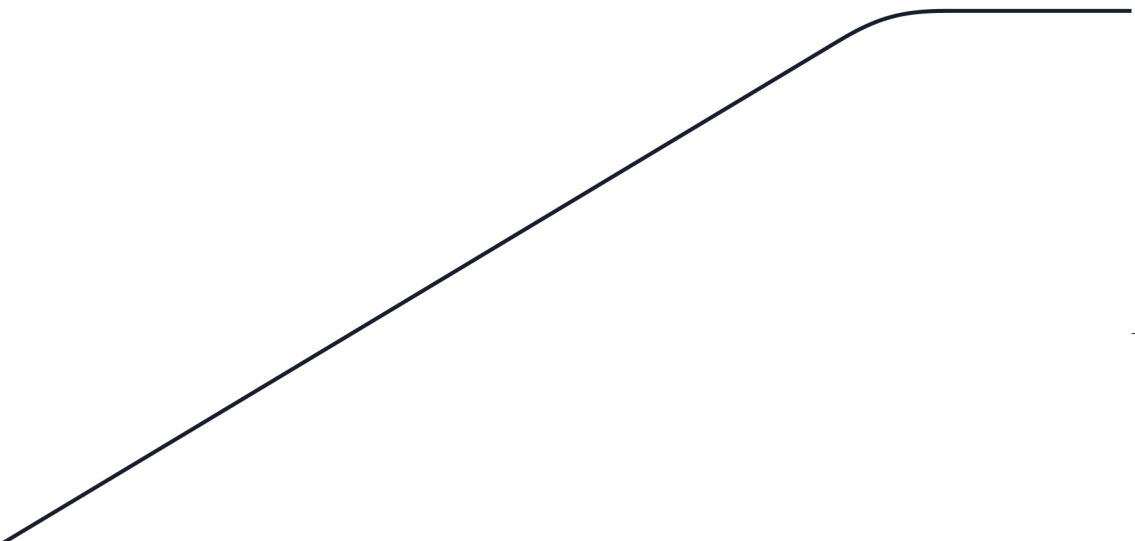


2025

Sorento

Owner's Manual



Movement that inspires

FOREWORD

Dear Customer,

Thank you for selecting your new Kia vehicle.

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

This Owner's Manual is valid for all variants of your model, and describes all options, features, and equipment available, along with the maintenance needs. This manual may also describe optional equipment not purchased on your vehicle, country specifications, and functions and features not available in your region. Please always keep this manual in the vehicle for your and any subsequent owner's reference.

Authorized Kia Dealerships provide factory-trained technicians, utilize recommended special service tools and supply genuine Kia replacement parts to help you maintain and service your Kia during your ownership.

All information contained in this Owner's Manual was accurate at the time of publication. As Kia continues to make improvements to its products, the company reserves the right to make changes to this manual or any of its vehicles at any time without notice and without incurring any obligations.

Please drive safely and enjoy your Kia vehicle!

© 2024 Kia America, Inc.

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

Printed in U.S.A.

How to use this manual

We want to help you get the greatest possible driving pleasure from your Kia. Your Owner's Manual can assist you in many ways.

We strongly recommend that you read the entire manual. 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 Kia. By reading your manual, you learn about features, important safety information and driving tips under various road conditions.

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

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

You will find various **WARNINGS**, **CAUTIONS**, and **NOTICES** in this manual. These **WARNINGS** were prepared to enhance your personal safety. You should carefully read and follow ALL procedures and recommendations provided in these **WARNINGS**, **CAUTIONS** and **NOTICES**.

WARNING

A **WARNING** indicates a hazardous situation which, if not avoided, may result in death or serious injury.

CAUTION

A **CAUTION** indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

A **NOTICE** is used to address practices not related to physical injury.

Table of Contents

Introduction	①
Your vehicle at a glance	②
Safety features of your Kia	③
Features of your vehicle	④
Driving your vehicle	⑤
Driver assistance guide	⑥
What to do in an emergency	⑦
Maintenance	⑧
Specifications, Consumer information and Reporting safety defects	⑨
Abbreviation	Ⓐ
Index	Ⓛ

Introduction 1

Fuel requirements	1-2
Vehicle modifications.....	1-4
Vehicle break-in process	1-4
Risk of burns when parking or stopping vehicle	1-5
Vehicle handling instructions	1-5
Vehicle data collection and Event Data Recorders.....	1-6

Introduction

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 Environmental Protection Agency (EPA) regulations, ethanol may be used in your vehicle.

Do not use gasohol containing more than 15% ethanol, and do not use gasohol or gasohol containing any methanol. Ethanol provides less energy than gasoline and attracts water. Thus, it is 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% ethanol.

"E85" fuel is an alternative fuel comprised of 85% ethanol and 15% 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%.

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 products which may inhibit proper drivability.

Other fuels

Using fuels that contain Silicone (Si), MMT (Methylcyclopentadienyl Manganese Tricarbonyl), Manganese (Mn) contained fuel, and other metallic 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 appear.

*** NOTICE**

Damage to the fuel system or performance problems caused by the use of these other 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 (MIL) 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 per-

formance 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 8,000 miles (13,000 km) 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 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.

* NOTICE

In addition, damage or performance problems resulting from any modification may not be covered under the warranty.

⚠ CAUTION

If you use an unauthorized electronic device, it may cause the vehicle to operate abnormally, wire damage, battery discharge and fire. For your safety, do not use unauthorized electronic devices.

Vehicle break-in process

By following a few simple precautions for the first 600 miles (1,000 km) you may increase performance, economy and life of your vehicle.

- Do not race the engine.
- While driving, avoid sudden acceleration
- Do not maintain a single engine speed for long periods of time, either fast or slow. Varying engine speeds 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.
- Fuel economy and engine performance may vary depending on your break-in process and stabilize after 4,000 miles (6,000 km). Engines may consume more oil during the break-in period.

Risk of burns when parking or stopping vehicle

- Do not park or stop the vehicle near flammable items such as leaves, paper, oil, or tires. Such items placed near the exhaust system can become a fire hazard.
- When an engine idles at high speed with the rear side of the vehicle touching the wall, heat of the exhaust gas can cause fire and/or discoloration. Keep enough space between the rear part of the vehicle and the wall.
- Do not touch the exhaust/catalytic systems while engine is running or right after the engine is turned off. There is a risk of burns since the systems are extremely hot.

Vehicle handling instructions

As with all 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, this vehicle is not designed for cornering at the same speeds as conventional 2-wheel drive vehicles.

Avoid sharp turns or abrupt maneuvers. 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" on page 5-62.

Vehicle data collection and Event Data Recorders

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

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

These data can help provide a better understanding of the circumstances in which crashes and injuries occur.

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

To read data recorded by an EDR, special equipment is required, and access to the vehicle or the EDR is needed. In addition to the vehicle

manufacturer, other parties, such as law enforcement, that have the special equipment, can read the information if they have access to the vehicle or the EDR.

Your vehicle at a glance

2

Exterior overview	2-2
Interior overview	2-4
Instrument panel overview	2-6
Engine compartment.....	2-8

Your vehicle at a glance

Exterior overview

Front view



OMQ4013001

* The actual shape of your Kia may differ from the illustration.

1. Hood	4-53
2. Headlamp	4-108, 8-56
3. Wheel and tire	7-13, 9-8
4. Outside rear view mirror	4-79
5. Panoramic sunroof	4-59
6. Front windshield wiper blades	4-114, 8-25
7. Windows	4-49
8. Front ultrasonic sensors	6-4
9. Front radar	6-4
10. Front view camera	6-4
11. Front fog lamp	8-56

Rear view



OMQ4A013004MX

* The actual shape of your Kia may differ from the illustration.

1. Doors	4-15
2. Fuel filler door	4-55
3. Rear combination lamp	8-56
4. High mounted stop lamp	8-60
5. Liftgate	4-38, 4-46
6. Antenna	4-163
7. Wide-rear view camera	6-100
8. Rear ultrasonic sensors	6-116, 6-128
9. Rear wiper	4-114, 8-25
10. Reversing lamp	8-60

Interior overview



* The actual shape of your Kia may differ from the illustration.

1. Inside door handle	4-17
2. Seat position memory system	4-36
3. Outside rear view mirror folding switch	4-79
4. Central door lock/unlock switch	4-17
5. Outside rear view mirror control switch	4-79
6. Power window switches	4-50
7. Power window lock button	4-52
Electronic power child safety lock button	4-19
8. Steering wheel tilt/telescopic lever/switch	4-63
9. Steering wheel	4-62
10. Instrument panel illumination control switch	4-83
11. ESC OFF button	5-43
12. Power liftgate open/close button	4-38, 4-43, 4-46

13.Hood release lever	4-53
14.Instrument panel fuse	8-44
15.Seat	3-5
16.Shift lever	5-10, 5-17
17.Brake pedal	

Instrument panel overview



OMQ4A013003

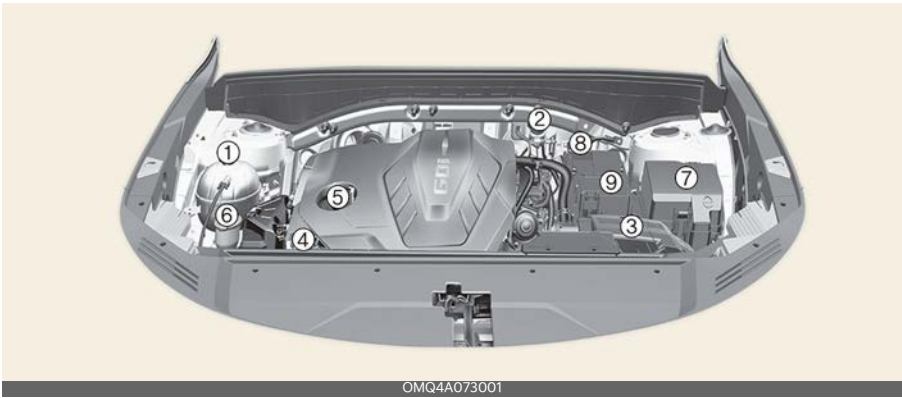
* The actual shape of your Kia may differ from the illustration.

1. Audio remote control button	
2. Driver's front air bag	3-48
3. Horn	4-65
4. Driving Assist button	6-66
5. Instrument cluster	4-82
6. Light control/turn signals lever	4-108
7. Wiper and washer control lever	4-114
8. ENGINE START/STOP button	5-6
9. Infotainment system	4-160
10. Hazard warning flasher switch	7-2
11. Climate control system	4-130
12. Front seat warmer and air ventilation seat button	4-145, 4-146
13. Glove box	4-144

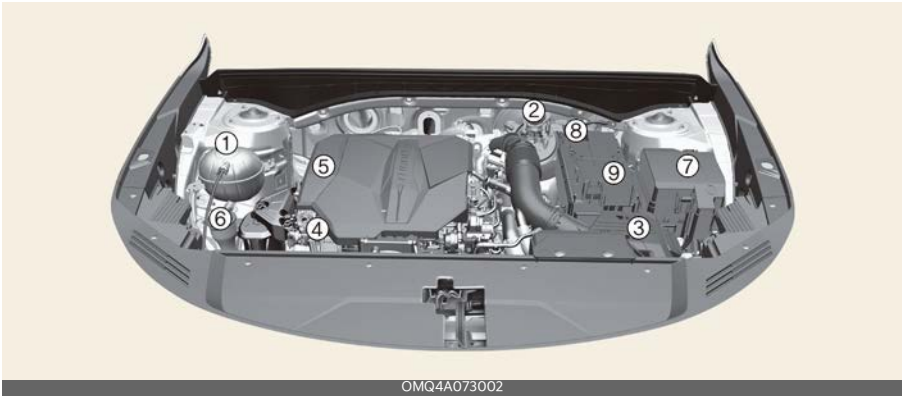
14.AUTO HOLD button	5-40
15.DBC switch	5-46
16.EPB switch	5-36
17.Parking Safety button	6-116, 6-128
18.ISG OFF button	5-52
19.Parking/View button	6-100, 6-103
20.Wireless charging system/USB Charger	4-147, 4-150
21.Center console storage box	4-143
22.AC Inverter	4-149
23.Power outlet	4-148
24.Passenger's front air bag	3-48
25.Steering wheel heater button	4-65

Engine compartment

Smartstream G2.5 GDi (Gasoline)



Smartstream G2.5 T-GDi (Gasoline)



* The actual engine compartment in your Kia may differ from the illustration.

1. Engine coolant reservoir	8-18
2. Brake fluid reservoir	8-21
3. Air cleaner	8-23
4. Engine oil dipstick	8-16
5. Engine oil filler cap	8-16
6. Windshield washer fluid reservoir	8-22
7. Fuse box	8-50
8. Negative battery terminal	7-4, 8-27
9. Positive battery terminal	7-4, 8-27

Safety features of your Kia 3

Important safety precautions	3-3
Seats	3-5
• Feature of Seat Leather.....	3-8
• Front seat adjustment for manual seat.....	3-9
• Front seat adjustment for power seat	3-10
• Rear seat adjustment	3-12
• Headrest (for front seat)	3-17
• Headrest (for rear seat).....	3-19
• Seatback pocket.....	3-20
• Small pocket (for 6 passenger vehicle).....	3-21
Seat belts	3-21
• Seat belt restraint system.....	3-21
• Seat belt precautions.....	3-28
• Care of seat belts	3-29
Child Restraint System (CRS).....	3-30
• Children always in the rear.....	3-30
• Selecting a CRS	3-31
• Installing a CRS	3-32
Air bag - Advanced Supplemental Restraint System	3-38
• How does the air bag system operate?.....	3-39
• Air bag warning and indicator.....	3-40
• Supplemental Restraint System (SRS) components and functions	3-41
• Occupant Detection System (ODS)	3-43
• Driver's and passenger's front air bag.....	3-48
• Side air bag	3-50
• Curtain air bag.....	3-51
• Air bag collision sensors.....	3-53
• Why didn't my air bag go off in a collision? (Inflation and non-inflation conditions of the air bag)	3-54
• Supplemental Restraint System (SRS) care	3-56

3 Safety features of your Kia

- Additional safety precautions..... 3-57
- Adding equipment to or modifying
your air bag-equipped vehicle 3-58
- Air bag warning labels..... 3-58

Safety features of your Kia

For the safety of the driver and vehicle passengers, you should become familiar with the vehicle's safety features.

Important safety precautions

You will find many safety precautions and recommendations throughout this section, and throughout this manual.

The safety precautions in this section are among the most important.

Always wear your seat belt

A seat belt is your best protection in all types of accidents. Air bags are designed to supplement seat belts, not replace them. Even though your Kia is equipped with air bags, ALWAYS fasten your seat belt and make sure all of your passengers have properly fastened their seat belts or restraints before placing your Kia in motion.

Restrain all children

All children under age 13 should ride in your Kia properly restrained in a rear seat, not the front seat. Each infants and small children should be restrained in an appropriate child restraint. Larger children should use a booster seat with the lap/shoulder belt until they can use the seat belt properly without a booster seat. Please refer to applicable State and Federal laws for child seating requirements.

Air bag hazards

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

inflating air bag. Follow all instructions and warnings in this manual.

Driver distraction

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

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

- ALWAYS set up your mobile devices (i.e., MP3 players, phones, navigation units, etc.) when your vehicle is parked or safely stopped.
- ONLY use your mobile device when allowed by laws and when conditions permit safe use. NEVER text or email while driving. Most states have laws prohibiting drivers from texting. Some states and cities also prohibit drivers from using handheld phones.
- NEVER let the use of a mobile device distract you from driving. You have a responsibility to your passengers and others on the road to always drive safely, with your hands on the wheel as well as your eyes and attention on the road.

Control your speed

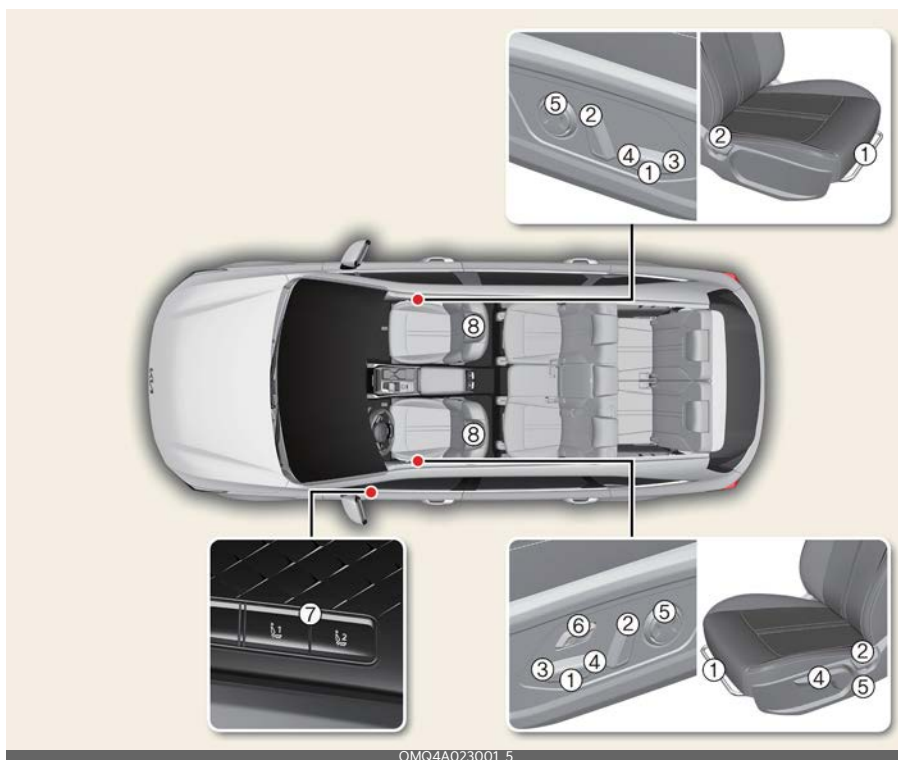
Excessive speed is a major factor in crash injuries and deaths. Generally, the higher the speed, the greater the risk, but serious injuries can also occur at lower speeds. Never drive faster what is safe for current driving conditions, regardless of the maximum speed posted.

Keep your Kia in safe condition

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

Seats

Front seat



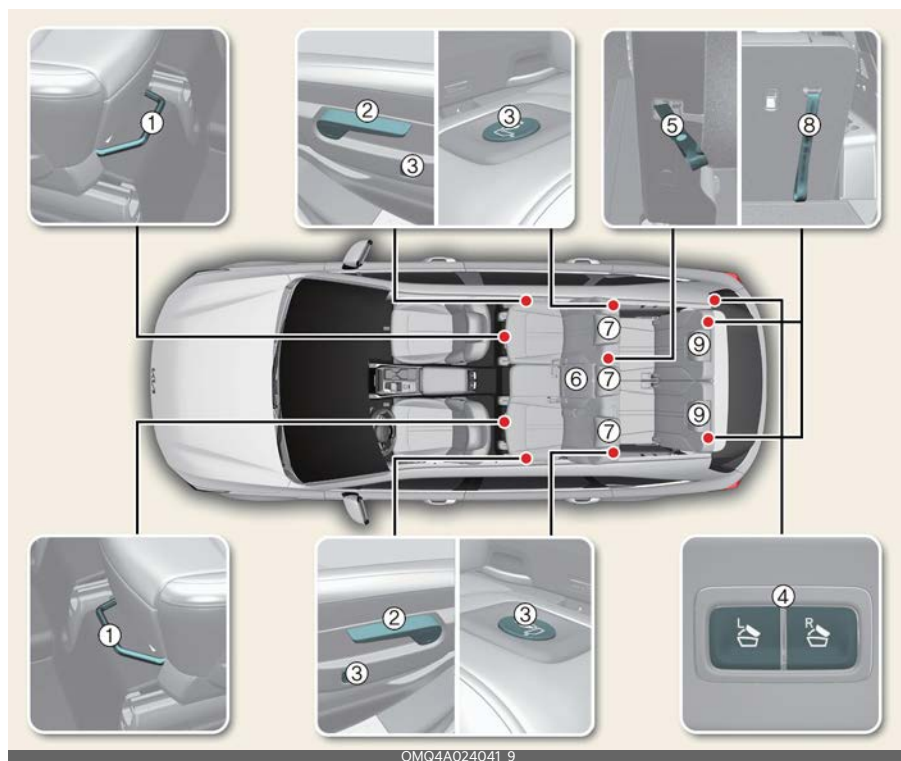
OMQ4A023001_5

* The actual features may differ from the illustration.

* There is no bench seat in the 2nd-row with vehicles equipped with 6 seating positions.

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

Rear seat



OMQ4A024041_9

* The actual feature in the vehicle may differ from the illustration.

* There is no bench seat on rear 2nd-row with vehicle equipped with 6 seating positions.

2nd row seat

- 1 Forward and backward
- 2 Seatback angle and folding
- 3 Walk-in switch
- 4 Seatback folding
- 5 Emergency strap folding
- 6 Armrest
- 7 Headrest

3rd row seat

- 8 Folding
- 9 Headrest

⚠ WARNING**Loose objects**

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

⚠ WARNING**Uprighting a 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 passengers to keep seatbacks in upright positions whenever the vehicle is in motion. If a seat is reclined during an accident, the restraint system's ability to restrain the passenger will be greatly reduced.

⚠ WARNING**Seat cushion**

Occupants should never sit on aftermarket seat cushions or sitting cushions. The passenger Occupant Detection System (ODS) may not operate properly, or 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 Kia.
- Do not allow anything to interfere with the normal position of the seatback. For example, storing items against the seatback could result in serious or fatal injury in a sudden stop or collision.
- Sit as far back as possible from the steering wheel while still maintaining comfortable control of your Kia. A distance of at least 10 inches (25 cm) 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 occupants.

⚠ WARNING**Unexpected seat movement**

After adjusting a manual seat, always check that it is locked by shifting your weight to the front and to the 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**Luggage and cargo**

Do not stack or pile luggage or cargo higher than the seatback in the cargo area. In an accident the cargo could strike and injure 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**Small objects**

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

⚠ CAUTION**Precautions with seat covers**

Use caution when working on the seat cover. A short circuit or disconnection

may occur which could cause an abnormal noise or damage the ventilation system.

⚠ WARNING**Seat short circuit risk**

Be aware of wires or air vents when placing a seat cover or covering the seat with plastic cover. Short circuits and blocked vents can cause damage and could lead to fire.

Feature of Seat Leather (if equipped)

- Your car seats are upholstered with a combination of artificial and genuine leather. Genuine leather is made from the skin of an animal, which undergoes a special process for use. Since it is a natural substance, each part differs in thickness or density. Wrinkles could appear depending on the temperature and humidity.
- The seat cover is made of stretchable material to improve occupant comfort.
- The seats are curved and the side supporting areas high, which provides driving comfort and stability.

⚠ CAUTION

- Belts with metallic accessories, zippers and keys, may damage the seat fabric.
- Make sure not to get the seat wet. It may change the nature of the leather.
- Bleach on clothes may contaminate the surface of the seat covering fabric.

* NOTICE

Wrinkles or abrasions may appear naturally from usage. It is not a defect. Wrinkles or abrasions are not covered by warranty.

Front seat adjustment for manual seat (if equipped)

The front seat can be adjusted by using the control levers located on the outside of the seat cushion.

Moving forward and backward

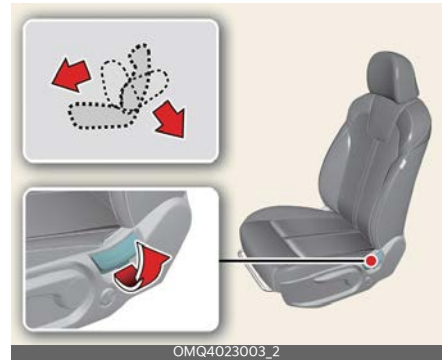
Adjust the seat before driving, and make sure the seat is locked securely by trying to move forward and backward without using the lever. If the seat moves, it is not locked properly.



