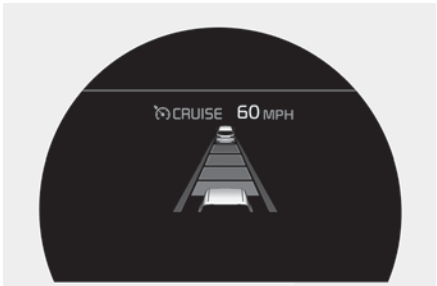
When the lane ahead is clear :



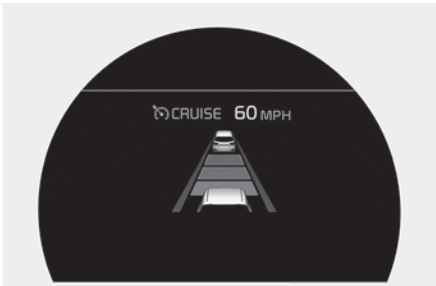
OUMA058402

The vehicle speed will maintain the set speed.

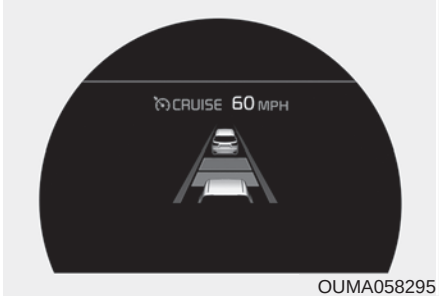
When there is a vehicle ahead of you in your lane :



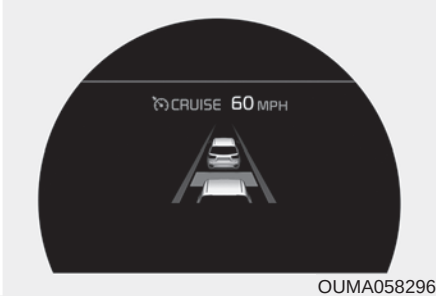
OUMA058293



OUMA058294



OUMA058295



OUMA058296

- The vehicle will maintain the set speed, when the lane ahead is clear.
- The vehicle will slow down or speed up within selected speed to maintain the selected distance, when there is a vehicle ahead of you in the lane. (A vehicle will appear in front of your vehicle in the LCD display only when there is an actual vehicle in front of you)
- If the vehicle ahead speeds up, your vehicle will travel at a steady cruising speed after accelerating to the selected speed.
- The warning chime sounds and LCD display blinks if it is hard to maintain the selected distance to the vehicle ahead.
- If the warning chime sounds, actively adjust the vehicle speed by depressing the brake pedal according to the road condition ahead and driving condition.
- Even if the warning chime is not activated, always pay attention to the driving conditions to prevent dangerous situations from occurring.

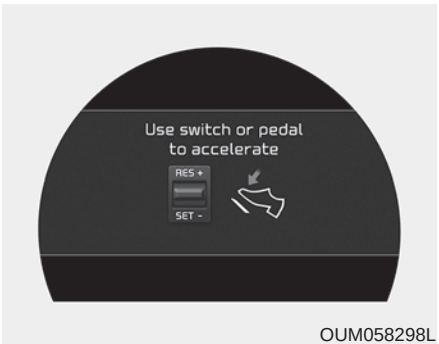


OUM058297L

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 will appear.

Adjust your vehicle speed for vehicles or objects that can suddenly appear in front of you by depressing the brake pedal according to the road condition ahead and driving condition.

In heavy traffic



OUM058298L

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+) 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. (if equipped with EPB (Electronic Parking Brake))

Radar to detect distance to the vehicle ahead



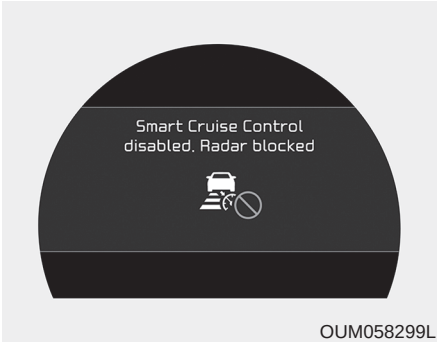
OUMA058054

The sensor detects distance to the vehicle ahead.

If the sensor is covered with dirt or other foreign matter, the vehicle to vehicle distance control may not operate correctly.

Always keep the sensor clean.

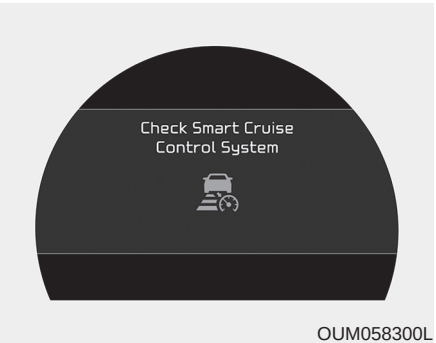
Radar check message



OUM058299L

When the sensor lens cover is blocked 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).

Smart cruise control system malfunction message



OUM058300L

The message will appear when the vehicle to vehicle distance control system is not functioning normally.

Take your vehicle to an authorized Kia dealer and have the system checked.

- Always keep the sensor and bumper clean.
- Use only a genuine Kia sensor cover for your vehicle.
- Do not install accessories around the sensor and do not replace the bumper by yourself. It may interfere with the sensor performance.
- Impact damage to the sensor or sensor area may cause the sensor to move slightly off position and result in the smart cruise control system not operating correctly without any warning or indicator from the cluster. If this occurs, have your vehicle checked by an authorized Kia dealer as soon as possible.
- Use only a genuine Kia sensor cover for your vehicle. Do not paint anything on the sensor cover.
- If the front bumper becomes damaged in the area around the radar sensor, the Smart Cruise Control System may not operate properly.

⚠ CAUTION - Sensor Damage

To prevent sensor cover damage from occurring, wash the car with a soft cloth.

To adjust the sensitivity of smart cruise control system

The sensitivity of vehicle speed when following the front vehicle to maintain the set distance can be adjusted. Go to the User Settings Mode (Driver Assistance) and select SCC Reaction (Smart Cruise Control). You may select one of the three stages you prefer.

- Slow:

  Vehicle speed following the front vehicle to maintain the set distance is slower than normal speed.
- Normal:

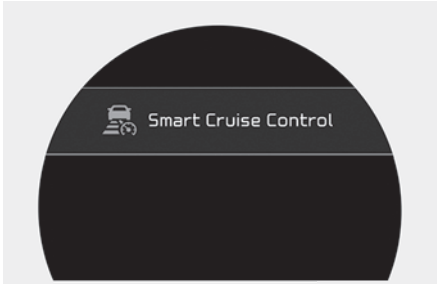
  Vehicle speed following the front vehicle to maintain the set distance is normal
- Fast:

  Vehicle speed following the front vehicle to maintain the set distance is faster than normal speed.

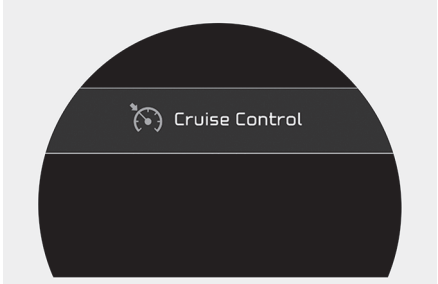
✻ NOTICE

The system remembers the last selected mode.

To convert to cruise control mode:



OUM058301L



OUM058357L

The driver may choose to only use the 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 the distance to distance switch for more than 2 seconds.
3. Choose between "Smart cruise control (SCC) mode" and "Cruise control (CC) mode".

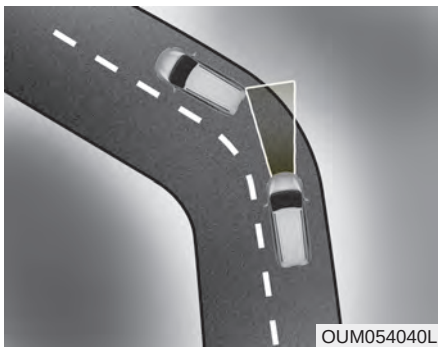
When using the cruise control mode, you must manually assess the distance to other vehicles as the system will not automatically brake to slow down for other vehicles.

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.

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

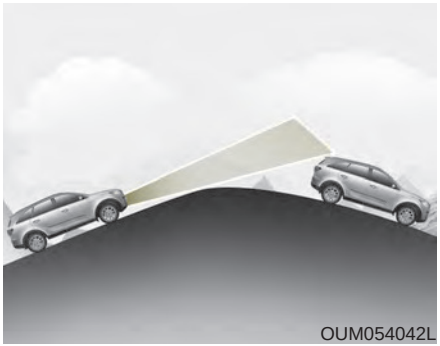


- On curves, the smart cruise control system may not detect a moving vehicle in your lane, and then your vehicle could accelerate to the set speed. Also, the vehicle speed will rapidly slow down when the vehicle ahead is recognized suddenly.
- Select the appropriate set speed on curves and adjust your vehicle speed by depressing the accelerator or brake pedal according to the road condition ahead and driving condition.



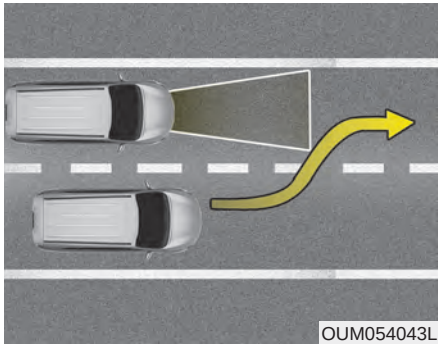
- Your vehicle speed can be reduced due to a vehicle in the adjacent lane. Adjust your vehicle speed by depressing the brake pedal according to the road condition ahead and driving condition. Apply the accelerator pedal and select the appropriate set speed. Check to be sure that the road conditions permit safe operation of the smart cruise control system.

On inclines

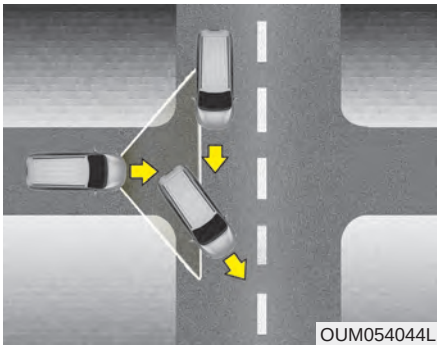

OUM054042L

- 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 slow down when the vehicle ahead is recognized suddenly.
- Select the appropriate set speed on inclines and adjust your vehicle speed by depressing the accelerator or brake pedal according to the road condition ahead.

Lane changing

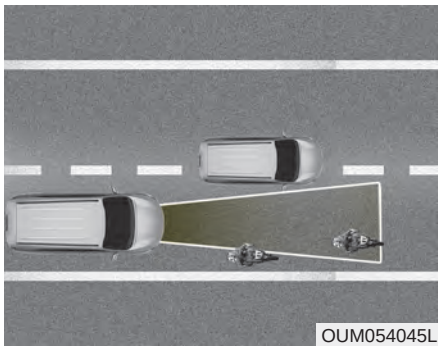

OUM054043L

- A vehicle which moves into your lane from an adjacent lane cannot be recognized by the sensor until it is in the sensor's detection range.
- The sensor may not detect immediately when a vehicle cuts in suddenly. Always pay attention to the traffic, road and driving conditions.
- If a vehicle which moves into your lane is slower than your vehicle, your speed may decrease to maintain the distance to the vehicle ahead.
- If a vehicle which moves into your lane is faster than your vehicle, your vehicle will accelerate to the selected speed.


OUM054044L

- 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.

Vehicle recognition


OUM054045L

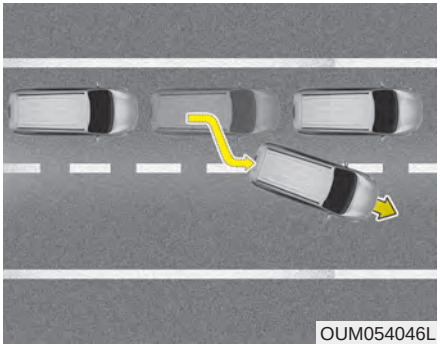
Some vehicles ahead in your lane cannot be recognized by the sensor as follows:

- Narrow vehicles such as motorcycles or bicycles
- Vehicles offset to one side
- Slow-moving vehicles or sudden-decelerating vehicles
- Stopped vehicles
- Vehicles with small rear profile such as trailers with no loads

A vehicle ahead cannot be recognized correctly by the sensor if any of following occurs:

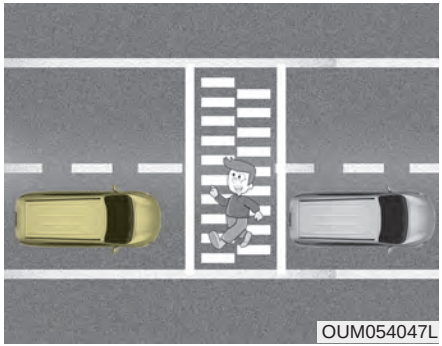
- When the vehicle is pointing upwards due to overloading in the liftgate
- While making turns by steering
- When driving to one side of the lane
- When driving on narrow lanes or on curves

Adjust your vehicle speed by depressing the brake pedal according to the road condition ahead and driving condition.


OUM054046L

- When vehicles are at a standstill and the vehicle in front of you changes to the next lane, be careful when your vehicle starts to move because it may not recognize the stopped vehicle 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.


OUM054047L

- Always look out for pedestrians when your vehicle is maintaining a distance with the vehicle ahead.


OUM054048L

- Always be cautious for vehicles that are taller with higher clearance, or vehicles carrying loads that stick out of the back of the vehicle.

⚠ WARNING
- Safe Use of smart cruise control system

The smart cruise control system can provide you with an additional level of safety and fatigue reduction. However you must maintain careful observation of the roadway in front and around you and maintain control of your vehicle and spacing around other vehicles as you normally would. For example, this will require you to apply the brakes as needed when coming upon a slower moving vehicle, or when a vehicle from another lane drives quickly in front of you.

⚠ WARNING - Inclines & Towing

Do not use smart cruise control system on steep inclines or when towing another vehicle or trailer since such extreme loading can interfere with your vehicle's ability to maintain the selected speed.

- After an engine start, please stop for several seconds. If system initialization is not completed, the smart cruise control system does not normally operate.
- After an engine start, if any objects are not detected or the sensor cover is obscured with foreign substances, there is a possibility that the smart cruise control system system may not work.
- The following conditions may cause a malfunction: over-loading the liftgate, suspension modification, tire replacement with unauthorized tires or tires with different tread wear and pressure levels.
- The smart cruise control system cannot guarantee the stop for every emergency situation.

  If an emergency stop is necessary, you must apply the brakes.
- 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.

- The smart cruise control system cannot recognize a stopped vehicle, pedestrians or an oncoming vehicle. Always look ahead cautiously to prevent unexpected and suddensituations from occurring.
- When other vehicles are changing lanes in front of you frequently, the smart cruise control system may not operate appropriately. Always look ahead cautiously to prevent unexpected and sudden situations from occurring.
- The smart cruise control system is not a substitute for safedriving practices but a convenience function only. It is the responsibility of the driver to always check the speed and the distance to the vehicle ahead.
- Always be aware of the selected speed and vehicle to vehicle distance.
- Always maintain sufficient braking distance and decelerate your vehicle by applying the brakes if necessary.

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:

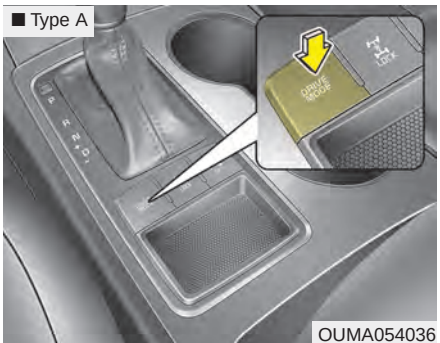
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance of 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.

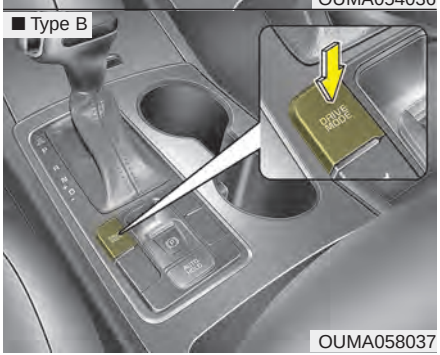
DRIVE MODE INTEGRATED CONTROL SYSTEM

■ Type A



OUMA054036

■ Type B



OUMA058037

The drive mode may be selected according to the driver's preference or road condition.

The mode changes whenever the DRIVE MODE button is turned.

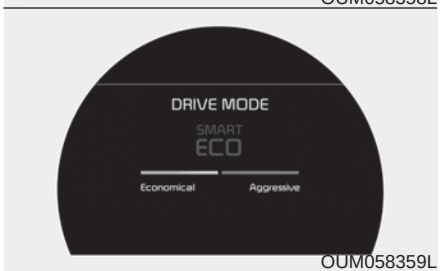
- SMART mode : SMART mode automatically adjusts the driving mode (ECO " COMFORT " SPORT) in accordance with the driver's driving habits.
- COMFORT mode : COMFORT mode provides soft driving and comfortable riding.
- SPORT mode : SPORT mode provides sporty but firm riding.
- ECO mode : ECO mode improves fuel efficiency for eco-friendly driving.

If it is in ECO or SMART mode, the each mode will be set when the engine is restarted. (However, if it is in COMFORT/SPORT mode, the driving mode will be set to COMFORT mode when the engine is restarted.)

SMART mode



OUM058358L



OUM058359L



OUM058360L

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 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 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.

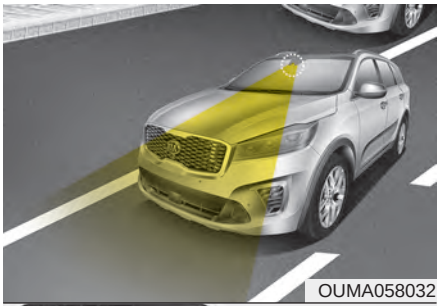
- When the coolant temperature is low:

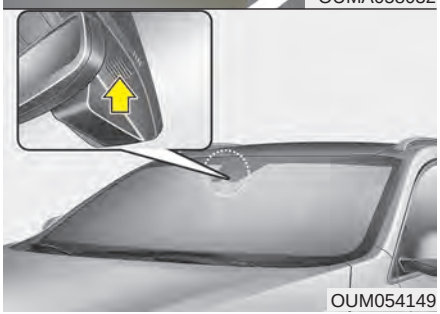
  The system will be limited until engine performance becomes normal.
- When driving up a hill:

  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.

LANE KEEPING ASSIST (LKA) SYSTEM (IF EQUIPPED)


OUMA058032


OUM054149

The Lane Keeping Assist System detects 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 slight counter-steering torque, trying to prevent the vehicle from moving out of its lane.

⚠ WARNING

Do not turn the steering wheel suddenly when the vehicle is being directed by the LKA system. This can result in a sudden loss of control and crash of the vehicle.

✻ NOTICE

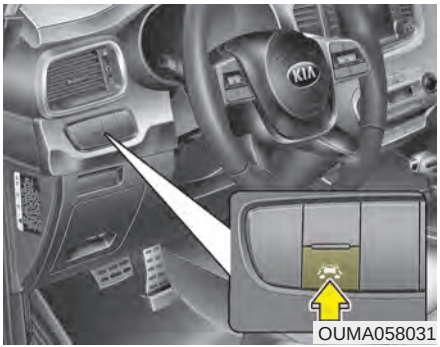
- **Driver is responsible for being aware of surroundings and steering the vehicle for safe driving practices.**
- **LKA SYSTEM helps prevent the driver from moving out of the lane unintentionally by assisting the driver's steering. However, the system is just a convenience function and the steering wheel is not always controlled. While driving, the driver should pay attention to the steering wheel.**
- **The operation of the LKA SYSTEM can be cancelled 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 accessories. If you disassemble the camera and assemble it again, take your vehicle to an authorized 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 Kia dealer and have the system checked to need a calibration.
- The system detects lane markers and controls the steering wheel by a front view camera, therefore, if the lane markers are hard to detect, the system may not work properly. Always be cautious when using the system.
- When the lane markers are hard to detect, please refer to “Driver’s Attention”.
- Do not remove or damage the related parts of LKA SYSTEM.
- Do not place objects on the crash pad that reflects light such as mirrors, white paper, etc. it may cause malfunction of LKA SYSTEM if the sunlight is reflected.
- You may not hear warning sound of LKA SYSTEM because of the excessive audio sound.
- If you continue to drive with your hands off the steering wheel, the LKA SYSTEM will stop controlling the steering wheel after the hands off alarm. After then, if you drive with your hands on the steering wheel, the control will be activated again.

✻ NOTICE

- **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.**
- **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 SYSTEM:

With the ignition switch in the ON position, press the LKA SYSTEM button located on the instrument panel on the lower left hand side of the driver.

The indicator in the cluster display will initially illuminate white.

When the indicator (white) activated in the previous ignition cycle, the system turns on without any control.

If you press the LKA SYSTEM button again, the indicator on the cluster display will go off.

The color of indicator will change depend on the condition of LKA SYSTEM.

- 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, [crash pad].
- 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, a green steering wheel indicator will illuminate 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.



OUM048470L



OUM048482L

- 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.

When the conditions below are met, LKA SYSTEM will be enable to assist steering.

- Vehicle speed is above 40 mph (64 km/h).
- Both lane markers are detected by LKA SYSTEM.
- The vehicle is between the lane markers.

If LKA SYSTEM can assist steering, a green steering wheel indicator will illuminate.

Warning



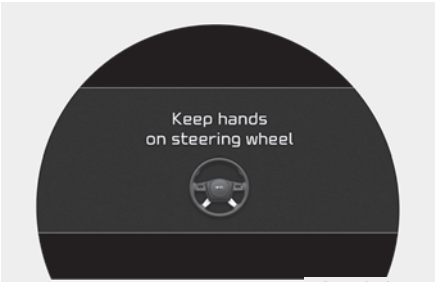
OUM048471L



OUM048473L

- If the vehicle leaves a lane, the lane marker you cross will blink on the LCD display.

- If the vehicle moves out its lane because steering torque for assistance is not enough, the line indicator of deviation direction will blink.
- If all the conditions to activate LKA SYSTEM are not satisfied, the system will convert to LDW system (Lane Departure Warning) and warn the driver only when the driver crosses the lane lines.



OUM048474L



OUM048475L

If the driver takes hands off the steering wheel for several seconds while the LKA is activated, the system will warn the driver.

✻ NOTICE

- **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 LKAS can treat the situation as you do not grab the wheel.**

If the driver still does not have their hands on the steering wheel after several seconds, the system will not control the steering wheel and warn the driver only when the driver crosses the lane markers.

However, if the driver has their hands on the steering wheel again, the system will start controlling the steering wheel.

- The driver is responsible for accurate steering.
- Even though the steering is assisted by the system, the driver may control the steering wheel.
- Turn off the system and drive the vehicle in below situations.
  - In bad weather
  - In bad road condition
  - When the steering wheel needs to be controlled by the driver frequently.
- 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 cancelled 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 (180 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.
- The steering will not be assisted when only one side lane marker is detected.
- 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.

- 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.

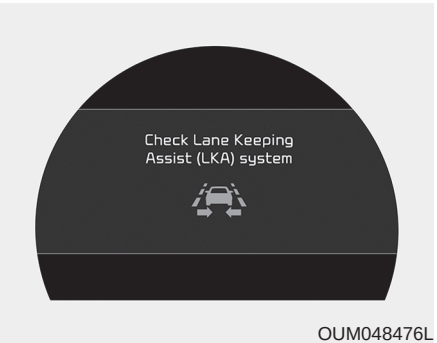
- **When external condition is intervened**
- **The brightness of outside changes suddenly when entering/existing a tunnel or passing under a bridge.**
- **The headlamps are not on at night or in a tunnel, or light level is low.**
- **There is a boundary structure in the roadway.**
- **The light of street, sun, oncoming vehicle and so on reflects from the water on the road.**
- **When light shines brightly in the reverse direction you drive.**
- **The distance from the vehicle ahead is very short or the vehicle ahead drives hiding the lane line.**
- **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



OUM048476L

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 with an audible warning if the LKA system is not working properly. In this case, have the system checked by an authorized Kia dealer.

When there is a problem with the system do one of the following:

- Turn the system on after turning the engine off and on again.
- Check if the ignition switch is in the ON position.
- Check if the system is affected by the weather. (ex: fog, heavy rain, etc.)
- Check if there is foreign matter on the camera lens

If the problem is not solved, have the system checked by an authorized Kia dealer.

LKA SYSTEM Function Change

The driver can change LKA to Lane Departure Warning System (LDW system) or change the LKA SYSTEM mode between Std. Lane Keeping Assist and Active Lane Keep. Assist from the User Settings Mode on the LCD display.

The driver can choose them by placing the ignition switch to the ON position and by selecting ‘User Settings’, ‘Driver Assistance’, and ‘Lane Safety’.

The system is automatically set to Std. Lane Keeping Assist.

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 steering wheel will not be controlled. When the vehicle's front wheel contacts the inside edge of lane line, LKA SYSTEM issues the lane departure warning.

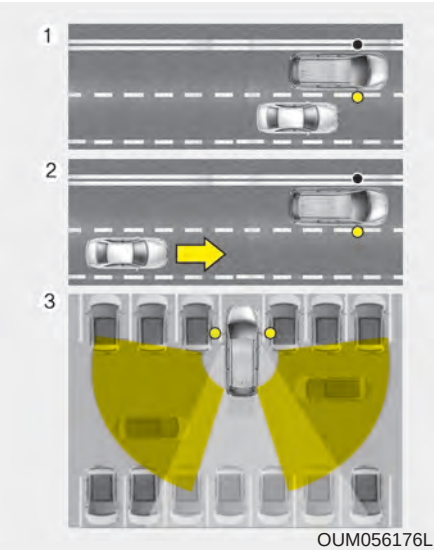
Std. Lane Keeping Assist

The Standard 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.

Active Lane Keep. Assist

The active LKA mode provides more frequent steering wheel control in comparison with the Standard LKA mode. Active LKA can reduce the driver's fatigue to assist the steering for maintaining the vehicle in the middle of the lane.

BLIND-SPOT COLLISION WARNING (BCW) (IF EQUIPPED)



OUM056176L

The Blind-Spot Collision Warning (BCW) system uses radar sensors in the rear bumper to monitor and warn the driver of an approaching vehicle in the driver's blind spot area.

The system monitors the rear area of the vehicle and provides information to the driver with an audible alert and a indicator on the outside rearview mirrors

(1) Blind spot area

The BCW 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

The BCW-Closing at high speed 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. Distance from approaching vehicle can be seen differently according to the relative speed.

(3) RCCW (Rear Cross-Traffic Collision Warning)

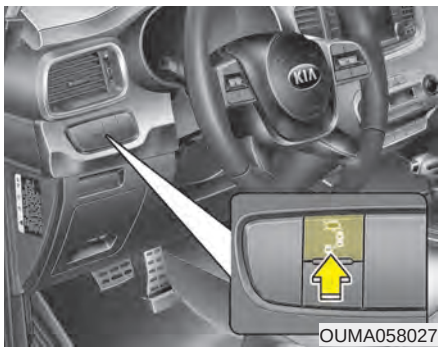
The RCCW feature monitors approaching cross traffic from the left and right side of the vehicle when your vehicle is in reverse. The feature will operate when the vehicle is moving in reverse below about 6 mph (10 km/h). If oncoming cross traffic is detected a warning chime will sound. Distance from approaching vehicle can be seen differently according to the relative speed.

⚠ WARNING
- BCW Limitations

- **The Blind-Spot Collision Warning System (BCW) is a supplemental system. Do not solely rely on the system and always pay attention to drive safely.**
- **The Blind-Spot Collision Warning System may not detect every object alongside the vehicle and is not a substitute for proper and safe lane changing procedures. Always drive safely and use caution when changing lanes.**

BCW (Blind-Spot Collision Warning)

Operating conditions



The indicator on the switch will illuminate when the Blind-Spot Collision Warning System (BCW) switch is pressed with the engine start/stop Button ON.

If vehicle speed exceeds 20 mph (30 km/h), the system will activate.

If you press the switch again, the switch indicator and system will be turned off.

If the vehicle is turned off, the system will remember the last settings upon restart.

When the system is not used turn the system off by turning off the switch.

When the system is turned on the warning light will illuminate for 3 seconds on the outside rearview mirror.