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.

Reclining seatback



To recline the seatback:

1. Lean forward slightly and lift the seatback recliner lever.
2. Carefully lean back on the seat and adjust the seatback of the seat to the desired position.
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.)

⚠ WARNING

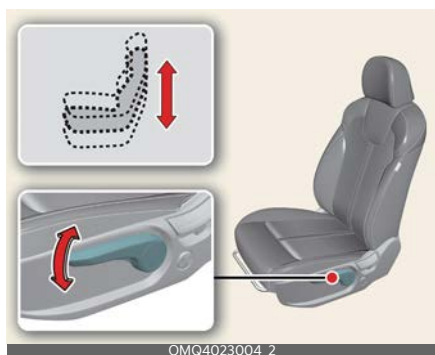
Reclining seatback

Sitting in a reclined position when the vehicle is in motion can be dangerous. Even when buckled up, the protections of the restraint system (seat belts and/or air bags) are greatly reduced by reclining the seatback.

Seat belts must be snug against an occupant's hips and chest to work properly. When the seatback is reclined, the shoulder belt cannot do its job because it will not be snug against your chest. In an accident, you could be thrown into the seat belt or slide under the seat belt, causing neck, abdominal, spinal, or other injuries.

The more the seatback is reclined, the greater chance your hips will slide under the lap belt or your neck will strike the shoulder belt.

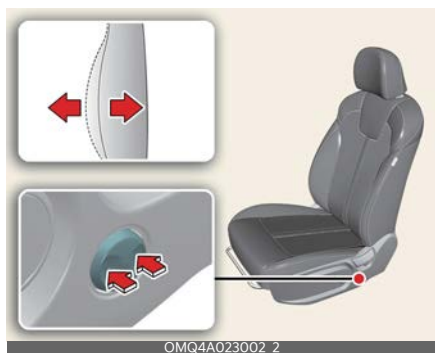
Changing seat cushion height (for driver's seat)



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

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

Adjusting 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 for power seat (if equipped)

The driver's 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 as to easily control the steering wheel, pedals and switches on the instrument panel.

⚠ WARNING

Unattended children

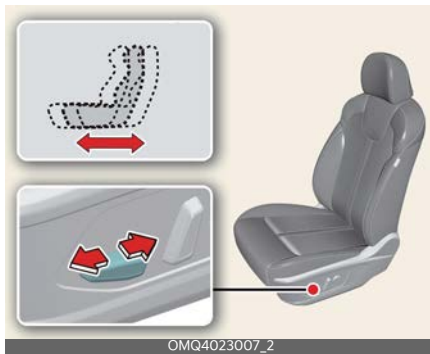
Never leave children unattended in a vehicle. Children might operate features of the vehicle that could injure them.

⚠ CAUTION

Power seating adjustments

- The power seating controls function by motor. Repeated operation may cause damage to the electrical equipment.
- Do not operate two or more power seat control switches at the same time. Damage to the power seat motor or electrical components may occur.

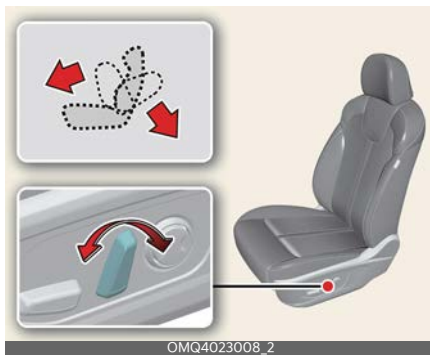
Moving forward and backward



To move the seat forward or backward:

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

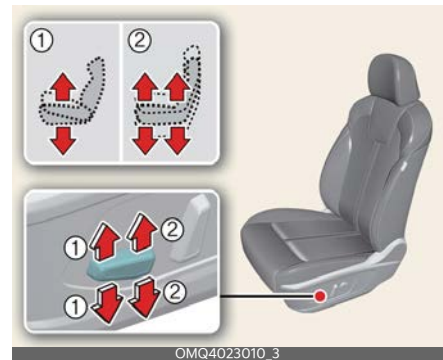
Reclining seatback



To recline the seatback:

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

Changing seat cushion tilt and height



To change the height of the seat:

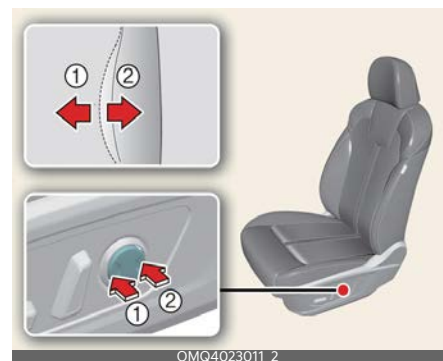
1. Pull the front portion of the control switch up to raise or press down to lower the front part of the seat cushion.

Pull the rear portion of the control switch up to raise or press down to lower the seat cushion.

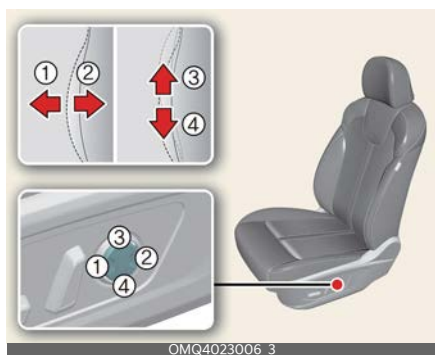
2. Release the switch once the seat reaches the desired position.

Adjusting lumbar support (if equipped)

Type A



Type B



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.

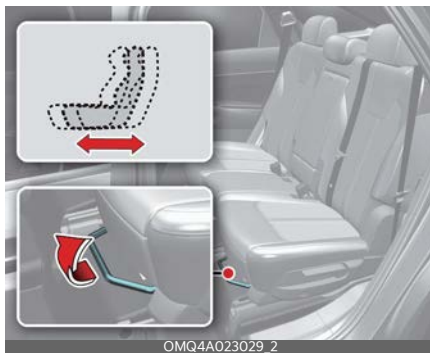
Adjusting cushion extension for driver's seat (if equipped)



1. Press the front portion of the switch to raise the cushion extension and the rear portion of the switch to lower it.
2. Release the switch once the cushion extension reaches the desired position.

Rear seat adjustment

Forward and backward (2nd row seat)

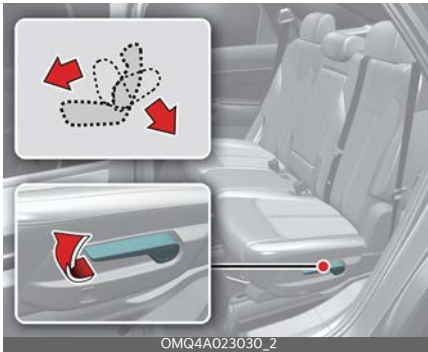


To move the seat forward or backward:

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

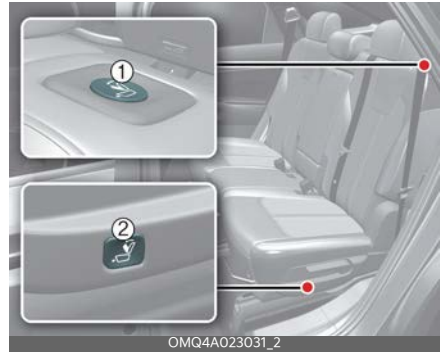
Walk-in seat (2nd row seat)

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

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



2. Press the switch (1) on the top of the 2nd row seat or press the switch (2) on the bottom of the 2nd row seat to unlock.



The 2nd row seat can also be unlocked by pulling the strap located beneath the 2nd row seat seatback. If the strap is located beneath the 2nd row seatback, there is a label attached to show where the strap is located.



⚠ WARNING

Never attempt to adjust using the 2nd row seat walk-in switch or strap while the vehicle is moving or when the seat is occupied as the seat may suddenly move and cause the passenger in the seat to be injured.

3. The 2nd row seatback will be folded and push the seat to the farthest forward position.

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



⚠ WARNING

Do not pull the strap when the 2nd-row seats are occupied.

Sudden movement of the seats may result in injury. Use the strap only when the folding switch in the 2nd row (in the upper part of the second-row seatback or the outer part of the seat) does not work.

Folding the rear seat

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

*** NOTICE**

Folded Seatback

Do not sit on folded down seatbacks. The purpose of the fold-down rear seatbacks is to allow you to carry longer objects that could not otherwise be accommodated.

- Never allow a passenger to sit on top of the folded down seatback while the car is moving. This is not a proper seating position since the seat has important crash protection features and seat belts are not available in this seat configuration.
- To reduce the risk of injury caused by sliding cargo within the passenger compartment of the vehicle, objects carried on the folded down seatback

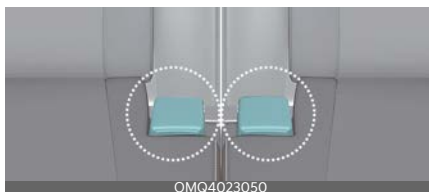
should not extend higher than the top of the front seats.

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.

2nd row seat



3rd row seat



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.

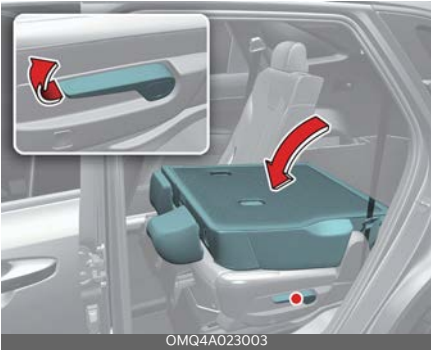
⚠ WARNING

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.

4. Pull on the seatback folding lever (for 2nd row) or strap (for 3rd row), 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.

2nd row seat

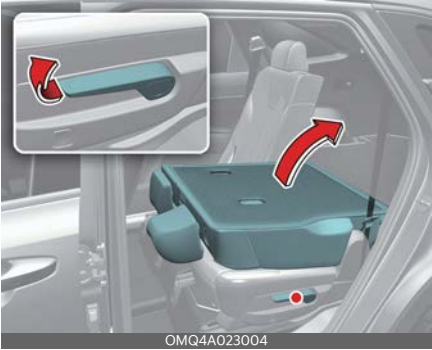


3rd row seat



5. To use the rear seat, lift and pull the seatback backward by pulling on the folding lever (for 2nd row) or strap (for 3rd row). Pull the seatback firmly until it clicks into place. Make sure the seatback is locked in place.

2nd row seat



3rd row seat



6. Return the rear seat belt to the proper position.

2nd row seat folding (from 3rd row)



2nd row seat folding switch is located on the right side of the 3rd row seat.

The 2nd row seat back will be folded.

If you press the left switch, left side seat back and center seat back will be folded.

If you press the right switch, right side seat back will be folded.

⚠ WARNING

Do not fold the rear seatbacks down until the driver has positioned his seat properly. Doing so can cause the driver to operate the vehicle out of position and increase the risk of bodily injury in a sudden stop or collision.

⚠ WARNING

Uprighting the seatback

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

⚠ WARNING

Rear seatback

To ensure maximum protection in the event of an accident or sudden stop, when returning the rear seat to the upright position:

- Be careful not to damage the seat belt webbing or buckle.
- Do not allow the seat belt webbing or buckle to become pinched or caught in the rear seat.
- Ensure the seatback is completely locked into its upright position by pushing on the top of the seatback.

⚠ CAUTION

Protecting rear seat belt buckles

When you fold the rear seatback, insert the buckle between the rear seatback and cushion. Doing so can prevent the buckle from being damaged by the rear seatback.

⚠ CAUTION

Rear seat belts

When returning the rear seatbacks to the upright position, remember to return the rear shoulder belts to their proper position.

⚠ WARNING

Cargo

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

⚠ WARNING**Cargo loading**

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

Headrest (for front seat)

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



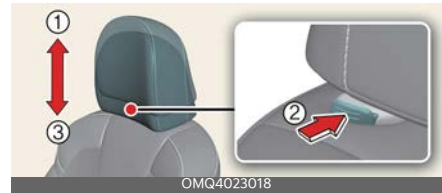
The headrest not only provides comfort for the driver and front passenger, but also helps protect the head and neck in the event of a collision.

⚠ WARNING**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. You may lose control of the vehicle.

⚠ CAUTION

Excessive pulling or pushing may damage the headrest.

Adjusting the height up and down

To raise the headrest:

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

⚠ WARNING

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

⚠ CAUTION

If you recline the seatback towards the front with the headrest angled seat cushion raised, the headrest may contact the sun visor or other parts of the vehicle.



Forward and backward adjustment (if equipped)



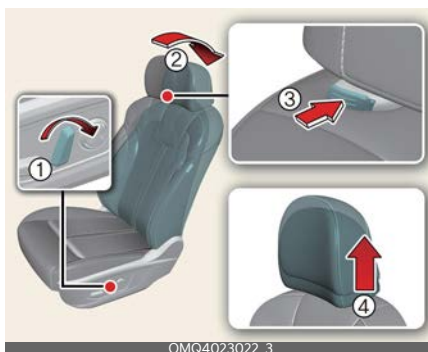
The headrest may be adjusted forward to 3 different positions by pulling the headrest forward to the desired position. To adjust the headrest to its furthest backwards position, pull it fully forward to the farthest position and release it. Adjust the headrest so that it properly supports the head and neck.

Removing headrest

Type A



Type B



To remove the headrest:

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

⚠ WARNING

Removing headrest

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

Reinstalling headrest

Type A





To reinstall the headrest:

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

Headrest (for rear seat)

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



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

To maximize the effectiveness in case of accidents, the headrest should be adjusted so the middle of the headrest is as high as the center of gravity of an occupant's head. Generally, the center of gravity of most people's heads is similar with the height as the top of their eyes.

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 (2nd row seat)



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

Removal (2nd row seat)



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

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

⚠ WARNING

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

3rd row headrest



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.

Armrest

7 passenger vehicle



6 passenger vehicle



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

Adjustable armrest is located on each side of 2nd row seatback. To use the armrest, pull it forward from the seatback and adjust to desired angle. Pull it backward to relocate the armrest.

Seatback pocket (if equipped)

There is a double pocket (1) in the front seat back for storing simple books or atlases, and USB charger (2) (if equipped) for rear passengers.



⚠ WARNING**Seatback pockets**

Do not put heavy, stiff or sharp objects in the seatback pockets. In an accident they could contact and injure vehicle occupants.

Small pocket (for 6 passenger vehicle) (if equipped)

There is a small pocket in the 2nd row seat cushion for storing simple objects.

**Seat belts**

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.

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 (CRS)" on page 3-30 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 the event of a crash.
- Always wear both the shoulder portion and lap portion of the lap/shoulder belt.

⚠ WARNING**Damaged seat belt**

Any damage to webbing or hardware may cause serious injury or death in an accident. The entire seat belt assembly

should be replaced when any part of the webbing or hardware is damaged.

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. Use 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 could either prevent the seat belt adjusting devices from operating to remove slack or prevent the seat belt assembly from being adjusted to remove slack.
- When you fasten the seat belt, be careful not to latch the seat belt in buckles of other seats. It is very dangerous and you may not be properly protected.
- Do not fasten and unfasten the seat belt repeatedly while driving. This could cause 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, liquids, etc.) to obstruct the seat belt buckle orifice. This may prevent the seat belt from fastening securely.

Seat belt warning



The seat belt warning light and warning chime operate under the following conditions:

Driver's seat belt warning

As a reminder to the driver, the seat belt warning light will appear for approximately 6 seconds each time you turn the ENGINE START/STOP button ON regardless of belt fastening. If the seat belt is not fastened, the warning chime will sound for about 6 seconds.

If you start to drive without the seat belt fastened over approximately 5 mph (9 km/h) and less than approximately 12 mph (20 km/h), the corresponding warning light will appear. The warning light will turn off when the vehicle speed drops below approximately 5 mph (9 km/h).

If you start to drive without the seat belt fastened or you unfasten the seat belt when you drive approximately 12 mph (20 km/h) and faster, the warning light will blink and warning chime will sound for approximately 100 seconds. When the seat belt is unfastened during driving, the warning light will appear when

the speed is over approximately 5mph (9 km/h) and less than approximately 12 mph (20 km/h). When the speed is approximately 12 mph (20 km/h) and faster, the warning light will blink and warning chime will sound for approximately 100 seconds.

Front passenger's seat belt warning

As a reminder to the front passenger, the seat belt warning light will appear for approximately 6 seconds each time you turn the ENGINE START/STOP button ON regardless of belt fastening. If you start to drive without the passenger seat belt fastened when you drive over approximately 5 mph (9 km/h) and less than approximately 12 mph (20 km/h), the corresponding warning light will appear. The warning light will turn off when the vehicle speed drops approximately below 5 mph (9 km/h).

If you start to drive without the passenger seat belt fastened or you unfasten the seat belt when you drive approximately 12 mph (20 km/h) and faster, the warning light will blink and warning chime will sound for approximately 100 seconds. When the passenger seat belt is unfastened during driving, the warning light will appear when the speed is over approximately 5mph (9 km/h) and less than approximately 12 mph (20 km/h). When the speed is approximately 12 mph (20 km/h) and faster, the warning light will blink and warning chime will sound for approximately 100 seconds.

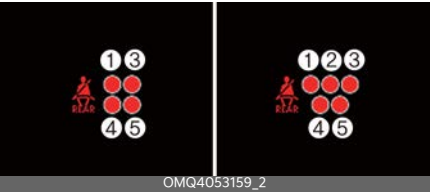
※ NOTICE

- Even if the front passenger seat is not occupied, the seat belt warning light will appear for approximately 6 seconds.

- The front passenger's seat belt warning may operate when luggage is placed on the front passenger seat.

Rear passenger's seat belt warning

6 seats/7 seats



* 2nd row seat: (1) Left side, (2) Center, (3) Right side

* 3rd row seat: (4) Left side, (5) Right side

As a reminder to the rear passenger, the rear passenger's seat belt warning lights will appear for approximately 6 seconds each time you turn the ignition switch ON regardless of belt fastening.

If you start to drive without the seat belt fastened, the seat belt warning light will appear for approximately 70 seconds.

If you unfasten the seat belt when you drive under 12 mph (20 km/h), the seat belt warning light will appear for approximately 70 seconds.

If you unfasten the seat belt when you drive over 12 mph (20 km/h), the seat belt warning chime will sound for approximately 35 seconds and the corresponding warning light will blink.

If the rear door is opened or closed under 6 mph (10 km/h), warning light and warning sound does not work even if driving over 12 mph (20 km/h).

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

Buckling your seat belt



- To buckle 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.

⚠ WARNING

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



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

in the illustration. Never wear the seat belt under the arm closest to the door.

* NOTICE

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

Releasing the seat belt



- Press the release button (1) in the locking buckle.

When it is released, the belt should automatically draw back into the retractor. If this does not happen, check the belt to be sure it is not twisted, then try again.

Adjusting the height of shoulder belt

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



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

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

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

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

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

⚠ WARNING

Shoulder belt positioning

Verify the shoulder belt anchor is locked into position at the appropriate height. Never position the shoulder belt across your neck or face. Improperly positioned seat belts can cause serious injuries in an accident.

⚠ WARNING

Seat belt replacement

After a collision, the seat belt system should be inspected to ensure it is operating normally. Replace any belts that are not functioning appropriately.

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

2nd row seat (7 passenger vehicle)



1. Rear right seat belt buckle
2. Rear center seat belt buckle
3. Rear left seat belt buckle

3rd row seat



1. Rear right seat belt buckle
2. Rear left seat belt buckle

⚠ WARNING

Prior to buckling the rear seat belts, ensure the latch matches the seat belt buckle. Forcefully connecting the left or right seat belt to the center buckle will not secure the occupant in an accident.

Stowing the rear seat belt

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

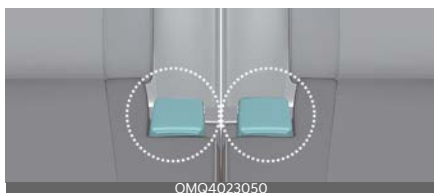
2nd row seat (for 7 passenger vehicle)



2nd row seat (for 6 passenger vehicle)



3rd row seat



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

CAUTION

When pulling out to wear the seat belt, the tongue should be slowly pulled out of the seat belt guide so that the seat belt guide does not come off the trim.

Pretensioner seat belt



Your Kia is equipped with pre-tensioner seat belts for the front driver and passenger, as well as the second row passengers.

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

The pre-tensioner seat belts may be activated in crashes where the collision is severe enough.

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

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.

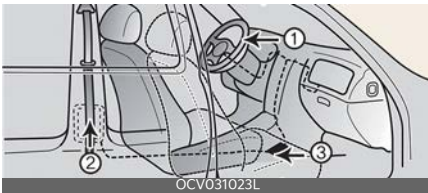
WARNING

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

* NOTICE

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

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



- 1 SRS air bag warning light
- 2 Front retractor pre-tensioner assembly
- 3 SRS control module

⚠ 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 inhaled for prolonged periods.

* NOTICE

- Both the driver's and front passenger's seat belt pre-tensioner systems may be activated not only in certain frontal collisions, but also in certain side collisions or rollovers, if the vehicle is equipped with a side or curtain air bag.
- Because the sensor that activates the SRS air bag is connected with the pre-tensioner seat belt, the SRS air bag

warning light  on the instrument panel will appear for approximately 3 ~ 6 seconds after the ENGINE START/STOP button has been turned to the ON position, and then it should turn off.

- If the pre-tensioner seat belt system is not working properly, this warning light will appear even if there is not a malfunction with the SRS air bag. If the SRS air bag warning light does not appear when the ENGINE START/STOP button has been turned to the ON position, or if it remains appears after illuminating for approximately 3 ~ 6 seconds, or if it appears 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.

* NOTICE

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

⚠ WARNING

Hot pre-tensioner

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

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

Take the following precautions when using seat belts.

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 (CRS)" on page 3-30.

* 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 (FMVSS). 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 (CRS)" on page 3-30.

Larger children

Children who are too large for Child Restraint System should always occupy the rear seat and use the available lap/shoulder belts. The lap portion should be fastened and snug on the hips as low as

possible. Check periodically to insure that the belt fits. A child's squirming could put the belt out of position. Children are given the most safety in the event of an accident when they are restrained by a proper restraint system in the rear seat. If a larger child (over age 13) must be seated in the front seat, the child should be securely restrained by the available lap/shoulder belt and the seat should be placed in the rearmost position. Children age 13 and under should be restrained securely in the rear seat. NEVER place a child age 13 and under in the front seat. NEVER place a rear facing child seat in the front seat of a vehicle.

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

⚠ WARNING

Small children

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

Restraint of pregnant women

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

⚠ WARNING**Pregnant women**

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

Injured person

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

One person per belt

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

Do not lie down

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

Care of seat belts

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

⚠ WARNING

Seatbelts can become hot in a vehicle that has been closed up in sunny weather. Please handle with care, as they could burn infants and children, if used abruptly.

Periodic inspection

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

Keep belts clean and dry

Seat belts should be kept clean and dry. 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 seat belt assembly should be replaced if the vehicle has been involved in an accident, even if no damage is visible. Additional questions concerning seat belt operation should be directed to an authorized Kia dealer.

Child Restraint System (CRS)

Infants and younger children must be restrained in an appropriate rear-facing or forward-facing Child Restraint System (CRS) that has first been properly secured to the rear seat of the vehicle.

Infants and younger children must be restrained in an appropriate rear-facing or forward-facing Child Restraint System (CRS) that has first been properly secured to the rear seat of the vehicle. Please refer to your state or federal laws for child seating requirements in the operation of a motor vehicle.

Children always in the rear

Children under age 13 must always ride in the rear seats and must always be properly restrained to minimize the risk of injury in an accident, sudden stop or sudden maneuver.

WARNING

Restraint Location

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

WARNING

Hot Child Restraint

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

According to accident statistics, children are safer when properly restrained in the rear seats than in the front seat. Even with air bags, children can be seriously injured or killed. Children too large for a

child restraint must use the seat belts provided.

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

The CRS must be properly placed and installed in the rear seat. You must use a commercially available CRS that meets the requirements of the Federal Motor Vehicle Safety Standards (FMVSS).

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

Child Restraint System (CRS)

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

Child Restraint Installation

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

- Always follow the Child Restraint System manufacturer's instructions for installation and use.
- Always properly restrain your child in the child restraint.

- If the vehicle head restraint prevents proper installation of a child seat (as described in the Child Restraint System manual), the head restraint of the respective seating position shall be readjusted or entirely removed.
- Do not use an infant carrier or a child safety seat that "hooks" over a seat-back as it may not provide adequate protection in an accident.
- A child restraint in the center seating position may also contact or push up against the safety belt buckles, which can damage the buckles and make them unusable or unsafe. Always check that the child restraint does not contact any of the safety belt buckles. Check the placement of the child restraint regularly to make sure that it has not shifted and come into contact with any of the safety belt buckles.

*** NOTICE**

After an accident, have a Kia dealer check the Child Restraint System, seat belts, tether anchors and lower anchors.

Selecting a CRS

When selecting a CRS for your child, always:

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

- Read and comply with the warnings and instructions for installation and use provided with the CRS.
- The American Academy of Pediatrics provides helpful fit and safety information about child restraints at www.healthychildren.org.

⚠ WARNING

Holding children

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

⚠ WARNING

Unattended children

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

⚠ WARNING

Seat belt use

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

CRS types

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

Rear-facing child seats



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

All children under age one must always ride in a rear-facing infant child restraint. Convertible and 3-in-1 child seats typically have higher height and weight limits for the rear-facing position, allowing you to keep your child rear-facing for a longer period of time.

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

Forward-facing child restraints



A forward-facing child seat provides restraint for the child's body with a harness. Keep children in a forward-facing child seat with a harness until they reach

the top height or weight limit allowed by your child restraint's manufacturer.

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

Booster seats

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

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

Installing a CRS

After selecting a proper child seat for your child, check to make sure it fits properly in your vehicle.

Follow the instructions provided by the manufacturer when installing the child seat. Note these general steps when installing the seat to your vehicle:

- **Properly secure the child restraint to the vehicle.** All child restraints must be secured to the vehicle with the lap part of a lap/shoulder belt or with the LATCH system.
- **Make sure the child restraint is firmly secured.** After installing a child restraint to the vehicle, push and pull the seat forward and from side-to-side to verify that it is securely attached to the seat. A child restraint

secured with a seat belt should be installed as firmly as possible. However, some side-to-side movement can be expected.

- **Secure the child in the child restraint.** Make sure the child is properly strapped in the child restraint according to the manufacturer instructions.

Lower Anchors and Tether for Children (LATCH) system

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

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

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

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



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

⚠ WARNING

LATCH Lower Anchors

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

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



1. Lower Anchor position indicator
2. Lower Anchor

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

To use the lower anchor, push the upper portion of the lower anchor cover.

Securing a child restraint with the LATCH anchors system

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

1. Move the seat belt buckle away from the lower anchors. Otherwise, the webbing or buckle can be damaged by the latch anchor, which can make them become unusable or unsafe.
2. Move any other objects away from the anchors that could prevent a secure connection between the child restraint and the lower anchors.
3. Place the child restraint on the vehicle seat, then attach the seat to the lower anchors according to the instructions provided by the child restraint manufacturer.
4. Follow the child restraint instructions for properly adjusting and tightening the lower attachments on the child restraint to the lower anchors.

WARNING

Take the following precautions when using the LATCH system:

- Read and follow all installation instructions provided with your Child Restraint System.
- To prevent the child from reaching and taking hold of the unused seat belts, buckle all unused rear seat belts before the child is placed into the vehicle. Lock each unused seatbelt following the instructions in the "automatic locking mode" subsection, and place the webbing behind the child seat or against an unused seatback. Children can be strangled if a shoulder belt becomes wrapped around their neck and the seat belt tightens.

- NEVER attach more than one child restraint to a single anchor. This could cause the anchor or attachment to come loose or break.
- Always have the LATCH system inspected by your authorized Kia dealer after an accident. An accident can damage the LATCH system and may not properly secure the child restraint.

NOTICE

The recommended maximum weight for the LATCH system is 65 lbs. (30 kg). When selecting a proper child restraint, consider that the maximum total weight of the child plus the child restraint should be less than 65 lbs. (30 kg).

As a guide, the MAX child restraint weight should be determined by the following calculation:

Child Restraint Weight = 65 - (child's total weight in lbs.)

Securing a child restraint seat with "Tether Anchor" system

7 passenger vehicle



6 passenger vehicle



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

Child Restraint hook holders are located on the seat back.

⚠ WARNING

Take the following precautions when installing the tether strap:

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

To install the tether anchor:



1. Route the Child Restraint System seat strap over the seatback.
For vehicles with adjustable headrest, route the tether strap under the headrest and between the headrest posts, otherwise route the tether strap over the top of the seatback.
2. Connect the tether to the tether anchorage, then tighten the tether according to the instructions of your Child Restraint System's manufac-

turer to firmly attach the Child Restraint System to the seat.

3. Check that the child restraint is securely attached to the seat by pushing and pulling the seat forward and from side-to-side.

Securing a child restraint with a lap/shoulder belt

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

Automatic locking mode



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

The "automatic locking" mode will help prevent the normal movement of the child in the vehicle from causing the seat belt to loosen and compromise the CRS. To install a CRS on the rear seats, do the following:

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

Be sure the seat belt webbing is not twisted.

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

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



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



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



5. Remove as much slack from the belt as possible by pushing down on the CRS while feeding the shoulder belt back into the retractor.

6. Push and pull on the CRS to confirm that the seat belt is holding it firmly in place. If it is not, release the seat belt and repeat steps 2 through 6.
7. Double check that the retractor is in the "automatic locking" mode by attempting to pull more of the seat belt out of the retractor. If you cannot, the retractor is in the "automatic locking" mode.

If your CRS manufacturer instructs or recommends you to use a tether anchor with the lap/shoulder belt, refer to "Securing a child restraint seat with "Tether Anchor" system" on page 3-35 for more information.

*** NOTICE**

When the seat belt is allowed to retract to its fully stowed position, the retractor will automatically switch from the "automatic locking" mode to the emergency lock mode for normal adult usage.

⚠ WARNING

Auto lock mode

Set the retractor to Automatic Lock mode when installing any Child Restraint System. If the retractor is not in the automatic locking mode, the child restraint can move when your vehicle turns or stops suddenly. A child can be seriously injured or killed if the child restraint is not properly anchored in the car.

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

Air bag - Advanced Supplemental Restraint System



OMQ4A023009

* The actual air bags in your Kia may differ from the illustration.

- 1 Passenger's front air bag
- 2 Driver's front air bag
- 3 Side air bag
- 4 Curtain air bag
- 5 Driver's knee 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 ENGINE START/STOP Button is in the ON Position and it can be activated within about 3 minutes after ignition off.
- 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, etc. Several factors determine whether the sensors produce an electronic deployment/inflation signal.
- Air bags will not deploy in every crash or collision situations. 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 airbags will remain inflated longer. This helps 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 airbag inflates extremely fast between the occupant and the vehicle structures before the occupant impacts the vehicle 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, airbag inflation can also cause injuries which can include facial abrasions, bruises and broken bones. This is because the rapid inflation also causes the airbags 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 the vehicle. A distance of at least 10 inch or inches (25 cm) 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 to reduce discomfort and prevent prolonged exposure to the smoke and powder.**

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

WARNING

Hot components

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

WARNING

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

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



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.

Do not place front-facing child restraints in the front passenger's seat. If the front passenger air bag inflates, it could cause serious or fatal injuries to the child.

WARNING

Air bag deployment

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

Air bag warning and indicator

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.



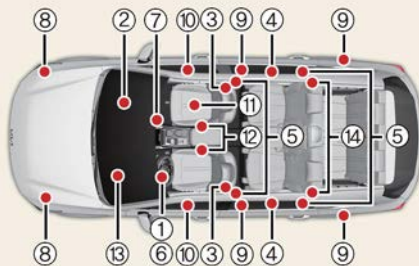
If the air bag warning light appears for more than 6 seconds after the ENGINE

START/STOP button has been turned to the ON position, or if it appears 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 occur, 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 ENGINE START/STOP button to the ON position.
- The light stays on after illuminating for approximately 3 ~ 6 seconds.
- The light comes on while the vehicle is in motion.
- The light blinks when the ENGINE START/STOP button to the ON position.

Supplemental Restraint System (SRS) components and functions



OMQ4A023010

* The actual position of SRS components may differ from the illustration.

The SRS consists of the following components:

1. Driver's front air bag module
2. Passenger's front air bag module
3. Front side air bag modules

4. Curtain air bag modules
5. Retractor pretensioner assemblies
6. Air bag warning light
7. SRS control module (SRSCM)/rollover sensor
8. Front impact sensors
9. Side impact sensors
10. Side pressure sensors
11. Occupant Detection System
12. Front driver/passenger's seat belt buckle sensor
13. Driver's knee air bag module
14. 2nd row seat side airbag module

The SRSCM continually monitors all elements while the ENGINE START/STOP Button is in the ON Position or approximately within 3 minutes after ignition off to determine if a frontal, near-frontal impact or side impact is severe enough to require air bag deployment or pretensioner seat belt deployment.

The SRS air bag warning light on the instrument panel will appear for about 3 ~ 6 seconds after the ENGINE START/STOP button is turned to the ON position, after which the air bag warning light should go out.

⚠ WARNING

If any of the following conditions occurs, this indicates a malfunction of the SRS. Have the system inspected by an authorized Kia dealer.

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

Driver's front air bag (1)



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

Driver's front air bag (2)



Upon deployment, tear seams molded directly into the pad covers will separate under pressure to allow full inflation of the air bags.

Driver's front air bag (3)



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

After complete inflation, the air bag immediately starts deflating, enabling the driver to maintain forward visibility

and the ability to steer or operate other controls.

Passenger's front air bag



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 and powder released in the vehicle. These conditions are normal and are non-toxic. 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. Wash all exposed skin areas thoroughly with cold water and a mild soap after an accident in which the air bags were deployed.
- The SRS can function only when the ENGINE START/STOP button is in the ON Position or approximately within 3

minutes after ignition off. The SRS is not working properly if any of the following situations occur :

- the SRS airbag warning light does not appear
- the SRS airbag warning light remains on continuously after illuminating for about 3 ~ 6 seconds when the ENGINE START/STOP button is turned to the ON position or after the vehicle is in ready mode
- the SRS airbag warning light comes on while driving

Have your vehicle immediately inspected by an authorized Kia dealer.

* NOTICE

Before replacing a fuse or disconnecting a battery terminal, turn the ENGINE START/STOP button to the OFF position. Never remove or replace air bag related fuse(s) when the ENGINE START/STOP button is in the ON position as the SRS warning light to illuminate.

Occupant Detection System (ODS)

Your Kia is equipped with an ODS in the front passenger's seat.



The ODS is designed to detect the presence of a properly seated front passenger and determine if the passenger's front air bag should be activate (may inflate) or not. Only the front passenger front air bag is controlled by the ODS.

Do not put anything in front of the passenger air bag (⊗₂) indicator.

Main components of the ODS

- A detection device is located within the front passenger seat cushion.
- An electronic system determines whether the passenger air bag systems should be activated or deactivated.
- An indicator light located on the overhead console which illuminate the words PASSENGER AIR BAG (⊗₂) indicates the front passenger air bag system is deactivated.
- The overhead console air bag warning light is connected to the ODS.

If the front passenger seat is occupied by a person other than what the system judges to be a properly seated adult (upright with the seatback in an upright position, centered on the seat cushion with their seat belt on, legs comfortably extended and feet on the floor), the PASSENGER AIR BAG (⊗₂) indicator will turn on and the front passenger's air bag will not be able to inflate, if necessary, in frontal crashes.

You will find the PASSENGER AIR BAG (⊗₂) indicator on the overhead console. 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 may not function properly if the passenger takes actions which can defeat the detection system. These include:

- Failing to sit in an upright position.
- Leaning against the door or center console.
- Sitting towards the sides or the front of the seat.
- Putting legs on the dashboard or resting them on other locations which reduce the passenger weight on the front seat.
- Improperly wearing the safety belt.
- Reclining the seatback.

Conditions and operation of the front passenger ODS

Condition detected by the occupant detection system	Indicator/Warning light		Devices
	"PASSENGER AIR BAG OFF" indicator light	SRS warning light	Front passenger air bag
1. Adult ¹	Off	Off	Activated
2. Child Restraint System (CRS) with child under 12 months old ^{2*3*4}	On	Off	Deactivated
3. Unoccupied	On	Off	Deactivated
4. Malfunction in the system	Off	On	Activated

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

* 2. Do not allow children to ride in the front passenger seat. When a larger child who has outgrown a CRS sits in the front passenger seat, the system may recognize him/her as an adult depending upon his/her physique or sitting position.

* 3. Never install a CRS on the front passenger seat.

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

⚠ WARNING

- Do not install a child restraint seat in the passenger seat when the seat is heavily soaked with any type of liquid.
- Do not modify the ODS. This may damage the system and prevent its proper function in a collision.

*** NOTICE**

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

*** NOTICE**

When the PASSENGER AIR BAG (⚠) symbol is appeared, the passenger air bag system will not operate. The passenger air bag system will operate when necessary if the symbol is not appeared.

*** NOTICE**

Do not modify or replace the front passenger seat. Don't place anything on or

attach anything such as a blanket, front seat cover or aftermarket seat heater to the front passenger seat. This can adversely affect the Occupant Detection System.

⚠ WARNING

Occupant Detection System

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

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



- Do not place feet on the front passenger seatback.



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



- Never excessively recline the front passenger seatback.



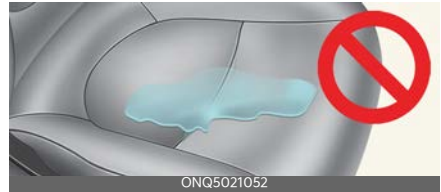
- Never place feet on the dashboard.



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



- Do not use car seat accessories such as thick blankets and cushions which cover up the car seat surface.
- Do not place electronic devices such as laptops or DVD players or heavy objects such as a large quantity of water bottles on the passenger seat.
- Wet passenger seat:
Do not spill liquid in the passenger seat. Spilled liquid on the passenger seat may cause the air bag warning light to appear or malfunction. If any liquid is spilled, make sure the seat has been completely dried before driving the vehicle.



Proper position



When an adult is seated in the front passenger seat, if the PASSENGER AIR BAG (⚠️) indicator is on, change the ENGINE START/STOP button to the OFF position and ask the passenger to sit 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). Restart the vehicle 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 (⚠️) indicator is still on, ask the passenger to move to the rear seat.

⚠️ WARNING

PASSENGER AIR BAG (⚠️) light

Do not allow an adult passenger to ride in the front seat when the PASSENGER AIR BAG (⚠️) indicator is illuminated, because the air bag will not deploy in the event of a collision. Have the passenger reposition 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 (⚠️) indicator remains illuminated after repositioned properly and the vehicle is restarted, have the passenger move to the rear seat because the passenger's front air bag will not deploy.

* NOTICE

The PASSENGER AIR BAG (⚠️) indicator does not illuminate if the front passenger seat is occupied. The occupant detection sensor will then classify the front passenger after several more seconds. Also, if the ENGINE START/STOP button is turned to the ON position when about 3 minutes have elapsed since the vehicle is in OFF position.

- 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 13 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 ODS is not working properly, the Supplemental Restraint System (SRS) air bag warning light on the instrument panel will appear because the passenger's front air bag is connected with the ODS. If there is a malfunction of the ODS the PASSENGER AIRBAG (⚠️) indicator will not appear. In this case, the passenger's front airbag will inflate in frontal

impact crashes even if there is no occupant in the front passenger seat.

Driver's and passenger's front air bag

Your Kia is equipped with an advanced supplemental restraint (air bag) system and lap/shoulder belts at both the driver and passenger seating position.

Driver's front air bag / Passenger's front air bag



Driver's knee air bag



The indicators are the words "AIR BAG" located on the air bag pad cover on the steering wheel and on the cover of the driver's side knee bolster located below the steering wheel and the passenger's side front panel pad above the glove box.

The Supplemental Restraint System (SRS) consists of air bags installed under the pad covers in the center of the steering wheel, in the knee bolster below the steering wheel column 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 of 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 sensor determines if the front passenger's seat belt is fastened.

These sensors provide the ability to control the SRS deployment based on whether 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 impacts. A second stage level is provided for severe impacts.

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

Your Kia is equipped with an ODS in the front passenger's seat. The ODS 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 (ODS)" on page 3-43.

WARNING

Modification to the seat structure is more likely to 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 1-800-333-4542(U.S. only). However, Kia neither endorses nor will it support any changes to any part or structure of the vehicle that could affect the advanced air bag system, including the ODS.

WARNING

Replacement/modifications

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

Advanced air bags are combined with pretensioner 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 seat belt.

NOTICE

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

Front air bags are not intended to deploy in side impacts, rear impacts or rollovers. When the frontal deployment threshold is satisfied in a side impact, the front air bags may deploy. Front air bags will not deploy in frontal impacts below the deployment threshold.

WARNING

SRS wiring

Do not tamper with or disconnect SRS wiring or other components of the SRS system. This could result in injury, due to

accidental deployment of the air bags or by rendering the SRS inoperative.

⚠ WARNING

Do not attach objects

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

Do not place any objects over the air bag or between the air bag and you.

Never place or insert any object into any small opening near the side airbag labels attached to the vehicle seats.

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

Side air bag

Your Kia is equipped with a side air bag in each front seat, 2nd row seat.



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

The purpose of these air bags is to provide the vehicle's driver and/or the front passenger and 2nd row outboard passengers with additional protection than that offered by the seat belts alone.

- The side air bags are designed to deploy during certain side impact collisions, depending on the crash severity of impact.
- The side air bags may deploy on the side of the impact or on both sides.
- The side curtain air bags on both sides of the vehicle will deploy if a roll-over or possible rollover is detected.
- The side air bags are not designed to deploy in all side impact or rollover situations.

⚠ WARNING

Unexpected deployment

Avoid impact to the side impact airbag sensor when the ENGINE START/STOP button is ON to prevent unexpected deployment of the side air bag.

- The side air bag is supplemental to the driver's and the passenger's seat belt systems and is not a substitute for them. 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 seat belts 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 the seat or seat cover is damaged, have the vehicle checked and repaired by an authorized Kia dealer. Inform the dealer that your Kia is equipped with side air bags and an ODS.

⚠ WARNING**Flying objects**

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

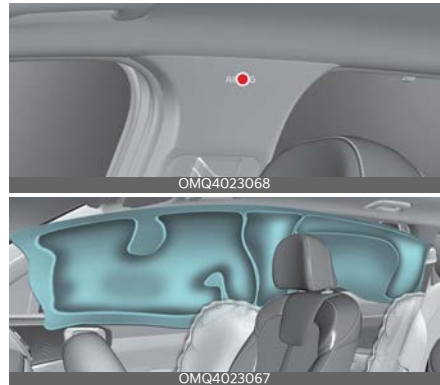
⚠ WARNING**Do not attach objects**

- Do not place any objects over the air bag or between the air bag and you. 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 collision severe enough to deploy the air bags.
- 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 an unexpected accident or injury.

- Do not install any accessory on the side or near the side air bags.

Curtain air bag

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



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

They are designed to help protect occupants in certain side impacts and to help reduce the risk of ejection from the vehicle as a result of a rollover, especially when the seat belts are also in use.

- The curtain air bags are designed to deploy during certain side impact collisions, depending on collision severity, angle, speed and point of impact. However, when the side deployment threshold is satisfied in a frontal impact, side air bags may deploy.
- The curtain air bags may deploy on the side of the impact or on both sides.
- 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, extend 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

Do not attach objects

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

Air bag collision sensors



OMQ4A023011

1



OMQ4A023045

2



OMQ4A023012

3



OMQ4023072

4



OMQ4023073

5



OMQ4023074

* The actual shape and position of sensors may differ from the illustration.

1 Supplemental Restraint System (SRS) control module/rollover sensor

2 Front impact sensor

3 Side pressure sensors (front door)

4 Side impact sensor (B-pillar)

5 Side impact sensor (C-pillar)

⚠ 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.

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

- Do not arbitrarily touch the front impact sensor. When the angle of the sensor is changed, the air bag system may malfunction.

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, side step or running boards, or replacing a bumper (or front door module) with non-genuine parts may adversely affect your Kia collision and air bag deployment performance.

Kia Genuine bumper guards/bumpers are guaranteed for quality and performance.

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 inflation conditions

Front air bags



Front air bags are designed to inflate in a frontal collision depending on several factors, including the severity of impact of the front collision.

Side and curtain air bags



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

Side and/or curtain air bags are designed to inflate when an impact is detected by side collision sensors depending on several factors, including the severity of impact resulted 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 primarily designed to inflate in frontal collisions, they may inflate in other types of collisions if the front impact sensors detect a sufficient frontal force in another type of impact.

Similarly, although side and curtain air bags are designed to inflate in certain side impact collisions, they may inflate in other types of collisions where a side force is detected by the sensors. For instance, side air bag and/or curtain air bags may inflate if 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 if side and/or curtain air bags do not provide impact protection in a rollover, 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

- Air bags may not deploy in certain low-speed collisions where the air bag would not add any benefit beyond the

protection already offered by the seat belts.



- Front 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 airbags may not inflate in side impact collisions, because passengers move in the direction of the collision. Thus, in side impacts, frontal airbag deployment would not provide additional occupant protection.



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



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



- Front air bags may not inflate in all rollover accidents when the SRS Control Module (SRSCM) indicates that the front air bag deployment would not provide additional occupant protection.



- Airbags may not inflate if the vehicle collides with an object such as a utility pole or tree. This is because the point of impact is concentrated in one area and the full force of the impact is not delivered to the sensors.



Supplemental Restraint System (SRS) care

The Supplemental Restraint System (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 appear, or continuously remains on, have your vehicle immediately inspected by an authorized Kia dealer.

Any work on the SRS, 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 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 bodily injury.

⚠ WARNING**Tampering with SRS**

Do not tamper with or disconnect SRS wiring or other components of the SRS system. Doing so could result in the accidental inflation of the air bag or render the SRS inoperative.

⚠ WARNING**Towing vehicle**

Always have the ignition off and wait for 3 minutes when your Kia 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.