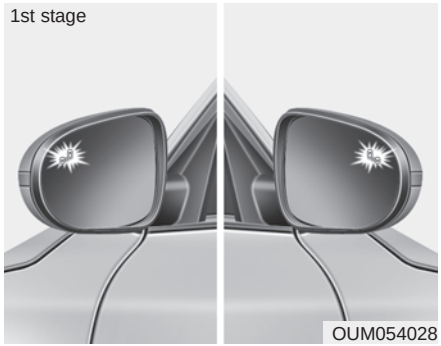
Warning type

The system will activate when:

1. The system is on.
2. Vehicle speed is above 20 mph (30 km/h).
3. Other vehicles are detected in the rear side.

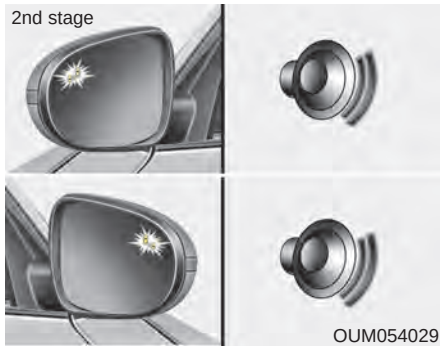
⚠ WARNING

The Blind-Spot Collision Warning System and Rear Cross-Traffic Collision Warning is not a substitute for proper and safe lane changing procedures. Always drive safely and use caution when changing lanes. The Blind-Spot Collision Warning System may not detect every object alongside the vehicle.



If a vehicle is detected within the boundary of the system, a warning light will illuminate on the outside rearview mirror.

If the detected vehicle is not in detecting range, the warning will turn off.



The second stage alarm will activate when:

1. The first stage alert is on
2. The turn signal is on to change a lane

When the second stage alert is activated, a warning light will blink on the outside rearview mirror and an alarm will sound.

If you move the turn signal switch to the original position, the second stage alert will be deactivated.

- The second stage alarm may be deactivated.

• To activate the alarm:

  Go to the User Settings Mode → Driver Assistance and select “Blind-Spot Collision Warning” on the LCD display.

• To deactivate the alarm:

  Go to the User Settings Mode → Driver Assistance and deselect “Blind-Spot Collision Warning” on the LCD display.

✻ NOTICE

The alarm function helps alert the driver. Deactivate this function only when it is necessary

Detecting sensor

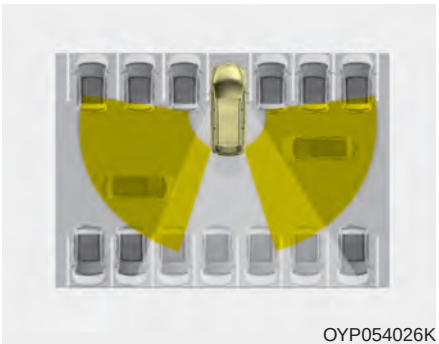


OUMA058030

The sensors are located inside of the rear bumper.

Always keep the rear bumper clean for the system to work properly.

RCCW (Rear Cross-Traffic Collision Warning)



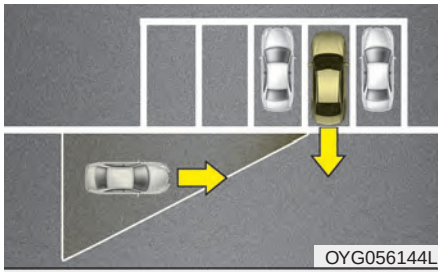
OYP054026K

When your vehicle moves backwards from a parking position, the sensor detects approaching vehicles to the left or right side direction and gives information to the driver.

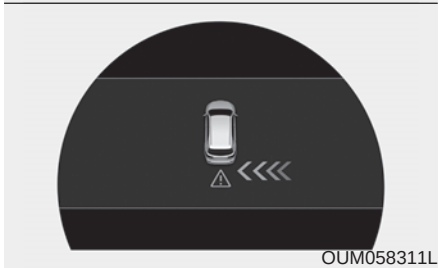
Operating conditions

- Select RCCW (Rear Cross-Traffic Collision Warning) in “User Settings” under “Driver Assistance” on the instrument cluster. The system will turn on and standby to activate.
- Select RCCW again, to turn the system off.
- If the vehicle is turned off, the RCCW system will remember the last settings upon restart. Always turn the RCCW system off when not in use.
- The system operates when the vehicle speed is below 6 mph (10km/h) with the shift lever in R (Reverse).
- The RCCW (Rear Cross-Traffic Collision Warning) detecting range is 1.6 feet ~ 65 feet based on the side direction. If the approaching vehicle speed is 2.5 mph (4 km/h) ~ 22 mph (36 km/h) within sensing range, it is detected. However, the system sensing range can vary based on conditions. Always pay attention to your surroundings.

Warning type


OYG056144L


OUM058312L


OUM058311L

- If the vehicle detected by sensors approaches your vehicle, the warning chime will sound and the warning light will blink on the outside rearview mirror.
- If the detected vehicle is out of detection range, moving away in the opposite direction or moving slow, or if the vehicle is right behind your vehicle, if the direction of the other vehicle is not heading towards your vehicle, the warning is cancelled.
- The system may not operate properly due to other factors or circumstances. Always pay attention to your surroundings.

❈ If your vehicle's left or right side bumper is blinded by a barrier or vehicles, the system sensing ability may be deteriorated.

⚠ WARNING

- **The Blind-Spot Collision Warning System and Rear Cross-Traffic Collision Warning is not a substitute for proper and safe lane changing procedures. Always drive safely and use caution when changing lanes. The Blind-Spot Collision Warning System may not detect every object alongside the vehicle.**

(Continued)

(Continued)

- **Drive safely even though the vehicle is equipped with a BCW (Blind-Spot Collision Warning) system. Do not solely rely on the system but check for yourself before changing lanes.**

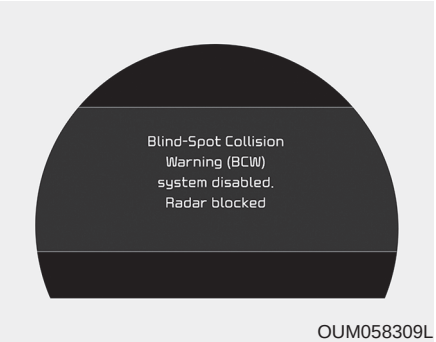
  The system may not alert the driver in some conditions so always check the surroundings while driving.

When the BCW system is being activated, 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.

✻ NOTICE

- **The system may not work properly if the bumper has been replaced or if repair work has been done near the sensor.**
- **The detection area differs according to the road's width. If the road is narrow the system may detect other vehicles in the next lane.**
- **If the road is very wide the system may not detect other vehicles.**
- **The system may turn off due to strong electromagnetic interference.**

Warning message



OUM058309L

The message will appear to notify the driver if there are foreign substances on the surface or inside the rear bumper or it is hot near the rear bumper. The light on the switch and the system will be turned off automatically.

Remove the foreign substance on the rear bumper.

After the foreign substance is removed, if you drive for approximately 10 minutes, the system will work normally.

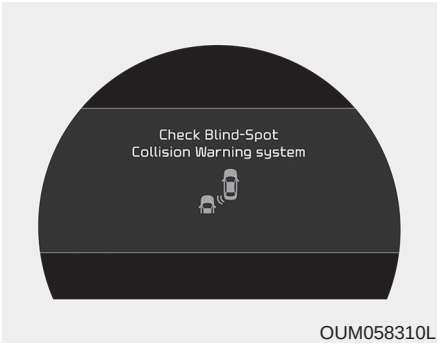
If the system does not work normally even though the foreign substance, trailer or carrier, or other equipment is removed, take your vehicle to an authorized Kia dealer and have the system checked.

It is possible to get the message with no foreign substance on the rear bumper, for example, when driving in sparse rural or open area, such as desert, where there is insufficient data for operation.

This message may also activate during heavy rain or due to road spray.

In this case, the vehicle does not need service.

When the cargo area or other equipment is being used, turn all functions of the system [OFF].



OUM058310L

If the system does not work properly, a warning message will appear and the light on the switch will turn off. The system will turn off automatically.

Have your vehicle inspected by an authorized Kia dealer.

Non-operating condition

Outside rearview mirror may not alert the driver when:

- The outside rearview mirror housing is damaged or covered with debris.
- The window is covered with debris.
- The windows are severely tinted.

DRIVER'S ATTENTION

The driver must be cautious in the below situations, because the system may not detect other vehicles or objects in certain circumstances.

- **The vehicle drives on a curved road or through a tollgate.**
- **The sensor is polluted with rain, snow, mud, etc.**
- **The rear bumper, in which the sensor is located, is covered or blocked with a foreign matter such as a sticker, a bumper guard, a bicycle stand, 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 liftgate, abnormal tire pressure, etc.**
- **The vehicle drives in a bad weather such as heavy rain or snow.**

(Continued)

(Continued)

- **There is a fixed object near the vehicle, such as a guardrail, pedestrian, animal, tunnel, etc.**
- **A big vehicle is near such as a bus or truck.**
- **A motorcycle or bicycle is near.**
- **A flat trailer is near.**
- **If the vehicle has started at the same time as the vehicle next to you and has accelerated.**
- **When the other vehicle passes at a very fast speed.**
- **While changing lanes.**
- **When going down or up a steep road where the height of the lane is different.**
- **When the other vehicle approaches very close.**
- **When a trailer or carrier is installed.**
- **When the temperature of the rear bumper is very high or low.**

(Continued)

(Continued)

- **When the sensors are blocked by other vehicles, walls or parking-lot pillars.**
- **When the detected vehicle also moves back, as your vehicle drives back.**
- **If there are small things like Shopping cart, baby carriage and pedestrians.**
- **If there is low height vehicle like sport vehicle.**
- **When other vehicles are close to your vehicle.**
- **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.**
- **When driving through a narrow road with many plants.**
- **When driving on wet surface.**

(Continued)

(Continued)

- **The vehicle is driven near areas containing metal substances such as a construction zone, railroad, etc.**
- **When the surrounding vehicle or structure is driving in a wide area (desert, field, suburb etc.)**

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.

DRIVER ATTENTION WARNING (DAW, IF EQUIPPED)

The Driver Attention Warning (DAW), system is to warn the driver with any hazardous driving situations upon detecting the driver's fatigue level or 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 'User Settings → Assist → Driver Attention Warning → Normal/Early' on the LCD display.
- The driver can select the Driver Attention Warning system mode.
  - Off : The Driver Attention Warning system is deactivated.
  - Normal : The Driver Attention Warning system alerts the driver of his/her fatigue level or inattentive driving practices.
  - Early : 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



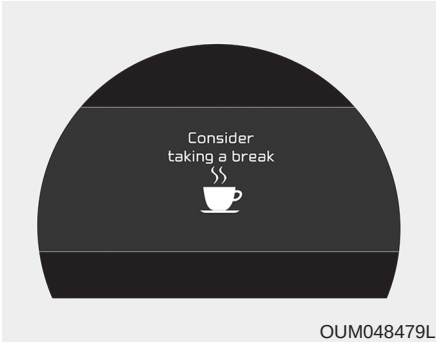
OUM048478L



OUM048477L

- The driver can monitor their driving conditions on the LCD display.
  - Select 'User Settings Mode' and then 'Assist' on the LCD display. (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 number decreases when the driver does not take a break for a certain period of time.
- The number 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



OUM048479L

- 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.

Resetting the system



OUM048480L

- 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 37mph (60 km/h) or over 112 mph (180 km/h).

System malfunction



OUM048481L

When the “Check System” warning message appears, the system is not working properly. In this case, have the vehicle inspected by an authorized 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.

✻ NOTICE

- **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, take your vehicle to an authorized Kia dealer and have the system checked to need a calibration.**
- **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**

✻ NOTICE

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 System (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).**

(Continued)

(Continued)

- **The vehicle drives on a curvy road.**
- **The vehicle drives on a bumpy road.**
- **The vehicle drives through a windy area.**
- **The vehicle is controlled by the following driver assistance systems:**
  - **Lane Keeping Assist System (LKA system)**
  - **forward collision-avoidance assist (FCA) System.**
  - **Smart Cruise Control (SCC) System**

ECONOMICAL OPERATION

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

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

- Drive smoothly. Accelerate at a moderate rate. Don't make "jackrabbit" starts or full-throttle shifts and maintain a steady cruising speed. Don't race between stoplights. Try to adjust your speed to the traffic so you don't have to change speeds unnecessarily. Avoid heavy traffic whenever possible. Always maintain a safe distance from other vehicles so you can avoid unnecessary braking. This also reduces brake wear.
- Drive at a moderate speed. The faster you drive, the more fuel your vehicle uses. Driving at a moderate speed, especially on the highway, is one of the most effective ways to reduce fuel consumption.
- Don't "ride" the brake pedal. This can increase fuel consumption and also increase wear on these components. In addition, driving with your foot resting on the brake pedal may cause the brakes to overheat, which reduces their effectiveness and may lead to more serious consequences.
- Take care of your tires. Keep them inflated to the recommended pressure. Incorrect inflation, either too much or too little, results in unnecessary tire wear. Check the tire pressures at least once a month.
- Be sure that the wheels are aligned correctly. Improper alignment can result from hitting curbs or driving too fast over irregular surfaces. Poor alignment causes faster tire wear and may also result in other problems as well as greater fuel consumption.
- Keep your vehicle in good condition. For better fuel economy and reduced maintenance costs, maintain your vehicle in accordance with the maintenance schedule in section 7. If you drive your vehicle in severe conditions, more frequent maintenance is required (see section 7 for details).
- Keep your vehicle clean. For maximum service, your vehicle should be kept clean and free of corrosive materials. It is especially important that mud, dirt, ice, etc. not be allowed to accumulate on the underside of the vehicle. This extra weight can result in increased fuel consumption and also contribute to corrosion.
- Travel lightly. Don't carry unnecessary weight in your vehicle. Weight reduces fuel economy.
- Don't let the engine idle longer than necessary. If you are waiting (and not in traffic), turn off your engine and restart only when you're ready to go.

- Remember, your vehicle does not require extended warm-up. After the engine has started, allow the engine to run for 10 to 20 seconds prior to placing the vehicle in gear. In very cold weather, however, give your engine a slightly longer warm-up period.
- Don't "lug" or "over-rev" the engine. Lugging is driving too slowly in a very high gear resulting in engine bucking. If this happens, shift to a lower gear. Over-revving is racing the engine beyond its safe limit. This can be avoided by shifting at the recommended speed.
- Use your air conditioning sparingly. The air conditioning system is operated by engine power so your fuel economy is reduced when you use it.
- Open windows at high speeds can reduce fuel economy.
- Fuel economy is less in crosswinds and headwinds. To help offset some of this loss, slow down when driving in these conditions.

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

⚠ WARNING - Engine off during motion

Never turn the engine off to coast down hills or anytime the vehicle is in motion. The power steering and power brakes will not function properly without the engine running. In addition, turning off the ignition while driving could engage the steering wheel lock resulting in loss of vehicle steering. Keep the engine on and downshift to an appropriate gear for engine braking effect.

SPECIAL DRIVING CONDITIONS

Hazardous driving conditions

When hazardous driving conditions are encountered such as water, snow, ice, mud, sand, or similar hazards, follow these suggestions:

- Drive cautiously and allow extra distance for braking.
- Avoid sudden braking or steering.
- When braking with non-ABS brakes pump the brake pedal with a light up-and-down motion until the vehicle is stopped.

Do not pump the brake pedal on a vehicle equipped with ABS.

- If stalled in snow, mud, or sand, use second gear. Accelerate slowly to avoid spinning the drive wheels.
- Use sand, rock salt, 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.

Reducing the risk of a rollover

This multi-purpose passenger vehicle is defined as a Sports Utility Vehicle (SUV). Utility vehicles have a significantly higher rollover rate than other types of vehicles. SUV's have higher ground clearance and a narrower track to make them capable of performing in a wide variety of off-road applications. Specific design characteristics give them a higher center of gravity than ordinary vehicles. An advantage of the higher ground clearance is a better view of the road, which allows you to anticipate problems. They are not designed for cornering at the same speeds as conventional passenger vehicles, any more than low-slung sports vehicles are designed to perform satisfactorily in off-road conditions. Due to this risk, driver and passengers are strongly recommended to buckle their seat belts. In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. There are steps that a driver can make to reduce the risk of a rollover.

If at all possible, avoid sharp turns or abrupt maneuvers, do not load your roof rack with heavy cargo, and never modify your vehicle in any way.

⚠ WARNING - Rollover

As with other Sports Utility Vehicle (SUV), failure to operate this vehicle correctly may result in loss of control, an accident or vehicle rollover.

- **Utility vehicles have a significantly higher rollover rate than other types of vehicles.**
- **Specific design characteristics (higher ground clearance, narrower track, etc.) give this vehicle a higher center of gravity than ordinary vehicles.**
- **A SUV is not designed for cornering at the same speeds as conventional vehicles.**
- **Avoid sharp turns or abrupt maneuvers.**

(Continued)

(Continued)

- **In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. Make sure everyone in the vehicle is properly buckled up.**

⚠ WARNING

Your vehicle is equipped with tires designed to provide safe ride and handling capability. Do not use a size and type of tire and wheel that is different from the one that is originally installed on your vehicle. It can affect the safety and performance of your vehicle, which could lead to steering failure or rollover and serious injury.

When replacing the tires, be sure to equip all four tires with the tire and wheel of the same size, type, tread, brand and load-carrying capacity. If you nevertheless decide to equip your vehicle with any tire/wheel combination not recommended by Kia for off road driving, you should not use these tires for highway driving.

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


OUM054141L

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 section 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 section 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:

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.

Tire chains


OUMA058136

Since the sidewalls of radial tires are thinner, they can be damaged by mounting some types of snow chains on them. Therefore, the use of snow tires is recommended instead of snow chains. Do not mount tire chains on vehicles equipped with aluminum wheels; snow chains may cause damage to the wheels. If snow chains must be used, use wire-type chains with a thickness of less than 0.59 in (15 mm). Damage to your vehicle caused by improper snow chain use is not covered by your vehicle manufacturers warranty.

When using tire chains, attach them to the drive wheels as follows.

FWD/AWD : Front wheels

⚠ CAUTION - Snow chains

Make sure the snow chains are the correct size and type for your tires. Incorrect snow chains can cause damage to the vehicle body and suspension and may not be covered by your vehicle manufacturer warranty.

Chain installation

When installing chains, follow the manufacturer's instructions and mount them as tightly as you can. Drive slowly with chains installed. If you hear the chains contacting the body or chassis, stop and tighten them. If they still make contact, slow down until it stops. Remove the chains as soon as you begin driving on cleared roads.

When mounting snow chains, park the vehicle on level ground away from traffic. Turn on the vehicle Hazard Warning flashers and place a triangular emergency warning device behind the vehicle if available. 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 section 7. Before winter, have your coolant tested to assure that its freezing point is sufficient for the temperatures anticipated during the winter.

Check battery and cables

Winter puts additional burdens on the battery system. Visually inspect the battery and cables as described in section 7. The level of charge in your battery can be checked by an authorized Kia dealer or a service station.

Change to “winter weight” oil if necessary

In some climates it is recommended that a lower viscosity "winter weight" oil be used during cold weather. See section 8 for recommendations. If you aren't sure what weight oil you should use, consult an authorized Kia dealer.

Check spark plugs and ignition system

Inspect your spark plugs as described in section 7 and replace them if necessary. Also check all ignition wiring and components to be sure they are not cracked, worn or damaged in any way.

To keep locks from freezing

To keep the locks from freezing, squirt an approved de-icer fluid or glycerine into the key opening. If a lock is covered with ice, squirt it with an approved de-icing fluid to remove the ice. If the lock is frozen internally, you may be able to thaw it out by using a heated key. Handle the heated key with care to avoid injury.

Use approved window washer anti-freeze in system

To keep the water in the window washer system from freezing, add an approved window washer anti-freeze solution in accordance with instructions on the container. Window washer anti-freeze is available from an authorized Kia dealer and most auto parts outlets. Do not use engine coolant or other types of anti-freeze as these may damage the paint finish.

Don’t let your parking brake freeze

Under some conditions your parking brake can freeze in the engaged position. This is most likely to happen when there is an accumulation of snow or ice around or near the rear brakes or if the brakes are wet. If there is a risk the parking brake may freeze, apply it only temporarily while you put the 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

If you are considering towing with your vehicle, you should first check with your country's Department of Motor Vehicles to determine their legal requirements.

Since laws vary the requirements for towing trailers, cars, or other types of vehicles or apparatus may differ. Ask an authorized Kia dealer for further details before towing.

⚠ WARNING - Towing a trailer

Always check your towing equipment to confirm correct equipment size and installation before use. Using incompatible or incorrectly installed trailer equipment can effect the vehicle operation and endanger you and your passengers.

You may require an additional wiring harness connector to install a trailer hitch. Please contact an authorized Kia dealer for more details.

⚠ WARNING - Weight limits

Before towing, make sure the total trailer weight, GCW (gross combination weight), GVW (gross vehicle weight), GAW (gross axle weight) and trailer tongue load are all within the limits.

⚠ CAUTION - Trailer installation

Follow instructions in this section when pulling a trailer. Pulling a trailer improperly can damage your vehicle and result in costly repairs not covered by your warranty.

Your vehicle can tow a trailer.* To identify what the vehicle trailering capacity is for your vehicle, you should read the information in “Weight of the trailer” that appears later in this section.

Remember that trailering is different than just driving your vehicle by itself. Trailering means changes in handling, durability, and fuel economy. Successful, safe trailering requires correct equipment, and it has to be used properly.

This section contains many time-tested, important trailering tips and safety rules. Many of these are important for your safety and that of your passengers. Please read this section carefully before you pull a trailer.

Load-pulling components such as the engine, transmission, wheel assemblies, and tires are forced to work harder against the load of the added weight. The engine is required to operate at relatively higher speeds and under greater loads. This additional burden generates extra heat. The trailer also adds considerably to wind resistance, increasing the pulling requirements.

Hitches

It's important to have the correct hitch equipment. Crosswinds, large trucks going by, and rough roads are a few reasons why you'll need the right hitch. Here are some rules to follow:

- Will you have to make any holes in the body of your vehicle when you install a trailer hitch? If you do, then be sure to seal the holes later when you remove the hitch.

  If you don't seal them, deadly carbon monoxide (CO) from your exhaust can get into your vehicle, as well as dirt and water.
- The bumpers on your vehicle are not intended for hitches. Do not attach rental hitches or other bumper-type hitches to them. Use only a frame-mounted hitch that does not attach to the bumper.
- Kia trailer hitch accessory is available at an authorized Kia dealer.

Safety chains

You should always attach chains between your vehicle and your trailer. Cross the safety chains under the tongue of the trailer so that the tongue will not drop to the road if it becomes separated from the hitch.

Instructions about safety chains may be provided by the hitch manufacturer or by the trailer manufacturer. Follow the manufacturer's recommendation for attaching safety chains. Always leave just enough slack so you can turn with your trailer. And, never allow safety chains to drag on the ground.

Trailer brakes

If your trailer is equipped with a braking system, make sure it conforms to your state's regulations and that it is properly installed and operating correctly.

If your trailer weight exceeds the maximum allowed weight without trailer brakes, then the trailer will also require its own brakes as well. Be sure to read and follow the instructions for the trailer brakes so you'll be able to install, adjust and maintain them properly.

- Don't tap into or modify your vehicle's brake system.

⚠ WARNING - Trailer brakes

Do not use a trailer with its own brakes unless you are absolutely certain that you have properly set up the brake system. This is not a task for amateurs. Use an experienced, competent trailer shop for this work.

Driving with a trailer

Towing a trailer requires a certain amount of experience. Before setting out for the open road, you must get to know your trailer. Acquaint yourself with the feel of handling and braking with the added weight of the trailer. And always keep in mind that the vehicle you are driving is now a good deal longer and not nearly so responsive as your vehicle is by itself.

Before you start, check the trailer hitch and platform, safety chains, electrical connector(s), lights, tires and mirror adjustment. If the trailer has electric brakes, start your vehicle and trailer moving and then apply the trailer brake controller by hand to be sure the brakes are working. This lets you check your electrical connection at the same time.

During your trip, check occasionally to be sure that the load is secure, and that the lights and any trailer brakes are still working.

Following distance

Stay at least twice as far behind the vehicle ahead as you would when driving your vehicle without a trailer. This can help you avoid situations that require heavy braking and sudden turns.

Passing

You'll need more passing distance up ahead when you're towing a trailer. And, because of the increased vehicle length, you'll need to go much farther beyond the passed vehicle before you can return to your lane. Due to the added load to the engine when going uphill the vehicle may also take longer to pass than it would on flat ground.

Backing up

Hold the bottom of the steering wheel with one hand. Then, to move the trailer to the left, just move your hand to the left. To move the trailer to the right, move your hand to the right. Always back up slowly and, if possible, have someone guide you.

Making turns

When you're turning with a trailer, make wider turns than normal. Do this so your trailer won't strike soft shoulders, curbs, road signs, trees, or other objects near the edge of the road. Avoid jerky or sudden maneuvers. Signal well in advance before turning or lane changes.

Turn signals when towing a trailer

When you tow a trailer, your vehicle has to have a different turn signal flasher and extra wiring. The green arrows on your instrument panel will flash whenever you signal a turn or lane change. Properly connected, the trailer lights will also flash to alert other drivers you're about to turn, change lanes, or stop.

When towing a trailer, the green arrows on your instrument panel will flash for turns even if the bulbs on the trailer are burned out. Thus, you may think drivers behind you are seeing your signals when, in fact, they are not. It's important to check occasionally to be sure the trailer bulbs are still working. You must also check the lights every time you disconnect and then reconnect the wires.

Do not connect a trailer lighting system directly to your vehicle's lighting system. Use only an approved trailer wiring harness.

An authorized Kia dealer can assist you in installing the wiring harness.

⚠ CAUTION

Always use an approved trailer wiring harness. Failure to use an approved trailer wiring harness could result in damage to the vehicle electrical system.

Driving on grades

Reduce speed and shift to a lower gear before you start down a long or steep downgrade. If you don't shift down, you might have to use your brakes so much that they would get hot and no longer operate efficiently.

On a long uphill grade, shift down and reduce your speed to around 45 mph (70 km/h) to reduce the possibility of engine and transmission overheating.

If your trailer weighs more than the maximum trailer weight without trailer brakes and you have an automatic transmission, you should drive in D (Drive) when towing a trailer.

Operating your vehicle in D (Drive) when towing a trailer will minimize heat build up and extend the life of your transmission.

Towing up hill

- When towing a trailer on steep grades (in excess of 6%) pay close attention to the engine coolant temperature gauge to ensure the engine does not overheat.

  If the needle of the coolant temperature gauge moves across the dial towards “H” (HOT), pull over and stop as soon as it is safe to do so, and allow the engine to idle until it cools down. You may proceed once the engine has cooled sufficiently.
- You must decide driving speed depending on trailer weight and uphill grade to reduce the possibility of engine and transmission overheating.

Parking on hills

Generally, if you have a trailer attached to your vehicle, you should not park your vehicle on a hill. People can be seriously or fatally injured, and both your vehicle and the trailer can be damaged if they unexpectedly roll downhill.

However, if you ever have to park your trailer on a hill, here's how to do it:

1. Pull the vehicle into the parking space. Turn the steering wheel in the direction of the curb (right if headed downhill, left if headed up hill).
2. If the vehicle has an automatic transmission, place the vehicle in P (Park).
3. Set the parking brake and shut off the engine.
4. Place chocks under the trailer wheels on the down hill side of the wheels.
5. Start the vehicle, hold the brakes, shift to neutral, release the parking brake and slowly release the brakes until the trailer chocks absorb the load.
6. Reapply the brakes, reapply the parking brake and shift the vehicle to P (Park) for automatic transmission.
7. Shut off the vehicle and release the vehicle brakes but leave the parking brake set.

When you are ready to leave after parking on a hill

1. With the automatic transmission in P (Park), apply your brakes and hold the brake pedal down while you:
   - Start your engine;
   - Shift into gear; and
   - Release the parking brake.
2. Slowly remove your foot from the brake pedal.
3. Drive slowly until the trailer is clear of the chocks.
4. Stop and have someone pick up and store the chocks.

Maintenance when trailer towing

Your vehicle will need service more often when you regularly pull a trailer. Important items to pay particular attention to include engine oil, automatic transmission fluid, axle lubricant and cooling system fluid. Brake condition is another important item to frequently check. Each item is covered in this manual, and the Index will help you find them quickly. If you're trailering, it's a good idea to review these sections before you start your trip.

Don't forget to also maintain your trailer and hitch. Follow the maintenance schedule that accompanied your trailer and check it periodically. Preferably, conduct the check at the start of each day's driving. Most importantly, all hitch nuts and bolts should be tight.

⚠ CAUTION - Air condition

Do not use the A/C while using your vehicle to tow uphill. Due to higher load during trailer usage, overheating might occur on hot days or during uphill driving.

- When towing check transmission fluid more frequently.

If you do decide to pull a trailer

Here are some important points if you decide to pull a trailer:

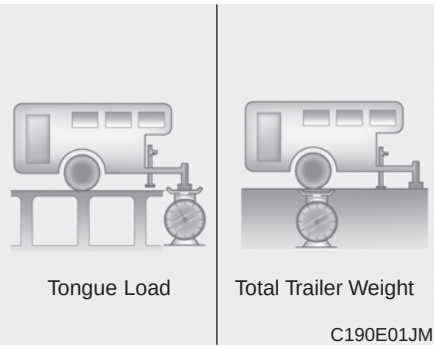
- Consider using a sway control. You can ask a hitch dealer about sway control.
- Do not do any towing with your vehicle during its first 1,200 miles (2,000 km) in order to allow the engine to properly break in. Failure to heed this caution may result in serious engine or transmission damage.
- When towing a trailer, be sure to consult an authorized Kia dealer for further information on additional requirements such as a towing kit, etc.
- Always drive your vehicle at a moderate speed (less than 60 mph (100 km/h)).
- On a long uphill grade, do not exceed 45 mph (70 km/h) or the posted towing speed limit, whichever is lower.
- The chart contains important considerations that have to do with weight:

[lbs.(kg)]

Item		Theta II 2.4	Lambda II 3.3
Maximum trailer weight	Without brake System	1,650 (750)	1,650 (750)
	With brake System	2,000 (907)	2,000 (907)
	With trailer package	-	2WD : 3,500 (1,587) 4WD : 5,000 (2,267)
Maximum tongue weight		280 (127)	350 (159)

To identify what the vehicle trailering capacity is for your vehicle, you should read the information in “Weight of the Trailer” that appears later in this section.

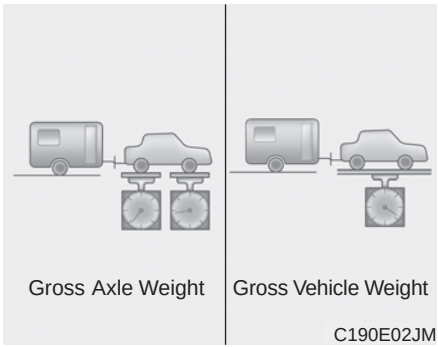
Weight of the trailer



What is the maximum safe weight of a trailer? It should never weigh more than the maximum trailer weight with trailer brakes. But even that can be too heavy.

It depends on how you plan to use your trailer. For example, speed, altitude, road grades, outside temperature and how often your vehicle is used to pull a trailer are all important. The ideal trailer weight can also depend on any special equipment that you have on your vehicle.

Weight of the trailer tongue



The tongue load of any trailer is an important weight to measure because it affects the total gross vehicle weight (GVW) of your vehicle. This weight includes the curb weight of the vehicle, any cargo you may carry in it, and the people who will be riding in the vehicle. And if you will tow a trailer, you must add the tongue load to the GVW because your vehicle will also be carrying that weight.

The trailer tongue should weigh a maximum of 10% of the total loaded trailer weight, within the limits of the maximum permissible trailer tongue load. After you've loaded your trailer, weigh the trailer and then the tongue, separately, to see if the weights are proper. If they aren't, you may be able to correct them simply by moving some items around in the trailer.

⚠ WARNING - Trailer

Always follow the loading instructions provided with your trailer. Improper loading can effect vehicle operation and result in an accident.

VEHICLE LOAD LIMIT

Tire and loading information label



OUMA054204/OUMA054205/OUMA054206/OUMA054207/OUMA054208/OUMA054209

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:

5 persons : 930 lbs. (420kg)

7 persons : 1,120 lbs. (506kg)

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)
- 7 persons
(Front seat : 2 persons,
Rear seat : 5 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:

* 2.4 L Engine
Without trailer brakes
: 1,650 lbs. (750 kg)
With trailer brakes
: 2,000 lbs. (907 kg)
With trailer package
: N/A

* 3.3L Engine
Without trailer brakes
: 1,650 lbs. (750 kg)
With trailer brakes
: 2,000 lbs. (907 kg)
With trailer package
: 2WD : 3,500 lbs. (1,587 kg)
4WD : 5,000 lbs. (2,267 kg)

Towing capacity is the maximum trailer weight including its cargo weight, your vehicle can tow.

Cargo capacity:

The cargo capacity of your vehicle will increase or decrease depending on the weight and the number of occupants and the tongue load, if your vehicle is equipped with a trailer.

Steps for determining correct load limit

1. Locate the statement “The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs.” on your vehicle's placard.
2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
3. Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.
4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the “XXX” amount equals 1400 lbs. and there will be five 150 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.

Example 1



C190F01JM

Item	Description	Total
A	Vehicle Capacity Weight	1400 lbs (635 kg)
B	Subtract Occupant Weight 150 lbs (68 kg) × 2	300 lbs (136 kg)
C	Available Cargo and Luggage weight	1100 lbs (499 kg)

Example 2



C190F02JM

Item	Description	Total
A	Vehicle Capacity Weight	1400 lbs (635 kg)
B	Subtract Occupant Weight 150 lbs (68 kg) × 5	750 lbs (340 kg)
C	Available Cargo and Luggage weight	650 lbs (295 kg)

Example 3



C190F03JM

Item	Description	Total
A	Vehicle Capacity Weight	1400 lbs (635 kg)
B	Subtract Occupant Weight 172 lbs (78 kg) × 5	860 lbs (390 kg)
C	Available Cargo and Luggage weight	540 lbs (245 kg)

Refer to your vehicle's tire and loading information label for specific information about your vehicle's capacity weight and seating positions. The combined weight of the driver, passengers and cargo should never exceed your vehicle's capacity weight.

Certification label



OEN056020

The certification label is located on the driver's door sill at the center pillar.

This label shows the maximum allowable weight of the fully loaded vehicle. This is called the GVWR (Gross Vehicle Weight Rating). The GVWR includes the weight of the vehicle, all occupants, fuel and cargo.

This label also tells you the maximum weight that can be supported by the front and rear axles, called Gross Axle Weight Rating (GAWR).

To find out the actual loads on your front and rear axles, you need to go to a weigh station and weigh your vehicle. Your dealer can help you with this. Be sure to spread out your load equally on both sides of the centerline.

⚠ WARNING - Over loading

Never exceed the GVWR for your vehicle, the GAWR for either the front or rear axle and vehicle capacity weight. Exceeding these ratings can affect your vehicle's handling and braking ability.

The label will help you decide how much cargo and installed equipment your vehicle can carry.

If you carry items inside your vehicle - like suitcases, tools, packages, or anything else - they are moving as fast as the vehicle. If you have to stop or turn quickly, or if there is a crash, the items will keep going and can cause an injury if they strike the driver or a passenger.

⚠ WARNING - Over loading

Do not overload your vehicle. Overloading your vehicle can cause heat buildup in your vehicle's tires and possible tire failure, increased stopping distances and poor vehicle handling all of which may result in a crash.

⚠ 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.

✻ NOTICE

Overloading your vehicle may cause damage. Repairs would not be covered by your warranty. Do not overload your vehicle.

VEHICLE WEIGHT GLOSSARY

This section will guide you in the proper loading of your vehicle and/or trailer, to keep your loaded vehicle weight within its design rating capability, with or without a trailer. Properly loading your vehicle will provide maximum return of the vehicle design performance. Before loading your vehicle, familiarize yourself with the following terms for determining your vehicle's weight ratings, with or without a trailer, from the vehicle's specifications and the certification label:

Base curb weight

This is the weight of the vehicle including a full tank of fuel and all standard equipment. It does not include passengers, cargo, or optional equipment.

Vehicle curb weight

This is the weight of your new vehicle when you picked it up from your dealer plus any aftermarket equipment.

Cargo weight

This figure includes all weight added to the Base Curb Weight, including cargo and optional equipment.

GAW (Gross axle weight)

This is the total weight placed on each axle (front and rear) - including vehicle curb weight and all payload.

GAWR (Gross axle weight rating)

This is the maximum allowable weight that can be carried by a single axle (front or rear). These numbers are shown on the certification label.

The total load on each axle must never exceed its GAWR.

GVW (Gross vehicle weight)

This is the Base Curb Weight plus actual Cargo Weight plus passengers.

GVWR (Gross vehicle weight rating)

This is the maximum allowable weight of the fully loaded vehicle (including all options, equipment, passengers and cargo). The GVWR is shown on the certification label located on the driver’s door sill.

What to do in an emergency

Road warning 6-2
- Hazard warning flashers 6-2

In case of an emergency while driving 6-3
- If the engine stalls at a crossroad or crossing. 6-3
- If you have a flat tire while driving. 6-3
- If the engine stalls while driving 6-3

If the engine will not start 6-4
- If engine doesn't turn over or turns over slowly 6-4
- If engine turns over normally but does not start 6-4

Emergency starting 6-5
- Jump starting. 6-5
- Push-starting 6-7

If the engine overheats. 6-8

Tire Pressure Monitoring System (TPMS) 6-9
- Check tire pressure 6-9
- Low tire pressure telltale 6-11
- Low tire pressure position telltale 6-11
- Changing a tire with TPMS 6-13
- This device complies with Part 15 of the FCC rules. 6-15

If you have a flat tire 6-16
- Jack and tools 6-16
- Removing and storing the spare tire 6-17
- Changing tires 6-19

Towing 6-26
- Towing service 6-26

ROAD WARNING

Hazard warning flashers



OUMA048542

The hazard warning flashers serves as a warning to other drivers to exercise extreme caution when approaching, overtaking, or passing your vehicle.

It should be used whenever emergency repairs are being made or when the vehicle is stopped near the edge of a roadway.

Depress the flashers switch with the ignition switch in any position. The flashers switch is located in the center facia panel. All turn signal lights will flash simultaneously.

- The hazard warning flashers operates whether your vehicle is running or not.
- The turn signals do not work when the hazard flashers is on.
- Care must be taken when using the hazard warning flashers 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 a firm level ground. If you are on a divided highway, do not park in the median area between the two traffic lanes.
2. When the vehicle is stopped, turn on your emergency hazard flashers, set the parking brake and put the transmission in P (Park).
3. Have all passengers get out of the vehicle. Be sure they all get out on the side of the vehicle that is away from traffic.
4. When changing a flat tire, follow the instruction provided later in this section.

If 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 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 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".

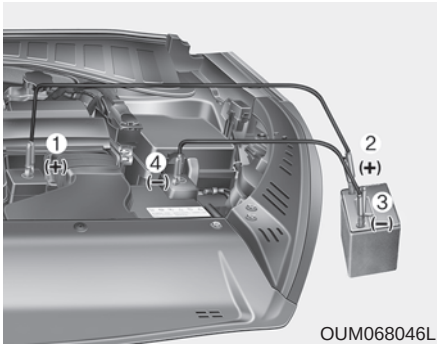
⚠ WARNING - Push/ Pull start

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 ignition switch in the LOCK position, check all connectors at the ignition coils and spark plugs. Reconnect any that may be disconnected or loose.
3. Check the fuel line in the engine compartment.
4. If the engine still does not start, call an authorized Kia dealer or seek other qualified assistance.

EMERGENCY STARTING



Connect cables in numerical order and disconnect in reverse order.

Jump starting

Jump starting can be dangerous if done incorrectly. Therefore, to avoid harm to yourself or damage to your vehicle or battery, follow these jump starting procedures. If in doubt, we strongly recommend that you have a competent technician or towing service jump start your vehicle.

⚠ CAUTION - 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 (for example, the engine lifting bracket) away from the battery (4). Do not connect it to or near any part that moves when the engine is cranked.

Do not allow the jumper cables to contact anything except the correct battery terminals or the correct ground. Do not lean over the battery when making connections.

⚠ WARNING - Battery cables

Do not connect the jumper cable from the negative terminal of the booster battery to the negative terminal of the discharged battery. This can cause the discharged battery to overheat and crack, releasing battery acid.

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 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 because the sudden surge forward when the engine starts could cause a collision with the tow vehicle.

IF THE ENGINE OVERHEATS

If your temperature gauge indicates overheating, you experience a loss of power, or hear loud pinging or knocking, the engine will probably be too hot. If this happens, you should:

1. Pull off the road and stop as soon as it is safe to do so.
2. Place the shift lever in P (Park) and set the parking brake. If the air conditioning is on, turn it off.
3. If engine coolant is running out under the vehicle or steam is coming out from underneath the hood, stop the engine. Do not open the hood until the coolant has stopped running or the steaming has stopped. If there is no visible loss of engine coolant and no steam, leave the engine running and check to be sure the engine cooling fan is operating. If the fan is not running, turn the engine off.
4. Check to see if the water pump drive belt is missing. If it is not missing, check to see that it is tight. If the drive belt seems to be satisfactory, check for coolant leaking from the radiator, hoses or under the vehicle. (If the air conditioning had been in use, it is normal for cold water to be draining from it when you stop).

⚠ WARNING - Under the hood

While the engine is running, keep hair, hands and clothing away from moving parts such as the fan and drive belts to prevent injury.

5. If the water pump drive belt is broken or engine coolant is leaking out, stop the engine immediately and call the nearest authorized Kia dealer for assistance.

⚠ WARNING - Radiator cap

Do not remove the radiator cap when the engine is hot. This may result in coolant being blown out of the opening and cause serious burns.

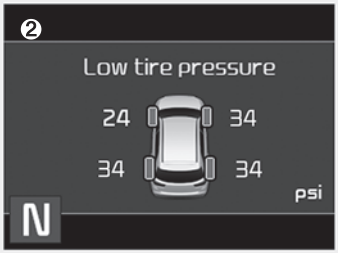
6. If you cannot find the cause of the overheating, wait until the engine temperature has returned to normal. Then, if coolant has been lost, carefully add coolant to the reservoir to bring the fluid level in the reservoir up to the halfway mark.
7. Proceed with caution, keeping alert for further signs of overheating. If overheating happens again, call an authorized Kia dealer for assistance.

Serious loss of coolant indicates there is a leak in the cooling system and this should be checked as soon as possible by an authorized Kia dealer.

TIRE PRESSURE MONITORING SYSTEM (TPMS)



OUMA058403



OUM068038L

(1) Low tire pressure telltale / TPMS malfunction indicator

(2) Low tire pressure position telltale (Shown on the LCD display)

Check tire pressure



OUM068037L

- You can check the tire pressure in the information mode on the cluster.
  - Refer to “User settings mode” in chapter 4.
- Tire pressure is displayed 1~2 minutes later after driving.
- If tire pressure is not displayed when the vehicle is stopped, “Drive to display” message displays. After driving, check the tire pressure.
- You can change the tire pressure unit in the user settings mode on the cluster.
  - psi, kpa, bar (Refer to “User settings mode” in chapter 4).

⚠ CAUTION

- ***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 ignition switch is turned to the ON position or engine is running, or if they remain illuminated after coming on for approximately 3 seconds, take your vehicle to your nearest authorized Kia dealer and have the system checked.

Low tire pressure telltale

Low tire pressure position telltale



OUM068038L

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 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 Kia dealer as soon as possible or replace the flat tire with the spare tire.

⚠ CAUTION - Repair Agents

Never use a puncture-repairing agent not approved by Kia to repair and/or inflate a low pressure tire. The tire sealant not approved by Kia may damage the tire pressure sensor.

Each wheel is equipped with a tire pressure sensor mounted inside the tire behind the valve stem. You must use TPMS specific wheels. It is recommended that you always have your tires serviced by an authorized Kia dealer.

Even if you replace the low pressure tire with the spare tire, the Low Tire Pressure telltale will 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 reinflated to the recommended pressure and installed on the vehicle or the TPMS sensor mounted on the replaced spare wheel is initiated by an authorized Kia dealer, the TPMS malfunction indicator and the low tire pressure telltale will turn off within a few minutes of driving.

If the indicator does not turn off after a few minutes of driving, please visit an authorized Kia dealer.

If an original mounted tire is replaced with the spare tire, the TPMS sensor on the replaced spare wheel should be initiated and the TPMS sensor on the original mounted wheel should be deactivated. If the TPMS sensor on the original mounted wheel located in the spare tire carrier still activates, the tire pressure monitoring system may not operate properly. Have the tire with TPMS serviced or replaced by an authorized Kia dealer.

You may not be able to identify a low tire by simply looking at it. Always use a good quality tire pressure gauge to measure the tire's inflation pressure. Please note that a tire that is hot (from being driven) will have a higher pressure measurement than a tire that is cold (from sitting stationary for at least 3 hours and driven less than 1 mile (1.6 km) during that 3 hour period).

Allow the tire to cool before measuring the inflation pressure. Always be sure the tire is cold before inflating to the recommended pressure.

A cold tire means the vehicle has been sitting for 3 hours and driven for less than 1 mile (1.6 km) in that 3 hour period.

Do not use any tire sealant if your vehicle is equipped with a Tire Pressure Monitoring System. The liquid sealant can 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.

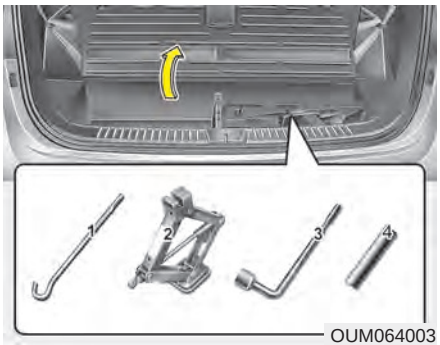
This device complies with Part 15 of the FCC rules.

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

Jack and tools



The jack and wheel lug nut wrench are stored in the luggage compartment.

Open the panel indicated in the illustration and locate the following tools:

(1) Jack handle

(2) Jack

(3) Wheel lug nut wrench

(4) Socket

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 in the luggage compartment insert provided.

Follow jacking instructions to reduce the possibility of personal 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

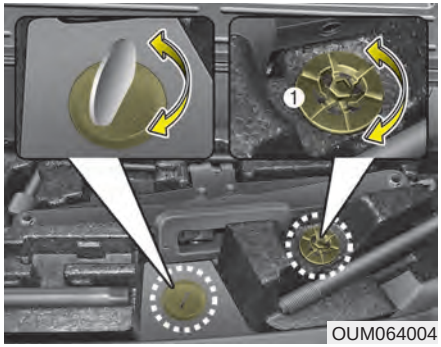
Never attempt vehicle repairs in the traffic lanes of a public road or highway.

- 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



Your spare tire is stored underneath your vehicle, directly below the cargo area.

To remove the spare tire:

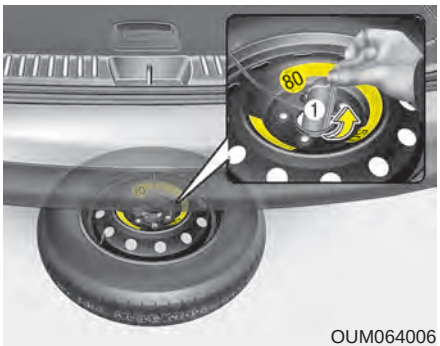
1. Open the liftgate.
2. Find the spare tire fixing bolt cover and remove the cover (1).

   If necessary, separate the tool case only after removing the clamp (2).



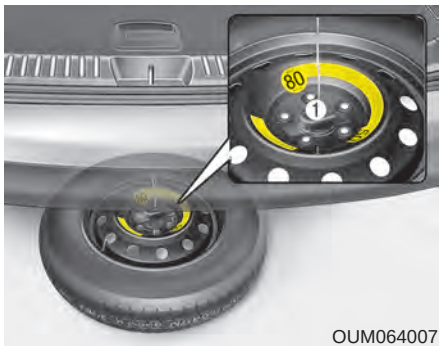
3. Connect the socket and wheel lug nut wrench.
4. Use the wheel lug nut wrench to loosen the bolt enough to lower the spare tire.

   Turn the wrench counterclockwise until the spare tire is resting on the ground.



OUM064006

5. After the spare tire is resting on the ground, continue to turn the wrench counterclockwise to create more slack in the line, and pull the tire out from underneath the vehicle. Do not continue rotating the wrench after feeling increased resistance from completely lowering the cable, otherwise the spare tire carrier may be damaged.
6. Remove the retainer (1) from the center of the spare tire.



OUM064007

To store the spare tire:

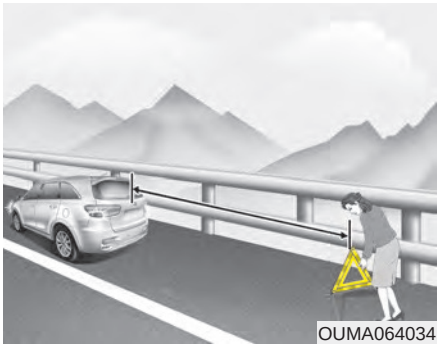
1. Lay the tire on the ground with the valve stem facing up.
2. Place the wheel under the vehicle and install the retainer (1) through the wheel center.
3. Turn the wrench clockwise until you feel or hear a click from the spare tire being fully seated in the stowed position.

⚠ WARNING

Ensure the spare tire retainer is properly aligned with the center of the spare tire to prevent the spare tire from “rattling”.

Otherwise, it may cause the spare tire to fall off the carrier and lead to an accident.

Changing tires


OUMA064034

1. Park on a level surface and apply the parking brake firmly.
2. Place the transmission shift lever in P (Park) with automatic transmission.
3. Activate the hazard warning flashers.

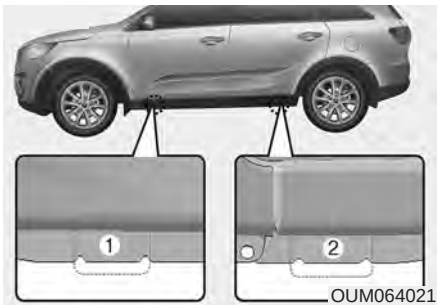

OUMA068035

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.

- 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.


OUM064008

6. Loosen the wheel lug nuts counterclockwise one turn each, but do not remove any nut until the tire has been raised off the ground.



OUM064021



OUM064009

7. Place the jack at the front (1) or rear (2) jacking position closest to the tire you are changing. Place the jack at the designated locations under the frame. The jacking positions are plates welded to the frame with two tabs and a raised dot to index with the jack.


OUM064010

8. 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. Then jiggle the wheel back and forth until the wheel can slide over the other studs.

Wheels may have sharp edges. Handle them carefully to avoid possible severe injury. Before putting the wheel into place, be sure that there is nothing on the hub or wheel (such as mud, tar, gravel, etc.) that prevents the wheel from fitting solidly against the hub.

⚠ WARNING - Installing a wheel

Make sure the wheel makes good contact with the hub when installed. If the contact of the mounting surface between the wheel and hub is not good, the wheel nuts could come loose and cause the loss of a wheel. Loss of a wheel may result in loss of control of the vehicle.

10. To install the wheel, hold it on the studs, put the wheel nuts on the studs and tighten them finger tight. Jiggle the tire to be sure it is completely seated, then tighten the nuts as much as possible with your fingers again.
11. Insert the wrench into the jack and lower the vehicle to the ground by turning the wheel nut wrench counterclockwise.



OUMA068011

Then position the wrench as shown in the drawing and tighten the wheel nuts. Be sure the socket is seated completely over the nut. Do not stand on the wrench handle or use an extension pipe over the wrench handle. Go around the wheel tightening every nut following the numerical sequence shown in the image until they are all tight. Then double-check each nut for tightness. After changing wheels, have an authorized Kia dealer tighten the wheel nuts to their proper torque as soon as possible.

Wheel nut tightening torque:

79~94 lbf·ft (11~13 kgf·m)

If you have a tire gauge, remove the valve cap and check the air pressure. If the pressure is lower than recommended, drive slowly to the nearest service station and inflate to the correct pressure. If it is too high, adjust it until it is correct. Always reinstall the valve cap after checking or adjusting the tire pressure. If the cap is not replaced, dust and dirt may get into the tire valve and air may leak from the tire. If you lose a valve cap, buy another and install it as soon as possible.

After you have changed the wheels, always secure the flat tire in its place and return the jack and tools to their proper storage locations.

⚠ CAUTION - Reusing lug nuts

Make certain during wheel removal that the same nuts that were removed are reinstalled - or, if replaced, that nuts with metric threads and the same chamfer configuration are used. Your vehicle has metric threads on the wheel studs and nuts. Installation of a non-metric thread nut on a metric stud will not secure the wheel to the hub properly and will damage the stud so that it must be replaced.

Note that most lug nuts do not have metric threads. Be sure to use extreme care in checking for thread style before installing aftermarket lug nuts or wheels. If in doubt, consult an authorized Kia dealer.

⚠ WARNING - Wheel studs

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 in the luggage compartment insert provided.

Check the inflation pressures as soon as possible after installing the spare tire. Adjust it to the specified pressure, if necessary. Refer to “Tires and wheels” in section 8.

Important - use of compact spare tire

Your vehicle is equipped with a compact spare tire. This compact spare tire takes up less space than a regular-size tire. This tire is smaller than a conventional tire and is designed for temporary use only.

- You should drive carefully when the compact spare is in use. The compact spare should be replaced by the proper conventional tire and rim at the first opportunity.
- The operation of this vehicle is not recommended with more than one compact spare tire in use at the same time.

⚠ WARNING

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.

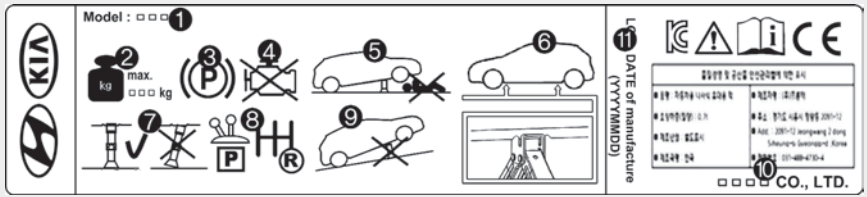
When using a compact spare tire, observe the following precautions:

- Under no circumstances should you exceed 50 mph (80 km/h); a higher speed could damage the tire.
- Ensure that you drive slow enough for the road conditions to avoid all hazards. Any road hazard, such as a pothole or debris, could seriously damage the compact spare.
- Any continuous road use of this tire could result in tire failure, loss of vehicle control, and possible personal injury.
- Do not exceed the vehicle's maximum load rating or the load-carrying capacity shown on the sidewall of the compact spare tire.
- Avoid driving over obstacles. The compact spare tire diameter is smaller than the diameter of a conventional tire and reduces the ground clearance approximately 1 inch (25 mm), which could result in damage to the vehicle.
- Do not take this vehicle through an automatic carwash 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

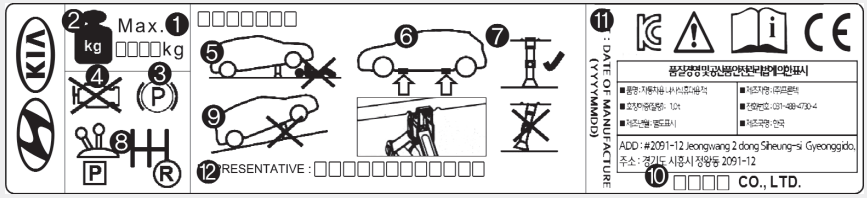
■ Example

• Type A



OHYK064001

• Type B



OHYK064005

• Type C



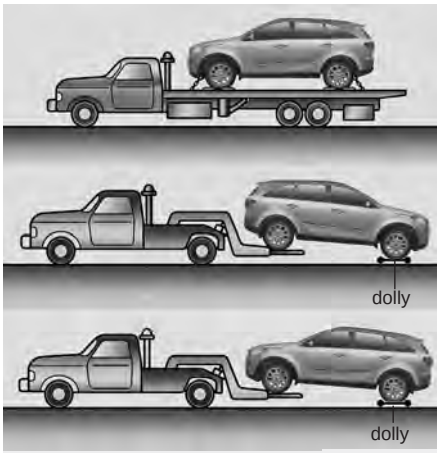
OHYK064002

❊ 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



OUM064022

If emergency towing is necessary, we recommend having it done by an authorized Kia dealer or a commercial tow-truck service. Proper lifting and towing procedures are necessary to prevent damage to the vehicle. The use of wheel dollies or flatbed is recommended.

For trailer towing guidelines information, refer to "Trailer towing" in section 5.

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.

On FWD vehicles, it is acceptable to tow the vehicle with the rear wheels on the ground (without dollies) and the front wheels off the ground.

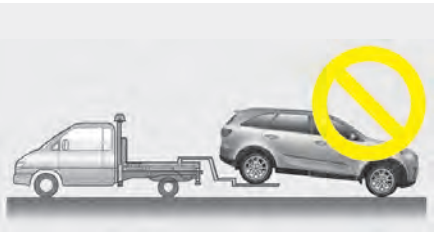
If any of the loaded wheels or suspension components are damaged or the vehicle is being towed with the front wheels on the ground, use a towing dolly under the front wheels.

When being towed by a commercial tow truck and wheel dollies are not used, the front of the vehicle should always be lifted, not the rear.