Additional safety precautions

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

⚠ WARNING

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

Adding equipment to or modifying your air bag-equipped vehicle

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

Air bag warning labels

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



Features of your vehicle

4

Keys.....	4-7
• Battery replacement	4-7
• Smart key	4-8
Immobilizer system	4-12
Theft-alarm system	4-13
• Armed stage	4-13
• Theft-alarm stage	4-14
• Disarmed stage	4-14
Door locks.....	4-15
• With the smart key	4-15
• With the mechanical key.....	4-15
• Operating door locks from inside the vehicle	4-17
• Door lock/unlock features.....	4-18
• Child-protector rear door lock.....	4-19
• Electronic child safety lock system	4-19
• In case of an emergency	4-20
• Rear Occupant Alert (ROA) System.....	4-20
Digital Key 2	4-23
• Digital Key 2 (Smart Phone)	4-23
• Digital Key 2 (Card Key)	4-27
• Personalized Profile and Vehicle Settings	4-30
• Used Vehicle/Digital Key 2 Maintenance.....	4-33
• Limitations of the System.....	4-33
Fingerprint authentication system.....	4-34
• Fingerprint authentication system settings.....	4-34
• Fingerprint authentication system operation.....	4-35
• Limitations of the system	4-35
• Used vehicle	4-36
Integrated Memory System.....	4-36
• Storing memory positions	4-37

4 Features of your vehicle

• Recalling memory positions.....	4-37
• Seat easy access	4-37
• Resetting the System	4-37
Liftgate.....	4-38
• Opening the liftgate.....	4-38
• Closing the liftgate	4-39
• Emergency liftgate safety release.....	4-39
Power liftgate.....	4-41
• Operating the power liftgate	4-42
• Setting the power liftgate.....	4-43
• Resetting the power liftgate.....	4-44
• Emergency liftgate safety release.....	4-45
• Power Liftgate automatic close.....	4-45
Smart Liftgate with Auto Open	4-46
• How to use the Smart Liftgate with Auto Open	4-46
• How to deactivate the Smart Liftgate with Auto Open function using the smart key	4-47
• Detecting area.....	4-48
Windows	4-49
• Window opening and closing	4-50
• Power window lock button.....	4-52
Hood	4-53
• Opening the hood.....	4-53
• Hood open warning	4-54
• Closing the hood	4-54
Fuel filler door.....	4-55
• Opening the fuel filler door	4-55
• Closing the fuel filler door	4-56
Panoramic sunroof	4-59
• Power sunshade.....	4-59
• Tilt open/close.....	4-60

• Slide open/close.....	4-60
• Automatic reversal.....	4-60
• Resetting the sunroof.....	4-61
• Sunroof open warning.....	4-62
Steering wheel	4-62
• Electric power steering (EPS).....	4-62
• Tilt & telescopic steering wheel.....	4-63
• Heated steering wheel.....	4-65
• Horn	4-65
Mirrors.....	4-66
• Inside rear-view mirror	4-66
• Outside rear view mirror	4-79
Instrument cluster	4-82
• LCD display	4-83
• LCD display modes.....	4-83
• Adjusting instrument cluster illumination	4-83
• Gauges.....	4-84
• Transmission shift indicator	4-87
LCD display modes	4-88
LCD displays.....	4-90
• Trip information (trip computer)	4-90
• Service mode	4-92
• LCD display messages.....	4-93
Warning and indicator lights	4-96
• Warning lights.....	4-96
• Indicator lights	4-103
Lighting.....	4-108
• Battery saver function.....	4-108
• Headlight delay function	4-108
• Daytime Running Light (DRL).....	4-108
• Lighting control	4-108

4 Features of your vehicle

• Operating high beam	4-110
• Operating turn signals and lane change signals	4-110
• Operating front fog light	4-111
• High Beam Assist (HBA)	4-111
Wipers and washers	4-114
• Auto control.....	4-115
• Operating windshield washers	4-115
• Operating rear window wiper and washer switch	4-116
Welcome system	4-117
Interior lights	4-118
• Automatic turn off function.....	4-118
• Map lamp.....	4-118
• Room (cabin) lamp.....	4-119
• Luggage compartment lamp.....	4-119
• Vanity mirror lamp	4-119
• Glove box lamp.....	4-120
Climate control system	4-120
• System operation.....	4-120
• Climate control air filter.....	4-122
• A/C refrigerant label.....	4-122
• Checking the amount of air conditioner refrigerant and compressor lubricant.....	4-123
Manual climate control system	4-124
• Using the infotainment/climate switchable controller	4-125
• Heating and air conditioning	4-126
Automatic climate control system.....	4-130
• Using the infotainment/climate switchable controller	4-131
• Heating and air conditioning automatically.....	4-132
• Heating and air conditioning manually.....	4-133
• A/C Automatic Drying	4-137

Features of your vehicle

4

• Smart Temperature Comfort Control System (for driver's seat).....	4-138
• Scheduled Ventilation Control.....	4-138
Windshield Defrosting and Defogging.....	4-139
• Defogging Inside Windshield with manual climate control system.....	4-139
• Defrosting Outside Windshield with manual climate control system.....	4-140
• Defogging inside windshield with automatic climate control.....	4-140
• Auto Defogging System.....	4-141
• Defroster.....	4-141
• Defogging Logic.....	4-142
Storage Compartment.....	4-143
• Center Console Storage.....	4-143
• Glove box.....	4-144
Interior Features.....	4-144
• Cup Holder.....	4-144
• Seat Warmer.....	4-145
• Air ventilation Seat.....	4-146
• Sun Visor.....	4-147
• USB Charger.....	4-147
• Power outlet.....	4-148
• AC Inverter.....	4-149
• Wireless Smart Phone Charging System.....	4-150
• Coat Hook.....	4-152
• Side Curtain.....	4-153
• Floor Mat Anchors.....	4-153
• Luggage Net Holder.....	4-154
• Cargo Security Screen.....	4-154
• Luggage Board (cover).....	4-156
• Luggage Tray.....	4-157

4

Features of your vehicle

- Luggage Side Tray 4-157
- Exterior Features 4-157**
- Roof rack 4-157
- Infotainment system..... 4-160**
- Using the infotainment/climate switchable controller 4-160
- Over-The-Air (OTA) Software Update 4-160
- Audio system 4-163
- Declaration of Conformity..... 4-166**

Features of your vehicle

Keys

The mechanical key and various remote functions are integrated into the smart key to provide convenience to the driver.

⚠ WARNING

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 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.

Record your key number



The key code number is stamped on the key code tag attached to the key set. If 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. Record the key code number and keep it in a safe and handy place, but not in the vehicle.

⚠ WARNING

Aftermarket keys

Use only Kia original parts for the ignition key in your vehicle. If an aftermarket key is used, the ENGINE START/STOP button may not return to ON after START. The starter will continue to operate causing possible fire due to excessive current in the wiring.

⚠ WARNING

Never leave the keys in your vehicle

Leaving children unattended in a vehicle with the keys is dangerous even if the vehicle is ACC or ON position. Unattended children could press the start button and may operate power window, other controls, or even make the vehicle move, which could result in serious bodily injury or death. Never leave the keys in your vehicle with unsupervised children, when the vehicle is running.

Battery replacement

The smart key uses a 3 volt lithium battery which will normally last for several years.



If you are unsure how to use or replace the battery, contact an authorized Kia dealer.

1. Pry open the key battery cover gently using a thin tool.
2. Replace the old battery with a new battery (CR2450). When replacing the battery, make sure align the battery poles properly.

If the battery is assembled with incorrect polarity, it will discharge, rendering the key unusable.

3. Install the battery in the reverse order of removal.

For smart key replacement, visit an authorized Kia dealer.

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.



Inappropriate disposal of battery can be harmful to the environment and human health. Dispose the battery according to your local laws or regulations.

⚠ WARNING

THIS PRODUCT CONTAINS A BUT-TON BATTERY

If swallowed, a lithium button battery can cause severe or fatal injuries within 2 hours.

Keep batteries out of reach of children.

If you think a battery may have been swallowed or placed inside any part of the body, Seek medical attention immediately.

⚠ CAUTION

Smart key damage

The smart key can malfunction if dropped, exposed to moisture, static electricity, heat or direct sunlight.

Smart key

With a smart key, you can lock or unlock a door and even start the vehicle without inserting the key.



The smart key works when it is within approximately 33 feet (10 m) from the vehicle. Antennae within the vehicle sense when the smart key is within range.

Tinting the vehicle windows with film, especially metalized film, may interfere with the signal from the smart key, reducing its operating range.

Lock (1)

All doors can be locked if the lock button is pressed while the key is within range of the vehicle. Once all doors are closed, the hazard warning lights will blink and the chime will sound once to indicate that all doors are locked.

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

If any door remains open or if the key is out of range, the hazard warning lights (and/or the chime) will not signal. If all doors are closed after the lock button is pressed, the hazard warning lights will blink once.

Unlock (2)

All doors will unlock if the unlock button is pressed once while the key is in range. The hazard warning lights will blink twice to indicate that all doors are unlocked.

Note that the doors will re-lock automatically unless you open any door within 30 seconds of pressing the unlock button.

If you attempt to lock or unlock the door by pressing the door lock/unlock button under any of the following conditions, the door will not be locked or unlocked.

- When you want to lock or unlock the door in the ACC or ON state.
- When you want to lock a door in a car with one or more doors open.

Depending on the vehicle, the driver can activate or deactivate the 2-press unlock setting function. For detailed information, refer to the separately supplied infotainment system manual.

* NOTICE

- Tinting the vehicle windows with film, especially metalized film, may interfere with receiving frequency transmitted by the smart key, reducing its operating range.
- If the smart key is inoperative due to exposure to water or liquids, it will not be covered by your manufacturer's vehicle warranty.

Power liftgate unlock, Power liftgate open/close (3) (if equipped)

The power liftgate is unlocked or opened (if equipped) if the button is pressed for more than 1 second.

When the power liftgate is opened, press and hold the power liftgate open/close button to close the liftgate. If you release the button while the liftgate is closing, power liftgate operation will stop with a warning sound for 5 seconds.

Panic alarm (4)

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

Remote start (5)

You can start the vehicle using the remote start button (5) of the smart key.

To start the vehicle remotely:

- Lock the doors by pressing the door lock button (1) within 33 ft (10 m) of the vehicle.
- Within 4 seconds after locking the doors, press the remote start button for over 2 seconds. The hazard lights will blink 3 times when the engine is started remotely.

Press the remote start button (5) once to turn off the vehicle.

If no further action for operating/driving the vehicle is taken, the vehicle will be turned off 10 minutes after starting the vehicle remotely.

While remote starting, the hazard warning lights blink 3 times. If you want to stop the vehicle, press the Remote Start button (5) again.

Start while inside the vehicle

You can start the vehicle while inside your Kia without inserting the key.

* For more information, refer to "ENGINE START/STOP button position" on page 5-6.

Mechanical key

When the battery of the smart key is discharged or the smart key does not operate normally, the door can be locked or unlocked using the mechanical key.



To remove the mechanical key, pull the mechanical key protective cover(1) from the smart key.

Smart key precautions

The smart key may not operate if any of the following occur:

- The smart key is close to a radio transmitter which can interfere with normal operation of the smart key, such as a radio station or an airport.
- The smart key is near a mobile two-way radio system
- The smart key is near a mobile phone, particularly if the phone is being used to make or receive calls or to send and receive messages. (Avoid placing the smart key adjacent to a mobile phone.)
- Another vehicle's smart key is being operated near your vehicle.

When the smart key does not work correctly, try the spare or open and close

the door with the mechanical key. Contact an authorized Kia dealer.

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

If the smart key is not moved for some time, the detection function (if equipped) of smart key operation will pause. Lift the smart key to activate the detection again.

* NOTICE

Loss of the smart key

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

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

▲ CAUTION

Transmitter

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

*** NOTICE**

- To prevent smart key magnetic damages, do not leave it near the following electrical appliances:
 - TVs
 - Personal computers
 - mobile phones, cordless phones and battery chargers
 - Table lamps
 - Induction cookers
- If you must leave the vehicle's key with a parking attendant, remove the mechanical key for your own use and provide the attendant with the smart key only.
- When bringing a smart key onto an airplane, make sure you do not press any button on the key while inside the cabin. If you are carrying the key in your bag etc., make sure that the buttons cannot be pressed accidentally. If you press a button, the key may emit radio waves that could interfere with the operation of the aircraft.
- If the smart key is inoperative due to exposure to water or liquids, it will not be covered by your manufacturer's vehicle warranty.

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 smart key 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.

Immobilizer system

The immobilizer system protects your vehicle from theft. If an improperly coded key (or other device) is used, the vehicle's power system is disabled.

When ENGINE START/STOP button is placed in the ON position, the immobilizer system indicator should come on briefly, then go off. If the indicator starts to blink, the system does not recognize the coding of the key.

Place the ENGINE START/STOP button in the OFF position, then place the ENGINE START/STOP button in the ON position again.

If the system repeatedly does not recognize the coding of the key, contact your Kia dealer.

Do not attempt to alter this system or add other devices to it. Electrical problems could result that may make your vehicle inoperable.

Deactivating the immobilizer system

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

Activating the immobilizer system

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

* NOTICE

When starting the vehicle, do not use the key with other immobilizer keys around. Otherwise, the vehicle 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.
2. This device must accept any interference received, including interference that may cause undesired operation.

* NOTICE

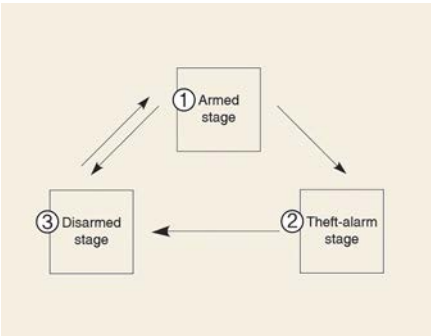
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. If the smart key is inoperative due to changes or modifications not expressly approved by the party responsible for compliance, it will not be covered by your 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:

- 1 Armed stage
- 2 Theft-alarm stage
- 3 Disarmed stage



If triggered, the system provides an audible alarm with blinking of the hazard warning lights.

CAUTION

Do not attempt to alter this system or add other devices to it.

Armed stage

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

- 1. Turn off the engine.
- 2. Make sure that all doors, the hood and liftgate are closed and latched.
- 3. Lock the doors by pressing the button of the front outside door handle with the smart key in your possession. After completion of the steps above, the hazard warning lights will operate once to indicate that the system is armed. If any door (or liftgate) or 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 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.

- 4. Lock the doors by pressing the lock button on the smart key. After completion of the steps above, the hazard warning lights will operate once to indicate that the system is armed.

*** NOTICE**

The theft-alarm system can be deactivated by an authorized Kia dealer. If you want this feature, consult an authorized Kia dealer.

*** NOTICE**

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

Theft-alarm stage

The alarm will sound and the hazard lights will blink continuously for approximately 30 seconds if any of the following occurs while the system is armed.

- A front or rear door is opened without using the smart key.
- The liftgate is opened without using the smart key.
- The hood is opened.

The horn will sound and the hazard warning lights will blink continuously for approximately 27 seconds, and repeat the horn 3 times unless the system is disarmed. To turn off the system, unlock the doors with the folding key or smart key.

Disarmed stage

The system will be disarmed when:

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

After pressing 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 pressing 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 you lose your keys, consult your authorized Kia dealer.

⚠ CAUTION

Adjusting alarm system

Do not change, alter or adjust the theft alarm system in your vehicle. Improper installation of the alarm system could damage the vehicle or cause the system malfunction.

* NOTICE

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

Door locks

Know how to use the door lock so that you can lock or unlock the door if necessary.

With the smart key

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



Locking

Pressing the button of the front driver side door handles with all doors closed and any door unlocked, locks all the doors. If all doors and engine hood are closed, the hazard warning lights will blink once to indicate that all doors are locked.

Unlocking

Pressing the button of the front driver side door handle unlocks all the doors. The hazard warning lights blink twice to indicate that all doors are unlocked.

* INFORMATION

- The door handle button will only operate when the smart key is within 40 inches (1 m) from the outside door handle.
- If you lock the doors using the door handle button, the doors are not locked and the chime will sound for 3 seconds under the following circumstances:

- The smart key is in the vehicle.
- The vehicle is in the ACC or ON position.
- Any door except the liftgate is open.
- After pressing the door lock/unlock button to unlock, the doors will lock automatically unless you open any door within 30 seconds.

With the mechanical key



To operate:

1. Pull out the door handle.
 2. Press the lever (1) located inside the bottom part of the cover with a key or flat-head screwdriver.
 3. Push out the cover (2) while pressing the lever (only the driver's door can be locked/unlocked).
 4. Turn the key toward the rear of the vehicle to unlock and toward the front of the vehicle to lock. Only the driver's door can be locked or unlocked.
- 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**

- When locking the door with a mechanical key, be aware that only the driver's door can be locked/unlocked.
- To lock all doors, operate the central lock switch inside the vehicle. Open the car door using the inner handle, then close the door and lock the driver's door with a mechanical key.
- Refer to "Operating door locks from inside the vehicle" on page 4-17 to lock from inside the vehicle.

*** NOTICE**

- Be careful not to lose or scratch the cover when removing it.
- When the key cover freezes and does not open, tap it lightly or indirectly warm (hand temperature, etc.) it up.
- Do not apply excessive force to the door and door handle. It may be damaged.

*** 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 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 be opened during vehicle operation

- Keep your body out of the way of the closing door to prevent injuries.

⚠ WARNING

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

⚠ CAUTION

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

*** NOTICE**

Always place the ENGINE START/STOP button in the OFF position, engage the parking brake, close all windows, and lock all doors when leaving your vehicle unattended.

- To lock a door without the key, push the central door lock button (2) when ENGINE START/STOP button is in the OFF position and close the door.



OMQ4A033001



- If you lock the door with the central door lock button (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

You can operate door locks with the door lock handle or central door lock switch.

With the door handle



- **Front door**
If the inner door handle is pulled when the door is locked, the door will unlock and open.
- **Rear door**
If the inner door handle is pulled once when the door is locked, the door will unlock.
If the inner door handle is pulled once more, the door will open.

Door lock malfunction

If a power door lock 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.

⚠ WARNING

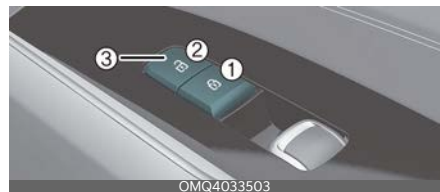
Do not pull the inner door handle of driver's (or passenger's) door while the vehicle is moving.

With central door lock switch

Driver side



Passenger side



1. Door Lock
2. Door Unlock
3. Doors indicating light

Operate by pressing the central door lock switch.

- To lock all vehicle doors, press the central door lock switch (1) of driver and passenger side.
- To unlock all vehicle doors, press central door unlock switch (2) of driver and passenger side.

When all vehicle doors are locked, the indicator lights (3) on the front doors will turn off. If any door is unlocked, it would turn on.

If any door is opened, the doors will not lock even though the central door lock switch is pressed.

WARNING

Doors

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

NOTICE

Unlocked vehicles

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

WARNING

Unattended children, the elderly or pets

An enclosed vehicle can become extremely hot, causing death or severe injury such as heatstroke to unattended children, the elderly or pets who cannot escape the vehicle. When left or trapped in a hot vehicle, make sure to stay hydrated and avoid sun exposure through the vehicle's windshield. Fur-

thermore, children might operate features of the vehicle that could injure them, or they could encounter other harm, possibly from someone gaining entry to the vehicle. Never leave children or animals unattended in your vehicle.

Door lock/unlock features (if equipped)

The vehicle is equipped with door lock/unlock features for the safety and convenience of passengers.

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).

You can activate or deactivate the auto door lock/unlock features in the vehicle. Refer to "LCD display modes" on page 4-83.

Auto lock enable on shift

When this feature is set in the cluster or infotainment system screen, all the doors will be locked automatically when the vehicle is shifted out of P (Park) while the vehicle is running.

Auto unlock on shift to P

When this feature is set in the infotainment system screen, all the doors will be unlocked automatically when the vehicle is shifted back into P (Park) while the vehicle is ON.

Auto unlock vehicle off

When this feature is set in the cluster or infotainment system screen, all the doors will be unlocked automatically when the vehicle is turned off.

Child-protector rear door lock (if equipped)

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.

The child safety locks are located on the edge of each rear door. When the child safety lock is in the lock position (1), the rear door will not open if the inner door handle is pulled.

To activate the child safety lock, insert a key (or screwdriver) into the hole and turn it clockwise to the lock position.

To allow a rear door to be opened from inside the vehicle, deactivate the child safety lock.

The outside door handle (2) still operates when the child safety lock is activated.

⚠ WARNING

Rear door locks

If children accidentally open the rear doors while the vehicle is in motion, they could fall out and be severely injured or killed. To prevent children from opening the rear doors from the inside, the rear door safety locks should be used whenever children are in the vehicle.

⚠ WARNING

- The system does not detect every obstacle approaching the vehicle exit.
- The driver and passenger are responsible for the accident occurred while exiting the vehicle. Always check the surrounding before you exit the vehicle.

Electronic child safety lock system (if equipped)

If you push the electronic child safety lock switch and the indicator illuminates, rear passengers cannot open the rear door from inside the vehicle.



To deactivate the electronic child safety lock, push the electronic child safety lock switch one more time and then the indicator turns off.

Safe Exit Assist is operated when the electronic child safety lock is activated and Safe Exit Assist is selected in the cluster. However, Safe Exit Assist does not automatically activate the electronic child safety lock system.

The electronic child safety lock is always on when the ENGINE START/STOP button is in the ON or ignition ON state and

for approximately 3 minutes after the engine is turned off.

If your vehicle is equipped with the Electronic child safety lock, the Child-protector rear door locks, which are manually operated, are not provided.

If electronic child safety lock is activated, rear passenger cannot open or close the rear window also. For more details, refer to "Windows" on page 4-49.

⚠ CAUTION

If the Electronic child safety lock malfunctions, a message is displayed and a chime will sound.



A: Child safety lock failure

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

In case of an emergency

If the electrical power door lock switch is not operating (e.g., dead car battery) the only way to lock the door(s) is with the mechanical key from the outside key hole.

Doors without an outside key hole can be locked as follows:

1. Open the door.
2. Insert the key(or a screwdriver) into the emergency door lock hole and turn the key to the lock position as shown.



3. Close the door securely.

*** NOTICE**

If the electrical power to door lock switch is not operating (e.g., dead car battery) and the liftgate is closed, you will not be able to open the liftgate until power is restored.

Rear Occupant Alert (ROA) System (if equipped)

The ROA reduces the risk that a rear passenger will be inadvertently left in the vehicle.

Make sure that all the windows are closed when ROA is operational. If the window is open, the alert may be activated by wind, insects, leaves and other movement in the rear seat area.

1st alert

When you open the front door after opening and closing the rear door and turning off the engine, the "Check rear seats" warning message appears on the cluster.

2nd alert

- After the 1st alert, the 2nd alert operates when any movement is detected in the rear seat after the driver's door is closed and all the doors are locked. The horn will activate for about 25 seconds. If the system continues to

detect a movement the alert operates up to 8 times.

- The system detects movement in the vehicle for 24 hours after the door is locked.
- Unlock the door with the smart key to stop the alert.

The 2nd alert is activated only after the prior activation of the 1st alert.

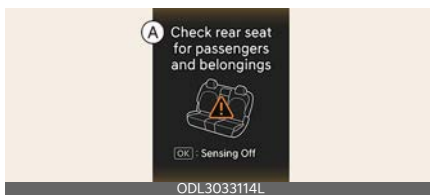
Operation

You can activate or deactivate the ROA from the infotainment system, the option can be found under the following menu:

1. Press the **SETUP** button of the infotainment system.
2. Press **Settings** → **Vehicle** → **Convenience** → **Rear Occupant Alert** on the infotainment system screen.

* NOTICE

- Make sure that all the windows are closed. If the window is open, the alert may activate by the sensor detecting an unintended movement (e.g., wind or bugs).



A: Check rear seat for passengers and belongings

- If you do not want to use the ROA system, press OK button on the steering wheel when the 1st alert is displayed on the cluster. Doing so will deactivate the 2nd alert once.

- If boxes or objects are stacked in the vehicle, the system may not detect the obstacle. Also, the warning may generate if the box or object falls off.
- The sensor may not operate normally if the sensor is obscured by foreign substances.
- The alert may activate if movement in the driver or passenger seat is detected.
- The alert may activate with the doors locked due to car wash or surrounding vibration or noise.
- Inside movement detection is stopped under remote start status.

⚠ WARNING

- Even if your vehicle is equipped with the Rear Occupant Alert (ROA) system, always make sure you check the rear seat before you exit the vehicle. The alert may not operate if:
 - The movement does not continue for a certain period of time or the movement is small.
 - If a child sits on a vehicle seat without a child car seat.
 - The rear passenger is covered with an obstacle such as a blanket.
 - Also, always be cautious of the passenger's safety as the detection function and 2nd alert may not operate depending on the surrounding environment and certain conditions.
 - If the seat or child restraint seat moves away from the sensor due to seat position adjustment.

⚠ WARNING

The door lock system may not work if the electrical system is compromised.

Accordingly, please train children passengers regarding how to open the car door manually before an emergency situation arises. That way, they would be able to open the door manually in the event an emergency situation arises.

Declaration of conformity The radio frequency components (ROA Radar Sensor) complies:

For United States



FCC ID: TQB-ICR010

It covers a sensor that is identified FCC ID: TQB-ICR010 on the label.

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.

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

This device must not be co-located or operating in conjunction with any other antenna or transmitter.

OMQ4A053036

For Canada

Model : ICR010
IC ID : 5074A-ICR010

This device contains license exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes :

1) L'appareil ne doit pas produire de brouillage;

2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

OMQ4A053037

Digital Key 2 (if equipped)

Kia Digital Key 2 provides convenience to the driver, such as locking or unlocking the driver and passenger doors or the liftgate and turning on the vehicle with a smart phone or card key, without a smart key.

Digital Key 2 (Smart Phone)

How to register Digital Key 2 (Smart phone)

Kia Digital Key 2 can only be used on the smartphones that support that function. Check your smartphone supplier's app store to download a compatible app. Not every smartphone is compatible with this function.

While updating the digital key 2 controller, the smart key function may not work temporarily. In this case, it can be operated with the door lock/unlock button of the smart key.

Smart Phone Set Up

To use Digital Key 2 (Smart phone) function, install the Kia Access app on your smart phone, register your information and subscribe the service.

For more details, access the web manual using the QR code in the infotainment system quick reference guide.

Smart Phone Registration



1 Smartphone key

2 My Smartphone key

3 Save

1. Turn the vehicle on with the Smart key and make sure to keep the smart key inside the vehicle during digital key registration.
2. After pressing **Digital Key Settings** → **Register** on Kia Access app, place the backside of the smart phone on the in-vehicle charging pad.



A: Charging pad

- As long as the device is supported from additional vehicle services, the Digital Key can be registered wirelessly.
3. Select **Save** menu on the instrument cluster or on the infotainment system screen. The saving process will begin automatically.
 4. When the digital key (smart phone) is saved, a message will appear on the instrument cluster or the infotainment system screen.
 5. Remove the smart phone from the in-vehicle authentication pad (wireless charging pad) and complete the sav-

ing process by following the instructions on the smart phone screen.

* INFORMATION

- The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference guide.

- Vehicle

When there is a digital key (smart phone) already saved in the vehicle, Delete All will be displayed on the Smartphone Key menu screen of the infotainment system and Delete will be displayed on the My Smartphone Key screen. If you want to save a digital key again, "How to delete Digital Key (Smart Phone)" on page 4-26.

- Smart Phone

The digital key cannot be saved again while the vehicle's digital key is saved in the owner's smart phone. Save the digital key after deleting the digital key from the Kia Access App.

- During the digital key 2 saving process, the process will cancel when:
 - The smart phone is removed from the in-vehicle authentication pad (wireless charging pad)
 - Changing the infotainment system or instrument cluster screen
 - The vehicle is turned off
 - The gear is shifted
 - There is no smart key (saving process will not begin)
- As the in-vehicle authentication pad may not work smoothly depending on the internal structure of the smartphones, the digital key may not be registered. In this case, register the device by moving the smartphone to the left or right of the in-vehicle

authentication pad (wireless charging pad).

- UWB (Ultra Wide Band) means ultra-wideband wireless communication technology.
- NFC (Near Field Communication) means short-range wireless communication.

How to Use the Digital Key 2 (Smart Phone)

Smart Phone Touch Control

The driver can lock and unlock the door by touching the smart phone on the door handle without activating the Kia Access App. The vehicle can be started by placing the smart phone on the charging pad. Make sure that the location of the smartphone's NFC antenna touches the door handle authentication pad.



A: Door handle authentication pad

B: Different smartphones have their NFC antennas located in different places.

The Apple iPhone's NFC antenna is located at the top of the back of the device, and the Apple Watch's NFC antenna is located in the center of the screen. The NFC antenna is located in the same location that you may use for tapping to make contactless payments. If you are uncertain about the location of the NFC antenna on your phone, contact

your smartphone manufacturer for more details.

Locking/Unlocking the doors

- If the driver touches the smart phone antenna to the driver's or passenger's door handle authentication pad for more than 2 seconds, the door will lock or unlock.
- After unlocking the doors, the doors will automatically re-lock after 30 seconds unless a door is opened.
- If the smart phone digital key does not operate, move the smart phone more than 4 inches (0.1 m) from the door handle authentication pad and try it again.

For smartphones without UWB support:

To lock or unlock the doors with a registered smartphone, touch the NFC antenna on the smartphone on the authentication pad of the driver's or passenger's outside door handle for about 2 seconds.

For smartphones with UWB support:

- To lock or unlock the doors, carry your smartphone and touch the door handle lock/unlock sensor (curved area) on the outside door handle.
- If Approach Unlock is enabled, the doors will be automatically unlocked when you approach the front seat outside door handle with your smartphone in your possession.

WARNING

- When you carry the smartphone supported by UWB and stay near the vehicle for about a few minutes, the door may not unlock automatically.
- If the smartphone is in a back pocket or bag, the signal may be blocked and could limit the Bluetooth connection and cause operation delay when locking/unlocking doors or starting the vehicle.
- If a tinting film containing metal components is applied, the digital key may not function properly.

* NOTICE

Note that the door will unlock and a beep sounds when using the Digital Key 2 if any of the following occur:

- When the Smart Key is in the vehicle
- The vehicle is in ACC or ON position
- Attempting to lock the door when more than one door, hood, liftgate is opened
- If a tinting film containing metal substances is applied to the digital key, it may not function properly.

Starting the vehicle

After placing your registered smart phone on the charging pad, depress the brake pedal and press the ENGINE START/STOP button.

- Once the vehicle is started, you can remove the smart phone from the pad.

For more details, refer to "ENGINE START/STOP Button (if equipped)" on page 5-6.

For smartphones without UWB support:

- Place the NFC antenna of the smartphone on the center of the charging pad, press the brake pedal, and then press the start button to start the vehicle.
- After starting the vehicle, you can remove the smartphone from the charging pad.
- Some smartphones may not have smooth NFC communication due to their internal structure. In such cases, move the smartphone to the right or left of the charging pad to operate it.

For smartphones with UWB support:

- Carry the smartphone inside the vehicle, press the brake pedal, and then press the start button to start the vehicle.
- To start the vehicle remotely, use an app provided by the smartphone manufacturer to lock the vehicle using the door lock button, and then press the remote start button within 4 seconds. The vehicle will start, and the hazard warning light will flash
- To turn off the vehicle, press the remote start button again.

⚠ WARNING

The vehicle can be started when the registered smart phone is placed on the in-vehicle authentication pad (wireless charging pad). Therefore, do not leave unsupervised children or people who are not aware of the system since it can result in serious injury or death. Always have the registered smart phone with

you to prevent vehicle theft when leaving the vehicle.

*** NOTICE**

The operation time of Digital Key 2 for shared user may extend during first time use.

Approach your Digital Key 2 (smartphone) on the authentication pad located in the outside door handle until the vehicle door lock/unlock function operates.

If the inner authentication pad is used for the first time, the function may not operate.

How to delete Digital Key (Smart Phone)

Turn the vehicle on with the smart key and make sure to keep the smart key inside the vehicle during the digital key (smart phone) deleting process.

1. To Delete All Digital Keys



1) Select Digital Keys

2) Select Smartphone key

3) Select Shared Keys

4) Select Delete all

With the vehicle on, touch **Setup** → **Vehicle** → **Digital Keys** → **Smartphone key** → **Delete all** on the infotainment system.

- The owner's key and the shared user's will be deleted.
- If there is no registered key, the menu cannot be selected.

2. To Delete One Digital Key



- 1) **Select Digital Keys**
- 2) **Select Smartphone key**
- 3) **Select the Digital Key you wish to delete.**
- 4) **Select Delete**

If the owner's smart phone has been changed, the new smart phone can be registered after only deleting the previous Digital Key 2 (Smart Phone).

*** NOTICE**

- If digital key (smart phone) is deleted, the digital key saved in the smart-phone is also deleted.
- If digital key (smart phone) is deleted on the smart phone, the digital key saved in the vehicle is also deleted.
- The function to delete shared user's key is not provided by the infotainment system.
- Digital key (smart phone) is not deleted even if Kia Access app is deleted on the smart phone.
- Digital key can be activated or deactivated within the Kia Access app provided from your smart phone manufacturer.

*** INFORMATION**

The infotainment system may change after software updates. For more information, refer to the user manual provided in the infotainment system and the quick reference guide.

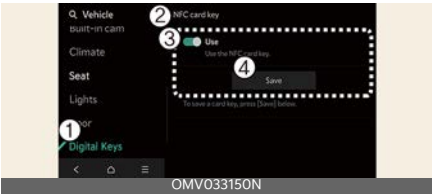
Digital Key 2 (Card Key)

How to register Digital Key 2 (Card Key)

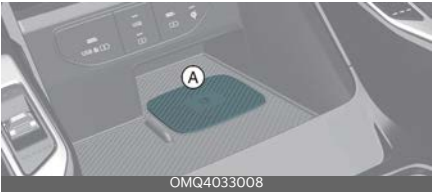
To use the card key as a digital key 2, register the card key in your vehicle system in accordance with the following procedures.

- 1. Enter the vehicle with two smart keys.
 - 1) In-vehicle authentication pad (wireless charging pad)
- 2. Check if **Use** menu is activated.

With the vehicle on, touch **Setup** → **Vehicle** → **Digital Keys** → **NFC Card key** → **Use** on the infotainment system.



- 1) **Digital Keys**
 - 2) **NFC Card key**
 - 3) **Use**
 - 4) **Save**
3. With the vehicle on, place the card key on the charging pad and press the **Save** menu on the infotainment system screen. The saving process will begin automatically.



A: Charging pad

4. When the digital key (card key) is saved, a message will appear on the infotainment system screen.

* INFORMATION

- The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference guide.
- When there is a digital key (card key) already saved in the vehicle, the **Save** menu is disabled. If you want to save a digital key again, refer to "How to delete Digital Key 2 (Card key)" on page 4-29 and follow the deleting procedure first before saving a digital key.
- To register the digital key (card key), the two smart keys must be in the vehicle.
- The registered digital key (card key) cannot be used for another vehicle.

How to use the Digital Key 2 (Card key)

Card key touch control

The driver can lock and unlock the door by touching the card key on the door handle. The vehicle can be started by placing the card key on the charging pad.



- A: **Door handle authentication pad**
 B: **Card key NFC antenna**

Locking/Unlocking the doors

- If the driver touches the NFC antenna of the registered card key 2 on the driver's or passenger's door handle authentication pad (1) for more than 2 seconds, the door will lock or unlock.
- After locking the door, make sure to check its locked state. After unlocking the doors, the doors will automatically re-lock after 30 seconds unless a door is opened.
- It works only if the center of the NFC card key touches the NFC authentication area of the vehicle door handle.

* NOTICE

When touching a smartphone NFC antenna to the center of the outside door handle authentication pad, the doors will not lock with a beep sound under the following conditions:

- When the Smart Key is in the vehicle
- When the vehicle is in ACC or ON position
- When one or more doors, hood or liftgate are open

Starting the vehicle

After placing your registered card key 2 on the charging pad, depress the brake pedal and press the ENGINE START/STOP button to start the vehicle.

- Once the vehicle is started, you can remove the card key from the pad.

For more detail, refer to "ENGINE START/STOP Button (if equipped)" on page 5-6.

⚠ WARNING

The vehicle can be started when the registered card key is placed on the charging pad. Therefore, do not leave

unsupervised children or people who are not aware of the system since it can result in serious injury or death. In addition, always have the registered card key with you to prevent vehicle theft when leaving the vehicle.

⚠ CAUTION

- The digital key (card key) may not work under the following conditions:
 - When the card key is not touching the center of the door handle authentication pad or the charging pad correctly.
 - If the card key overlaps NFC-enabled cards such as credit card or smart phone.
 - If the card key does not work, move the card key approximately 4 inches (10 cm) away from the authentication pad and then touch it again.
- The card key can be damaged by impact. If the card key is damaged, replace the card key with a new one and register it again.
- A damaged or lost card key is not covered by your warranty. The replacement cost is the owner's responsibility.
- Long-time exposure to high temperature may cause the card key to malfunction. Be careful not to expose the key to direct sunlight or high temperature.
- If the card key is left on the charging pad while driving, it may cause malfunction of the card key. After starting the vehicle, make sure to separate the card key from the in-vehicle charging pad.

- If the card key is placed between the charging pad and the smartphone and the smartphone is wirelessly charging, it may cause the card key to malfunction. For example, charging the smartphone while the card key is attached to the back of the smartphone case.

How to delete Digital Key 2 (Card key)

1. Turn the vehicle on with the smart key and make sure to keep the smart key inside the vehicle during the card key deleting process.
2. With the vehicle on, place the card key on the in-vehicle authentication pad. With the vehicle on, touch **Setup** → **Vehicle** → **Digital key** → **NFC card key** → **Delete** on the infotainment system.

The **Delete** menu will be disabled if there is no card key saved.



- 1) **Digital key**
 - 2) **NFC card Key**
 - 3) **Use**
 - 4) **Delete**
3. When the card key is deleted, a message will appear on the infotainment screen or cluster.

*** INFORMATION**

The infotainment system may change after software updates. For more infor-

mation, refer to the user's manual provided in the infotainment system.

Personalized Profile and Vehicle Settings

When the smartphone registered in the vehicle is linked with user profile, the vehicle will automatically operate (door lock/unlock with digital key, etc.) according to the linked user profile setting. User profile linking and personalization are available for the total of two drivers. The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference guide.

Linking / Unlinking profile

How to link user profile

1. Select **Setup** → **User profile** → **Profile setting** → **Link Digital Key (Smartphone)** on the infotainment system settings menu.
2. If you select **Link**, the registered phone number's digital key and the user profile will link. Select **Link** according to the instruction.
3. When the process is complete, the message 'Digital Key Link Complete.' will appear on the infotainment system screen.
4. Click the Link button and select the smartphone you want to link from the smartphone list displayed on the screen. Link it according to the instructions.
5. When the process is complete, the message 'Digital Key Link Complete.'

will appear on the infotainment system screen.

How to unlink user profile

1. Select **Setup** → **User Profile** → **Profile Setting** → **Link Digital Key (Smartphone)** on the infotainment system. Unlink the smartphone in the User Profile settings. Unlink the smartphone in the User Profile settings. Unlinking is possible only when user profile is linked.
2. When unlinking is complete, the message 'Digital key is unlinked.' will appear on the infotainment system screen.

* INFORMATION

- The user profile cannot be linked to both Driver 1 and Driver 2 that are connected to a single smartphone. Personalization will operate with the recently linked user profile, and the previously linked user profile will be automatically canceled.
- User profile can be linked when Digital Key is registered on the smartphone and the vehicle. The smartphone with another vehicle's digital key cannot be linked.
- NFC card key cannot be linked with personalized profile.
- If you remove the smartphone from the charging pad before completing the user profile link, the linking process will not be completed normally.
- Once the user profile linked Digital Key in the smartphone is deleted, Digital Key 2 should be re-registered and personalized by linking the user profile again.
- The infotainment system may change after software updates. For more

information, refer to the user's manual provided in the infotainment system and the quick reference guide.

Vehicle personalization operation

The personalization function linked with Digital Key 2 works under the following conditions:

- Touch the driver's door handle with the profile linked smartphone to lock or unlock the doors (Personalization does not operate when locking or unlocking the front passenger door.).
- The personalization function using the digital key can be operated after linking the digital key in the infotainment system profile menu.
- The personalization function works only when the vehicle is OFF or when the vehicle is started remotely. If the vehicle is not started remotely, personalization function does not work with the digital key.

* INFORMATION

User profile operation according to door lock/unlock system is as follows.

Item	Personalization operation
Initial value	Guest
Profile linked smartphone key	Linked profile
Profile unlinked smartphone key	Recently activated profile
NFC card key	
Smart key	

Vehicle personalization with Digital Key 2

The available personalization function in the vehicle is as follows.

System	Personalization Item	
User Settings menu	Lamp	Blink number of one-touch signal lamps
	Cluster	Information display on the cluster, Voice volume, Welcome sound
	Seat	Seat position
		Smart heating wire ventilation On/Off
	Door	Automatic door lock/unlock
	Smartphone wireless charging	Wireless charging On/Off
	Air conditioning	Setting up temperature unit, Block air inflow/ Automatic ventilation Window defroster On/Off
Infotainment Settings menu	Navigation	Preferred volume of the navigation system
		Recent destination
	User preset	My menu list settings, Radio preset
	Phone connectivity	Bluetooth preferential connection
		CarPlay/Android Auto/MirrorLink On/Off
Air conditioning	Operating condition	Latest operation setup of the following functions: Temperature (AUTO), air flow direction, air volume, air conditioner, air intake control, SYNC, Front windshield defroster, OFF

For more information of personalization, refer to the infotainment system manual.

 CAUTION

If you leave the digital key in the vehicle after locking or unlocking the doors or starting the vehicle with the smart key, the doors can be locked with the central door lock. Always have the digital key with you.

Used Vehicle/Digital Key 2 Maintenance

Purchasing used vehicle

If any of the digital key devices (smartphone key, card key (if equipped)) are registered in the vehicle, the message 'Digital key(s) active' will appear on the instrument cluster once when the vehicle is turned on after unlocking the vehicle door.

When purchasing a used car, be sure to check the message and delete the smartphone key and card key (if equipped) registered by the previous user. Be sure to notify an authorized Kia dealer when you purchase a used vehicle. Check whether the card key (if equipped) that came with the used vehicle operates properly. If the digital key (card key) (if equipped) does not work properly, delete the card key (if equipped) and register the smartphone key. Then re-register the card key (if equipped).

Digital Key 2 Maintenance

If you need to have your Digital Key 2 System repaired or replaced, the registered digital key (smartphone/card key) (if equipped) can be deleted depending on the type of maintenance.

Limitations of the System

- Digital Key 2 may not work if any of the following occurs:
 - Smartphone battery or the vehicle battery is discharged
 - NFC or Bluetooth is turned off in the smartphone settings
 - A credit card overlaps the back of your smart phone, or a metal or thick smartphone case is used
- Using the card key (if equipped) with other cards, or using it in a wallet or card holder
- There is electronic interference by other vehicles, objects, etc.
- There may be a communication error with Digital Key 2 NFC function if a metallic cover or communication device is attached to the smartphone. If there is a malfunction of Digital Key 2, remove the cover attached to the smartphone and try again.
- The vehicle may not be controlled by the smartphone if any of the following occurs:
 - Basic and necessary functions of the smartphone are operating (general call, urgent call, audio or contactless payment)
 - Using wireless earphone (general call, urgent call or audio)
 - When Digital Key 2 app function is being limited due to smartphone default settings or app launch priority policy per manufacturer

Fingerprint authentication system (if equipped)

Fingerprint authentication system allows the driver to have access to personal information, unlock profile and exit valet mode with an enrolled fingerprint.

Fingerprint authentication system settings

To use the system, the driver's fingerprint must be enrolled in the driver's profile. The drivers can set or delete their fingerprint through the infotainment system. Follow the following procedure.

Enrolling fingerprint



1. Turn on the vehicle.
2. Select **Setup** → **User Profile** → **Driver 1** → **Fingerprint Identification** → **Set/Delete Fingerprint** → **Set** in the infotainment.
3. Gently place your finger that you would like to enroll on the fingerprint sensor (A) according to the instruction. Fingerprint authentication attempts with excessive force may fail.
4. Following the instructions, place several parts of your fingerprint until the scanning process is complete.
5. Once the scanning process is completed, the message **Saving fingerprint** appears and the fingerprint enrollment process is complete.
6. When the fingerprint enrollment process is completed in the vehicle, the status is displayed on the infotainment system.

- The fingerprint enrollment process is canceled when the following condition occurs:
 - The infotainment system screen is altered.
 - The ENGINE START/STOP button turns on or off.
 - The gear is shifted and the vehicle is driven.

* INFORMATION

The infotainment system may change after software updates. For more information, refer to the manual provided in the infotainment system and the quick reference guide.

Deleting fingerprint

1. Select **Setup** → **User Profile** → **Driver 1** → **Fingerprint Identification** → **Set/Delete Fingerprint** → **Delete** in the infotainment system screen.
2. Delete the enrolled fingerprint according to the message **"Delete all Driver 1 fingerprints?"**
3. Once the fingerprint is deleted, the status is displayed on the infotainment system screen.

* NOTICE

- If no fingerprint is enrolled in the infotainment system, the sensor will not operate.
- The maximum of two fingerprint can be enrolled. Driver 1 and Driver 2 can enroll one fingerprint each.
- Please remove all substances including protection film on the fingerprint sensor and enroll your fingerprint.
- The fingerprint enrollment process is canceled when the following condition occurs:

- The infotainment system screen is altered.
- The ENGINE START/STOP button turns on or off.
- The gear is shifted and the vehicle is driven.

⚠ CAUTION

Do not duplicate your fingerprint with anyone.

*** NOTICE**

Touch the fingerprint authentication sensor gently. Fingerprint authentication attempts with excessive force may fail.

*** INFORMATION**

The infotainment system may change after software updates. For more information, refer to the manual provided in the infotainment system and the quick reference guide.

Fingerprint authentication system operation

Touch control

Convenient features such as personal information access, profile unlock, and valet mode exit can be used through the fingerprint authentication system. When the fingerprint shape appears on the infotainment system screen, you should place your finger on the recognition sensor in the vehicle according to the instruction message for authorization and then you can operate the linked features without entering you password. If the fingerprint authentication system does not work, move your finger away from the fingerprint authentication sensor and try again.

Fingerprint linked features can be turned on or off from the Settings menu. Select:

- **Setup → User Profile → Driver 1 (or Driver 2) → Fingerprint Identification**

Fingerprint linked features	Characteristic
Personal information access	Use with a fingerprint without a password
Profile unlock	
Valet mode exit	

*** NOTICE**

You cannot link a profile with the same fingerprint for Driver 1 and Driver 2. The personalization function works with the recently linked profile, and the previously linked profile will be automatically canceled.

*** INFORMATION**

The infotainment system may change after software updates. For more information, refer to the manual provided in the infotainment system and the quick reference guide.

Limitations of the system

- Fingerprint authentication system may not work when:
 - Trying to authorize with unregistered fingerprint.
 - Not touching the center of fingerprint authentication sensor.
 - Your fingerprint is obscured.
 - The sensor is obscured.
 - The film on the sensor is not removed.

- The fingerprint is altered (e.g., damaged, swollen, chapped).
- The hand is overly dry.
- The sensor is touched too quickly.
- If fingerprint authentication fails over 5 consecutive times, fingerprint enrollment and deletion may be temporarily restricted. You should try it later or try other methods such as inputting your password.
- When you visit an authorized Kia dealer for repairs parts due to fingerprint authorization system or related part failure, your registered fingerprint might be deleted. Have your smart key with you when you visit an authorized Kia dealer.
- You cannot use the fingerprint sensor when the battery is discharged.
- If you turn the vehicle on or off while proceeding the fingerprint authorization, the process will not complete.

⚠ WARNING

Do not enroll children's fingerprints in the vehicle. If you enroll children's fingerprints and the children are in the vehicle, unexpected accidents may occur.

Used vehicle

When purchasing a used vehicle

If you purchase a used vehicle, you should confirm and delete all of the enrolled fingerprints in Driver 1 and Driver 2 profile.

Integrated Memory System (if equipped)

Integrated Memory System for the driver's seat is provided to store and recall the following memory settings with a simple button operation.