⚠ WARNING - Side and curtain Air bag

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

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



OUM064013



OUM064012

⚠ CAUTION - Towing

- ***Do not tow the vehicle backwards with the front wheels on the ground as this may cause damage to the vehicle.***
- ***Do not tow with sling-type equipment. Use wheel lift or flatbed equipment.***

When towing your vehicle in an emergency without wheel dollies :

1. Set the ignition switch in the ACC position.
2. Place the 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.

Maintenance

Engine compartment 7-3
Maintenance services 7-5
• Owner's responsibility 7-5
• Owner maintenance precautions 7-6
Owner maintenance 7-8
• Owner maintenance schedule 7-8
Scheduled maintenance service. 7-10
Explanation of scheduled maintenance items . . . 7-16
Checking fluid levels 7-20
Engine oil. 7-21
• Checking the engine oil level 7-21
• Changing the engine oil and filter 7-22
Engine coolant 7-23
• Checking the coolant level 7-23
• Changing the coolant 7-25
Brake fluid 7-26
• Checking the brake fluid level 7-26
Washer fluid 7-27
• Checking the washer fluid level 7-27
Parking brake 7-28
• Checking the parking brake. 7-28
Air cleaner. 7-29
• Filter replacement 7-29
Climate control air filter 7-31
• Filter inspection 7-31
Wiper blades 7-33
• Blade inspection. 7-33
• Blade replacement 7-33
Battery 7-36
• For best battery service 7-36
• Battery recharging 7-37
• Recharging battery 7-38
• Reset items 7-38
Tires and wheels 7-39
• Tire care 7-39
• Recommended cold tire inflation pressures 7-39
• Tire pressure 7-40
• Checking tire inflation pressure. 7-40
• Tire rotation 7-41
• Wheel alignment and tire balance 7-42
• Tire replacement 7-43
• Wheel replacement 7-44
• Tire traction 7-44
• Tire maintenance 7-44
• Tire sidewall labeling 7-44
• All season tires 7-51
• Summer tires 7-51
• Snow tires 7-51
• Tire chains 7-51
• Radial-ply tires 7-52
• Low aspect ratio tire 7-52

Fuses 7-53
- Inner panel fuse replacement. 7-55
- Engine compartment fuse replacement. 7-57
- Fuse/relay panel description. 7-60

Light bulbs 7-71
- Bulb replacement precaution 7-71
- Light bulb position (Front). 7-73
- Light bulb position (Rear) 7-74
- Light bulb position (Side). 7-75
- Headlamp (Low beam) bulb replacement (Headlamp Type A). 7-75
- Headlamp (High beam) bulb replacement (Headlamp Type A). 7-76
- Front turn signal lamp bulb replacement (Headlamp Type A). 7-78
- Position lamp (LED type) replacement (Headlamp Type A). 7-78
- Side marker (front) (LED type) bulb replacement. . 7-79
- Headlamp (LED type) replacement (Headlamp Type B). 7-79
- Side repeater lamp (LED type) bulb replacement. . 7-80
- Front fog lamp bulb replacement 7-80
- Stop and tail lamp (Bulb type) bulb replacement . . 7-81
- Rear turn signal lamp (Bulb type) bulb replacement. . 7-82
- Side marker (rear) (Bulb type) bulb replacement. . 7-84
- Side marker (rear) (LED type) bulb replacement. . 7-85
- Tail lamp (inside) (Bulb type) bulb replacement . . . 7-85
- Back up lamp (Bulb type) bulb replacement 7-86
- Stop and tail lamp (LED type) bulb replacement . . 7-87
- High mounted stop lamp (LED type) bulb replacement 7-87
- License plate lamp bulb replacement 7-88
- Map lamp (Bulb type) bulb replacement 7-88
- Map lamp (LED type) bulb replacement 7-89
- Room lamp bulb replacement 7-89
- Personal lamp (LED type) bulb replacement. 7-90
- Glove box lamp replacement 7-90
- Luggage lamp (Bulb type) bulb replacement. 7-91
- Luggage lamp (LED type) bulb replacement. 7-91
- Vanity mirror lamp (Bulb type) bulb replacement. . 7-92
- Vanity mirror lamp (LED type) bulb replacement. . 7-92

Appearance care. 7-93
- Exterior care 7-93
- Interior care. 7-98

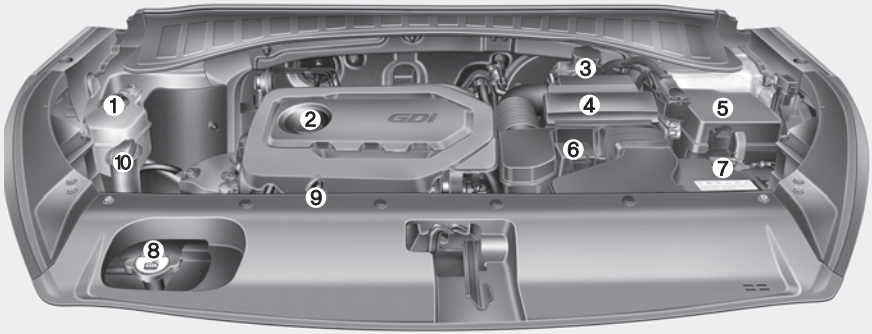
Emission control system 7-102
- Crankcase emission control system. 7-102
- Evaporative emission control (including ORVR: Onboard Refueling Vapor Recovery) system. . . . 7-102
- Exhaust emission control system. 7-103

California perchlorate notic 7-105

7

ENGINE COMPARTMENT

■ **Gasoline Engine (Theta II 2.4L) - GDI**

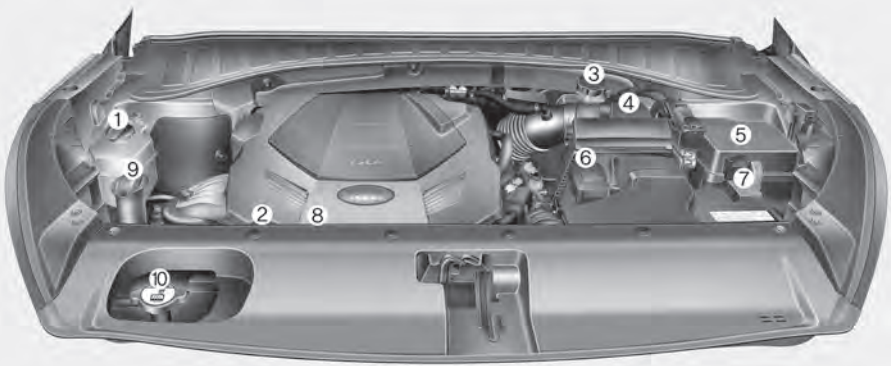


1. Engine coolant reservoir
2. Engine oil filler cap
3. Brake fluid reservoir
4. Air cleaner
5. Fuse box
6. Positive battery terminal
7. Negative battery terminal
8. Radiator cap
9. Engine oil dipstick
10. Windshield washer fluid reservoir

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

OUM074100L

■ **Gasoline engine (Lambda II 3.3L) – GDI**



1. Engine coolant reservoir
2. Engine oil filler cap
3. Brake fluid reservoir
4. Air cleaner
5. Fuse box
6. Positive battery terminal
7. Negative battery terminal
8. Engine oil dipstick
9. Windshield washer fluid reservoir
10. Radiator cap

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

OUMA078255

MAINTENANCE SERVICES

You should exercise the utmost care to prevent damage to your vehicle and injury to yourself whenever performing any maintenance or inspection procedures.

Should you have any doubts concerning the inspection or servicing of your vehicle, we strongly recommend that you have an authorized Kia dealer perform this work.

An authorized Kia dealer has factory trained technicians and genuine Kia parts to service your vehicle properly. For expert advice and quality service, see an authorized Kia dealer.

Inadequate, incomplete or insufficient servicing may result in operational problems with your vehicle that could lead to vehicle damage, an accident, or personal injury.

Owner's responsibility

✻ NOTICE

Maintenance Service and Record Retention are the owner's responsibility.

You should retain documents that show proper maintenance has been performed on your vehicle in accordance with the scheduled maintenance service charts shown on the following pages. You need this information to establish your compliance with the servicing and maintenance requirements of your vehicle warranties.

Detailed warranty information is provided in your Warranty & Consumer Information manual.

Repairs and adjustments required as a result of improper maintenance or a lack of required maintenance are not covered.

We recommend you have your vehicle maintained and repaired by an authorized Kia dealer. An authorized Kia dealer meets Kia's high service quality standards and receives technical support from Kia in order to provide you with a high level of service satisfaction.

✻ 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 spongey 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 Kia dealer with special tools.

✻ NOTICE

Improper owner maintenance during the warranty period may affect warranty coverage. For details, read the separate Warranty & Consumer Information manual provided with the vehicle. If you're unsure about any servicing or maintenance procedure, have it done by an authorized Kia dealer.

⚠ WARNING - Maintenance work

Do not wear jewelry or loose clothing while working under the hood of your vehicle with the engine running. These can become entangled in moving parts, if you must run the engine while working under the hood, make certain that you remove all jewelry (especially rings, bracelets, watches, and necklaces) and all neckties, scarves, and similar loose clothing before getting near the engine or cooling fans.

OWNER MAINTENANCE

The following lists are vehicle checks and inspections that should be performed by the owner or an authorized Kia dealer at the frequencies indicated to help ensure safe, dependable operation of your vehicle.

Any adverse conditions should be brought to the attention of your dealer as soon as possible.

These Owner Maintenance Checks are generally not covered by warranties and you may be charged for labor, parts and lubricants used.

Owner maintenance schedule

When you stop for fuel:

- Check the engine oil level.
- Check the coolant level in the 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 checks, and hood hinges.
- Lubricate the door and hood locks and latches.
- Lubricate the door rubber weatherstrips.
- Check the air conditioning system.
- Inspect and lubricate the 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 mile/h(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 - Non 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	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5
	Km×1,000	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180
Drive belts *1		At first, inspect at 60,000 miles (96,000 km) or 72 months, after that, inspect every 15,000 miles (24,000 km) or 24 months														
Engine oil and engine oil filter	Theta II 2.4L GDI	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
	Lambda II 3.3L GDI	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Fuel additives *2		Add every 7,500 miles (12,000 km) or 12 months														
Air cleaner filter		I	I	I	R	I	I	I	R	I	I	I	R	I	I	I
Spark plugs	Theta II 2.4L GDI	Replace every 97,500 miles (156,000 km)														
	Lambda II 3.3L GDI	Replace every 97,500 miles (156,000 km)														
Valve clearance *3	Theta II 2.4L GDI	Inspect every 60,000 miles (96,000 km) or 72 months														
	Lambda II 3.3L 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 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 Kia dealer perform the operation.

Normal Maintenance Schedule - Non 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	**7.5**	**15**	**22.5**	**30**	**37.5**	**45**	**52.5**	**60**	**67.5**	**75**	**82.5**	**90**	**97.5**	**105**	**112.5**
	Km×1,000	**12**	**24**	**36**	**48**	**60**	**72**	**84**	**96**	**108**	**120**	**132**	**144**	**156**	**168**	**180**
Rotate tires	Rotate every 7,500 miles (12,000 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	
Coolant (Engine)	At first, replace at 120,000 miles (192,000 km) or 10 years, after that, replace every 30,000 miles (48,000 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	
Brake discs 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 ball joints	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	
Air conditioner compressor/refrigerant	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	
Propeller shaft (AWD)	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	
Exhaust system	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 - Non 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	7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105	112.5
	Km×1,000	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180
Cooling system		-	-	-	I	-	I	-	I	-	I	-	I	-	I	-
Automatic transmission fluid		No check, No service required														
Rear axle oil (AWD) *5		-	-	-	I	-	-	-	I	-	-	-	I	-	-	-
Transfer case oil (AWD) *5		-	-	-	I	-	-	-	I	-	-	-	I	-	-	-
Vapor hose and fuel filler cap		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-
Fuel tank air filter *4		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-
Fuel lines, hoses and connections		-	-	-	I	-	-	-	I	-	-	-	I	-	-	-
Parking brake (Foot Type)		-	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.

*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 : Transfer case oil and rear axle oil should be changed anytime they have been submerged in water.

Maintenance Under Severe Usage Conditions - Non 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	Theta II 2.4L GDI	R	Every 3,750 miles (6,000 km) or 6 months	A, B, C, D, E, F, G, H, I, J, K
	Lambda II 3.3L GDI	R	Every 3,750 miles (6,000 km) or 6 months	A, B, C, D, E, F, G, H, I, J, K
Air cleaner filter		R	More frequently	C, E
Spark plugs		R	More frequently	A, B, F, G, H, I, K
Automatic transmission fluid		R	Every 60,000 miles (96,000 km)	A, C, D, E, F, G, H, I, J
Brake discs and pads, calipers and rotors		I	More frequently	C, D, E, G, H
Parking brake (Foot Type)		I	More frequently	C, D, G, H
Steering gear rack, linkage and boots		I	More frequently	C, D, E, F, G
Suspension ball joints		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
Rear axle oil (AWD)	R	Every 75,000 miles (120,000 km)	C, E, G, H, I, J
Transfer case oil (AWD)	R	Every 75,000 miles (120,000 km)	C, E, G, H, I, J
Climate control air filter	R	More frequently	C, E, G
Propeller shaft	I	More frequently	C, D, E, F, G, H, I, J

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 but depends on fuel quality. 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 be Inspected or replaced by an authorized Kia dealer.

Fuel lines, fuel hoses and connections

Check the fuel lines, fuel hoses and connections for leakage and damage. Have an authorized Kia dealer replace any damaged or leaking parts immediately.

Vapor hose and fuel filler cap

The vapor hose and fuel filler cap should be inspected at 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 (if equipped)

Inspect the surface of hoses for evidence of heat and/or mechanical damage. Hard and brittle rubber, cracking, tears, cuts, abrasions, and excessive swelling indicate deterioration. Particular attention should be 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 components 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 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 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 lever (or pedal) and cables.

Brake discs, pads, calipers and rotors

Check the pads for excessive wear, discs for run out and wear, and calipers for fluid leakage.

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

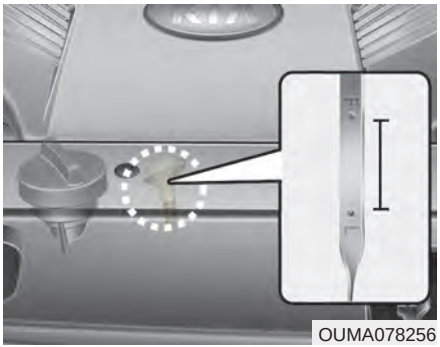
Check the air conditioning lines and connections for leakage and damage.

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


OUMA078256

1. Be sure the vehicle is on level ground.
2. Start the engine and allow it to reach normal operating temperature.
3. Turn the engine off and wait for a few minutes (about 5 minutes) for the oil to return to the oil pan.
4. Pull the dipstick out, wipe it clean, and re-insert it fully.

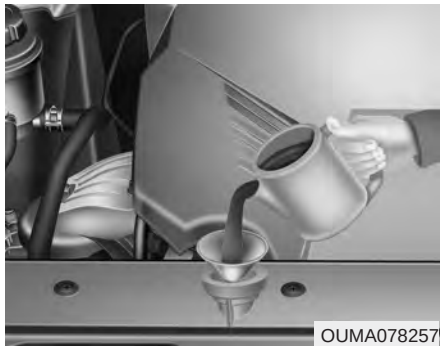
⚠ WARNING - Radiator hose

Be very careful not to touch the radiator hose when checking or adding the engine oil as it may be hot enough to burn you.

5. Pull the dipstick out again and check the level. The level should be between F and L.

⚠ CAUTION - Replacing engine oil

Do not overfill the engine oil. It may damage the engine.


OUMA078257

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 Kia dealer according to the Maintenance Schedule at the beginning of this chapter.

⚠ CALIFORNIA PROPOSITION 65 WARNING

Engine oil contains chemicals known to the State of California to cause cancer, birth defects and reproductive harm. Used engine oil may cause irritation or cancer of the skin if left in contact with the skin for prolonged periods of time. Always protect your skin by washing your hands thoroughly with soap and warm water as soon as possible after handling used oil.

ENGINE COOLANT

The high-pressure cooling system has a reservoir filled with year round antifreeze coolant. The reservoir is filled at the factory.

Check the antifreeze protection and coolant level at least once a year: at the beginning of the winter season, and before traveling to a colder climate.

⚠ CAUTION - 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.

Checking the coolant level

⚠ WARNING



Removing radiator cap

Never attempt to remove the radiator cap while the engine is operating or hot. Doing so could result in serious personal injury from escaping hot coolant or steam.

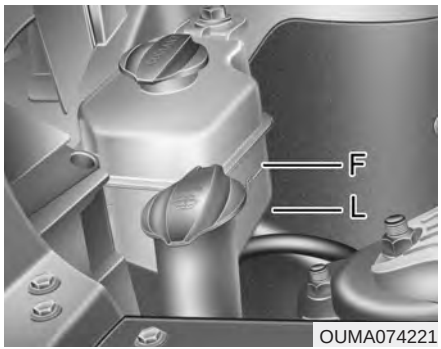
- Turn the engine off and wait until it cools down. Use extreme care when removing the radiator cap. Wrap a thick towel around it, and turn it counterclockwise slowly to the first stop. Step back while the pressure is released from the cooling system.

  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.

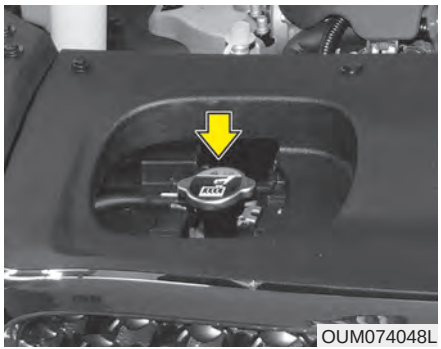
If the coolant level is low, add enough specified coolant to provide protection against freezing and corrosion. Bring the level to F, but do not overfill. If frequent additions are required, see an authorized Kia dealer for a cooling system inspection.

Recommended engine coolant

- When adding coolant, use only deionized water or soft water for your vehicle and never mix hard water in the coolant filled at the factory. An improper coolant mixture can result in serious malfunction or engine damage.
- The engine in your vehicle has aluminum engine parts and must be protected by an ethylene-glycol-based coolant to prevent corrosion and freezing.
- DO NOT USE alcohol or methanol coolant or mix them with the specified coolant.
- Do not use a solution that contains more than 60% antifreeze or less than 35% antifreeze. 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


OUM074048L

⚠ 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.

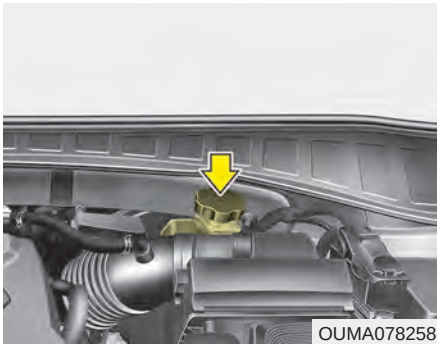
Changing the coolant

Have the coolant changed by an authorized Kia dealer according to the Maintenance Schedule at the beginning of this chapter.

Put a thick cloth around the radiator cap before refilling the coolant in order to prevent the coolant from overflowing into engine parts such as the alternator.

BRAKE FLUID

Checking the brake fluid level



Check the fluid level in the reservoir periodically. The fluid level should be between MAX (Maximum) and MIN (Minimum) marks on the side of the reservoir.

Before removing the reservoir cap and adding brake fluid, clean the area around the reservoir cap thoroughly to prevent brake fluid contamination.

⚠ CAUTION - Proper fluid

Only use brake fluid in brake system. Small amounts of improper fluids (such as engine oil) can cause damage to the brake system.

If the level is low, add fluid to the MAX (Maximum) level. The level will fall with accumulated mileage. This is a normal condition associated with the wear of brake linings. If the fluid level is excessively low, have the brake system checked by an authorized Kia dealer.

Use only the specified brake fluid. (Refer to "Recommended lubricants or capacities" in 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 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.

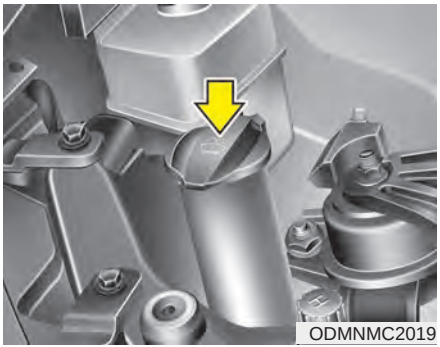
⚠ CAUTION - Brake fluid

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


ODMNMC2019

The reservoir is translucent so that you can check the level with a quick visual inspection.

Check the fluid level in the washer fluid reservoir and add fluid if necessary. Plain water may be used if washer fluid is not available. However, use washer solvent with antifreeze characteristics in cold climates to prevent freezing.

⚠ WARNING - 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

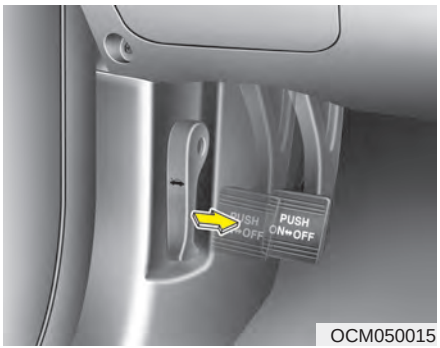
- **Do not use radiator coolant or antifreeze in the washer fluid reservoir.**
- **Radiator coolant can severely obscure visibility when sprayed on the windshield and may cause loss of vehicle control.**

⚠ WARNING - Windshield fluid

Do not drink the windshield washer fluid. The windshield washer fluid is poisonous to humans and animals.

PARKING BRAKE

Checking the parking brake



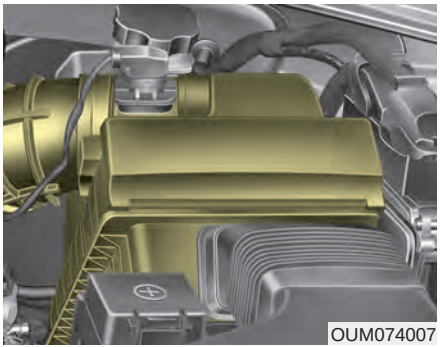
OCM050015

Check whether the stroke is within specification when the parking brake pedal is depressed with 66 lb, 294 N (30 kg) of force. Also, the parking brake alone should securely hold the vehicle on a fairly steep grade. If the stroke is more or less than specified, have the parking brake adjusted by an authorized Kia dealer.

Stroke : 8~9 notch

AIR CLEANER

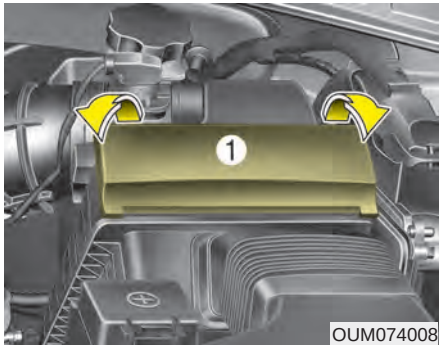
Filter replacement



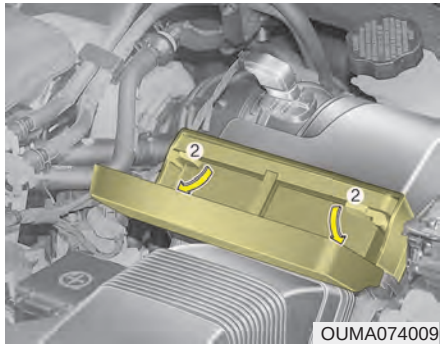
It must be replaced when necessary, and should not be washed.

You can clean the filter when inspecting the air cleaner element.

Clean the filter by using compressed air.



1. Pull out the air cleaner cover.



2. Unlock by turning the locking lever upward.
3. Pull the air cleaner filter to replace.
4. Lock the cover with the reverse order.

Replace the filter according to the Maintenance Schedule.

If the vehicle is operated in extremely dusty or sandy areas, replace the element more often than the usual recommended intervals. (Refer to "Maintenance under severe usage conditions" in this chapter.)

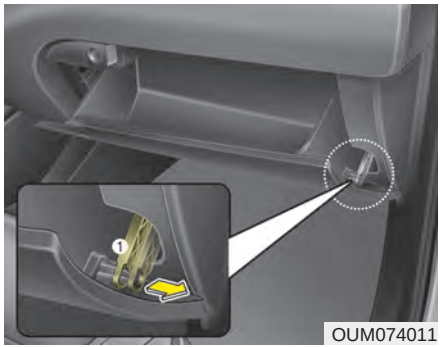
⚠ CAUTION - Air filter maintenance

- ***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 non-genuine parts could damage the air flow sensor.***

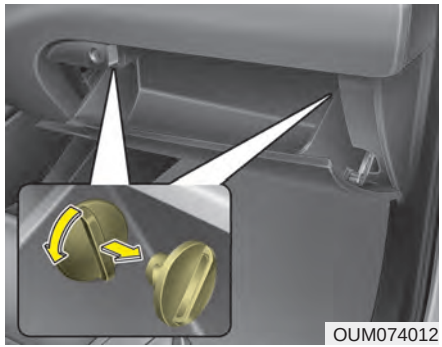
CLIMATE CONTROL AIR FILTER (IF EQUIPPED)

Filter inspection

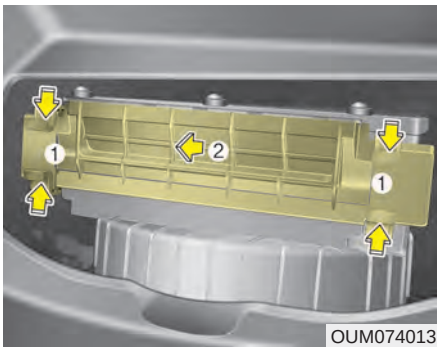
The climate control air filter should be replaced according to the maintenance schedule. If the vehicle is operated in severely air-polluted cities or on dusty rough roads for a long period, it should be inspected more frequently and replaced earlier. When you replace the climate control air filter, replace it performing the following procedure, and be careful to avoid damaging other components.



1. Open the glove box and remove the support strap (1).



2. With the glove box open, remove the stoppers on both sides.



OUM074013

3. Remove the climate control air filter case by pulling out right side of the cover.

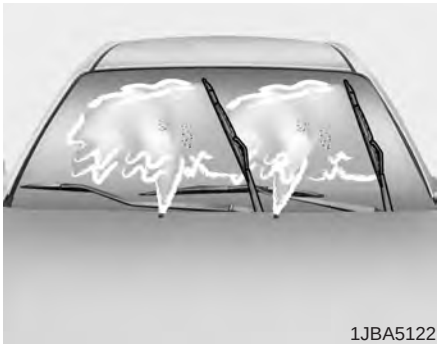

OYP074008K

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



Commercial hot waxes applied by automatic vehicle 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 vehicle 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.

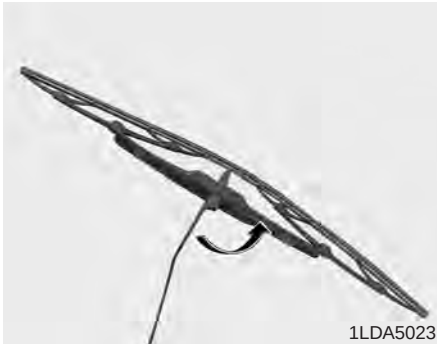
Blade replacement

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.

Using any aftermarket wiper blades could result in wiper malfunction and failure.

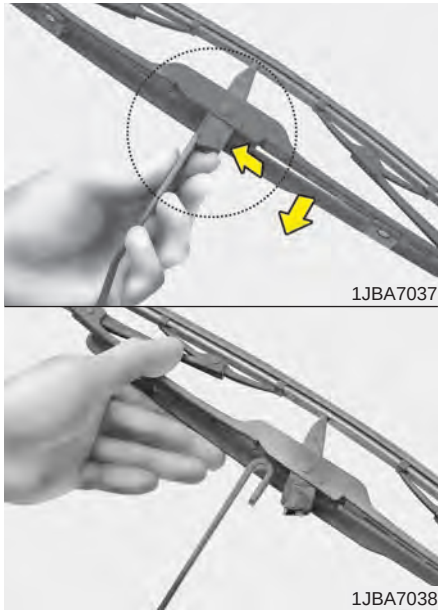
Front windshield wiper blade



1. Raise the wiper arm and turn the wiper blade assembly to expose the plastic locking clip.

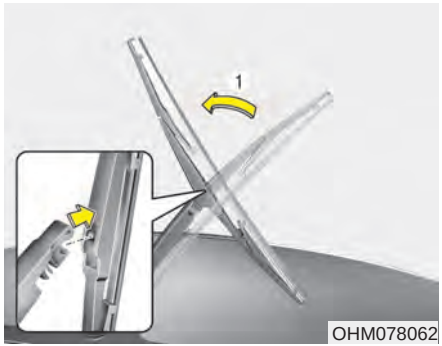
⚠ CAUTION - Wiper arms

Do not allow the wiper arm to fall against the windshield, since it may chip or crack the windshield.

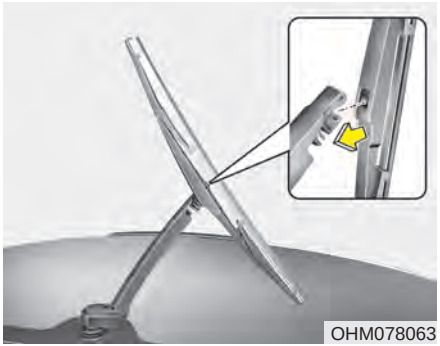


2. Compress the clip and slide the blade assembly downward.
3. Lift it off the arm.
4. Install the blade assembly in the reverse order of removal.

Rear window wiper blade



1. Raise the wiper arm and pull out the wiper blade assembly.

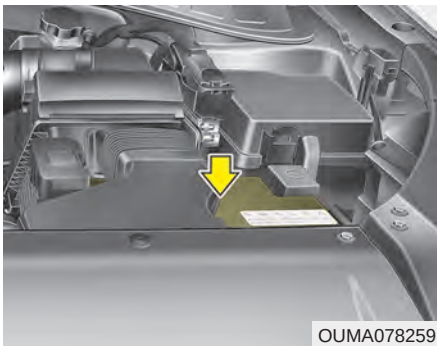

OHM078063

2. Install the new blade assembly by inserting the center part into the slot in the wiper arm until it clicks into place.
3. Make sure the blade assembly is installed firmly by trying to pull it slightly.

To prevent damage to the wiper arms or other components, have an authorized Kia dealer replace the wiper blade.

BATTERY

For best battery service


OUMA078259

- 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.

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.

⚠ CALIFORNIA PROPOSITION 65 WARNING

Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer, birth defects and reproductive harm. Batteries also contain other chemicals known to the State of California to cause cancer. Wash hands after handling.

✻ NOTICE

If you connect unauthorized electronic devices to the battery, the battery may be discharged. Never use unauthorized devices.

Battery recharging

Your vehicle has a maintenance-free, calcium-based battery.

- If the battery becomes discharged in a short time (because, for example, the headlamps or interior lamps 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.

Recharging battery

When recharging the battery, observe the following precautions:

- The battery must be removed from the vehicle and placed in an area with good ventilation.
- Do not allow cigarettes, sparks, or flame near the battery.
- Watch the battery during charging, and stop or reduce the charging rate if the battery cells begin gassing (boiling) violently or if the temperature of the electrolyte of any cell exceeds 120°F (49°C).
- Wear eye protection when checking the battery during charging.
- Disconnect the battery charger in the following order.

1. Turn off the battery charger main switch.
2. Unhook the negative clamp from the negative battery terminal.
3. Unhook the positive clamp from the positive battery terminal.

- 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)
- Integrated Memory System (See chapter 3)
- Audio (See chapter 4)

TIRES AND WHEELS

Tire care

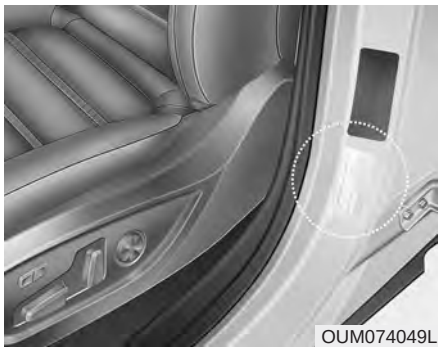
For proper maintenance, safety, and maximum fuel economy, you must always maintain recommended tire inflation pressures and stay within the load limits and weight distribution recommended for your vehicle.

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, vehicle handling, and minimum tire wear.

For recommended inflation pressure, refer to “Tire and wheels” in chapter 8.


OUM074049L

All specifications (sizes and pressures) can be found on a label attached to the driver’s side center pillar.

⚠ WARNING - Tire under inflation

Inflate your tire consistent with the instructions provided in this manual. Severe under inflation can lead to severe heat build-up, causing blowouts, tread separation and other tire failures that can result in the loss of vehicle control. This risk is much higher on hot days and when driving for long periods at high speeds.

- Underinflation also results in excessive wear, poor handling and reduced fuel economy. Wheel deformation also is possible. Keep your tire pressures at the proper levels. If a tire frequently needs refilling, have it checked by an authorized Kia dealer.
- Overinflation produces a harsh ride, excessive wear at the center of the tire tread, and a greater possibility of damage from road hazards.
- Warm tires normally exceed recommended cold tire pressures by 4 to 6 psi (28 to 41 kPa). Do not release air from warm tires to adjust the pressure or the tires will be underinflated.
- Be sure to reinstall the tire inflation valve caps. Without the valve cap, dirt or moisture could get into the valve core and cause air leakage. If a valve cap is missing, install a new one as soon as possible.

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.

Checking tire inflation pressure

Check your tires once a month or more.

Also, check the tire pressure of the spare tire.

How to check

Use a good quality gauge to check tire pressure. You cannot tell if your tires are properly inflated simply by looking at them. Radial tires may look properly inflated even when they're underinflated.

Check the tire's inflation pressure when the tires are cold. - "Cold" means your vehicle has been sitting for at least three hours or driven no more than 1 mile (1.6 km).

Remove the valve cap from the tire valve stem. Press the tire gauge firmly onto the valve to get a pressure measurement. If the cold tire inflation pressure matches the recommended pressure on the tire and loading information label, no further adjustment is necessary. If the pressure is low, add air until you reach the recommended amount.

If you overfill the tire, release air by pushing on the metal stem in the center of the tire valve. Recheck the tire pressure with the tire gauge. Be sure to put the valve caps back on the valve stems. They help prevent leaks by keeping out dirt and moisture.

- Inspect your tires frequently for proper inflation as well as wear and damage. Always use a tire pressure gauge.
- Tires with too much or too little pressure wear unevenly causing poor handling, loss of vehicle control, and sudden tire failure leading to accidents, injuries, and even death. The recommended cold tire pressure for your vehicle can be found in this manual and on the tire label located on the driver's side center pillar.
- Remember to check the pressure of your spare tire. Kia recommends that you check the spare every time you check the pressure of the other tires on your vehicle.

Tire rotation

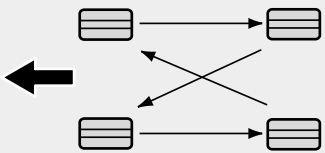
To equalize tread wear, it is recommended that the tires be rotated every 7,500 miles (12,000 km) or sooner if irregular wear develops.

During rotation, check the tires for correct balance.

When rotating tires, check for uneven wear and damage. Abnormal wear is usually caused by incorrect tire pressure, improper wheel alignment, out-of-balance wheels, severe braking or severe cornering. Look for bumps or bulges in the tread or side of tire. Replace the tire if you find either of these conditions. Replace the tire if fabric or cord is visible. After rotation, be sure to bring the front and rear tire pressures to specification and check lug nut tightness.

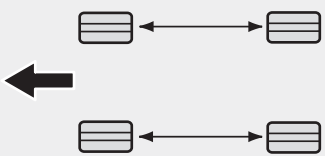
Refer to “Tire and wheels” in chapter 8.

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 will appear as a solid band across the tread. This shows there is less than 1/16 inch (1.6 mm) of tread left on the tire. Replace the tire when this happens.

Do not wait for the band to appear across the entire tread before replacing the tire.

The ABS works by comparing the speed of the wheels. The tire size affects wheel speed. When replacing tires, all 4 tires must use the same size originally supplied with the vehicle. Using tires of a different size can cause the ABS (Anti-lock Brake System) and ESC (Electronic Stability Control) to work irregularly.

✻ NOTICE

- **We recommend that when replacing tires, use the same which were originally supplied with the 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.

⚠ CAUTION - Wheels

Wheels that do not meet Kia specifications may fit poorly and result in damage to the vehicle or unusual handling and poor vehicle control.

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, headlamp aim and bumper height.

Tire traction

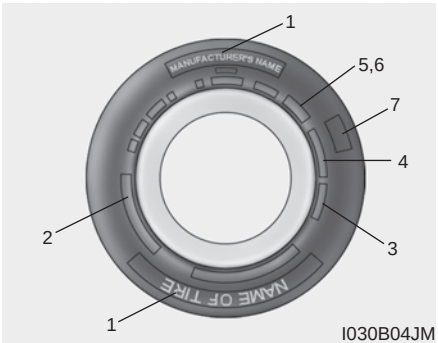
Tire traction can be reduced if you drive on worn tires, tires that are improperly inflated or on slippery road surfaces. Tires should be replaced when tread wear indicators appear. Slow down whenever there is rain, snow or ice on the road to reduce the possibility of losing control of the vehicle.

Tire maintenance

In addition to proper inflation, correct wheel alignment helps to decrease tire wear. If you find a tire is worn unevenly, have your dealer check the wheel alignment.

When you have new tires installed, make sure they are balanced. This will increase vehicle ride comfort and tire life. Additionally, a tire should always be rebalanced if it is removed from the wheel.

Tire sidewall labeling



I030B04JM

This information identifies and describes the fundamental characteristics of the tire and also provides the Tire Identification Number (TIN) for safety standard certification. The TIN can be used to identify the tire in case of a recall.

1. Manufacturer or brand name

Manufacturer or Brand name is shown.

2. Tire size designation

A tire's sidewall is marked with a tire size designation. You will need this information when selecting replacement tires for your vehicle. The following explains what the letters and numbers in the tire size designation mean.

Example tire size designation:

(These numbers are provided as an example only; your tire size designator could vary depending on your vehicle.)

P235/65R17 108T

P - Applicable vehicle type (tires marked with the prefix "P" are intended for use on passenger vehicles or light trucks; however, not all tires have this marking).

235 - Tire width in millimeters.

65 - Aspect ratio. The tire's chapter height as a percentage of its width.

R - Tire construction code (Radial).

17 - Rim diameter in inches.

108 - Load Index, a numerical code associated with the maximum load the tire can carry.

T - Speed Rating Symbol. See the speed rating chart in this chapter for additional information.

Wheel size designation

Wheels are also marked with important information that you need if you ever have to replace one. The following explains what the letters and numbers in the wheel size designation mean.

Example wheel size designation:

7.0JX17

7.0 - Rim width in inches.

J - Rim contour designation.

17 - Rim diameter in inches.

Tire speed ratings

The chart below lists many of the different speed ratings currently being used for passenger vehicle tires. The speed rating is part of the tire size designation on the sidewall of the tire. This symbol corresponds to that tire's designed maximum safe operating speed.

Speed Rating Symbol	Maximum Speed
S	112 mph (180 km/h)
T	118 mph (190 km/h)
H	130 mph (210 km/h)
V	149 mph (240 km/h)
Z	Above 149 mph (240 km/h)

3. Checking tire life (TIN : Tire Identification Number)

Any tires that are over 6 years old, based on the manufacturing date, (including the spare tire) should be replaced by new ones. You can find the manufacturing date on the tire sidewall (possibly on the inside of the wheel), displaying the DOT Code. The DOT Code is a series of numbers on a tire consisting of numbers and English letters. The manufacturing date is designated by the last four digits (characters) of the DOT code.

DOT : XXXX XXXX OOOO

The front part of the DOT means a plant code number, tire size and tread pattern and the last four numbers indicate week and year manufactured.

For example:

DOT XXXX XXXX 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 200

TRACTION AA

TEMPERATURE A

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.

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.

These grades are molded on the side-walls of passenger vehicle tires. The tires available as standard or optional equipment on your vehicle may vary with respect to grade.

Traction - AA, A, B & C

The traction grades, from highest to lowest, are AA, A, B and C. Those grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning, or peak traction characteristics.

Temperature -A, B & C

The temperature grades are A (the highest), B and C representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger vehicle tires must meet under the Federal Motor Vehicle Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

Tire terminology and definitions

Air Pressure: The amount of air inside the tire pressing outward on the tire. Air pressure is expressed in pounds per square inch (psi) or kilopascal (kPa).

Accessory Weight: This means the combined weight of optional accessories. Some examples of optional accessories are, automatic 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 pounds per square inch (psi) or kilopascals (kPa) before a tire has built up heat from driving.

Curb Weight: This means the weight of a motor vehicle with standard and optional equipment including the maximum capacity of fuel, oil and coolant, but without passengers and cargo.

DOT Markings: A code molded into the sidewall of a tire signifying that the tire is in compliance with the U.S. Department of Transportation motor vehicle safety standards. The DOT code includes the Tire Identification Number (TIN), an alphanumeric designator which can also identify the tire manufacturer, production plant, brand and date of production.

GVWR: Gross Vehicle Weight Rating

GAWR FRT: Gross Axle Weight Rating for the Front Axle.

GAWR RR: Gross Axle Weight Rating for the Rear axle.

Intended Outboard Sidewall: The side of an asymmetrical tire, that must always face outward when mounted on a vehicle.

Kilopascal (kPa): The metric unit for air pressure.

Light truck(LT) tire: A tire designated by its manufacturer as primarily intended for use on lightweight trucks or multipurpose passenger vehicles.

Load ratings: The maximum load that a tire is rated to carry for a given inflation pressure

Load Index: An assigned number ranging from 1 to 279 that corresponds to the load carrying capacity of a tire.

Maximum Inflation Pressure: The maximum air pressure to which a cold tire may be inflated. The maximum air pressure is molded onto the sidewall.

Maximum Load Rating: The load rating for a tire at the maximum permissible inflation pressure for that tire.

Maximum Loaded Vehicle Weight: The sum of curb weight; accessory weight; vehicle capacity weight; and production options weight.

Normal Occupant Weight: The number of occupants a vehicle is designed to seat multiplied by 150 pounds (68 kg).

Occupant Distribution: Designated seating positions.

Outward Facing Sidewall: The side of a asymmetrical tire that has a particular side that faces outward when mounted on a vehicle. The outward facing sidewall bears white lettering or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same moldings on the inner facing sidewall.

Passenger (P-Metric) Tire: A tire used on passenger cars and some light duty trucks and multipurpose vehicles.

Ply: A layer of rubber-coated parallel cords

Pneumatic tire: A mechanical device made of rubber, chemicals, fabric and steel or other materials, that, when mounted on an automotive wheel, provides the traction and contains the gas or fluid that sustains the load.

Production options weight: The combined weight of installed regular production options weighing over 5 lb.(2.3 kg) in excess of the standard items which they replace, not previously considered in curb weight or accessory weight, including heavy duty brakes, ride levelers, roof rack, heavy duty battery, and special trim.

Recommended Inflation Pressure: Vehicle manufacturer's recommended tire inflation pressure and shown on the tire placard.

Radial Ply Tire: A pneumatic tire in which the ply cords that extend to the beads are laid at 90 degrees to the centerline of the tread.

Rim: A metal support for a tire and upon which the tire beads are seated.

Sidewall: The portion of a tire between the tread and the bead.

Speed Rating: An alphanumeric code assigned to a tire indicating the maximum speed at which a tire can operate.

Traction: The friction between the tire and the road surface. The amount of grip provided.

Tread: The portion of a tire that comes into contact with the road.

Treadwear Indicators: Narrow bands, sometimes called "wear bars," that show across the tread of a tire when only 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. (68 kg) plus the rated cargo and luggage load.

Vehicle Maximum Load on the Tire: Load on an individual tire due to curb and accessory weight plus maximum occupant and cargo weight.

Vehicle Normal Load on the Tire: Load on an individual tire that is determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight and driving by 2.

Vehicle Placard: A label permanently attached to a vehicle showing the original equipment tire size and recommended inflation pressure.

All season tires

Kia specifies all season tires on some models to provide good performance for use all year round, including snowy and icy road conditions. All season tires are identified by ALL SEASON and/or M+S (Mud and Snow) on the tire sidewall. Snow tires have better snow traction than all season tires and may be more appropriate in some areas.

Summer tires

Kia specifies summer tires on some models to provide superior performance on dry roads. Summer tire performance is substantially reduced in snow and ice. Summer tires do not have the tire traction rating M+S (Mud and Snow) on the tire side wall. if you plan to operate your vehicle in snowy or icy conditions, Kia recommends the use of snow tires or all season tires on all four wheels.

Snow tires

If you equip your vehicle with snow tires, they should be the same size and have the same load capacity as the original tires. Snow tires should be installed on all four wheels; otherwise, poor handling may result.

Snow tires should carry 4 psi (28 kPa) more air pressure than the pressure recommended for the standard tires on the tire label on the driver's side of the center pillar, or up to the maximum pressure shown on the tire sidewall, whichever is less.

Do not drive faster than 75 mph (120 km/h) when your vehicle is equipped with snow tires.

Tire chains

Tire chains, if necessary, should be installed on the front wheels.

Be sure that the chains are installed in accordance with the manufacturer's instructions.

To minimize tire and chain wear, do not continue to use tire chains when they are no longer needed.

- When driving on roads covered with snow or ice, drive at less than 20 mph (30 km/h).
- Use the SAE “S” class or wire chains.
- If you hear noise caused by chains contacting the body, retighten the chain to avoid contact with the vehicle body.
- To prevent body damage, retighten the chains after driving 0.3~0.6 miles (0.5~1.0 km).
- Do not use tire chains on vehicles equipped with aluminum wheels. In unavoidable circumstance, use a wire type chain.
- Use wire chains less than 0.59 inches (15 mm) to prevent damage to the chain’s connection.

Radial-ply tires

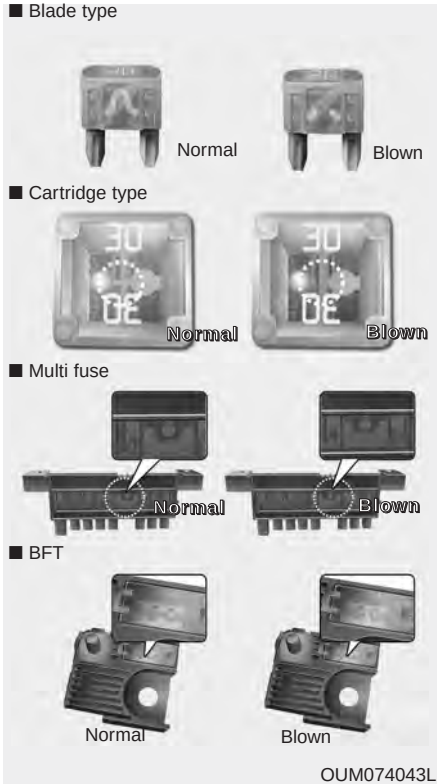
Radial-ply tires provide improved tread life, road hazard resistance and smoother high speed ride. The radial-ply tires used on this vehicle are of belted construction, and are selected to complement the ride and handling characteristics of your vehicle. Radial-ply tires have the same load carrying capacity, as bias-ply or bias belted tires of the same size, and use the same recommended inflation pressure. Mixing of radial-ply tires with bias-ply or bias belted tires is not recommended. Any combinations of radial-ply and bias-ply or bias belted tires when used on the same vehicle will seriously deteriorate vehicle handling. The best rule to follow is: Identical radial-ply tires should always be used as a set of four.

Longer wearing tires can be more susceptible to irregular tread wear. It is very important to follow the tire rotation interval shown in this chapter 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.

⚠ CAUTION

- ***It is not easy to recognize tire damage with your own eyes. But if there is the slightest hint of tire damage, even though you cannot see the tire damage with your own eyes, have the tire checked or replaced because the tire damage may cause air leakage from the tire.***
- ***If the tire is damaged by driving on a rough road, off road, pothole, manhole, or curb stone, it will not be covered by the warranty.***
- ***You can find out the tire information on the tire sidewall.***

FUSES



A vehicle's electrical system is protected from electrical overload damage by fuses.

This vehicle has 2 fuse panels, one located in the driver's side panel bolster, the other in the engine compartment near the battery.

If any of your vehicle's lights, accessories, or controls do not work, check the appropriate circuit fuse. If a fuse has blown, the element inside the fuse will melt.

If the electrical system does not work, first check the driver's side fuse panel.

Always replace a blown fuse with one of the same rating.

If the replacement fuse blows, this indicates an electrical problem. Avoid using the system involved and immediately consult an authorized Kia dealer.

Three kinds of fuses are used: blade type for lower amperage rating, cartridge type, and multi fuse for higher amperage ratings.

⚠ WARNING - Fuse replacement

- **Never replace a fuse with anything but another fuse of the same rating.**
- **A higher capacity fuse could cause damage and possibly a fire.**
- **Never install a wire or aluminum foil instead of the proper fuse - even as a temporary repair. It may cause extensive wiring damage and a possible fire.**
- **Do not arbitrarily modify or add-on electric wiring to the vehicle.**

⚠ CAUTION

Do not use a screwdriver or any other metal object to remove fuses because it may cause a short circuit and damage the system.

✻ NOTICE

- 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 AVN 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.

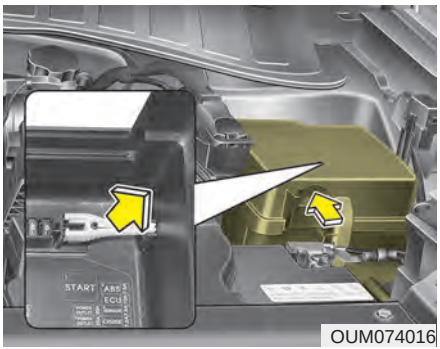
Inner panel fuse replacement



OUMA074015

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.



OUM074016

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 Kia dealer.

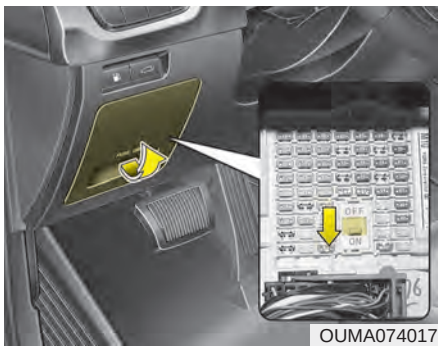
If you do not have a spare, use a fuse of the same rating from a circuit you may not need for operating the vehicle, such as the power outlet fuse.

If the head lamp, turn signal lamp, stop signal lamp, fog lamp, DRL, tail lamp, HMSL do not work and the fuses are OK, check the fuse panel in the engine compartment. If a fuse is blown, it must be replaced.

✻ NOTICE

If the headlamp, fog lamp, turn signal lamp, or tail lamp malfunction even without any problem to the lamps, have the vehicle checked by an authorized Kia dealer for assistance.

Fuse switch



OUMA074017

Always, put the fuse switch at the ON position.

If you move the switch to the OFF position, some items such as audio and digital clock must be reset and transmitter (or smart key) may not work properly. When the switch is Off, the caution indicator will be displayed on the instrument cluster.

Always place the fuse switch in the ON position while driving the vehicle.

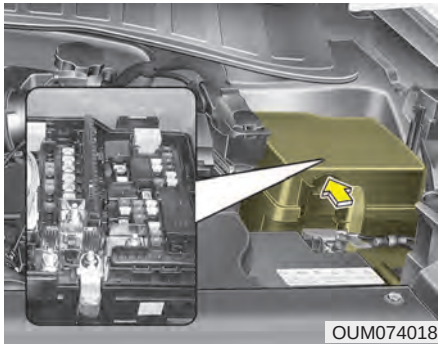
⚠ CAUTION - Fuse Panel Covers

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

- **Set all switches to ON before driving.**
- **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

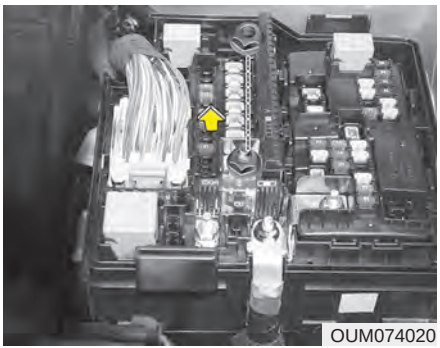


1. Turn the ignition switch and all other switches off.
2. Remove the fuse panel cover by pressing the tab and pulling the cover up. When the blade type fuse is disconnected, remove it by using the clip designed for changing fuses located in the engine compartment fuse box. Upon removal, securely insert 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 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


OUM074020

If the main fuse is blown, it must be removed as follows:

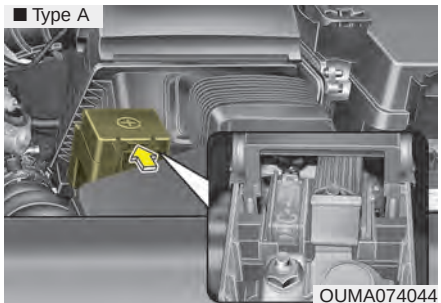
1. Turn off the engine.
2. Disconnect the negative battery cable.
3. Remove the nuts shown in the picture above.
4. Replace the fuse with a new one of the same rating.
5. Reinstall in the reverse order of removal.

✻ NOTICE

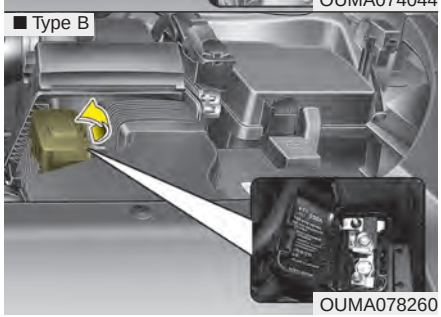
Do not disassemble nor assemble the multi fuse when it is secured with nuts and bolts. Incorrect or partial assembly torque may cause a fire. Have the vehicle checked by an authorized Kia dealer.

Main fuse

■ Type A


OUMA074044

■ Type B


OUMA078260

If the main fuse is blown, it must be removed as follows:

1. Turn off the engine.
2. Disconnect the negative battery cable.

3. Remove the nuts shown in the picture above.
4. Replace the fuse with a new one of the same rating.
5. Reinstall in the reverse order of removal.

✻ NOTICE

The electronic system may not function correctly even when the engine room 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 (BFT type), which is located inside the positive battery terminal (+) cap.
Since the main fuse is designed more intricately than other parts, have the vehicle checked by an authorized 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

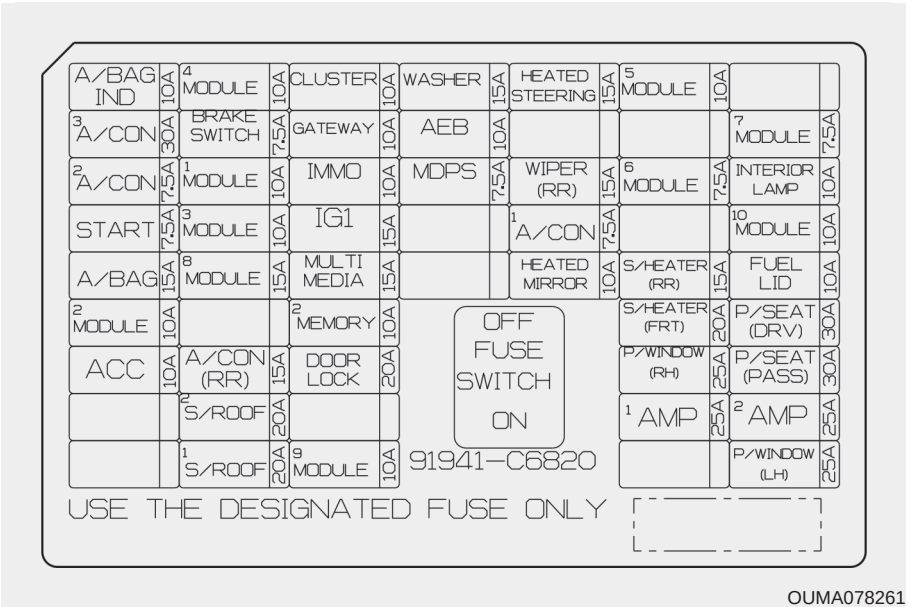


OUMA074021

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.