- Driver's seat position
- Outside rear view mirror position
- Instrument panel illumination intensity
- Steering wheel (if equipped)

⚠ WARNING

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

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

*** INFORMATION**

- If the battery is disconnected, the memory settings will be deleted.
- If integrated memory system does not operate normally, have the system checked by an authorized Kia dealer.

Storing memory positions

1. Shift to P (Park) while the Start/Stop button is in the ON position.
2. Adjust the driver's seat position, outside rearview mirror position, steering wheel position, and head-up display height to the desired position.
3. Hold the button (1 or 2). The system will beep once and notify you 'Driver 1 (or 2) settings saved' will appear on the infotainment screen.

Recalling memory positions

1. Shift to P (Park) while the Start/Stop button is in the ON position.
2. Press the desired memory button (1 or 2). The system will beep once, and then the driver's seat position, outside rearview mirror position, steering wheel position, and head-up display height will automatically adjust to the stored positions.
3. Driver 1 (or 2) settings applied' will appear on the infotainment screen.

Seat easy access

Seat easy access will move the driver's seat and steering wheel automatically as follows:

Exiting the vehicle:

- The driver's seat will move as follows when the Start/Stop button is in the OFF position with the gear in P (Park) and the driver's door open.
- Driver seat: Moves rearward depending on the distance selected from the Settings menu in the infotainment system. However, the driver's seat may not move rearward if there is not enough space between the driver's seat and the rear seats.

Entering the vehicle:

- The driver's seat will move as follows when the Start/Stop button is pressed to the ACC, ON or START position or while carrying the smart key, the driver's door is closed with the Start/Stop button in the OFF position.
 - Driver seat, Steering wheel position: Moves back to its original position.
- You can set the Seat Easy Access function from the Settings menu in the infotainment system screen.
Select Driver seat, **Setup** → **Vehicle Settings** → **Seat** → **Seating Easy Access** → **Driver Seat Easy Access** → **Normal/Extended/Off**.

Resetting the System

Take the following procedures to reset integrated memory system, when it does not operate properly.

Resetting integrated memory system

1. Stop the vehicle and open the driver's door with the Start/Stop button in the ON position and the vehicle shifted to P (Park).
2. Adjust the driver's seat and seatback to the foremost position.
3. Press the memory button 1 (or 2) and push forward the driver's seat movement switch over 2 seconds simultaneously.

While resetting integrated memory system

1. Resetting starts with a notification sound.
2. The driver's seat and seatback is adjusted to the rearward position with the notification sound.
3. The driver's seat and seatback is re-adjusted to the default position (central position) with the notification sound. However, in the following cases, the resetting procedure and the notification sound may stop.
 - The memory button is pressed.
 - The seat control switch is operated.
 - The gear is shifted out of P (Park).
 - The driving speed exceeds 3 mph (5 km/h).
 - The driver's door is closed.

* NOTICE

- While integrated memory system is being reset, if the resetting and notification sound stops incompletely, restart the resetting procedure again.
- Make sure that there is no objects around the driver's seat in advance of resetting the integrated memory system.
- After resetting the integrated memory system, the adjustment for the driver seat must be stored again to recall the memory position.

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 fresh air can enter the vehicle.

⚠ WARNING

Rear cargo area

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

Opening the liftgate



OMQ4033022_2

- The liftgate is locked or unlocked when all doors are locked or unlocked with the transmitter (or smart key) or central door lock switch.
- Only the liftgate is unlocked if the liftgate unlock button on the transmitter or smart key is pressed for approximately 1 second.

- If unlocked, the liftgate can be opened by pressing the handle and pulling it up.
- Once the liftgate is opened and then closed, the liftgate locks automatically. (All doors must be locked.)

* NOTICE

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

⚠ WARNING

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

⚠ CAUTION

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

Closing the liftgate



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

⚠ WARNING

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

⚠ WARNING

Exhaust fumes

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

⚠ CAUTION

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

Emergency liftgate safety release

4



To unlock and open the liftgate manually from inside the luggage compartment, perform the following procedure:

1. Insert a long, flat object, such as a key into the opening at the bottom of the liftgate.
2. Slide the latch in the direction of the arrow to unlock the liftgate.
3. Push the liftgate to open.

⚠ WARNING

- You and your passengers must be aware of the location of the Emergency Liftgate Safety Release lever in this vehicle and how to open the liftgate in case you are accidentally locked in the liftgate.
- NEVER allow anyone to occupy the liftgate of the vehicle at any time. If the liftgate is partially or totally

latched and the person is unable to get out, serious injury or death could occur due to lack of ventilation, exhaust fumes and rapid heat build-up, or because of exposure to cold weather conditions. The liftgate is also a highly dangerous location in the event of a crash because it is not a protected occupant space but is a part of the vehicle's crush zone.

- Your vehicle should be kept locked and the Smart Key should be kept out of the reach of children. Parents should teach their children about the dangers of playing in liftgates.
- Use the release lever for emergencies only.

⚠ 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.

⚠ CAUTION

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

⚠ WARNING

Do not grasp the part supporting the liftgate (gas lifter), as this may cause serious injury.



Power liftgate (if equipped)

Power liftgate operating conditions

The power liftgate operates when the gear is in P (Park) with the vehicle running. However, the power liftgate will operate regardless of the gear position when the vehicle is off. Also, the liftgate can be opened only when vehicle speed is below 1.8 mph (3 km/h).

For safety, before attempting to open or close the liftgate, make sure the vehicle is in P (Park).

WARNING

- Never leave children or animals unattended in your vehicle. Children may operate the power liftgate. Doing so can result in injury to themselves or others and can damage the vehicle.



A: 27 inches (70 cm)

B: 27 inches (70 cm)

- Make sure that there are no people or objects in the path of the power liftgate or smart liftgate prior to use. Serious injury, damage to the vehicle or damage to surrounding objects (for example, walls, ceilings, vehicles, etc.) may result if contact with the liftgate occurs.
- The liftgate may not open or may close unintentionally injuring people around the liftgate under the following situation:

- There is a lot of snow on the liftgate.
- There is a heavy object on the liftgate such as a bicycle carrier, ladder, etc.
- Do not open the liftgate before removing snow or heavy object on the liftgate.

* NOTICE

- Do not close or open the liftgate manually. This may cause damage to the power liftgate. If it is necessary to close or open the liftgate manually when the battery is discharged or disconnected, do not apply excessive force.
- Do not operate the power liftgate more than 10 times continuously when the vehicle is not running. Use the power liftgate with the vehicle running when the power liftgate is used repeatedly to prevent battery discharge.
- Do not leave the power liftgate open for a long period of time. This may drain the battery.
- Do not apply excessive force when the power liftgate is operating. Doing so could result in vehicle damage.
- Do not grab or hold on to the liftgate support struts at any time. Damage to the liftgate support struts could result. Deformation of the liftgate support struts may cause vehicle damage and personal injury may occur.



- Do not modify or repair any part of the power liftgate by yourself. This must be done by an authorized Kia dealer.
- Do not operate the power liftgate under the following conditions. The power liftgate may not operate properly.
 - One side of the vehicle is lifted to inspect the vehicle or change a tire
 - Parking on an uneven road such as a slope, etc.
- Close the liftgate completely and lock all doors and liftgate using the central door lock button before using an automatic car wash.
- Do not spray high pressure water directly on the power liftgate outside open/close button. The liftgate may open unintentionally.

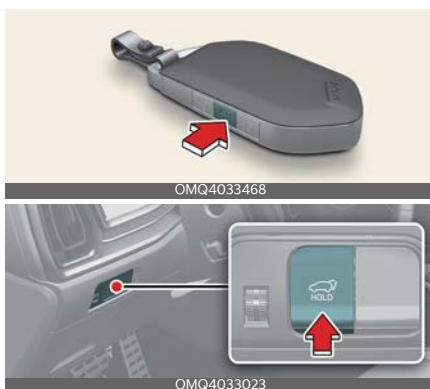
* INFORMATION

- If the liftgate is not fully closed and vehicle speed is at or above 1.8 mph (3 km/h), a warning will sound 10 times. Immediately park the vehicle at a safe place, close the liftgate, and check that the liftgate open warning on the instrument cluster is turned off.
- In cold and wet climates, the outside power liftgate open/close button may not work properly due to freezing conditions. If this occurs, remove the ice before using the outside power liftgate open/close button or use the power liftgate open/close button on the smart key or the instrument panel.
- Operating the power liftgate more than 5 times continuously could cause damage to the operating motor. If this occurs, the power liftgate will not operate to prevent the motor from overheating. If any of the power lift-

gate buttons are pressed to try to open the liftgate, the chime will sound 3 times, but the liftgate will remain closed. Allow the power liftgate system to cool for about 1 minute before operating the system again.

Operating the power liftgate

Power liftgate open/close button (Smart key, Instrument panel) (if equipped)



Press the power liftgate open/close button for 1 second. The liftgate opens or closes with a warning sound.

While the liftgate is opening or closing, press the button to stop liftgate operation

If the smart key is not within operation range (approximately 10 m) from the vehicle, liftgate operation will stop with a warning sound for 5 seconds.

Power liftgate open/close button (Outside the power liftgate)



When the liftgate is closed, press the power liftgate open/close button to open the liftgate.

If the vehicle is locked, press the power liftgate open/close button with the smart key in your possession.

If the liftgate is unlocked, the liftgate will open or close with a warning sound when the power liftgate open/close button is pressed without carrying the smart key.

Power liftgate open/close button (Inside the power liftgate)



Press the power liftgate open/close button. The liftgate opens or closes automatically.

Automatic reverse

During power liftgate operation if the power liftgate senses any obstacle, the liftgate will stop or will fully open. The automatic reverse feature may not oper-

ate properly, or it may operate unexpectedly under the following circumstances:

- The automatic reverse feature may not detect the resistance if the detected resistance is below a certain level, or if the liftgate is almost fully closed near the latched position.
- The automatic reverse feature may operate if a strong impact is applied with no obstructions placed.

⚠ WARNING

Never intentionally place any object or part of your body in the path of the power liftgate to make sure the automatic reverse feature operates. Serious injury, or damage to the vehicle or object may occur.

* INFORMATION

The power liftgate may stop operating if the automatic reverse feature operates more than two times while attempting to open or close the liftgate. If this occurs, carefully open or close the liftgate manually, and then after 30 seconds try to operate the power liftgate automatically again.

Setting the power liftgate

To use each feature, you must select the opening speed or opening height from the settings menu. Deselect the settings when you do not want to use the feature.

Power liftgate opening speed

To adjust the power liftgate speed, select **Setup** → **Vehicle** → **Door** → **Power Liftgate Opening Speed** → **Normal/Fast** in the infotainment system. (Default setting is **Fast**)

Power liftgate opening height

To adjust the power liftgate opening height, select **Setup → Vehicle → Door → Power Liftgate Opening Height → Full Open/Level 3/Level 2/Level 1/User Height Setting** in the infotainment system.

See additional information in supplied Infotainment Manual.

User height setting

1. Position the liftgate manually to the height you prefer.
2. Press the power liftgate open/close button located inside the liftgate for more than 3 seconds.

If 'User Height Setting' is selected for the power liftgate opening height, the power liftgate will automatically open to the height manually set by you.

* INFORMATION

- If the power liftgate opening height has not been manually set, the power liftgate will fully open when 'User Height Setting' from the infotainment system is selected.
- If one of the height setting (Full Open/Level 3/Level 2/Level 1) is selected from the settings menu in the infotainment system, and then 'User Height Setting' is selected, the liftgate will open to the height manually set by you.
- The power liftgate opening speed and opening height settings change according to the linked User Profile. If the User Profile is changed, power liftgate opening speed and opening height settings will change accordingly.

Resetting the power liftgate

In some circumstances resetting the power liftgate operation may need to be performed. Some instances where resetting the power liftgate may be required include:

- When the 12-volt battery is recharged
- When the 12-volt battery is reinstalled after removal or replacement
- When the related fuse is reinstalled after removal or replacement



1. With the vehicle off or running, put the gear in P (Park).
2. Press the power liftgate open/close inner button and outer button simultaneously until a chime sounds.
3. Slowly close the liftgate manually.
4. Press the power liftgate open/close outer button. The power liftgate will open with a chime sound.

Wait until the liftgate fully opens to complete resetting. If the liftgate stops before it is fully open, resetting cannot be completed.

* INFORMATION

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

Emergency liftgate safety release



To unlock and open the liftgate manually from inside the luggage compartment, perform the following procedure:

1. Insert a long, flat object, such as a key into the opening at the bottom of the liftgate.
2. Slide the latch in the direction of the arrow to unlock the liftgate.
3. Push the liftgate to open.

⚠ WARNING

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

Power Liftgate automatic close

Using power liftgate automatic close feature



1. When the liftgate is open, approach the detecting area, which is 20~40 inches (50~100 cm) from behind the liftgate with the smart key in your possession. Wait for approximately 3 seconds until the chime sounds.
2. With the smart key, move away from the vehicle. The liftgate closes automatically with a chime sound.

Setting Power Liftgate automatic close

With the engine on, select **Setup** → **Vehicle** → **Door** → **Power Liftgate** to turn on Power Liftgate Auto Close and deselect to turn off the feature in the infotainment system.

See additional information in supplied Infotainment Manual.



Press the automatic close release button while the liftgate is open. The power liftgate automatic close feature will turn off.

Smart Liftgate with Auto Open (if equipped)

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



How to use the Smart Liftgate with Auto Open

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 Liftgate with Auto Open does not operate when:

- The smart key is detected within 15 seconds after the doors are closed and locked, and is continuously detected.
- The smart key is detected within 15 seconds after the doors are closed and locked, and 60 in (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 Liftgate with Auto Open, go to **Setup** → **Vehicle** → **Door** → **Smart Liftgate** in the infotainment system.

2. Detect and Alert



If you are positioned in the detecting area (20 ~ 40 in [50 ~ 100 cm] behind the vehicle) carrying a smart key, the hazard warning lights will blink and chime will sound 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 6 times and then the liftgate will open.

⚠ WARNING

- 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 Liftgate with Auto Open 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 Liftgate with Auto Open 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 gas lifters and attached hardware if the liftgate is not closed prior to driving.

How to deactivate the Smart Liftgate with Auto Open function using the smart key



1. Door lock
2. Door unlock
3. Liftgate open
4. Panic button
5. Remote start

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

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

*** NOTICE**

- If you press the door unlock button (2), the Smart Liftgate with Auto Open function will be deactivated temporarily. But, if you do not open any door for 30 seconds, the Smart Liftgate with Auto Open 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 Liftgate with Auto Open function is not in the Detect and Alert stage, the Smart Liftgate with Auto Open function will not be deactivated.
- In case you have deactivated the Smart Liftgate with Auto Open function by pressing the smart key button and opened a door, the Smart Liftgate with Auto Open function can be activated again by closing and locking all doors.

Detecting area



- The vehicle is slantingly parked on a slope or unpaved road, etc.

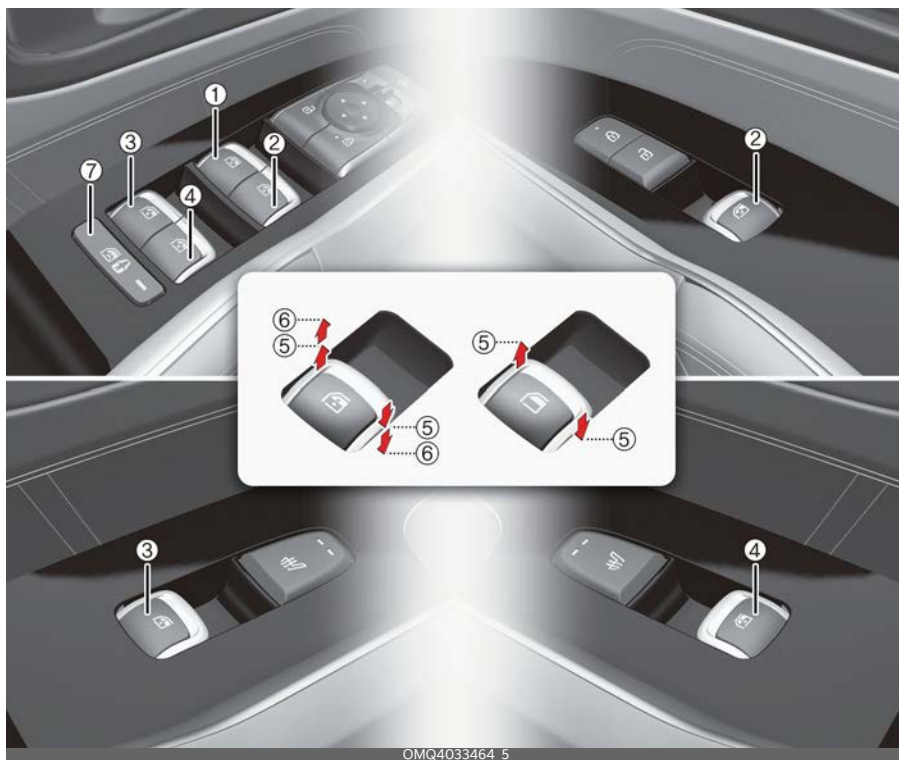
- The Smart Liftgate with Auto Open operates with a welcome alert if the smart key is detected within 20 ~ 40 in (50 ~ 100 cm) from the liftgate.
- The alert stops at once if the smart key is positioned outside the detecting area during the Detect and Alert stage.

* NOTICE

- The Smart Liftgate with Auto Open 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 mobile 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.

Windows

The doors of this vehicle are equipped with power windows that can be operated by a switch.



OMQ4033464_5

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

*: if equipped

*** NOTICE**

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

ENGINE START/STOP button must be in the ON position for power windows to operate.

Each door has a power window switch that controls the door's window. The driver has a power window lock button which can block the operation of rear passenger windows. The power windows can be operated for approximately 3 minutes after ENGINE START/STOP button turned to the ACC or LOCK position. If the front doors are opened, the power windows cannot be operated even within the 3 minutes period.

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

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

*** NOTICE**

While driving with the rear windows down or with the sunroof (if equipped) in an open (or partially open position), your vehicle may demonstrate a wind buffeting or pulsation noise. This noise is a normal occurrence and can be reduced or eliminated by taking the following actions. If the noise occurs with one or both of the rear windows down, partially lower both front windows approximately 1 inches (2.5 cm). 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.

*** NOTICE**

If you press the one-touch window button for micro adjustment, the glass will go down to a specific location to improve your convenience.

Window opening and closing

You can open and close windows using the power window switch.

Type A

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

Type B - 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.

To reset the power windows

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

1. Press ENGINE START/STOP button to the ON position.
2. Close the window and continue pulling up the power window switch for at least 1 second after the window is completely closed.

Automatic reversal (if equipped)



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 inches (30 cm) to allow the object to be cleared.

If the window detects the resistance while the power window switch is pulled up continuously, the window will stop

upward movement and then lower approximately 1 inch (2.5 cm).

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

* NOTICE

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

⚠ WARNING

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

⚠ WARNING

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

⚠ CAUTION

Do not install any accessories in the vehicle that extend into the open window area. Such objects could prevent

the automatic reverse feature from functioning.

Power window lock button

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



When the power window lock button is pressed:

- The driver's master control can operate all passengers' power windows.
 - The front passenger's control can operate the front passenger's power window.
 - The rear passengers' control cannot operate the rear passenger's power window.
- * If the power window lock switch is operated (indicator turns on), rear passenger cannot open the rear door (if equipped with the Electronic Child Safety Lock System). For more details, refer to "Electronic child safety lock system (if equipped)" on page 4-19.

CAUTION

- To prevent possible damage to the power window system, do not open or close two windows or more at the same time. This will ensure the longevity of the fuse.
- Never try to operate the main switch on the driver's door and the individual door window switch in opposite direc-

tions at the same time. The window will stop and cannot be opened or closed.

WARNING

Windows

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

Remote window opening (if equipped)



You can still control the windows movement with the engine turned off. Press the Door Unlock button (1) for more than 3 seconds. The window

moves down after the doors are unlocked, as long as you press the door unlock button (1). The window movement stops, when you release the door unlock button (1).

* Remote window opening requires the automatic power window down for all seats to be applied.

⚠ WARNING

If vehicle is left unattended after operating the Remote window opening function, theft may be possible. In addition, please use caution there might be a malfunction due to the inflow of water while raining.

⚠ CAUTION

- The remote window opening function may abruptly stop, when you move away from your vehicle during operation. Stay close to your vehicle, while monitoring the window movement.
- One of the windows may stop operating, when the window is interrupted by certain force. However, the other windows will keep operating. Thus, you should make sure that all windows are opened.
- Be careful when using the remote window openings function, as the doors will be unlocked.

Hood

The hood serves as a cover for the engine compartment. Open the hood if maintenance work needs to be performed in the engine compartment or if you need to look at the compartment.

Opening the hood

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



2. Go to the front of the vehicle, raise the hood slightly, push the secondary hood release lever (1) to the left and lift the hood (2).



3. Pull out the support rod.



4. Hold the hood open with the support

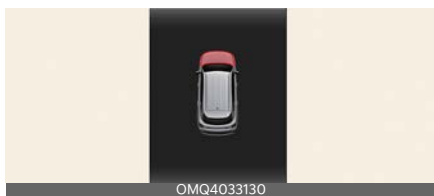
⚠ WARNING

Support rod

- After driving, the engine compartment and support rod will be hot. Grasp the support rod in the area wrapped in rubber to prevent burns.
- The support rod must be inserted completely into the hole provided whenever you inspect the engine compartment. This will prevent the hood from falling and possibly injuring you.

Hood open warning

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



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

Closing the hood



1. Before closing the hood, check the following:
 - All filler caps in the engine compartment must be correctly installed.

- Gloves, rags or any other combustible material must be removed from the engine compartment.

2. Lower the hood until it is about 12 in. (30 cm) above the closed position and let it drop. Make sure that it locks into place.
3. Check that the hood has engaged properly.
 - If the hood can be raised slightly, it is not properly engaged.
 - Open it again and close it with a little more force.

⚠ CAUTION

Hood obstruction

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

⚠ WARNING

Fire risk

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

⚠ WARNING

Unsecured 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 may result in an accident.

Fuel filler door

The vehicle's fuel filler door must be opened and closed by hand from outside the vehicle.

Opening the fuel filler door

To unlock fuel filler door:

- Press the unlock button on your smart key
 - Press the Central Door unlock button on armrest trim of driver's door
 - Pull the driver's inside door handle outward
1. Turn the engine off.
 2. Ensure the driver's door is unlocked for unlocking fuel filler door.
 3. Press the rear center edge of fuel filler door.



4. Pull the fuel filler door (1) out to fully open.



5. To remove the fuel tank cap (2), turn it counterclockwise. You may hear a hissing noise as the pressure inside the tank equalizes.
6. Place the cap on the fuel filler door.

* NOTICE

The fuel filler door will unlock when Driver's door is unlocked

To unlock fuel filler door:

- Press the unlock button on your smart key
- Press the Central Door unlock button on armrest trim of driver's door
- Pull the driver's inside door handle outward

The fuel filler door will lock when all doors are locked

To lock fuel filler door:

- Press the lock button on your smart key
- Press the Central Door lock button on armrest trim of driver's door

※ All doors will automatically lock after the vehicle speed exceeds 9.3 mph (15 km/h) Fuel door is also locked when vehicle speed exceeds 9.3 mph (15 km/h).

⚠ CAUTION

Before refueling, be sure to check what type of fuel is used for your vehicle.

If you put diesel or ethanol fuel into a gasoline-powered vehicle, it will affect the fuel system and cause serious damage to the vehicle.

* NOTICE

If the fuel filler door does not open because ice has formed around it, tap lightly or push on the door to break the ice and release the door. Do not pry on the door. If necessary, spray around the door 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.