OUMA078261

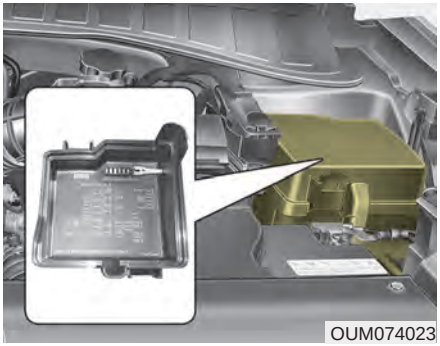
Description	Fuse rating	Protected component
AIR BAG IND.	10A	Cluster, A/C Control Module
A/CON 3	30A	Blower Motor
A/CON 2	7.5A	A/C Control Module (Auto)
START	7.5A	E/R Junction Block (Start Relay), Transmission Range Switch
AIR BAG	15A	SRS Control Module, Passenger Occupant Detection Sensor
MODULE 2	10A	Crash Pad Switch, Tire Pressure Monitoring Module, 4WD ECM, Lane Departure Warning Module, Console Switch, Rear Parking Assist Sensor LH/RH, Rear Parking Assist Buzzer, Rear Parking Assist Sensor LH/RH (Center), Blind Spot Detection Radar LH/RH, Electronic Parking Brake Module, Front Parking Assist Sensor LH/RH, Front Parking Assist Sensor LH/RH
ACC	10A	Power Outlet Relay, BCM, Audio, A/V & Navigation Head Unit, Surround View Monitoring Unit, Smart Key Control Module, AMP, USB Charger, Phone Wireless Charger
MODULE 4	10A	Head Lamp Leveling Device Actuator LH/RH, MUT
BRAKE SWITCH	7.5A	Smart Key Control Module, Stop Lamp Switch
MODULE 3	10A	A/C Control Module, A/V & Navigation Head Unit, Electro Chromic Mirror, Driver IMS Control Module, ATM Shift Lever Indicator, Rear Seat Warmer LH, Front Air Ventilation Control Module, Front Seat Warmer Control Module, Dynamic Bending Light Unit
MODULE 1	10A	BCM, Stop Lamp Switch, Driver/Passenger Doormodule, Sport Mode Switch
MODULE 8	15A	Smart Key Control Module, Immobilizer Module

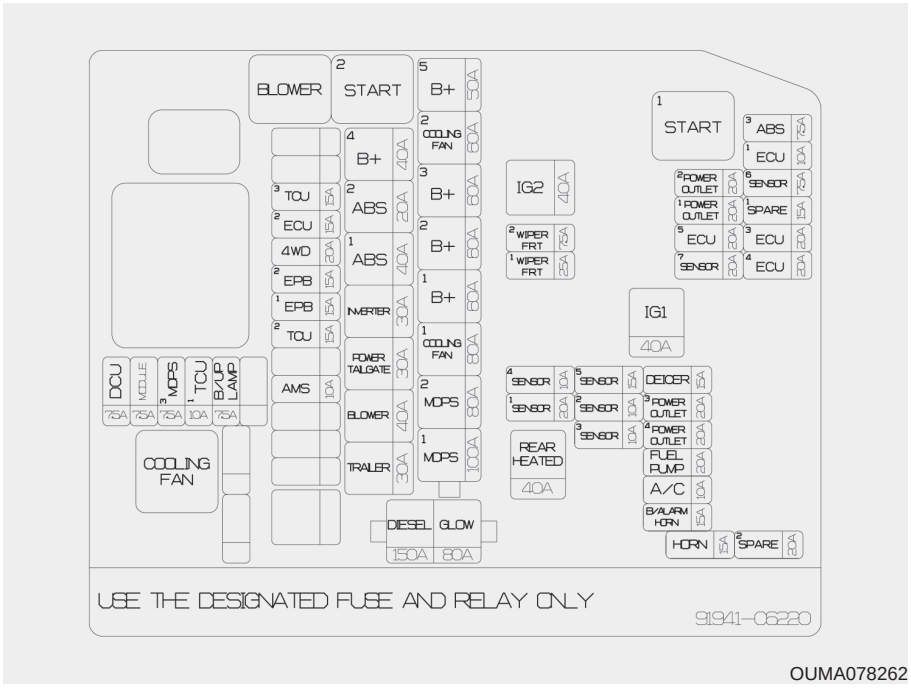
Description	Fuse rating	Protected component
A/CON (RR)	15A	ICM Relay Box (Rear Blower Motor Relay)
SUNROOF 2	20A	Sunroof Control Module (Roller)
SUNROOF 1	20A	Sunroof Control Module (Glass)
CLUSTER	10A	Instrument Cluster
GATEWAY	10A	Gateway (MCU IG1)
IMMO.	10A	Smart Key Control Module, Immobilizer Module
IG1	15A	E/R Junction Block (Fuse - MDPS 3, MODULE, TCU 1), PCB Block (Fuse - ABS 3, SENSOR 6, ECU 1)
MULTIMEDIA	15A	USB Charger, Audio, A/V & Navigation Head Unit
MEMORY 2	10A	Instrument Cluster, A/C Control Module, Rear A/C Control Module, Electro Chromic Mirror, Driver/Passenger Door Module, Passenger Power Window Switch, Driver IMS Control Module
DOOR LOCK	20A	Door Lock Relay, Door Unlock Relay, Tail Gate Relay, DRIVER/PASSENGER/RL/RR DOOR MODULE
MODULE 9	10A	Start/Stop Button Switch, Smart Key Control Module
WASHER	15A	BCM, Multifunction Switch
AEB	10A	FCA (Forward Collision-Avoidance Assist) Unit
MDPS	7.5A	MDPS UNIT (COLUMN TYPE), Steering Angle Sensor

Description	Fuse rating	Protected component
HEATED STEERING	15A	BCM
WIPER (RR)	15A	Rear Wiper Relay, Rear Wiper Motor
A/CON 1	7.5A	A/C Control Module, E/R Junction Block (Blower Relay), ICM Relay Box (Rear Blower Motor Relay)
HEATED MIRROR	10A	A/C Control Module, Driver/Passenger Power Outside Mirror
MODULE 5	10A	BCM, Smart Key Control Module
MODULE 6	7.5A	Surround View Monitoring Unit, Rear A/C Control Module, Rear Seat Warmer LH, Front Air Ventilation Control Module, Front Seat Warmer Control Module, AC Inverter Module, Crash Pad Switch
S/HEATER (RR)	15A	Rear Seat Warmer LH
S/HEATER (FRT)	20A	Front Air Ventilation Control Module, Front Seat Warmer Control Module
P/WINDOW (RH)	25A	Rear Safety Power Window RH, Rear Power Window Switch RH, Passenger Safety Power Window Module, Passenger Door Module, Passenger Power Window Switch
AMP 1	25A	AMP
MODULE 7	7.5A	Gateway (MCU B+), Key Solenoid, Tire Pressure Monitoring Module, MUT
INTERIOR LAMP	10A	Glove Box Lamp, Ignition Key Ill. & Door Warning Switch, Driver Foot Lamp, Vanity Lamp LH/RH Switch, Cargo Lamp, Center Room Lamp, Overhead Console Lamp, Rear Personal Lamp LH/RH
FUEL LID	10A	Fuel Filler & Tail Gate Switch

Description	Fuse rating	Protected component
P/SEAT (DRV)	30A	Driver IMS Control Module, Driver Seat Manual Switch
P/SEAT (PASS)	30A	Passenger Seat Manual Switch
AMP 2	25A	AMP
P/WINDOW (LH)	25A	Rear Safety Power Window LH, Rear Power Window Switch LH, Driver Safety Power Window Module, Driver Door Module
MODULE 10	10A	BCM, RAIN SENSOR

Engine compartment fuse panel


OUM074023



OUMA078262

Description		Fuse rating	Protected component
MULTI FUSE	MDPS 1	100A	MDPS Unit (Rack Type)
	MDPS 2	80A	MDPS Unit (Column Type)
	COOLING FAN 1	80A	Cooling Fan 1 Relay
	B+1	60A	IGPM (Fuse - S/HEATER (RR), P/SEAT (DRV), P/SEAT (PASS), P/WINDOW (LH))
	B+2	60A	IGPM (Fuse - S/HEATER (FRT), P/WINDOW (RH), FULE LID, AMP 1, AMP 2, MUDULE 7, MODULE 10)
	B+3	60A	IGPM (IPS 1, Fuse - Leak Current Autocut Device Fuse - MULTIMEDIA, MEMORY 2), INTERIOR LAMP
	B+5	50A	IGPM (IPS 0/IPS 1/IPS 2/IPS 3/IPS 4/IPS 5/IPS 6/IPS 7/IPS 8, Fuse - S/ROOF 1)
FUSE	B+4	40A	IGPM (Fuse - DOOR LOCK, MUDULE 8, MODULE 9, BRAKE SWITCH, A/CON (RR), S/ROOF 2)
	ABS 2	20A	ESC Module
	ABS 1	40A	ESC Module, Multipurpose Check Connector
	INVERTER	30A	AC Inverter Module
	POWER TAIL GATE	30A	Power Tail Gate Module
	TRAILER	30A	Trailer Power Outlet
	BLOWER	40A	Blower Relay

Description		Fuse rating	Protected component
FUSE	AMS	10A	Battery Sensor
	TCU 2	15A	TCU
	EPB 1	15A	Electronic Parking Brake Module
	EPB 2	15A	Electronic Parking Brake Module
	4WD	20A	4WD ECM
	ECU 2	15A	PCM
	TCU 3	15A	TCU
	MDPS 3	7.5A	MDPS Unit (Rack Type)
	TCU 1	10A	Transmission Range Switch
	B/UP LAMP	7.5A	IGPM(B/UP LAMP SIGNAL INPUT)

Description	Fuse rating	Protected component
ABS 3	7.5A	ESC Control Module, Multipurpose Check Connector
ECU 1	10A	PCM
IG 2	40A	RLY. 4 (Start Relay), PDM (IG2) Relay, Ignition Switch
POWER OUTLET 1	20A	Front Power Outlet & Cigarette Lighter
SENSOR 6	7.5A	GCU
POWER OUTLET 2	20A	Front Power Outlet
MODULE	7.5A	Smart Cruise Control Radar
ECU 4	20A	[Theta II 2.4L Engine] PCM (E-CVVT Relay)
WIPER 1	25A	Wiper Low Relay
DEICER	15A	Front Deicer Relay
ECU 5	20A	[Theta II 2.4L Engine] PCM (E-CVVT Relay)
IG 1	40A	PDM (IG1) Relay, PDM (ACC) Relay, Ignition Switch
SENSOR 4	10A	[Theta II 2.4L Engine] Oxygen Sensor (Up/Down) [Lambda II 3.3L Engine] PCM, Oxygen Sensor #1/#2/#3/#4
SENSOR 5	15A	[Theta II 2.4L Engine] PCM

Description	Fuse rating	Protected component
WIPER 2	7.5A	Wiper Parking Signal
POWER OUTLET 3	20A	Rear Power Outlet
SENSOR 1	20A	[Theta II 2.4L Engine] Ignition Coil #1/#2/#3/#4 [Lambda II 3.3L Engine] Ignition Coil #1/#2/#3/#4/#5/#6, Condecser #1/#2
SENSOR 3	10A	[Theta II 2.4L Engine] Fuel Pump Relay [Lambda II 3.3L Engine] Fuel Pump Relay, PCM
POWER OUTLET 4	20A	Luggage Power Outlet
REAR HEATED	40A	Rear Defogger Relay
SENSOR 2	10A	[Theta II 2.4L Engine] E/R Junction Block (Cooling Fan 1 Relay), Oil Control Valve (Exhaust), Purge Control Solenoid Valve, Canister Close Valve, Variable Intake Solenoid Valve [Lambda II 3.3L Engine] E/R Junction Block (Cooling Fan 1 Relay), Variable Intake Solenoid Valve #1/#2, Purge Control Solenoid Valve, Oil Control Valve #1/#2/#3/#4 (Intake/Exhaust), PCM, Canister close valve, A/CON Compressor Relay
FUEL PUMP	20A	Fuel Pump Relay
HORN	15A	Horn Relay
B/ALARM HORN	15A	Burglar Alarm Horn Relay
A/C	10A	A/CON Compressor
SPARE 1	15A	DUMMY
SENSOR 7	20A	NOx SENSOR

Relay NO.	Relay Name	Type
E31	Blower Relay	MICRO
E32	START #2 Relay	MICRO
E33	Cooling Fan #1 Relay	MINI

LIGHT BULBS

Bulb replacement precaution

Please keep extra bulbs on hand with appropriate wattage ratings in case of emergencies.

Refer to “Bulb Wattage” in chapter 8.

When changing lamps, first turn off the engine at a safe place, firmly apply the parking brake and detach the battery’s negative (-) terminal.

⚠ WARNING - Working on the lights

Prior to working on the light, firmly apply the parking brake, ensure that the ignition switch is turned to the LOCK position and turn off the lights to avoid sudden movement of the vehicle and burning your fingers or receiving an electric shock.

Use only bulbs of the specified wattage.

⚠ CAUTION - Light replacement

Be sure to replace the burned-out bulb with one of the same wattage rating. Otherwise, it may cause damage to the fuse or electric wiring system.

⚠ 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 Kia dealer.

- **Lamp part malfunction due to electrical control system stabilization**

A normally functioning lamp may flicker momentarily. This momentary occurrence is due to stabilization function of the vehicle's electrical on control system. If the lamp soon returns to normal, the vehicle does not require service.

However, if the lamp goes out after the momentary flickering, or the flickering continues, we recommend the system be serviced by an authorized Kia dealer.

✻ NOTICE

- **If the light bulb or lamp connector is removed 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 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 Kia dealer.

✻ NOTICE

After driving in heavy rain or washing, headlamp and taillamp lenses could appear frosty. This condition is caused by the temperature difference between the lamp inside and outside. This is similar to the condensation on your windows inside your vehicle during the rain and doesn't indicate a problem with your vehicle. If the water leaks into the lamp bulb circuitry, we recommend that you have the vehicle checked by an authorized Kia dealer.

If you don't have the necessary tools, the correct bulbs and the expertise, consult an authorized Kia dealer. In many cases, it is difficult to replace vehicle light bulbs because other parts of the vehicle must be removed before you can get to the bulb. This is especially true if you have to remove the headlamp assembly to get to the bulb(s).

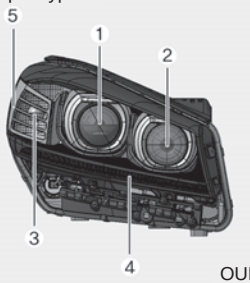
Removing/installing the headlamp assembly can result in damage to the vehicle.

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.

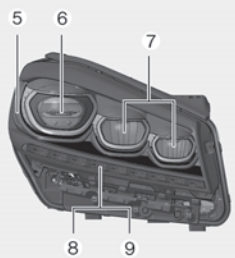
Light bulb position (Front)

■ Head lamp – Type A



OUMA078217

■ Head lamp – Type B



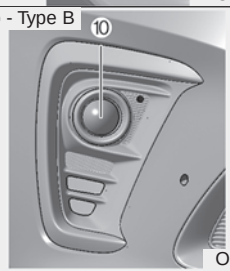
OUMA078218

■ Fog lamp - Type A



OUMA078219

■ Fog lamp - Type B



OUMA078263

■ Fog lamp - Type C

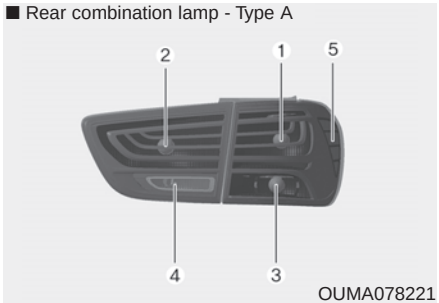


OUMA078264

(1) Headlamp (Low) (Bulb type)
(2) Headlamp (High) (Bulb type)
(3) Front turn signal lamp (Bulb type)
(4) Position lamp (LED type)
(5) Side marker (LED type)
(6) Headlamp (Low/High) (LED type)
(7) Headlamp (Low Assist) (LED type)
(8) Front turn signal lamp (LED type)
(9) Position lamp / Day time running lamp (LED type)
(10) Front fog lamp (Bulb type)
(11) Front fog lamp (LED type)

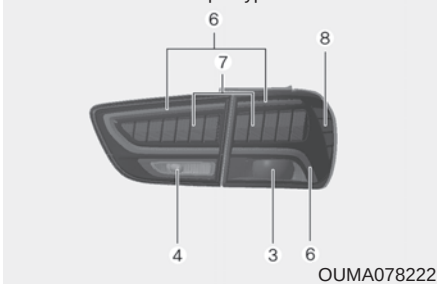
Light bulb position (Rear)

■ Rear combination lamp - Type A



OUMA078221

■ Rear combination lamp - Type B



OUMA078222

■ License plate lamp



OUMA078265

■ High mounted stop lamp



OUMA078225

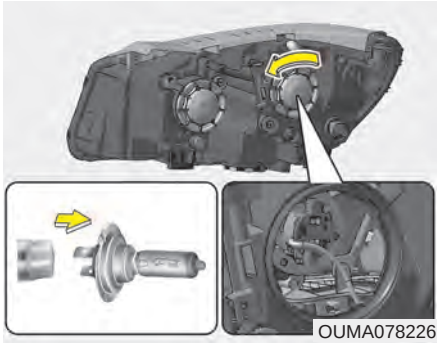
(1) Stop and tail lamp (Bulb type)
(2) Tail lamp (Bulb type)
(3) Rear turn signal lamp (Bulb type)
(4) Back Up lamp (Bulb type)
(5) Side marker (Bulb type)
(6) Tail lamp (LED type)
(7) Stop and tail lamp (LED type)
(8) Side marker (LED type)
(9) License plate lamp (Bulb type)
(10) High mounted stop lamp (LED type)

Light bulb position (Side)



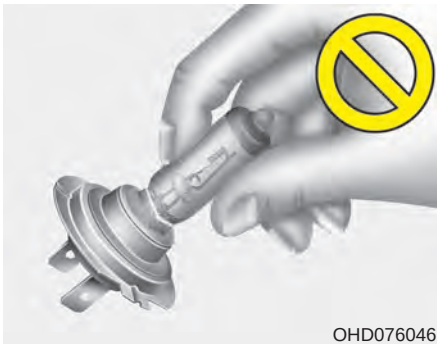
(1) Side repeater lamp (LED type)

Headlamp (Low beam) bulb replacement (Headlamp Type A)



1. Open the hood.
2. Remove the headlamp bulb cover by turning it counterclockwise.
3. Remove the bulb-socket from the headlamp assembly by turning the bulb-socket counterclockwise until the tabs on the bulb-socket align with the slots on the headlamp assembly.
4. Remove the bulb from bulb-socket by pulling it out.
5. Insert a new bulb by inserting it into the bulb-socket.
6. Install the bulb-socket in the headlamp assembly by aligning the tabs on the bulb-socket with the slots in the headlamp assembly. Push the bulb-socket into the headlamp assembly and turn the bulb-socket clockwise.
7. Install the headlamp bulb cover by turning it clockwise.

Headlamp bulb

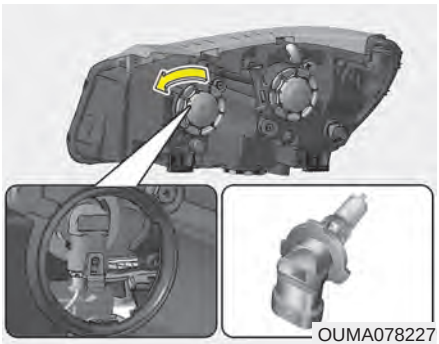

OHD076046

⚠ WARNING - Halogen bulbs

- **Halogen bulbs contain pressurized gas that will produce flying pieces of glass if broken.**
- **Always handle them carefully, and avoid scratches and abrasions. If the bulbs are lit, avoid contact with liquids.**
- Never touch the glass with bare hands. Residual oil may cause the bulb to overheat and burst when lit.

  A bulb should be operated only when installed in a headlight.
- If a bulb becomes damaged or cracked, replace it immediately and carefully dispose of it.
- Wear eye protection when changing a bulb. Allow the bulb to cool down before handling it.

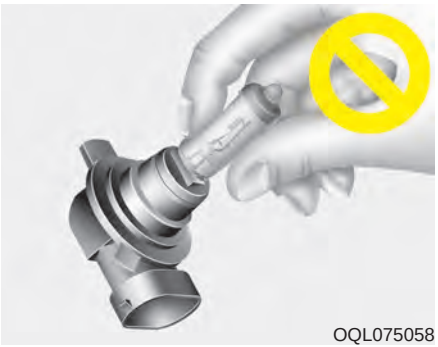
Headlamp (High beam) bulb replacement (Headlamp Type A)


OUMA078227

1. Open the hood.
2. Remove the headlamp bulb cover by turning it counterclockwise.
3. Disconnect the headlamp bulb socket-connector.
4. Remove the bulb-socket from the headlamp assembly by turning the bulb-socket counterclockwise until the tabs on the bulb-socket align with the slots on the headlamp assembly.

5. Install a new bulb-socket assembly in the headlamp assembly by aligning the tabs on the bulb-socket with the slots in the headlamp assembly. Push the bulb-socket into the headlamp assembly and turn the bulb-socket clockwise.
6. Install the headlamp bulb cover by turning it clockwise.

Headlamp bulb



OQL075058

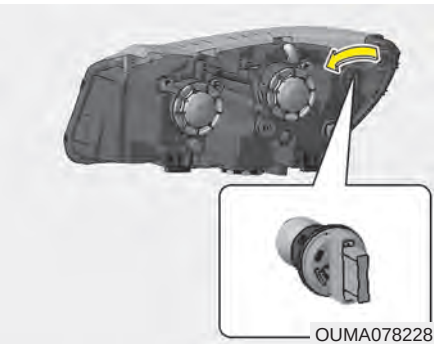
⚠ WARNING - Halogen bulbs

- **Halogen bulbs contain pressurized gas that will produce flying pieces of glass if broken.**
- **Always handle them carefully, and avoid scratches and abrasions. If the bulbs are lit, avoid contact with liquids.**

- Never touch the glass with bare hands. Residual oil may cause the bulb to overheat and burst when lit.

  A bulb should be operated only when installed in a headlight.
- If a bulb becomes damaged or cracked, replace it immediately and carefully dispose of it.
- Wear eye protection when changing a bulb. Allow the bulb to cool down before handling it.

Front turn signal lamp bulb replacement (Headlamp Type A)


OUMA078228

1. Open the hood.
2. Remove the bulb-socket from the headlamp assembly by turning the bulb-socket counterclockwise until the tabs on the bulb-socket align with the slots on the headlamp assembly.
3. Remove the bulb from the bulb-socket by pressing it in and rotating it counterclockwise until the tabs on the bulb align with the slots in the bulb-socket. Pull the bulb out of the bulb-socket.
4. Insert a new bulb by inserting it into the bulb-socket and rotating it until it locks into place.
5. Install the socket in the headlamp assembly by aligning the tabs on the bulb-socket with the slots in the assembly. Push the bulb-socket into the headlamp assembly and turn the socket clockwise.

Position lamp (LED type) replacement (Headlamp Type A)



OUM078229L

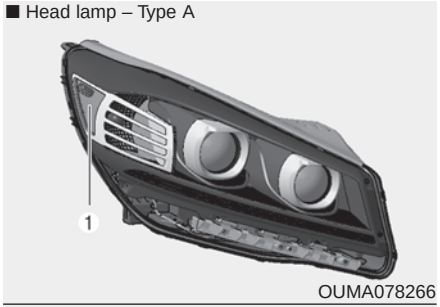
If the position lamp (LED) (1) does not operate, have the vehicle checked by an authorized Kia dealer.

The LED lamps cannot be replaced as a single unit because it is an integrated unit. The LED lamps has to be replaced with the unit.

A skilled technician should check or repair the position lamp (LED), for it may damage related parts of the vehicle.

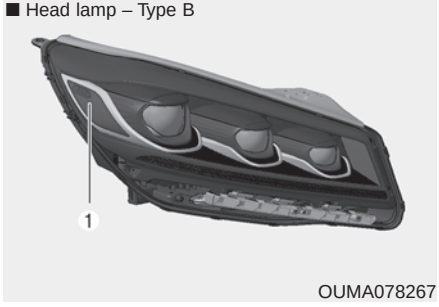
Side marker (front) (LED type) bulb replacement

■ Head lamp – Type A



OUMA078266

■ Head lamp – Type B



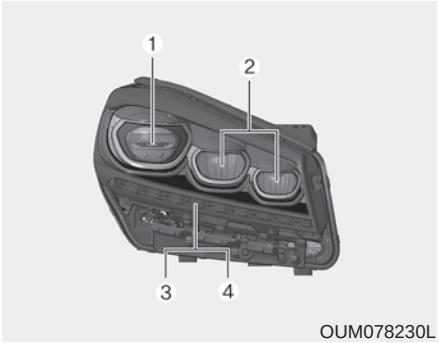
OUMA078267

If the side marker (LED) (1) does not operate, have the vehicle checked by an authorized Kia dealer.

The LED lamps cannot be replaced as a single unit because it is an integrated unit. The LED lamps has to be replaced with the unit.

A skilled technician should check or repair the side marker (LED), for it may damage related parts of the vehicle.

Headlamp (LED type) replacement (Headlamp Type B)



OUM078230L

If the Low/High beam lamp(1,2), Front turn signal lamp(3), Day time running lamp/Position lamp(4) does not operate, have the vehicle checked by an authorized Kia dealer.

The LED lamps cannot be replaced as a single unit because it is an integrated unit. The LED lamps 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.

Side repeater lamp (LED type) bulb replacement



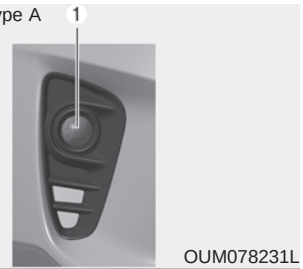
If the side repeater lamp (LED) (1), does not operate, have the vehicle checked by an authorized Kia dealer.

The LED lamps cannot be replaced as a single unit because it is an integrated unit. The LED lamps has to be replaced with the unit.

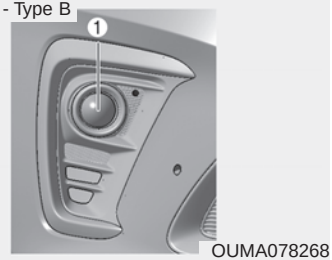
A skilled technician should check or repair the side repeater lamp (LED), for it may damage related parts of the vehicle.

Front fog lamp bulb replacement

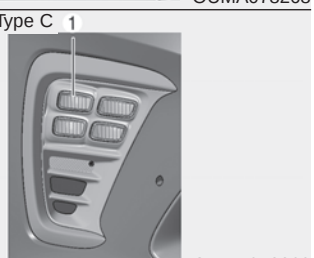
■ Fog lamp - Type A



■ Fog lamp - Type B



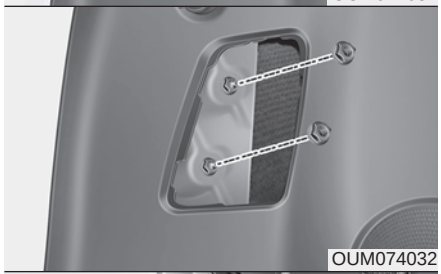
■ Fog lamp - Type C



If the front fog lamp (1) does not operate, have the vehicle checked by an authorized Kia dealer.

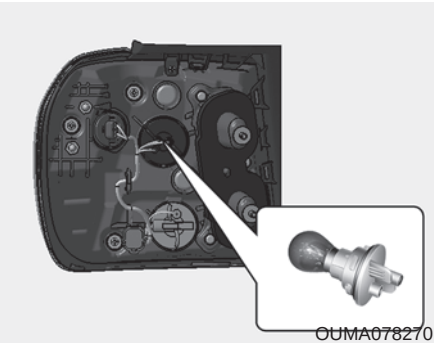
Stop and tail lamp (Bulb type) bulb replacement


OUM074031


OUM074032


OUM078033L

1. Open the liftgate.
2. Open the service cover.
3. Remove the nuts from the vehicle.
4. Remove the rear combination lamp assembly from the body of the vehicle.
5. Disconnect the rear combination lamp connector.

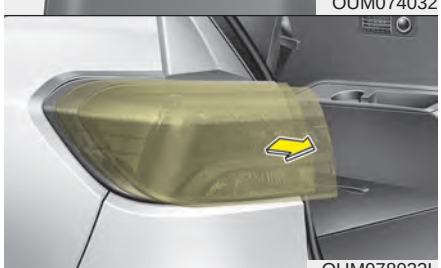

OUMA078270

6. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
7. Remove the bulb from the socket by pressing it in and rotating it counterclockwise until the tabs on the bulb align with the slots in the socket. Pull the bulb out of the socket.
8. Insert a new bulb by inserting it into the socket and rotating it until it locks into place.
9. Install the socket in the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.
10. Install the rear combination lamp assembly to the body of the vehicle.
11. Install the service cover.

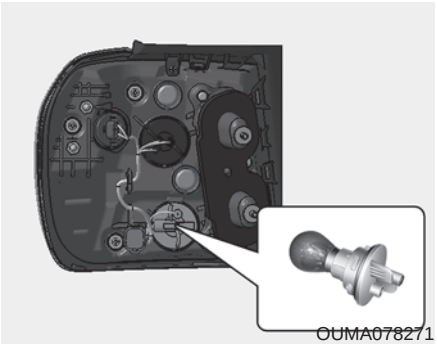
Rear turn signal lamp (Bulb type) bulb replacement


OUM074031


OUM074032


OUM078033L

1. Open the liftgate.
2. Open the service cover.
3. Remove the nuts from the vehicle.
4. Remove the rear combination lamp assembly from the body of the vehicle.
5. Disconnect the rear combination lamp connector.

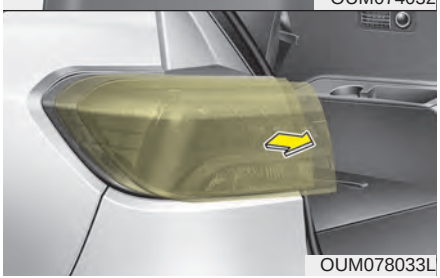

OUMA078271

6. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
7. Remove the bulb from the socket by pressing it in and rotating it counterclockwise until the tabs on the bulb align with the slots in the socket. Pull the bulb out of the socket.
8. Insert a new bulb by inserting it into the socket and rotating it until it locks into place.
9. Install the socket in the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.
10. Install the rear combination lamp assembly to the body of the vehicle.
11. Install the service cover.

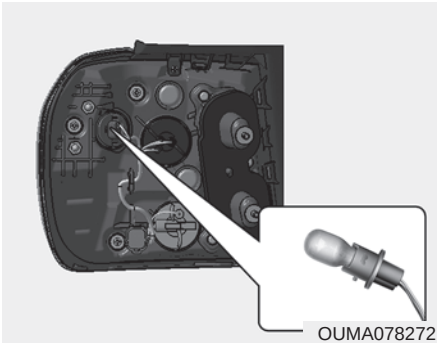
Side marker (rear) (Bulb type) bulb replacement


OUM074031


OUM074032


OUM078033L

1. Open the liftgate.
2. Open the service cover.
3. Remove the nuts from the vehicle.
4. Remove the rear combination lamp assembly from the body of the vehicle.
5. Disconnect the rear combination lamp connector.


OUMA078272

6. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
7. Remove the bulb from bulb-socket by pulling it out.
8. Insert a new bulb by inserting it into the bulb-socket.
9. Install the socket in the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.

10. Install the rear combination lamp assembly to the body of the vehicle.
11. Install the service cover.

Side marker (rear) (LED type) bulb replacement

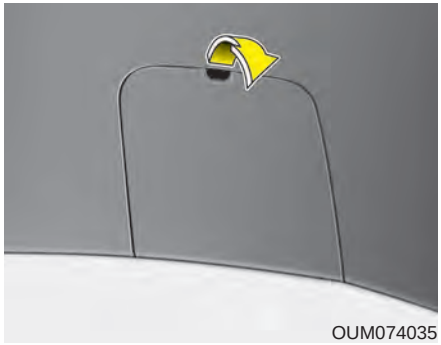


If the side marker (LED) (1) does not operate, have the vehicle checked by an authorized Kia dealer.

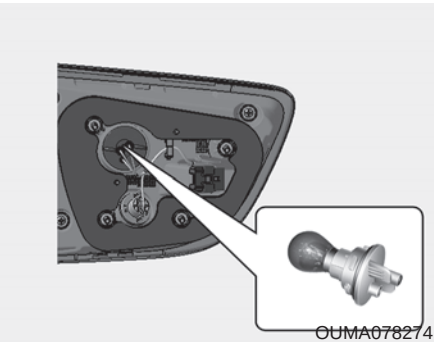
The LED lamps cannot be replaced as a single unit because it is an integrated unit. The LED lamps has to be replaced with the unit.

A skilled technician should check or repair the side marker (LED), for it may damage related parts of the vehicle.

Tail lamp (inside) (Bulb type) bulb replacement

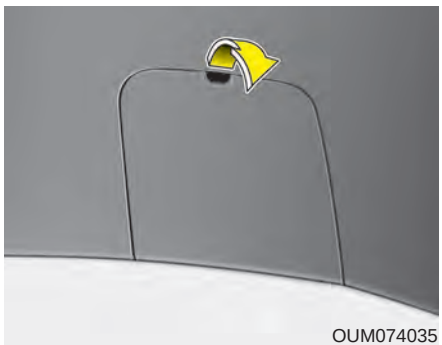


1. Open the liftgate.
2. Remove the service cover.

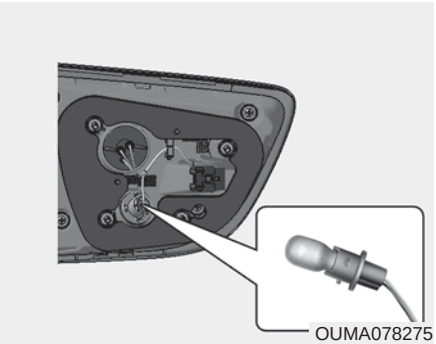

OUMA078274

3. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
4. Remove the bulb from the socket by pressing it in and rotating it counterclockwise until the tabs on the bulb align with the slots in the socket. Pull the bulb out of the socket.
5. Insert a new bulb by inserting it into the socket and rotating it until it locks into place.
6. Install the socket in the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.
7. Install the service cover.

Back up lamp (Bulb type) bulb replacement

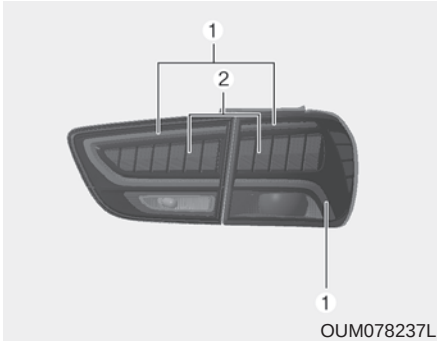

OUM074035

1. Open the liftgate.
2. Remove the service cover.


OUMA078275

3. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
4. Remove the bulb from bulb-socket by pulling it out.
5. Insert a new bulb by inserting it into the bulb-socket.
6. Install the socket in the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.
7. Install the service cover.

Stop and tail lamp (LED type) bulb replacement



OUM078237L

If the stop and tail lamp (LED) (1,2), does not operate, have the vehicle checked by an authorized Kia dealer.

The LED lamps cannot be replaced as a single unit because it is an integrated unit. The LED lamps has to be replaced with the unit.

A skilled technician should check or repair the stop and tail lamp (LED), for it may damage related parts of the vehicle.

High mounted stop lamp (LED type) bulb replacement



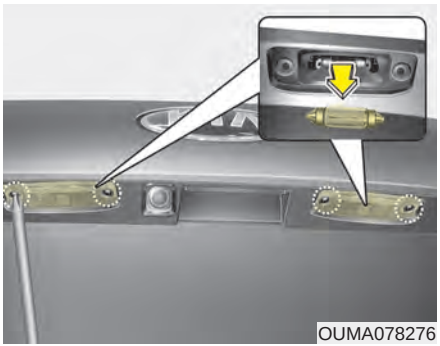
OUM078239L

If the high mounted stop lamp (LED) (1) does not operate, have the vehicle checked by an authorized Kia dealer.

The LED lamps cannot be replaced as a single unit because it is an integrated unit. The LED lamps has to be replaced with the unit.

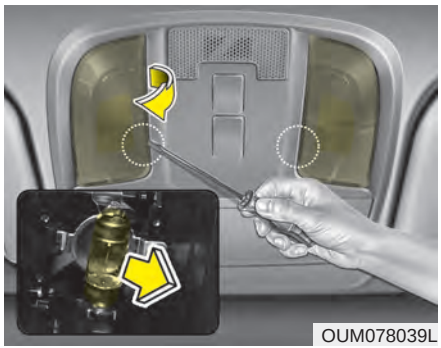
A skilled technician should check or repair the high mounted stop lamp (LED), for it may damage related parts of the vehicle.

License plate lamp bulb replacement



1. Remove the lamp cover by using a screwdriver.
2. Remove the bulb from bulb-socket by pulling it out.
3. Insert a new bulb by inserting it into the bulb-socket.
4. Install the lamp cover to the lamp housing.

Map lamp (Bulb type) bulb replacement



⚠ WARNING

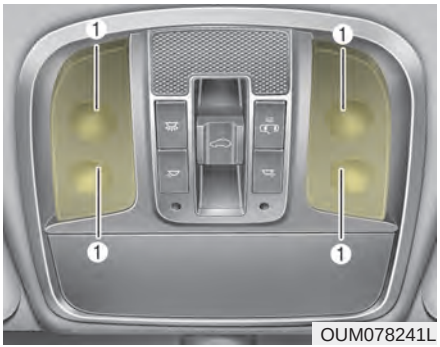
Prior to working on the Interior lamps, ensure that the "OFF" button is depressed to avoid burning your fingers or receiving an electric shock.

1. Using a flat-blade screwdriver, gently pry the lens cover from lamp housing.
2. Remove the bulb by pulling it straight out.
3. Install a new bulb in the socket.
4. Align the lens cover tabs with the lamp housing notches and snap the lens into place.

⚠ CAUTION

Be careful not to dirty or damage the lens, lens tab, and plastic housings.

Map lamp (LED type) bulb replacement



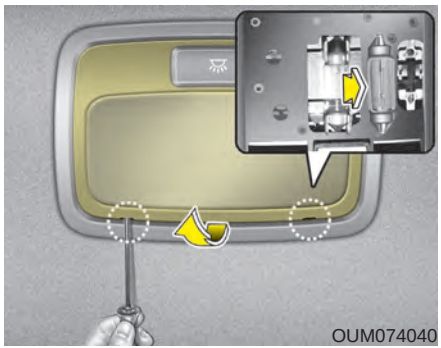
OUM078241L

If the map lamp (LED) (1), does not operate, have the vehicle checked by an authorized Kia dealer.

The LED lamps cannot be replaced as a single unit because it is an integrated unit. The LED lamps has to be replaced with the unit.

A skilled technician should check or repair the map lamp (LED), for it may damage related parts of the vehicle.

Room lamp bulb replacement


OUM074040

⚠ WARNING

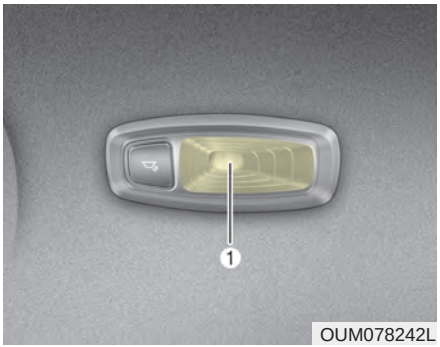
Prior to working on the Interior lamps, ensure that the "OFF" button is depressed to avoid burning your fingers or receiving an electric shock.

1. Using a flat-blade screwdriver, gently pry the lens cover from lamp housing.
2. Remove the bulb by pulling it straight out.
3. Install a new bulb in the socket.
4. Align the lens cover tabs with the lamp housing notches and snap the lens into place.

⚠ CAUTION

Be careful not to dirty or damage the lens, lens tab, and plastic housings.

Personal lamp (LED type) bulb replacement

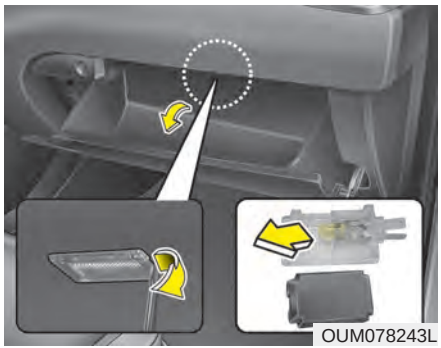


If the personal lamp (LED) (1), does not operate, have the vehicle checked by an authorized Kia dealer.

The LED lamps cannot be replaced as a single unit because it is an integrated unit. The LED lamps has to be replaced with the unit.

A skilled technician should check or repair the personal lamp (LED), for it may damage related parts of the vehicle.

Glove box lamp replacement

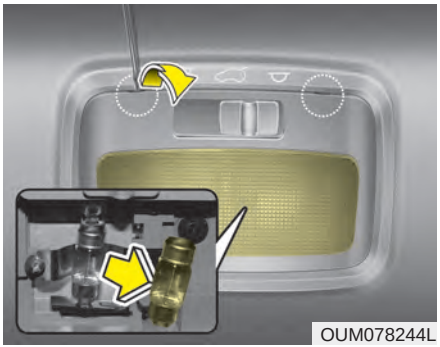


1. Using a flat-blade screwdriver, gently pry the lamp assembly from interior.
2. Remove the cover from the lamp assembly.
3. Remove the bulb by pulling it straight out.
4. Install a new bulb in the socket.
5. Install the cover to the lamp assembly.
6. Install the lamp assembly to interior.

⚠ CAUTION

Be careful not to dirty or damage the lens, lens tab, and plastic housings.

Luggage lamp (Bulb type) bulb replacement


OUM078244L

⚠ WARNING

Prior to working on the Interior lamps, ensure that the "OFF" button is depressed to avoid burning your fingers or receiving an electric shock.

1. Using a flat-blade screwdriver, gently pry the lens cover from lamp housing.
2. Remove the bulb by pulling it straight out.
3. Install a new bulb in the socket.
4. Align the lens cover tabs with the lamp housing notches and snap the lens into place.

⚠ CAUTION

Be careful not to dirty or damage the lens, lens tab, and plastic housings.

Luggage lamp (LED type) bulb replacement



OUMA078277

If the luggage lamp (LED) (1) does not operate, have the vehicle checked by an authorized Kia dealer.

The LED lamps cannot be replaced as a single unit because it is an integrated unit. The LED lamps has to be replaced with the unit.

A skilled technician should check or repair the luggage lamp (LED), for it may damage related parts of the vehicle.

Vanity mirror lamp (Bulb type) bulb replacement


OXM079041

⚠ WARNING

Prior to working on the Interior lamps, ensure that the "OFF" button is depressed to avoid burning your fingers or receiving an electric shock.

1. Using a flat-blade screwdriver, gently pry the lamp assembly from interior.
2. Remove the bulb by pulling it straight out.
3. Install a new bulb in the socket.
4. Install the lamp assembly to interior.

⚠ CAUTION

Be careful not to dirty or damage the lens, lens tab, and plastic housings.

Vanity mirror lamp (LED type) bulb replacement



OUMA078278

If the vanity mirror lamp (LED) (1) does not operate, have the vehicle checked by an authorized Kia dealer.

The LED lamps cannot be replaced as a single unit because it is an integrated unit. The LED lamps 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.

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.

⚠ CAUTION - Headlight Lens

To prevent damage, do not clean headlight lens with chemical solvents or strong detergents.

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.

After washing the vehicle, test the brakes while driving slowly to see if they have been affected by water. If braking performance is impaired, dry the brakes by applying them lightly while maintaining a slow forward speed.

High-pressure washing

- When using high-pressure washers, make sure to maintain sufficient distance from the vehicle.

  Insufficient clearance or excessive pressure can lead to component damage or water penetration.
- Do not spray the camera, sensors or its surrounding area directly with a high pressure washer. Shock applied from high pressure water may cause the device to not operate normally.
- Do not bring the nozzle tip close to boots (rubber or plastic covers) or connectors as they may be damaged if they come into contact with high pressure water.


OUM078249L

⚠ 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.***

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.

Taking care of leather seats

- 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

- Remove all contaminates 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.

Cleaning the upholstery and interior trim

Vinyl

Remove dust and loose dirt from vinyl with a whisk broom or vacuum cleaner. Clean vinyl surfaces with a vinyl cleaner.

Fabric

Remove dust and loose dirt from fabric with a whisk broom or vacuum cleaner. Clean with a mild soap solution recommended for upholstery or carpets. Remove fresh spots immediately with a fabric spot cleaner. If fresh spots do not receive immediate attention, the fabric can be stained and its color can be affected. Also, its fire-resistant properties can be reduced if the material is not properly maintained.

Using anything but recommended cleaners and procedures may affect the fabric's appearance and fire-resistant properties.

Cleaning the lap/shoulder belt webbing

Clean the belt webbing with any mild soap solution recommended for cleaning upholstery or carpet. Follow the instructions provided with the soap. Do not bleach or re-dye the webbing because this may weaken it.

Cleaning the interior window glass

If the interior glass surfaces of the vehicle become fogged (that is, covered with an oily, greasy or waxy film), they should be cleaned with a glass cleaner. Follow the directions on the glass cleaner container.

⚠ CAUTION - Rear window

Do not scrape or scratch the inside of the rear window. This may result in damage of the rear window defroster grid.

EMISSION CONTROL SYSTEM

The emission control system of your vehicle is covered by a written limited warranty. Please see the warranty information contained in the Warranty & Maintenance booklet in your vehicle.

Your vehicle is equipped with an emission control system to meet all applicable emission regulations.

There are three emission control systems, as follows.

(1) Crankcase emission control system
(2) Evaporative emission control system
(3) Exhaust emission control system

In order to assure the proper function of the emission control systems, it is recommended that you have your vehicle inspected and maintained by an authorized Kia dealer in accordance with the maintenance schedule in this manual.

Caution for the Inspection and Maintenance Test (With Electronic Stability Control (ESC) system)

- **To prevent the vehicle from misfiring during dynamometer testing, turn the Electronic Stability Control (ESC) system off by pressing the ESC switch.**
- **After dynamometer testing is completed, turn the ESC system back on by pressing the ESC switch again.**

1. Crankcase emission control system

The positive crankcase ventilation system is employed to prevent air pollution caused by blow-by gases being emitted from the crankcase. This system supplies fresh filtered air to the crankcase through the air intake hose. Inside the crankcase, the fresh air mixes with blow-by gases, which then pass through the PCV valve into the induction system.

2. Evaporative emission control (including ORVR: Onboard Refueling Vapor Recovery) system

The Evaporative Emission Control System is designed to prevent fuel vapors from escaping into the atmosphere.

(The ORVR system is designed to allow the vapors from the fuel tank to be loaded into a canister while refueling at the gas station, preventing the escape of fuel vapors into the atmosphere.)

Canister

Fuel vapors generated inside the fuel tank are absorbed and stored in the onboard canister. When the engine is running, the fuel vapors absorbed in the canister are drawn into the surge tank through the purge control solenoid valve.

Purge Control Solenoid Valve (PCSV)

The purge control solenoid valve is controlled by the Engine Control Module (ECM); when the engine coolant temperature is low during idling, the PCSV closes so that evaporated fuel is not taken into the engine. After the engine warms up during ordinary driving, the PCSV opens to introduce evaporated fuel to the engine.

3. Exhaust emission control system

The Exhaust Emission Control System is a highly effective system which controls exhaust emissions while maintaining good vehicle performance.

Vehicle modifications

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

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

- If you use unauthorized electronic devices, it may cause the vehicle to operate abnormally, wire damage, battery discharge and fire. For your safety, do not use unauthorized electronic devices.

Engine exhaust gas precautions (carbon monoxide)

- Carbon monoxide can be present with other exhaust fumes. Therefore, if you smell exhaust fumes of any kind inside your vehicle, have it inspected and repaired immediately. If you ever suspect exhaust fumes are coming into your vehicle, drive it only with all the windows fully open. Have your vehicle checked and repaired immediately.

⚠ WARNING - Exhaust

Engine exhaust gases contain carbon monoxide (CO). Though colorless and odorless, it is dangerous and could be lethal if inhaled. Follow the instructions on this page to avoid CO poisoning.

- Do not operate the engine in confined or closed areas (such as garages) any more than what is necessary to move the vehicle in or out of the area.
- When the vehicle is stopped in an open area for more than a short time with the engine running, adjust the ventilation system (as needed) to draw outside air into the vehicle.
- Never sit in a parked or stopped vehicle for any extended time with the engine running.
- When the engine stalls or fails to start, excessive attempts to restart the engine may cause damage to the emission control system.

Operating precautions for catalytic converters (if equipped)

⚠ WARNING - Catalytic converter

Keep away from the catalytic converter and exhaust system while the vehicle is running or immediately thereafter. The exhaust and catalytic systems are very hot and may burn you.

⚠ WARNING - Fire

- **Do not park, idle or drive the vehicle over or near flammable objects, such as grass, vegetation, paper, leaves, etc. A hot exhaust system can ignite flammable items under your vehicle.**
- **Also, do not remove the heat sink around the exhaust system, do not seal the bottom of the vehicle or do not coat the vehicle for corrosion control. It may present a fire risk under certain conditions.**

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

Therefore, the following precautions must be observed:

- Use only UNLEADED FUEL for gasoline engines.
- Do not operate the vehicle when there are signs of engine malfunction, such as misfire or a noticeable loss of performance.
- Do not misuse or abuse the engine. Examples of misuse are coasting with the ignition off and descending steep grades in gear with the ignition off.
- Do not operate the engine at high idle speed for extended periods (5 minutes or more).
- Do not modify or tamper with any part of the engine or emission control system. All inspections and adjustments must be made by an authorized Kia dealer.
- Avoid driving with 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).

Specifications, Consumer information and Reporting safety defects

Dimensions 8-2
Engine 8-2
Bulb wattage 8-3
Tires and wheels 8-5
Gross vehicle weight. 8-6
Luggage volume 8-6
Air conditioning system 8-6
Recommended lubricants and capacities. 8-7
• Recommended sae viscosity number 8-9
Vehicle identification number (VIN) 8-10
Vehicle certification label. 8-10
Tire specification and pressure label 8-11
Engine number 8-11
Refrigerant label. 8-11
Consumer assistance (U.S. Only) 8-12
• Toll free consumer assistance 8-12
• Emergency roadside assistance 8-12
• Trip interruption 8-13
• Registering your vehicle in a foreign country 8-14
Electrical equipment (U.S. Only) 8-15
• Installation of a mobile two-way radio system. 8-15
Reporting safety defects (U.S. Only) 8-16
Online factory authorized manuals
(U.S. Only) 8-16
• Service manual. 8-16
• Electrical troubleshooting manual. 8-16
• Owner's manual 8-16

DIMENSIONS

ITEM			5 Seats	7 Seats
Overall length [in. (mm)]			189.0 (4,800)	←
Overall width [in. (mm)]			74.4 (1,890)	←
Overall height [in. (mm)]	Without Roof rack		66.3 (1,685)	←
	With Roof rack		66.5 (1,690)	←
Tread [in. (mm)]	Front	235/65 R17	64.3 (1,633)	←
		235/60 R18	64.1 (1,628)	←
		235/55 R19	64.1 (1,628)	←
	Rear	235/65 R17	64.7 (1,644)	←
		235/60 R18	64.5 (1,639)	←
		235/55 R19	64.5 (1,639)	←
Wheelbase [in. (mm)]			109.4 (2,780)	←

ENGINE

ITEM	Gasoline Theta II 2.4	Gasoline Lambda II 3.3
Displacement [cu. in (cc)]	143.95 (2,359)	203.94 (3,342)
Bore x Stroke [in. (mm)]	3.46X3.81 (88x97)	3.62X3.29 (92x83.8)
Firing order	1-3-4-2	1-2-3-4-5-6
No. of cylinders	4. In-line	V - type

BULB WATTAGE

Light Bulb			Wattage (W)	Bulb type
Front	Headlamps (Low)		55	H7LL
	Headlamps (High)		60	9005
	Headlamps (Low/High)		LED	LED
	Front turn signal lamps		LED	LED
			28	2357NA
	Front position lamps	LED type	LED	LED
	Daytime running light*		LED	LED
	Front fog lamps	Type A	55	9006
		Type B	55	9006
		Type C	LED	LED
	Side Repeater lamps	LED type	LED	LED
Rear	Rear Stop/Tail lamps (outside)	Bulb type	21/5	P21/5
	Rear tail lamps (Inside)		5	P21/5
	Rear Stop/Tail lamps (outside)	LED type	LED	LED
	Rear tail lamps (Inside)		LED	LED
	Rear turn signal lamps		27	PY27W
	Back-up lamps		16	W16W
	High mounted stop lamp		LED	LED
	License plate lamps		10W	C5W x 2

(Continued)

* If equipped

(Continued)

Light Bulb			Wattage (W)	Bulb type
Interior	Map lamps		20 (LED*)	FESTOON (LED*)
	Room lamps		10	FESTOON
	Rear Personal Lamps		LED*	LED*
	Vanity mirror lamps	Bulb type	5	FESTOON
		LED type	LED	FESTOON
	Glove box lamp		5	FESTOON
	Luggage room lamp	Bulb type	8	FESTOON
		LED type	LED	FESTOON

* If equipped

TIRES AND WHEELS

Item	Tire size	Wheel size	Supplier	Load Capacity		Speed capacity		Inflation pressure [bar(psi, kPa)]				Wheel lug nut torque [Kgf·m (lbf·ft, N·m)]
								Normal load *3		Maximum load		
				LI *1	Kg	SS *2	Km/h	Front	Rear	Front	Rear	
Full size tire	235/65 R17	7.0JX17	Kumho	104	900	H	210	2.35 (34, 235)	2.35 (34, 235)	2.35 (34, 235)	2.35 (34, 235)	11~13 (79 ~ 94, 107 ~ 127)
			Hankook	104	900	H	210					
	235/60 R18	7.5JX18	Kumho	103	875	H	210	2.35 (34, 235)	2.35 (34, 235)	2.35 (34, 235)	2.35 (34, 235)	
			Nexen	103	875	H	210					
	235/55 R19	7.5JX19	Kumho	101	825	H	210	2.35 (34, 235)	2.35 (34, 235)	2.35 (34, 235)	2.35 (34, 235)	
			Michelin	101	825	H	210					
Compact spare tire	T165/90 R17	4.0TX17	Kumho	116	1250	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 3psi to the standard tire pressure specification if colder temperatures are expected soon. Tires typically loose 1psi for every 12°F 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: 1.5psi/km

GROSS VEHICLE WEIGHT

ITEM			FOR USA	
			5 Seats	7 Seats
Theta II 2.4 [lbs. (kg)]	AT	2WD	5,026 (2,280)	5,335 (2,420)
		4WD	5,159 (2,340)	5,490 (2,490)
Lambda II 3.3 [lbs. (kg)]	AT	2WD	-	5,489 (2,490)
		4WD	-	5,622 (2,550)

LUGGAGE VOLUME

ITEM		5 Seats	7 Seats
SAE	MIN.	38.8 cu ft (1,099L)	38.0 cu ft (1,077L)
	MAX.	73.5 cu ft (2,082L)	72.9 cu ft (2,066L)

MIN : Behind rear seat (2nd row)

MAX : Behind front seat (1st row)

AIR CONDITIONING SYSTEM

Item		Weight of volume	Classification
Refrigerant	FRONT A/CON	650 ± 25g	R-1234yf
	FRONT + REAR A/CON	850 ± 25g	
Compressor lubricant	FRONT A/CON	120 ± 10g	PAG(FD46XG)
	FRONT + REAR A/CON	210 ± 10g	

We recommend that you contact an authorized 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 (drain and refill) Recommends (or equivalent) TOTAL QUARTZ	Gasoline Engine	Theta II 2.4 GDI	5.07 US qt. (4.8 *l*)	API SM or above*3, ILSAC GF-4 or above*4, ACEA-A5 or above
		Lambda II 3.3 GDI	6.87 US qt. (6.5 *l*)	API SM or above*3, ILSAC GF-4 or above*4, ACEA-A5 or above
Automatic transmission fluid	Gasoline Engine	Theta II 2.4 GDI	7.50 US qt. (7.1 *l*)	ATF SP-IV or equivalent
		Lambda II 3.3 GDI	8.24 US qt. (7.8 *l*)	

*1 : Refer to the recommended SAE viscosity numbers on the next page.

*2 : Engine oils labeled Energy Conserving Oil are now available. Along with other additional benefits, they contribute to fuel economy by reducing the amount of fuel necessary to overcome engine friction. Often, these improvements are difficult to measure in everyday driving, but in a year's time, they can offer significant cost and energy savings.

*3 : If the API SM engine oil is not available, you can use API SN or above.

*4 : If the ILSAC GF-4 engine oil is not available, you can use ILSAC GF-5 or above.

Lubricant			Volume	Classification
Coolant	Gasoline Engine	Theta II 2.4 GDI	8.35 US qt. (7.9 *l*)	Mixture of antifreeze and distilled water (Ethylene glycol base coolant for aluminum radiator)
		Lambda II 3.3 GDI	9.83 US qt. (9.3 *l*)	
Brake fluid			0.445~0.485 US qt. (0.41~0.45 *l*)	FMVSS116 DOT-3 or DOT-4
Rear differential oil (AWD)			0.56 ~ 0.67 US qt. (0.53 ~ 0.63 *l*)	HYPOID GEAR OIL API GL-5, SAE 75W/90 (SHELL HD AXLE OIL 75W90 or equivalent)
Transfer case oil (AWD)	Gasoline Engine	Theta II 2.4 GDI	0.36 ~ 0.38 US qt. (0.34 ~ 0.36 *l*)	HYPOID GEAR OIL API GL-5, SAE 75W/90 (SHELL HD AXLE OIL 75W90 or equivalent)
		Lambda II 3.3 GDI	0.66 ~ 0.72 US qt. (0.62 ~ 0.68 *l*)	
Fuel			75 US qt. (71 *l*)	Refer to Fuel requirements in section 1

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

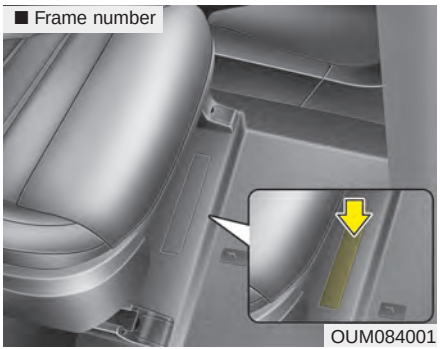
Temperature	°C	-30	-20	-10	0	10	20	30	40	50
	(°F)	-10		0	20	40	60	80	100	120
Gasoline Engine Oil (Theta II 2.4 GDI)					10W-30					
					5W-20, 5W-30					
Gasoline Engine Oil (Lambda II 3.3 GDI)					10W-30					
					5W-30					



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.

VEHICLE IDENTIFICATION NUMBER (VIN)

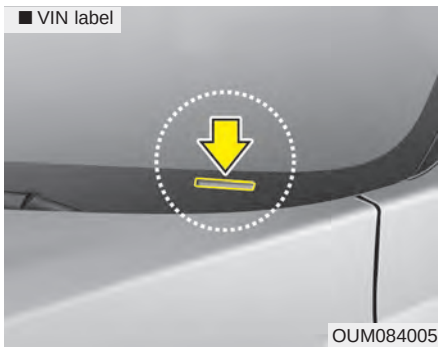
■ Frame number



The vehicle identification number (VIN) is the number used in registering your vehicle and in all legal matters pertaining to its ownership, etc.

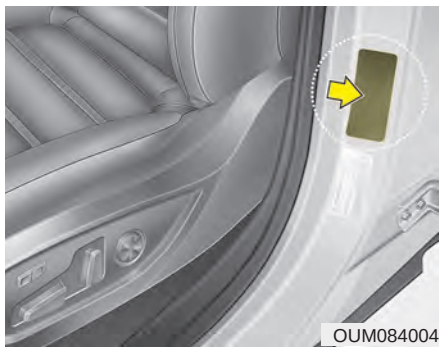
The number is punched on the floor under the front passenger seat.