Closing the fuel filler door

To lock fuel filler door:

- Press the lock button on your smart key
 - Press the Central Door lock button on armrest trim of driver's door
- * All doors will automatically lock after the vehicle speed exceeds 9.3 mph (15 km/h). Fuel lid is also locked when vehicle speed exceeds 9.3 mph (15 km/h)
1. To install the fuel tank cap, turn it clockwise until it "Clicks".
 2. Close the fuel filler door by pressing rear center edge of the fuel filler door.

* NOTICE

Press the vehicle's fuel door to LOCK position when the fuel filler door is completely closed in order to lock the fuel filler door.

If the fuel filler door is not completely closed, the fuel filler door will not be locked.

⚠ 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.

* 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.

* NOTICE

Tighten the cap until it clicks one time, otherwise, the engine warning indicator light will appear.

⚠ CAUTION

Keep the door into LOCK position when the vehicle is being washed (i.e. high pressure washer, automatic car washer, etc.)

⚠ WARNING

Always tighten your fuel cap before you leave the fuel station. Failure to securely install your fuel cap can lead to fuel spillage in an accident and increase fire risk.

⚠ WARNING

Fire/explosion risk

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

⚠ WARNING

Static electricity

- Before touching the fuel nozzle, you should eliminate potentially dangerous static electricity discharge by touching another metal part of the vehicle, a safe distance away from the fuel filler neck, nozzle, or other gas source.
- Do not get back into a vehicle once you have begun refueling since you can generate static electricity by

touching, rubbing or sliding against any item or fabric (polyester, satin, nylon, etc.) capable of producing static electricity. Static electricity discharge can ignite fuel vapors resulting in rapid burning. If you must 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 mobile phones while refueling. Electric current and/or electronic interference from mobile phones can potentially ignite fuel vapors causing a fire.

WARNING

Refueling & Vehicle fires

When refueling, always shut the engine off. Sparks produced by electrical components related to the engine can ignite fuel vapors causing a fire. Once refueling is complete, check to make sure the

filler cap and filler door are securely closed, before starting the engine.

WARNING

Smoking

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

Make sure to refuel your vehicle according to "Fuel requirements" on page 1-2.

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.

WARNING

- Do not allow anyone that has not discharged static electricity from their body to come close to an open fuel tank.
- Do not inhale vaporized fuel.

WARNING

Risk of injury from fuel

Fuels are poisonous and harmful to your health.

- Fuel contains substances that are harmful if inhaled.

- Do not swallow fuel or let it come into contact with skin, eyes or clothing.
- Do not inhale fuel vapors.
- Keep children away from fuel.

If you or other people come into contact with fuel, observe the following:

- Immediately rinse fuel off your skin with soap and water.
- If fuel comes into contact with your eyes, immediately rinse them thoroughly with clean water. Seek medical attention immediately.
- If you swallow fuel, seek medical attention immediately. Do not induce vomiting.
- Change immediately out of clothing that has come into contact with fuel.

* NOTICE

Damage caused by the wrong fuel

Fuel that does not conform to the required quality can lead to increased wear as well as damage to the engine and exhaust system. Only use the fuel recommended.

* NOTICE

Damage caused by the wrong fuel

Vehicles with a gasoline engine:

Even small amounts of the wrong fuel could result in damage to the fuel system, the engine and the emission control system.

* NOTICE

Do not overfill the fuel tank

Do not overfill the fuel tank; otherwise fuel may spill, causing harm to the environment and damaging the vehicle.

* NOTICE

- Do not use diesel or ethanol to refuel vehicles with a gasoline engine.
- Do not switch on the ignition if you accidentally refuel with the wrong fuel. Otherwise, fuel can enter the fuel system.
- Even small amounts of the wrong fuel could result in damage to the fuel system and the engine. Have the system serviced by an authorized Kia dealer.

Panoramic sunroof (if equipped)

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



The sunroof can only be operated when ENGINE START/STOP button is in the ON or START position.

The sunroof can be operated for approximately 3 minutes after ENGINE START/STOP button is in the ACC or LOCK/OFF position. However, if the front door is open, the sunroof cannot be operated even within the 3 minute period.

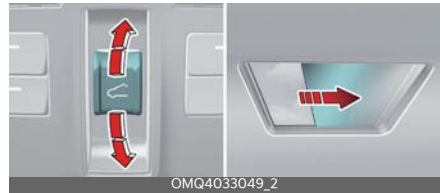
WARNING

- Be sure to operate the sunroof while the car is stationary. If you operate the sunroof while driving, it may interfere with driving and cause an accident.
- Even when leaving the vehicle for a short time, turn off the ignition and carry the key to prevent children from operating the sunroof.
- Do not sit on the roof. Sitting on a roof or lifting heavy objects can damage the sunroof.

NOTICE

Do not operate the sunroof when roof bars are installed on the vehicle or when there is luggage on the roof.

Power sunshade



Use the power sunshade to block direct sunlight coming through the sunroof glass.

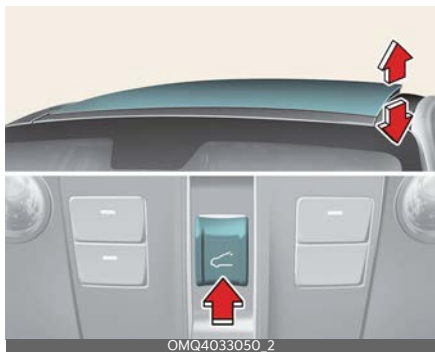
- Push the sunroof switch rearward to the first detent position, the power sunshade automatically slides open.
- Push the sunroof switch forward to the first detent position, the power sunshade automatically closes. However, if the sunroof glass is open, the glass will close first.

To stop the power sunshade at any point, push the sunroof switch in any direction.

NOTICE

- Do not pull or push the power sunshade by hand as such action may damage the power sunshade or cause it to malfunction.
- Wrinkles formed on the power sunshades are normal due to material characteristic.

Tilt open/close



- Push the sunroof switch upward, the sunroof glass tilts open. However, if the power sunshade is closed, the sunshade will open first.
- Push the sunroof switch upward or forward when the sunroof glass is tilt opened, the sunroof glass automatically closes.

To stop the sunroof movement at any point, push the sunroof switch in any direction.

Slide open/close



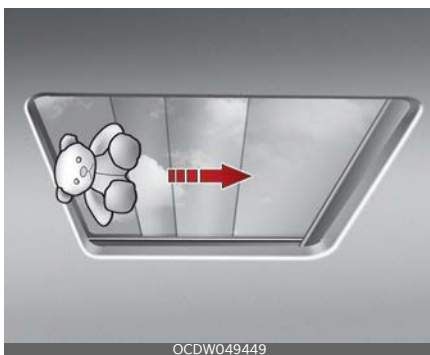
- Push the sunroof switch rearward to the first detent position, the sunroof glass opens. However, if the power sunshade is closed, the power sunshade will open first.

Push the sunroof switch forward to the first detent position, the sunroof glass closes. However, if the sunroof glass is close, the power sunshade will close.

- Push the sunroof switch forward or rearward to the second detent position, the power sunshade and sunroof glass operate automatically (auto slide feature).

To stop the sunroof movement at any point, push the sunroof switch in any direction.

Automatic reversal



If the power sunshade or sunroof glass senses any obstacle while it is closing automatically, it will reverse direction then stop at a certain position.

The auto reverse function may not work if an object thin or soft is caught between the sliding power sunshade or sunroof glass and sunroof sash.

⚠ WARNING

- Make sure heads, hands, arms or any other body parts or objects are out of the way before operating the sunroof. Body parts or objects may get caught causing injuries or vehicle damage.
- Never deliberately use your body parts to test the automatic reversal

function. The power sunshade or sunroof glass may reverse direction, but there is a risk of injury.

* NOTICE

- Do not continue to push the sunroof switch after the sunroof is fully opened, closed, or tilted. Damage to the sunroof motor could occur.
- Continuous operations such as slide open/close, tilt open/close, etc. may cause the motor or sunroof system to malfunction.
- Regularly remove any accumulated dust on the sunroof rail.
- Dust accumulated between the sunroof and roof panel can make noise. Open the sunroof and remove dust regularly using a clean cloth.
- Do not try to open the sunroof when the temperature is below freezing or when the sunroof is covered with snow or ice. The sunroof may not work properly and may break if opened by force.
- Do not open or drive with the sunroof glass open immediately after rain or washing the vehicle. Water may wet the interior of the vehicle.
- Do not extend any luggage outside the sunroof while driving. Vehicle damage may occur if the vehicle suddenly stops.

▲ WARNING

Do not extend your head, arms, body parts or objects outside the sunroof while driving. Injuries may occur if the vehicle suddenly stops.

Resetting the sunroof



In some circumstances resetting the sunroof operation may need to be performed. Some instances where resetting the sunroof may be required include:

- When the 12-volt battery is either disconnected or discharged
- When the sunroof fuse is replaced
- If the sunroof one-touch AUTO OPEN/CLOSE operation is not functioning properly

Sunroof resetting procedure

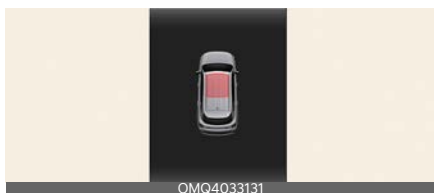
1. It is recommended to perform the reset procedure with the vehicle engine running. Start the vehicle in P (Park).
2. Make sure the power sunshade and sunroof glass are in the fully closed position. If the power sunshade and sunroof glass are open, push the switch forward until the sunshade and sunroof glass are fully closed.
3. Release the switch when the power sunshade and sunroof glass are fully closed.
4. Push the switch forward until the power sunshade and sunroof glass moves slightly. Then release the switch.
5. Once again push and hold the sunroof switch forward until the sunroof glass slides open and closed. Do not release the switch until the operation is completed.

If you release the switch during operation, start the procedure again from step 2.

* NOTICE

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

Sunroof open warning



If the driver turns off the engine when the sunroof is not fully closed, the warning chime will sound for several seconds and the sunroof open warning will appear on the cluster LCD display.

Close the sunroof securely when leaving your vehicle.

⚠ CAUTION

Make sure the sunroof is closed fully when leaving your vehicle. If the sunroof is left open, rain or snow may wet the interior of the vehicle. Also, leaving the sunroof open when the vehicle is unattended may invite theft.

Steering wheel

The steering wheel of this vehicle is equipped with the Electric Power Steering (EPS) system.

Electric power steering (EPS)

Power steering uses the motor to assist you in steering the vehicle.

If the engine is off or if the power steering system becomes inoperable, the vehicle may still be steered, but will require increased steering effort.

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

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

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

* NOTICE

The following symptoms may occur during normal vehicle operation:

- when ENGINE START/STOP button is the ON position, the steering wheel enters normal operation mode after diagnosing the EPS system (for about 3 seconds).
- A click noise may be heard from the EPS relay after turning the ENGINE START/STOP button is turned to the ON or OFF position.
- If the steering wheel is operated when the vehicle is not in motion or driven at a low speed, you may hear some noise.

- If the EPS system does not operate normally, the warning light will appear or blink on the instrument cluster. If the power assistance of steering fails, you will need to use more force to steer.
- Operating the steering wheel at lower temperatures may require more force and accompany noise. However, when the temperature increases, it returns to normal.
- Take your vehicle to an authorized Kia dealer and have the vehicle checked as soon as possible.
- 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.
- When jump starting the vehicle after battery discharge, the steering wheel may not function properly. It is a temporary situation due to low battery voltage, and upon stable battery charging, the steering wheel will function normally again. Please move the steering wheel around to make sure the steering wheel is functioning properly before driving the vehicle.

CAUTION

When you continuously operate the steering wheel, the overcurrent protection device activates and requires more force to operate the steering wheel. This doesn't indicate a malfunction, and it works for your safety and will return to normal after some time.

CAUTION

If the EPS system does not work or an error occurs, the warning light on the instrument panel may be turned on or blink and it may require more force to operate the steering wheel. Hold the steering wheel more tightly than usual and operate with greater force. And then immediately pull your vehicle over to a safe place and have your vehicle inspected by an authorized Kia dealer.

Tilt & telescopic steering wheel

A tilt and telescopic steering wheel 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.

Adjusting steering wheel angle and height

Manual type



1. To change the steering wheel angle, pull down the lock release lever (1).
2. Adjust the steering wheel to the desired angle (2) and distance forward/back (3).

Move the steering wheel, so it points toward your chest, not toward your face. Make sure you can see the instrument panel warning lights and gauges. After adjusting, pull up the lock.

3. Pull up the lock-release lever to lock the steering wheel in place.
Push the steering wheel both up and down to be certain it is locked in position.
4. 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 engage. In this case, adjust

the steering wheel again to lock the steering wheel.

Electric type



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

⚠ CAUTION

- Never adjust the position of the steering wheel while driving.
- While adjusting the steering wheel height, please do not push or pull it hard since the fixture can be damaged.

Heated steering wheel (if equipped)

When ENGINE START/STOP button is in the ON position, pressing the heated steering wheel button warms the steering wheel. The indicator on the button will appear.



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

- The heated steering wheel defaults to the OFF position whenever ENGINE START/STOP button is in the ON position.

* 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 or gasoline. Doing so may damage the surface of the steering wheel.
- If the surface of the steering wheel is struck by a sharp object, damage to the heated steering wheel components could occur.

⚠ 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 a long time.

Horn

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. Check the horn regularly to be sure it operates properly.

⚠ CAUTION

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

Mirrors

This vehicle is equipped with inside and outside rear-view mirrors to provide views of objects behind the vehicle.

Inside rear-view mirror

Adjust the rear-view 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 could interfere with your vision out the rear window.

⚠ WARNING

Mirror adjustment

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

*** NOTICE**

Do not modify the inside mirror in any manner, including installing a wide mirror. Doing so could result in injury during an accident or deployment of the air bag.

⚠ 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.

Day/night rear-view mirror (if equipped)



(A): Day, (B): Night

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

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

Remember that you lose some rear-view clarity in the night position.

Electric Chromic Mirror (ECM) (if equipped)

The ECM automatically controls the glare from the headlights of vehicles behind you in nighttime or in low light driving conditions.



For Telematics button function:

1. Virtual assist button
2. Kia Connect (Voice local search) button
3. Roadside assist button

The sensor mounted in the mirror senses the light level around the vehicle, and automatically controls the headlamp glare from the vehicles behind you.

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

Electrochromic mirror (ECM) with HomeLink® system (if equipped)



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

Your vehicle may be equipped with a Gentex Automatic-Dimming Mirror with an Integrated HomeLink® Wireless Control System.

During nighttime driving, this feature will automatically detect and reduce rear view mirror glare. The HomeLink® Universal Transceiver allows you to activate your garage door(s), electric gate, home lighting, etc.

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

The NVS® Mirror automatically reduces glare by monitoring light levels in the front and the rear of the vehicle. Any objects that obstructs the light sensor will degrade the automatic dimming control feature.

For more information regarding NVS® mirrors and other applications, please refer to the Gentex website: www.gentex.com

Your mirror will automatically dim upon detecting glare from the vehicles traveling behind you.

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

Integrated HomeLink® Wireless Control System

The HomeLink® Wireless Control System provides a convenient way to replace up to three handheld radio-frequency (RF) transmitters used to activate compatible devices such as gate operators, garage door openers, entry door locks, security systems, and home lighting.

* NOTICE

Considering the Home Security when the vehicle is parked outside the garage, the HomeLink will ONLY work when vehicle is in ACC position or ON position.

⚠ CAUTION

Before programming HomeLink to a garage door opener or gate operator, make sure that people and objects are out of the way of the device to prevent potential harm or damage. When programming a garage door opener, it is advised to park outside of the garage.

Do not use HomeLink with any garage door opener that lacks safety stop and reverse features as required by U.S. federal safety standards (this includes any garage door opener model manufactured before April 1, 1982). A garage door that cannot detect an object signaling the door to stop and reverse - does not meet current U.S. federal safety

standards. For more information, contact HomeLink at **www.homelink.com**, or call HomeLink customer support at **1-800-355-3515**.

It is also recommended that a new battery be replaced in the hand-held transmitter of the device being trained to HomeLink for quicker training and accurate transmission of the radio frequency.

1. Programming HomeLink®

The following steps show how to program HomeLink. If you have any questions or are having difficulty programming your HomeLink buttons, refer to the HomeLink website or call the HomeLink customer support toll-free number. Do this, before going back to the dealer who sold you the car.

- Visit the HomeLink website at: www.homelink.com. Then at the top of the page, choose your vehicle make. Then watch the You Tube video, and/or access additional website information.
- If you choose to access the website via your cell phone, scan the QR code.



- Or, call HomeLink customer support at **1-800-355-3515**
(Please have the vehicle make/model AND the opener device make/model readily available.)

1) Programming Preparation

1. When programming a garage door opener, it is advised to park the vehicle outside of the garage.

2. It is recommended that a new battery be placed in the hand-held transmitter of the device being programmed to HomeLink for quicker training and accurate transmission of the radio-frequency signal.
3. Place ENGINE START/STOP button to the ACC (Accessory) position for programming of HomeLink.



2) Programming a New HomeLink® Button

1. Press and release the HomeLink button (1), (2) or (3), you would like to program. The HomeLink indicator light (7) will flash orange slowly (if not, perform the steps of "Erasing HomeLink Buttons" section, and start over).



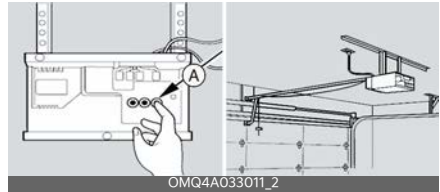
2. Position the garage door opener remote 1 - 3 inches (2 - 8 cm) away from the HomeLink buttons.



3. While the HomeLink indicator light (7) is flashing orange, press and hold the

hand-held remote button. Continue pressing the hand-held remote button until the HomeLink indicator light (7) light changes from orange to green. You may now release the hand-held remote button.

4. Wait until your garage door comes to a complete stop, regardless of position, before proceeding to the next steps.
5. Press and release the HomeLink button you are programming and observe the indicator light.
 - If the indicator light remains solid green, your device should operate when the HomeLink button is pressed. At this point, if your device operates, programming is complete.
 - If the indicator light rapidly flashes green, firmly press, hold for two seconds and release the HomeLink button up to three times in a row slowly to complete the programming process. Do not press the HomeLink button rapidly. At this point if your device operates, programming is complete. If the device does not operate, continue with step 6.
6. At the garage door opener motor, (security gate motor, etc.) locate the "Learn", "Smart", "Set" or "Program" button. This can usually be found where the hanging antenna wire is attached to the motor-head unit (see the device's manual to identify this button). The name and color of the button may vary by manufacturer.



* A ladder and/or second person may simplify the following steps.

7. Firmly press and release the "Learn", "Smart", "Set" or "Program" button. You now have up to 30 seconds in which to complete the next step.
8. Return to the vehicle and firmly press, hold for two seconds and release, the HomeLink button up to three times in a row slowly. Do not press the HomeLink button rapidly. As soon as you see the garage door start to move, stop pressing any buttons until a few seconds after the garage door has come to a complete stop, regardless of position. At this point programming is complete and your device should operate when the HomeLink button is pressed and released.

3) Two-Way Communication Programming (For select garage door openers)

If your garage door opener has the 'myQ' logo on its side, your opener has Two-Way Communication capability. HomeLink has the capability to establish Two-Way Communication with your garage door opener. HomeLink can receive and display "closing" or "opening" status messages from compatible garage door openers. At any time, HomeLink can also recall and display the last recorded status communicated by the garage door opener to indicate your garage door being "closed" or "opened".

To check if your garage door opener is compatible with this feature, refer to www.homelink.com/compatible/Two-way-Communication. If your garage door opener has this functionality, AND the Two-Way Communication indicators (4), (6) in the mirror appear while the garage door is opening/closing, then no further steps are needed. Two-Way Communication Programming is already complete. However, if your garage door opener has this functionality, AND the Two-Way Communication indicators (4), (6) in the mirror DO NOT appear while the garage door is opening/closing, use the following instructions to enable this functionality.

1. In your vehicle, press and hold the programmed HomeLink button for 2 seconds, then release. Confirm that the garage door is moving. AFTER it stops, you will have one minute to complete the following steps:
 - * A ladder and/or second person may simplify the following steps.
2. On your garage door opener in your garage, locate the "Learn" button (usually near where the hanging antenna wire is attached to the garage door opener). If there is difficulty locating this button, refer to the device's owner's manual.
3. Press and release the "Learn" button.
4. A light on your garage door opener may flash, and your Two-Way Communication indicators (4), (6) in your vehicle may flash, confirming completion of the process.
5. Return to the vehicle and firmly press and release the programmed HomeLink button to activate your garage door. The Two-Way Communication indicators (4), (6) flash in orange

when the door is moving. Do not make any additional button presses until AFTER the garage door has come to a complete stop.

6. Your Two-Way Communication programming is now complete.

*** NOTICE**

If your garage door opener has Two-Way Communication functionality, it is possible for HomeLink to stop functioning the garage door shortly after initial programming, if the Two-Way Communication Programming wasn't properly completed. This usually happens after the first 10 times a programmed HomeLink button is pressed. If you experience this, completing the "Programming a New HomeLink Button" and "Two-Way Communication Programming" will restore door operation.

4) Canadian Programming

Canadian radio-frequency laws require transmitter remote signals to "time-out" (or quit) after a couple seconds of transmission, which may not be long enough for HomeLink to pick up the signal during programming.

If you live in Canada or you are having difficulties programming a gate operator or garage door opener by using the programming procedures, replace "Programming a New HomeLink Button" step 3 with the following:

While the HomeLink indicator light (7) is flashing orange, press and release ("cycle") your device's hand-held remote every two seconds until the HomeLink indicator light (7) changes from orange to green. You may now release the hand-held remote button. Then proceed

with "Programming a New HomeLink Button" step 4.

2. Operating HomeLink®

1) Operating HomeLink®

1. Press and release the desired programmed HomeLink button (1, 2 or 3).

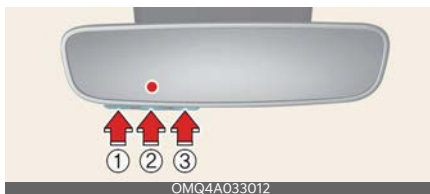


* NOTICE

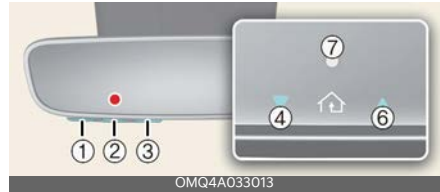
The HomeLink indicator (7) should light green, solid or flashing, and your programmed device should operate. If your device does not operate, the HomeLink programming was not successful, and you'll need to reprogram the button.

2) Two-Way Communication Display Behavior

1. Press and release one of the programmed HomeLink buttons (1, 2 or 3)



2. The indicator (4) and (6) operates as below, if your garage door opener has Two-Way Communication functionality.



- If the indicator (4) flashes in Orange, it indicates that the garage door is "Closing".
- The indicator (4) turns solid green once the garage door has closed.
- If the indicator (6) flashes in Orange, it indicates that the garage door is "Opening".
- The indicator (6) turns solid green once the garage door has fully opened.
- If the indicator (4) or (6) does not turn to green, it indicates that the last status of garage door was not received properly. The HomeLink mirror tries to receive the last known status of the garage door for a few seconds.

3) Recalling Garage Door Status

HomeLink mirror with Two-Way Communication provides a way to view the last stored message from the garage door opener. In order to recall the last known status of the last activated device, press the buttons "1 and 2" OR "2 and 3" simultaneously.

- If the indicator (4) appears solid Green, it indicates that the last activated device was "closed" properly.
- If the indicator (6) appears solid Green, it indicates that the last activated device was "open" properly.

3. Erasing HomeLink® Buttons

1) Erasing and Reprogramming a Single HomeLink® Button:

1. Press and hold the desired HomeLink button you want to re-program. DO NOT release the button.
2. The HomeLink indicator light (7) will appear solid green. Release the button as soon as the HomeLink indicator light (7) begins to flash orange, usually about 20 seconds.
3. Proceed with the steps in the "Programming a New HomeLink Button" section.