■ VIN label



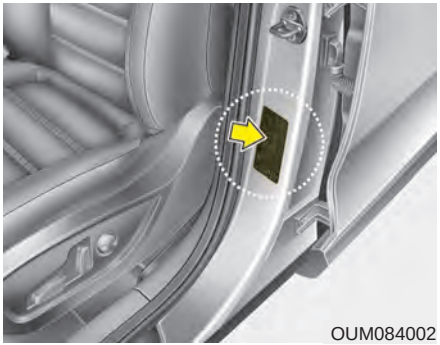
The VIN is also on a plate attached to the top of the dashboard. The number on the plate can easily be seen through the windshield from outside.

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

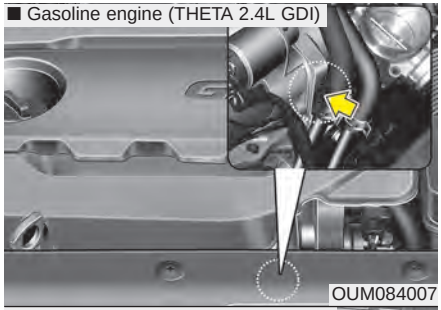


The tires supplied on your new vehicle are chosen to provide the best performance for normal driving.

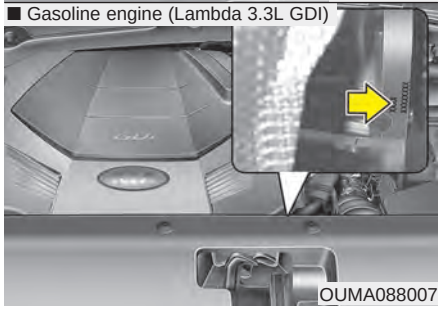
The tire label located on the driver's side center pillar gives the tire pressures recommended for your vehicle.

ENGINE NUMBER

■ Gasoline engine (THETA 2.4L GDI)



■ Gasoline engine (Lambda 3.3L 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 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 Kia Dealer in the area in which you plan to register your vehicle. You may additionally experience difficulty in obtaining services in a foreign country for any number of reasons.

Further, we cannot assume any responsibility for problems that result from unsatisfactory service or lack of service outside of the United States.

ELECTRICAL EQUIPMENT (U.S. ONLY)

The electrical system of your vehicle is designed to perform under all reasonably expected operating conditions. However, before any additional electrical equipment is installed in your vehicle, consult an Authorized Kia Dealer, in order to ensure that you do not void your warranty.

Certain electrical equipment, or the way in which it is installed, may adversely affect the operation of your vehicle, including such systems as the engine control system, the audio system and the electrical charging system and thus potentially void all or part of your warranty.

We assume no responsibility for any expense you may incur or for any malfunction of your vehicle or any of its components or systems that may result from the installation of additional electrical equipment that is not supplied, or recommended for installation by, Kia.

Installation of a mobile two-way radio system

If a mobile two-way radio system is installed improperly, or if an excessively powerful type of system is used, other electronic systems may be adversely affected. To avoid damage to your vehicle, consult an Authorized Kia Dealer concerning the proper equipment and installation.

Kia motor vehicles are designed and manufactured to meet or exceed all applicable safety standards.

For your safety, however, we strongly urge you to read and follow all directions in this Owner's Manual, particularly the information under the headings "NOTICE", "CAUTION" and "WARNING".

If, after reading this manual, you have any questions regarding the operation of your vehicle, safety issues and defects please contact your Kia's toll-free Consumer Assistance hot line as below:

National Consumer Affairs Manager
Kia Motors America, Inc.
P.O. Box 52410
Irvine, CA 92619-2410
1-800-333-4Kia (4542)

REPORTING SAFETY DEFECTS (U.S. ONLY)

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Kia Motors America, Inc.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Kia Motors America, Inc.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to http://www.safercar.gov; 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.

Index

A

AC inverter 4-178
Accumulated driving information mode 4-84
Adding equipment to or modifying your air bag-equipped vehicle 3-71
Air bag inflation conditions 3-66
Air bag non-inflation conditions 3-68
Air bag warning label 3-71
Air bag warning light 3-49
Air bags 3-46
Operation 3-47
Air bag warning light 3-49
SRS components and functions 3-50
Occupant detection system 3-53
Driver's and passenger's front air bag 3-59
Side air bag 3-61
Curtain air bag 3-63
Air bag inflation conditions 3-66
Air bag non-inflation conditions 3-68
SRS Care 3-70
Adding equipment to or modifying your air bag-equipped vehicle 3-71
Air bag warning label 3-71
Air cleaner 7-29
Filter replacement 7-29
Air conditioning system lubricants 8-6
All Wheel Drive (AWD) 5-21
All Wheel Drive (AWD) transfer mode selection . . 5-22
For safe all wheel drive operation 5-23
Antenna 4-188
Anti-lock Brake System (ABS) 5-39
Appearance care 7-93
Exterior care 7-93
Interior care 7-98
Assist mode 4-86
Audio system 4-188
Antenna 4-188
Steering wheel remote controller 4-189
AUX, USB port 4-190
Auto defogging system 4-170
Auto hold 5-36
Auto light 4-124
Automatic car wash entry support guidelines 4-122
Automatic climate control system 4-153
Automatic heating and air conditioning 4-154
Manual heating and air conditioning 4-155
To cancel or reset the automatic ventilation 4-160
Climate control air filter 4-163
Air conditioning refrigerant label 4-165
Checking the amount of air conditioner refrigerant and compressor lubricant 4-164
Automatic heating and air conditioning 4-154

Automatic transmission 5-14
Automatic transmission operation 5-14
Good driving practices 5-20
Automatic turn off function 4-136
AUX, USB port 4-190

B

Back up lamp (Bulb type) bulb replacement 7-86
Battery 7-36
For best battery service 7-36
Battery recharging 7-37
Recharging the battery 7-38
Reset items 7-38
Battery replacement (Folding key) 4-8
Battery replacement (Smart key) 4-16
Battery saver function 4-123
Before driving 5-5
Blind-Spot Collision Warning (BCW) system 5-101
BCW (Blind-Spot Collision Warning) 5-102
RCCW (Rear Cross-Traffic Collision Warning) . . 5-104
Driver's attention 5-108
Bonnet see the hood 4-44
Bottle holder 4-175
Brake fluid 7-26
Checking the brake fluid level 7-26
Brake system 5-27
Power brakes 5-27
Parking brake 5-29
Electronic parking brake (EPB) 5-30
Auto hold 5-36
Anti-lock brake system (ABS) 5-39
Electronic stability control (ESC) 5-41
Vehicle stability management (VSM) 5-45
Hill-start assist control (HAC) 5-47
Bulb replacement 7-71
Bulb replacement precaution 7-71
Bulb wattage 8-3
Button start/stop, see engine start/stop button 5-10

C

California perchlorate notice 7-105
Camera (Rear view) 4-120
Capacities (Lubricants) 8-7
Care
Care of seat belts 3-37
Tire care 7-39
Exterior care 7-93
Interior care 7-98
Center console storage 4-171
Central door lock switch 4-23
Chains - Tire 5-124
Checking fluid levels 7-20

Checking tire inflation pressure 7-40
Child restraint system 3-38
Using a child restraint system 3-39
Placing a passenger seat belt into the auto lock mode 3-40
Securing a child restraint seat with tether anchor system 3-43
Securing a child restraint seat with child seat lower anchor system 3-44
Child-protector rear door lock 4-24
Climate control air filter 7-31
Filter inspection 7-31
Closing the sunroof 4-54
Coat hook 4-184
Combined instrument, see instrument cluster 4-74
Consumer assistance 8-12
Coolant 7-23
Cooling fluid, see engine coolant 7-23
Crankcase emission control system 7-102
Cruise control system 5-63
To set cruise control speed 5-63
To increase cruise control set speed 5-64
To decrease the cruising speed 5-65
To temporarily accelerate with the cruise control on 5-65
To cancel cruise control 5-65
To resume cruising speed at more than approximately 20mph (30 km/h) 5-66
To turn cruise control off 5-66
Cup holder 4-174
Curtain air bag 3-63

D

Dashboard illumination, see instrument panel illumination 4-75
Dashboard, see instrument cluster 4-74
Day/Night rearview mirror 4-60
Daytime running light 4-123
Defogging (Windshield) 4-166
Defroster (Rear window) 4-140
Defrosting (Windshield) 4-166
Digital speedometer 4-85
Dimensions 8-2
Display illumination, see instrument panel illumination 4-75
Displays, see instrument cluster 4-74
Distance to empty 4-88
Do not use methanol 1-4
Door lock button 4-22
Door locks 4-21
From outside the vehicle 4-21
From inside the vehicle 4-22
Door lock button 4-22
Central door lock switch 4-23
Child-protector rear door lock 4-24
Drinks holders, see cup holders 4-174

Drive mode integrated control system 5-86
SMART mode 5-86
SPORT mode 5-89
ECO mode 5-89
Driver Attention Warning (DAW) system 5-110
System setting and activation. 5-110
Resetting the system. 5-112
System disabled 5-112
System malfunction 5-113
Driver position memory system 3-10
Driver's and passenger's front air bag. 3-59
Driving at night. 5-120
Driving in flooded areas 5-121
Driving in the rain 5-120
Driving off-road 5-121
Driving with a trailer 5-128
Dynamic Bending Light (DBL) 4-130

E

ECO mode (Drive mode integrated control system) . . 5-89
Economical operation 5-115
Electric chromatic mirror (ECM) with compass 4-62
Electric power steering 4-56
Electrical equipment 8-15
Electrochromic mirror (ECM) 4-61
Electrochromic mirror with HomeLink system 4-65
Electronic parking brake (EPB) 5-30
Electronic Stability Control (ESC). 5-41
Emergency liftgate safety release. 4-37
Emergency starting 6-5
Jump starting 6-5
Emergency while driving 6-3
Emission control system. 7-102
Crankcase emission control system 7-102
Evaporative emission control (including ORVR: Onboard Refueling Vapor Recovery) system . . . 7-102
Exhaust emission control system. 7-103
Engine 8-2
Engine compartment. 2-6
Engine compartment. 7-3
Engine coolant 7-23
Checking the coolant level. 7-23
Changing the coolant 7-25
Engine coolant temperature gauge 4-77
Engine number 8-11
Engine oil 7-21
Checking the engine oil level. 7-21
Changing the engine oil and filter 7-22
Engine overheats. 6-8
Engine start/stop button 5-10
Illuminated engine start/stop button. 5-10
Engine start/stop button position 5-10
Starting the engine 5-12
Engine start/stop button illumination 5-10
Engine start/stop button position 5-10

Engine will not start 6-4
Evaporative emission control (including ORVR:
Onboard Refueling Vapor Recovery) system 7-102
Exhaust emission control system 7-103
Explanation of scheduled maintenance items 7-16
Engine oil and filter 7-16
Drive belts 7-16
Fuel filter (for gasoline) 7-16
Fuel lines, fuel hoses and connections 7-16
Vapor hose and fuel filler cap 7-16
Vacuum crankcase ventilation hoses 7-17
Air cleaner filter 7-17
Spark plugs 7-17
Valve clearance 7-17
Cooling system 7-17
Coolant 7-17
Automatic transmission fluid 7-17
Brake hoses and lines 7-18
Brake fluid 7-19
Parking brake 7-19
Brake discs, pads, calipers and rotors 7-19
Exhaust pipe and muffler 7-19
Suspension mounting bolts 7-19
Steering gear box, linkage & boots/lower arm
ball joint 7-19
Drive shafts and boots 7-19
Air conditioning refrigerant 7-19
Exterior care 7-94
Exterior features 4-187
Roof rack 4-187
Exterior overview 2-2

F

Flat tire 6-16
Jack and tools 6-16
Removing and storing the spare tire 6-17
Changing tires 6-19
Floor mat anchor(s) 4-184
Fluid
Brake fluid 7-26
Washer fluid 7-27
Folding key 4-5
Record your key number 4-5
Key operations 4-5
Transmitter precautions 4-7
Battery replacement 4-8
Immobilizer system 4-9
Folding the outside rearview mirror 4-72
Forward Collision-Avoidance assist (FCA) 5-49
System setting and activation 5-49
FCA warning message and system control 5-52
Brake operation 5-53
FCA front radar/camera sensor 5-53
System malfunction 5-55

Limitation of the system 5-57
Recognizing pedestrians. 5-61
Front fog lamp bulb replacement 7-81
Front fog light. 4-129
Front seat adjustment - power 3-7
Front seat adjustment-manual. 3-5
Front turn signal lamp bulb replacement
(Headlamp Type A) 7-78
Fuel additives 1-4
Fuel economy 4-82
Fuel filler lid. 4-46
Opening the fuel filler lid. 4-46
Closing the fuel filler lid 4-46
Emergency fuel filler lid release 4-49
Fuel gauge. 4-77
Fuel requirements 1-2
Gasoline containing alcohol and methanol 1-3
Other fuels 1-4
Gasoline containing MMT. 1-4
Do not use methanol 1-4
Fuel additives. 1-4
Operation in foreign countries 1-5
Fuses 7-53
Inner panel fuse replacement 7-55
Fuse switch. 7-56
Engine compartment fuse replacement 7-57
Multi fuse 7-58
Main fuse 7-58
Fuse/relay panel description. 7-60

G

Gasoline containing alcohol and methanol 1-3
Gasoline containing MMT 1-4
Gauges 4-76
Glove box 4-171
Glove box lamp 4-138
Glove box lamp replacement 7-90
Gross vehicle weight 8-6

H

Hazard warning flasher. 6-2
Hazardous driving conditions 5-117
Headlamp (High beam) bulb replacement
(Headlamp Type A) 7-76
Headlamp (LED type) replacement
(Headlamp Type B) 7-79
Headlamp (Low beam) bulb replacement
(Headlamp Type A) 7-75
Headlight (Headlamp) escort function 4-139
Headlight leveling device 4-129
Headlight position. 4-124
Headrest (Front) 3-11
Headrest (Rear). 3-22

Heated steering wheel 4-58
High - beam operation 4-125
High beam assist 4-126
High mounted stop lamp (LED type) bulb replacement 7-87
Highway driving 5-121
Hill-start Assist Control (HAC) 5-47
Hitches 5-128
Hood 4-44
Opening the hood 4-44
Closing the hood 4-45
Hood open warning 4-44
Horn 4-59
How to use this manual 1-2

I

Icy road warning 4-80
If you do decide to pull a trailer 5-133
Immobilizer system (Folding key) 4-9
Immobilizer system (Smart key) 4-16
Indicator lights 4-106
Inside rearview mirror 4-60
Instrument cluster 4-74
Instrument cluster control 4-75
LCD display control 4-75
Gauges 4-76
Warning lights 4-98
Indicator lights 4-106
Instrument panel overview 2-5
Interior care 7-98
Interior features 4-174
Cup holder 4-174
Seat warmer 4-175
Seat cooler 4-176
Sunvisor 4-177
Power outlet 4-177
Coat hook 4-184
Floor mat anchor(s) 4-184
USB charger 4-180
Luggage net (Holder) 4-185
Side curtain 4-185
Wireless smart phone charging system 4-181
AC inverter 4-178
Interior light 4-136
Automatic turn off function 4-136
Map lamp 4-137
Room lamp 4-136
Luggage lamp 4-138
Glove box lamp 4-138
Vanity mirror lamp 4-138
Interior overview 2-4

J

Jump starting 6-5

K

Key operations (Folding key) 4-5
Key positions 5-7
Illuminated ignition switch 5-7
Ignition switch position 5-7
Starting the engine 5-8

L

Label
Tire sidewall labeling 7-44
Vehicle certification label 8-10
Tire specification and pressure label 8-11
Refrigerant label 8-11
Lane Keeping Assist (LKA) system 5-91
LKA system operation 5-93
Driver's attention 5-97
LKA system malfunction 5-98
LKA system function change 5-99
LCD display 4-81
LCD modes 4-81
Trip information 4-82
Trip modes 4-82
Fuel economy 4-82
Accumulated driving information mode 4-84
One time driving information mode 4-84
Digital speedometer 4-85
Smart shift 4-85
Turn by turn mode 4-85
Assist mode 4-86
Distance to empty 4-88
User settings mode 4-88
LCD modes 4-81
License plate lamp bulb replacement 7-88
Liftgate (for manual liftgate) 4-25
Opening the liftgate 4-25
Closing the liftgate 4-25
Emergency liftgate safety release 4-26
Light bulb position (Front) 7-73
Light bulb position (Rear) 7-74
Light bulb position (Side) 7-75
Light bulbs 7-71
Bulb replacement precaution 7-71
Light bulb position (Front) 7-73
Light bulb position (Rear) 7-74
Light bulb position (Side) 7-75
Headlamp (Low beam) bulb replacement (Headlamp Type A) 7-75
Headlamp (High beam) bulb replacement (Headlamp Type A) 7-76

Front turn signal lamp bulb replacement (Headlamp Type A) 7-78
Position lamp (LED type) replacement (Headlamp Type A) 7-78
Side marker (front) (LED type) bulb replacement . 7-79
Headlamp (LED type) replacement | (Headlamp Type B) 7-79
Side repeater lamp (LED type) bulb replacement . . 7-80
Front fog lamp bulb replacement. 7-80
Stop and tail lamp (Bulb type) bulb replacement . . 7-81
Rear turn signal lamp (Bulb type) bulb replacement. 7-82
Side marker (rear) (Bulb type) bulb replacement . . 7-84
Side marker (rear) (LED type) bulb replacement . . 7-85
Tail lamp (inside) (Bulb type) bulb replacement. . . 7-85
Back up lamp (Bulb type) bulb replacement. 7-86
Stop and tail lamp (LED type) bulb replacement . . 7-87
High mounted stop lamp (LED type) bulb replacement 7-87
License plate lamp bulb replacement. 7-88
Map lamp (Bulb type) bulb replacement. 7-88
Map lamp (LED type) bulb replacement. 7-89
Room lamp bulb replacement 7-89
Personal lamp (LED type) bulb replacement. 7-90
Glove box lamp replacement. 7-90
Luggage lamp (Bulb type) bulb replacement 7-91
Luggage lamp (LED type) bulb replacement 7-91
Vanity mirror lamp (Bulb type) bulb replacement. . 7-92
Vanity mirror lamp (LED type) bulb replacement. . 7-92
Lighting. 4-123
Battery saver function 4-123
Daytime running light 4-123
Parking & Tail light 4-124
Auto light 4-124
Headlight position 4-124
High - beam operation 4-125
High beam assist 4-126
Turn signals and lane change signals. 4-128
Check headlight 4-129
Headlight leveling device. 4-129
Front fog light 4-129
Dynamic Bending Light (DBL). 4-130
Loss of the smart key (Smart key) 4-15
Lubricants and capacities 8-7
Luggage box 4-173
Luggage lamp 4-138
Luggage lamp (Bulb type) bulb replacement. 7-92
Luggage lamp (LED type) bulb replacement. 7-92
Luggage net (Holder) 4-185
Luggage volume 8-6

M

Maintenance
Engine compartment 7-3
Maintenance services 7-5
Owner maintenance 7-8

Scheduled maintenance service 7-10
Explanation of scheduled maintenance items 7-16
Tire maintenance 7-44
Maintenance schedule. 7-10
Normal maintenance schedule 7-11
Maintenance under severe usage conditions 7-14
Maintenance services 7-5
Owner's responsibility 7-5
Owner maintenance precautions 7-6
Maintenance when trailer towing 5-132
Manual climate control system. 4-141
Heating and air conditioning 4-142
3rd row air conditioning. 4-147
System operation 4-148
Climate control air filter. 4-150
Air conditioning refrigerant label 4-151
Checking the amount of air conditioner refrigerant and compressor lubricant 4-151
Map lamp 4-137
Map lamp (Bulb type) bulb replacement 7-88
Map lamp (LED type) bulb replacement 7-89
Mirrors 4-60
Inside rearview mirror 4-60
Day/Night rearview mirror. 4-60
Electro Chromic Mirror (ECM) 4-61
Electric Chromatic Mirror (ECM) with compass . . 4-62
Electro chromic mirror with HomeLink system . . . 4-65
Outside rearview mirror 4-70
Remote control 4-71
Reverse parking aid function 4-72
Folding the outside rearview mirror 4-72

O

Occupant detection system 3-53
Odometer 4-78
Oil (Engine) 7-21
One time driving information mode 4-84
Online factory authorized manuals. 8-16
Operation in foreign countries 1-5
Operation (Air bags) 3-47
Other fuels 1-4
Outside rearview mirror 4-70
Outside temperature gauge 4-79
Overheats 6-8
Owner maintenance 7-8
Owner maintenance schedule. 7-8

P

Panoramic sunroof 4-50
Sunroof open warning 4-51
Sunshade. 4-52
Sliding the sunroof 4-52
Tilting the sunroof 4-54

Closing the sunroof 4-54
Resetting the sunroof 4-55
Parking & Tail light 4-124
Parking assist system 4-115
Type of warning indicator and sound. 4-116
Parking brake 5-29,7-28
Checking the parking brake 7-28
Personal lamp (LED type) bulb replacement 7-90
Placing a passenger seat beltinto the auto lock mode 3-40
Position lamp (LED type) replacement (Headlamp Type A) 7-78
Power brakes. 5-27
Power liftgate 4-27
Opening the liftgate 4-28
Closing the liftgate 4-29
How to reset the power liftgate 4-32
Power liftgate opening height user setting. 4-33
Power outlet 4-177
Power window lock button. 4-42
Precautions 3-35
Pre-tensioner seat belt. 3-33

R

Rear parking assist system 4-111
Operation of the rear parking assist system 4-111
Non-operational conditions of rear parking assist system. 4-112
Rear parking assist system precautions 4-113
Rear seat adjustment. 3-16
Headrest(rear). 3-22
Rear turn signal lamp (Bulb type) bulb replacement . . 7-82
Rear view camera 4-120
Rear window wiper and washer switch 4-134
Recommended lubricants and capacities 8-7
Recommended SAE viscosity number. 8-9
Record your key number (Folding key) 4-5
Record your key number (Smart key) 4-11
Reducing the risk of a rollover 5-117
Refrigerant label 8-11
Remote control (Outside rear view mirror) 4-71
Reporting safety defects 8-16
Resetting the sunroof 4-55
Reverse parking aid function 4-72
Road warning 6-2
Rocking the vehicle 5-119
Roof rack 4-187
Room lamp 4-136

Room lamp bulb replacement. 7-89
Rotation (Tire) 7-41

S

Safety chains. 5-128
Scheduled maintenance service 7-10
Normal maintenance schedule 7-11
Maintenance under severe usage conditions 7-14
Seat belt restraint system 3-26
Seat belt warning 3-27
Seat belts. 3-26
Seat belt restraint system 3-26
Seat belt warning 3-27
Pre-tensioner seat belt 3-33
Precautions 3-35
Care of seat belts 3-37
Seat cooler 4-176
Seat warmer 4-175
Seats 3-2
Front seat 3-2
2nd row seat 3-2
3rd row seat 3-2
Securing a child restraint seat withchild seat lower anchor system. 3-44
Securing a child restraint seatwith tether anchor system. 3-43
Side air bag 3-61
Side curtain 4-185
Side marker (front) (LED type) bulb replacement. . . . 7-79
Side marker (rear) (Bulb type) bulb replacement. 7-84
Side marker (rear) (LED type) bulb replacement. 7-85
Side repeater lamp (LED type) bulb replacement 7-80
Sliding the sunroof 4-52
Smart cruise control with stop & go system 5-67
Smart cruise control switch 5-69
Speed setting 5-69
Vehicle to vehicle distance setting. 5-74
To adjust the sensitivity of smart cruise control system 5-79
To convert to cruise control mode 5-79
Limitations of the system. 5-80
Smart key 4-11
Record your key number 4-11
Smart key function 4-11
Loss of the smart key 4-15
Smart key precautions 4-15
Battery replacement 4-16
Immobilizer system 4-16
Smart key function (Smart key) 4-11
Smart key precautions (Smart key) 4-15
Smart liftgate 4-33
How to use the Smart Liftgate 4-33
How to deactivate the Smart Liftgate function using the smart key 4-36
Detecting area. 4-36

Smart mode (Drive mode integrated control system) . . . 5-86
Smart shift. 4-85
Smooth cornering 5-119
Snow tires 5-123
Spare tire
Jack and tools 6-16
Removing and storing the spare tire 6-17
Changing tires 6-19
Special driving conditions 5-117
Hazardous driving conditions. 5-117
Reducing the risk of a rollover. 5-117
Rocking the vehicle 5-119
Smooth cornering 5-119
Driving at night 5-120
Driving in the rain 5-120
Driving in flooded areas. 5-121
Driving off-road 5-121
Highway driving. 5-121
Speedometer 4-76
Sport mode (Drive mode integrated control system) . . . 5-89
SRS Care. 3-70
SRS components and functions 3-50
Starting difficulties, see engine will not start 6-4
Starting the engine - With a smart key 5-12
Steering wheel. 4-56
Electric power steering (EPS) 4-56
Tilt and telescopic steering. 4-57
Heated steering wheel 4-58
Horn 4-59
Steering wheel remote controller 4-189
Stop and tail lamp (Bulb type) bulb replacement. 7-81
Stop and tail lamp (LED type) bulb replacement. 7-87
Storage compartment 4-171
Center console storage 4-171
Glove box 4-171
Sunglass holder 4-172
Luggage box. 4-173
Sunglass holder. 4-172
Sunroof open warning 4-51
Sunshade 4-52
Sunvisor 4-177
Surround view monitoring system 4-121
Automatic car wash entry support guidelines 4-122

T

Tachometer 4-76
Tail lamp (inside) (Bulb type) bulb replacement 7-85
Trailer brakes 5-128
Theft alarm system 4-18
Armed stage 4-18
Theft-alarm stage 4-19
Disarmed stage 4-19
Tilt and telescopic steering 4-57
Tilting the sunroof 4-54

Tire chains. 5-124
Tire pressure monitoring system 6-9
Check tire pressure. 6-9
Low tire pressure telltale 6-11
Changing a tire with TPMS 6-13
Tire replacement 7-43
Tire rotation 7-41
Tire specification and pressure label 8-11
Tires and wheels. 7-39,8-5
Tire care 7-39
Recommended cold tire inflation pressures. 7-39
Tire pressure. 7-40
Checking tire inflation pressure. 7-40
Tire rotation 7-41
Wheel alignment and tire balance 7-42
Tire replacement. 7-43
Wheel replacement. 7-44
Tire traction 7-44
Tire maintenance 7-44
Tire sidewall labeling. 7-44
Tire terminology and definitions 7-48
All season tires. 7-51
Summer tires 7-51
Snow tires. 7-51
Tire chains 7-51
Radial-ply tires. 7-52
Low aspect ratio tire. 7-52
Towing 6-26
Towing service 6-26
Trailer towing 5-127
Hitches 5-128
Safety chains 5-128
Trailer brakes 5-128
Driving with a trailer 5-128
Maintenance when trailer towing. 5-132
If you do decide to pull a trailer 5-133
Transmission - Automatic transmission 5-14
Transmission shift indicator 4-79
Transmitter precautions (Folding key) 4-7
Trip information 4-82
Trip modes 4-82
Turn by turn mode 4-85
Turn signals and lane change signals 4-128

U

USB charger 4-180
User settings mode 4-88
Using a child restraint system 3-39

V

Vanity mirror lamp 4-138
Vanity mirror lamp (Bulb type) bulb replacement 7-92
Vanity mirror lamp (LED type) bulb replacement 7-92

Vehicle break-in process 1-5
Vehicle certification label 8-10
Vehicle data collection and event data recorders 1-6
Vehicle handling instructions 1-5
Vehicle identification number (VIN) 8-10
Vehicle load limit 5-135
Tire and loading information label. 5-135
Certification label 5-139
Vehicle Stability Management (VSM) 5-45
Vehicle weight glossary 5-141

W

Warning and indicator lights. 4-98
Warning lights 4-98
Warning messages. 4-93
Washer fluid 7-27
Checking the washer fluid level. 7-27
Welcome system
Headlight (Headlamp) escort function 4-139
Welcome system 4-139
Interior light 4-139
Pocket lamp 4-139
Wheel alignment and tire balance 7-42
Wheel replacement 7-44
Windows 4-39
Power window lock button 4-42
Windshield defrosting and defogging. 4-166
Manual climate control system 4-166
Automatic climate control system 4-167
Defogging logic 4-168
Windshield washers 4-133
Windshield wipers 4-131
Winter driving. 5-123
Snow tires. 5-123
Tire chains 5-124
Wiper blades 7-33
Blade inspection 7-33
Blade replacement 7-33
Wipers and washers 4-131
Windshield wipers 4-131
Windshield washers 4-133
Rear window wiper and washer switch 4-134
Wireless smart phone charging system 4-181

© 2018 KIA MOTORS AMERICA, INC.