* NOTICE

If you do not complete the re-programming of a new device to the button, it will revert to the previously stored programming.

2) The following instructions will erase ALL HomeLink® programming from ALL buttons:



1. Press and hold the buttons (1) and (3) simultaneously
2. The HomeLink indicator light (7) will appear solid Orange for about 10 seconds
3. Release the buttons once the HomeLink indicator light (7) changes to Green and flashes rapidly

4. Now all three HomeLink buttons (1), (2) and (3) are cleared of any programming

Information

HomeLink and the HomeLink House logo are registered trademarks of Gentex Corporation.

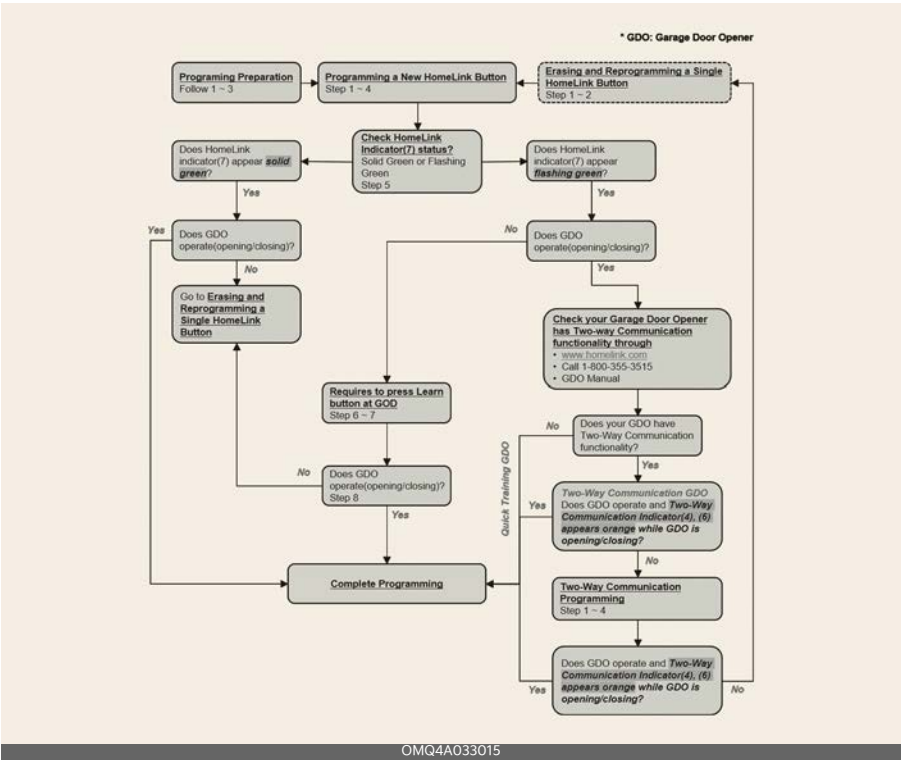
The myQ logo is a registered trademark of The Chamberlain Group, Inc

FCC (USA) and ISED (Canada)

This device complies with FCC rules part 15 and Innovation, Science, and Economic Development Canada RSS-210. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference that may be received including interference that may cause undesired operation. **WARNING:** The transmitter has been tested and complies with FCC and ISED rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

This equipment complies with FCC and ISED radiation exposure limits set forth for an uncontrolled environment. End Users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must be at least 20 cm from the user and must not be co-located or operating in conjunction with any other antenna or transmitter.

HomeLink 5 Programing Flow Chart



Digital Center Mirror (if equipped)

The Digital Center Mirror is a system that uses the camera on the rear of the vehicle and displays its image on the screen of the Digital Center Mirror. The Digital Center Mirror allows the driver to see the rear view despite obstructions, such as the headrest or luggage, ensuring rear visibility.

⚠ WARNING

- Failure to follow the warnings and instructions for proper use of the Digital Center Mirror could result in serious accident.
 - The Digital Center Mirror is a convenience feature and it is not a substitute for proper vehicle operation. The system has areas where objects cannot be viewed. Check the blind spot of the Digital Center Mirror before vehicle operation. The driver is always responsible for safe driving.
 - Do not operate the Digital Center Mirror while driving. Doing so can be a distraction and it could lose control of your vehicle and cause an accident or serious injury.
 - Do not disassemble or modify the Digital Center Mirror, the camera unit or wiring. It may result in an accident or fire. If you notice smoke or an odor coming from the Digital Center Mirror, stop using the system immediately. Have the system inspected by an authorized Kia dealer.

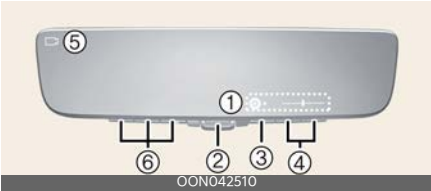
*** NOTICE**

- Be sure to adjust the Digital Center Mirror before driving.
 - Switch the system to the conventional rearview mirror mode and be properly seated on the driver's seat. Then adjust the mirror so as to see outside the rear window properly.
 - Push the lever all the way to change to digital mirror mode and adjust the display settings. Driving without adjusting the mirror may cause difficulty in watching the display at the Digital Mirror mode (camera view mode) due to reflection from the surface of the mirror.
- If the Digital Center Mirror malfunctions, immediately switch the system to the conventional rearview mirror mode.
- When sunlight or high beams from following vehicles occurs, it may appear on the screen of the Digital Center Mirror. Switch the system to the conventional rearview mirror mode appropriately.
- If the camera lens (1) is dirty, the displayed image may not be clear. Clean it with a soft cloth or swab dampened with water.



OMV033052

System component



- 1 Icon display area
Displays icons, adjusting Brightness & Tilt
- 2 Lever
Operate to change between digital mirror mode and optical mirror mode.
- 3 Menu button
Press to display the icon display area and select the item you want to adjust (Brightness & Tilt).
- 4 Select/adjust button
Press to change the setting of the item you want to adjust.
- 5 Camera indicator
Indicates that the camera is operating normally.
- 6 HomeLink buttons
For the operation of the “HomeLink® Universal Transceiver”.

How to change the mode

The mode can be switched when the switch is in the ON position.



- 1. Pull the mode select lever to all the way switch to the Digital Center Mirror mode (camera view mode).
* Displays an image of the area behind the vehicle. In this mode, the camera indicator is shown.
- 2. Push the mode select lever to all the way switch to the optical inside rear-view mirror mode.
* Turns off the display of the Digital Center Mirror allows it to be used as an optical mirror.

Adjusting the mirror height



The height of the rearview mirror can be adjusted to suit your driving posture. Change to optical mirror mode, adjusting the rearview mirror angle by moving it up and down.

Display settings (Digital mirror mode)



1. Press the menu button (1) The icons will be displayed.

Icons	Settings
	Select to adjust the brightness of the display.
	Select to adjust the display up/down.

2. Press the menu button (1) repeatedly and select the item you want to adjust.
3. Press the button (2) or button (3) to change the setting.
- The icons will disappear if the button is not operated for approximately 5 seconds or more.

* If the brightness of the Digital Center Mirror is set too high, it may cause eye strain.

Adjust the Digital Center Mirror to an appropriate brightness. If your eyes become tired, change to optical mirror mode.

To prevent the light sensors from malfunctioning



To prevent the light sensors from malfunctioning, do not touch or cover them.

Digital mirror mode operating condition

The EV button is in the ON position. When the EV button is changed ignition switch LOCK/OFF or ACC position, the image will be disappeared.

When using the Digital Center Mirror in digital mirror mode

- When the liftgate is open, the Digital Center Mirror image may not display properly. Before driving, make sure the liftgate is closed.
- If the display is difficult to see due to reflected light, close the sunshade of the sunroof. (if equipped)
- Any of the following conditions may occur when driving in the dark. None of them indicates that the malfunction has occurred.
 - Colors of objects in the displayed image may differ from their actual color.

- Depending on your physical condition or age, it may take longer than usual to focus on the displayed image. In this case, change to optical mirror mode.
- Do not let passengers stare at the displayed image when the vehicle is being driven, as doing so may cause motion sickness.

When the system malfunctions



If the symbol shown in the illustration is displayed when using the Digital Center Mirror in digital mirror mode, the system may be malfunctioning. The symbol will disappear in a few seconds. Change to optical mirror mode and have the vehicle inspected by an authorized KIA dealer.

⚠ CAUTION

- To prevent the Digital Center Mirror from malfunctioning.
- Do not use detergents, such as thinner, benzene, or alcohol to clean the mirror. They may discolor, deteriorate or damage the mirror surface.
- Do not remove, disassemble or modify the mirror and camera.
- Do not allow an organic solvent, vehicle wax, window cleaner or glass coating to adhere to the camera. If this happens, wipe it off as soon as possible.
- When cleaning the camera lens, wipe the camera lens with a damp soft cloth.
- Do not rub the camera lens with force, as it may be scratched and will not be able to transmit a clear image.
- Do not subject the camera to a strong impact as this could cause a malfunction. If this happens, have the vehicle inspected by an authorized KIA dealer as soon as possible.
- Operating the system in the ON position could cause discharge of the battery.
- Do not attach an antenna of wireless device near the Digital Center Mirror. Electronic waves from a wireless device may cause a distorted image in Digital Center Mirror.
- Do not push buttons excessively or operate the lever aggressively. It may cause a system failure or the Digital Center Mirror to fall out.
- Never rotate the body of Digital Center Mirror by 90° or more. It may damage the Digital Center Mirror. Do not apply strong shocks to the body of Digital Center Mirror. It may cause a system failure.
- If it is difficult to see the Digital Center Mirror display screen because of a strong external light, switch the mode to the conventional rearview mirror mode for better use.

Digital Center Mirror error icon and solution

Symptom	Likely cause	Solution
If the high temp icon () is displayed on the display right side.	The Digital Center Mirror is extremely hot. (The display will gradually become dimmer. If the temperature continues to increase, the Digital Center Mirror will turn off.)	Reducing the cabin temperature is recommended to reduce the temperature of the mirror. (The icon will disappear when the mirror becomes cool.) If the icon does not disappear even though the mirror is cool, have the vehicle inspected by an authorized Kia dealer.
If the display icon  has been switched to  which is the display error icon.	The system may malfunction.	Change to optical mirror mode and have the vehicle inspected by an authorized KIA dealer.

Outside rear view mirror

Your vehicle is equipped with both left-side and right-side outside rear view mirrors.

Be sure to adjust the mirror angles before driving.

The mirrors can be adjusted remotely with the control levers or remote switch, depending on the type of mirror control installed. The mirror heads can be folded back to prevent damage in an automatic car wash or when passing through a narrow street.

* NOTICE

Rear view mirrors

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

⚠ CAUTION

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

⚠ CAUTION

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

⚠ WARNING

Do not adjust or fold the outside rear view mirrors while the vehicle is moving. This could result in a crash and in serious injury or death.

Adjusting the outside rear view mirrors

The electric remote control mirror switch allows you to adjust the position of the left and right outside rear-view mirrors.



Adjusting the rear view mirrors:

1. Move the R or L switch (2) to select the right side mirror or the left side mirror.
2. Press a corresponding point on the mirror adjustment control (1) to position the selected mirror up, down, left or right.

⚠ CAUTION

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

Folding the outside rear-view mirror

Manual type (if equipped)

To fold the outside rear-view mirror, grasp the housing of the mirror and fold it toward the rear of the vehicle.



Electric type (if equipped)

The outside rear-view mirror can be folded or unfolded by pressing the switch as below.



- To fold the outside rear view mirror depress the button.
- To unfold it, depress the button again.

⚠ CAUTION

The electric type outside rear view mirror operates even though the ENGINE START/STOP button is in the LOCK or OFF position. To prevent unnecessary battery discharge, do not adjust the mirrors longer than necessary while the engine is not running.

⚠ CAUTION

So not fold an electric type outside rear view mirror by hand. It could cause motor failure.

Reverse parking aid function (if equipped)

When you shift the gear to the R (Reverse) position, the outside rear-view mirror(s) will rotate downwards to aid with driving in reverse.



The position of the outside rear view mirror switch (1) determines whether or not the mirrors will move:

Left/Right: When either the L (Left) or R (Right) switch is selected, both outside rear-view mirrors will move.

Neutral: When neither switch is selected, the outside rear-view mirrors will not move.

The outside rear-view mirrors will automatically revert to their original positions if any of the followings occur:

- The ENGINE START/STOP button is placed to either the LOCK/OFF position or the ACC position.
- The gear is shifted to any position except R (Reverse).
- The remote control outside rear view mirror switch is not selected.

Auto reverse user settings

If you cannot secure enough visibility with the angles provided as factory default conditions, you can readjust and

store the angles of outside rear-view mirrors.

The factory default angles of the right and left rear view mirrors might be set differently to improve visibility.

1. Set the shift lever to P (Parking). Make sure that the vehicle is stopped and the mirrors are not working.
 2. Position the lever to L (left) or R (right) depending on the mirror that you want to adjust.
 3. Step on the brake pedal and shift the shift lever to R (Reverse).
 4. When the downward movement of the rear-view mirror is finished, adjust the mirror to the desired angle by pressing the switches, ▼, ▲, ◀, ▶.
 5. If you shift the shift lever to a position other than R (Reverse or), change the rear view mirror selector lever to the neutral position, and the automatic return of the mirror is finished, the adjusted angle will be automatically saved.
 6. You can adjust the rear-view mirror on the other side by following the same procedures (1-5).
4. When the downward movement of the rear-view mirror is finished, press the switch ▲ to locate the mirror in the position higher than before (P, N or D).
(Adjust the mirror in the higher position compared to its position in the driving mode)
 5. It is initialized when the shift lever is shifted to a position other than R (Reverse), or the rear-view mirror selector lever is changed to the neutral position. (Initialized position will be applied from next operation)
 6. You can initialize settings for the mirror on the other side by following the same procedures (1-5).

CAUTION

We recommend following the procedures in an orderly manner to change or initialize the auto reversing user settings: If you move to the next step before completing the previous one, the changed angle may not change or initialization may not work properly

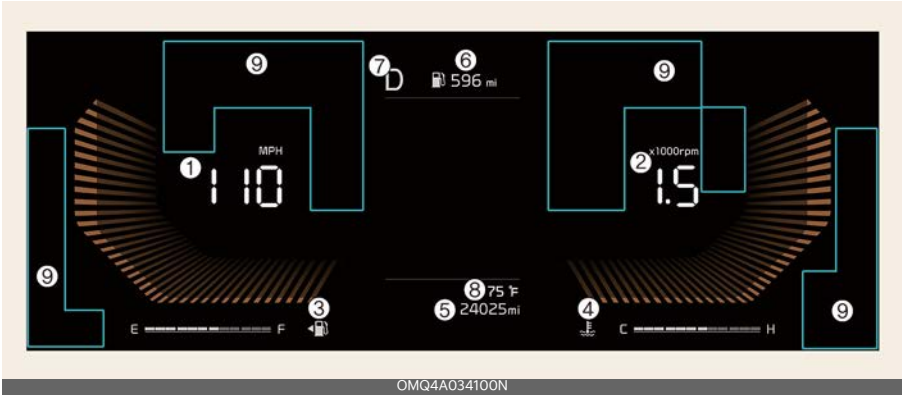
How to reset auto reverse user settings

If you want to change the automatic control function of rear-view mirrors to factory-default conditions, follow the steps below.

1. Shift the shift lever to P (Park). Make sure that the vehicle is stopped and the mirror is not working.
2. Choose the mirror to be adjusted by positioning the lever to L (left) or R (right).
3. Step on the brake pedal and shift the shift lever to R (Reverse).

Instrument cluster

Type A



Type B



* The actual cluster in the vehicle may differ from the illustration.

1. Speedometer
2. Tachometer
3. Fuel gauge
4. Engine coolant temperature gauge
5. Odometer
6. Distance to empty
7. Transmission shift indicator (if equipped)
8. Outside temperature gauge
9. Warning and indicator lights

LCD display

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

LCD Display Control



Switch	Control	Action
Mode (1) 	Short Press	Changing view modes
Up/Down (2) 	Short Roll	Searching Utility information
OK (3) 	Short Press	Operating additional functions
	Long Press	Resetting menu information

LCD display modes

View	Description
Driving Assist view	Displays information related to Driver assistance system
Navigation view	Displays information related to navigation system
Utility information view	Displays information related to driving, warning, etc.

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 tail lights are turned on.



WARNING

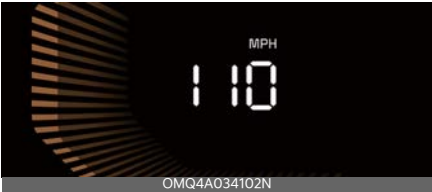
Never adjust the instrument cluster while driving. This could result in loss of control and lead to an accident that may cause DEATH, SERIOUS INJURY, or property damage.

Gauges

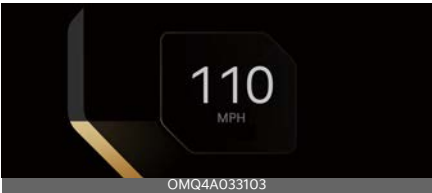
The gauges display various information such as the speed of the vehicle, etc.

Speedometer

Type A



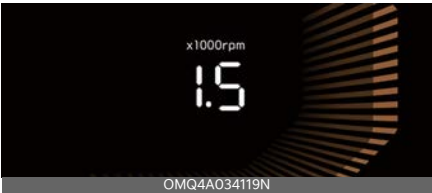
Type B



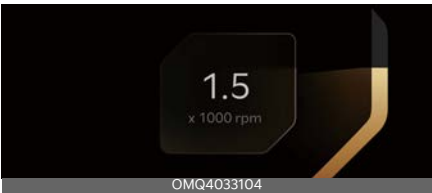
The speedometer indicates the speed of the vehicle and is calibrated in miles per hour (mph) and kilometers per hour (km/h).

Tachometer

Type A



Type B



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

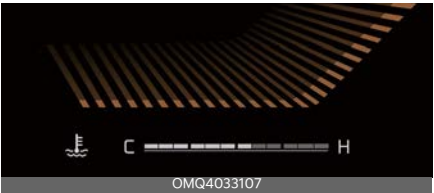
Use the tachometer to select the correct shift points and to prevent lugging and/or over-revving the engine.

 **CAUTION**

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

Engine coolant temperature gauge

Type A



Type B



This gauge indicates the temperature of the engine coolant when the ENGINE START/STOP button is ON.

 **CAUTION**

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

Do not continue driving with an overheated engine. If your vehicle overheats,

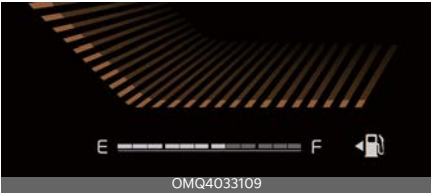
refer to "If the engine overheats" on page 7-6.

⚠ WARNING

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

Fuel gauge

Type A



Type B



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

*** NOTICE**

- The fuel tank can be found in "Recommended lubricants and capacities" on page 9-9.
- The fuel gauge is supplemented by a low fuel warning light, which will appear when the fuel tank is nearly empty.
- On inclines or curves, the fuel gauge pointer may fluctuate or the low fuel warning light may come on earlier

than usual due to the movement of fuel in the tank.

⚠ WARNING

Fuel gauge

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

⚠ CAUTION

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

*** NOTICE**

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

Odometer

Type A



Type B

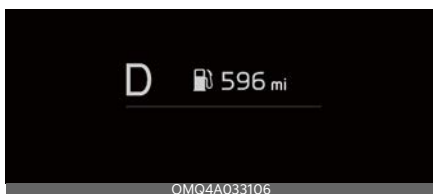


The odometer Indicates the total distance that the vehicle has been driven and should be used to determine when periodic maintenance should be performed.

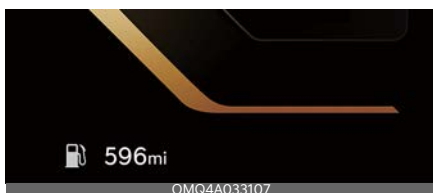
- Odometer range: 0 ~ 999,999 mi or 1,599,999 km.

Distance to empty

Type A



Type B



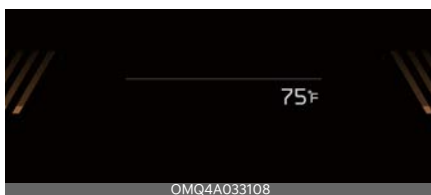
- The distance to empty is the estimated distance the vehicle can be driven with the remaining fuel.
 - Distance range: 1 ~ 9,999 mi or 1 ~ 9,999 km.
- If the estimated distance is below 1 mile (1 km), the trip computer will display "----" as distance to empty.
- If the level of the remaining fuel is more than three-quarters, more than 0.8 gallons (3 liters) of fuel must be refilled for the fuel gauge to change. In other cases, more than 1.6 gallons (6 liters) of fuel must be refilled for the vehicle to change the fuel gauge.

* NOTICE

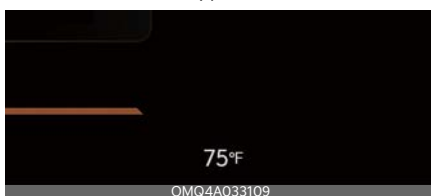
- If the vehicle is not on level ground or the battery power has been interrupted, the distance to empty function may not operate correctly.
- The distance to empty may differ from the actual driving distance as it is an estimate of the available driving distance.
- The trip computer may not register 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.

Outside temperature gauge

Type A



Type B



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

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

The outside temperature on the display may not change immediately like a regu-

lar 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.

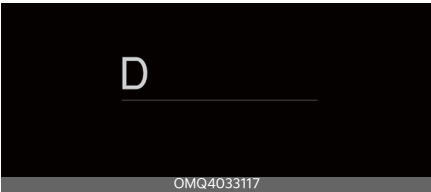
* For more details, refer to "LCD display modes" on page 4-88.

Transmission shift indicator

Transmission shift indicator displays gear information depending on your vehicle's transmission type.

Automatic transmission/Dual clutch transmission shift indicator

Type A



Type B



This indicator displays which automatic transmission gear is selected.

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

LCD display modes

The LCD display provides 5 modes. You can switch modes by pressing the Mode button.

		Mode				
		 Trip Computer	 Turn by Turn (TBT)*	 Driving Assist	 Information/Master warning	
 Up/ Down	Current Trip	Route Guidance	Lane Keeping Assist Smart Cruise Control Navigation-based Smart Cruise Control* Lane Following Assist Highway Driving Assist*	The Master Warning mode displays warning messages related to the vehicle when one or more systems is not operating normally.		
	Since Refueling					
	Since Last Reset					
	Auto Stop*	Destination Info				
	Tire Pressure Monitoring System					
	Driving Force Distribution*					

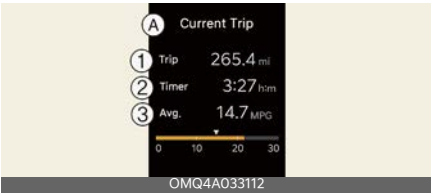
The information provided may differ depending on which functions are applicable to your vehicle.

* : if equipped

* NOTICE

Keep the engine running when configuring the display settings to prevent the battery from discharging.

Trip computer mode



A: Current Trip

- 1 Trip
- 2 Timer
- 3 Avg.

The trip computer mode displays information related to vehicle driving parameters including fuel economy, tripmeter information and timer.

* For more details, refer to "Trip information (trip computer)" on page 4-90.

Advanced Driving Assist mode

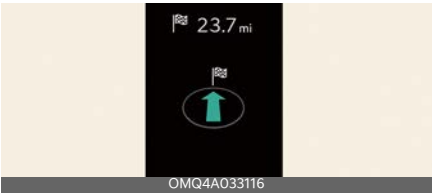


This mode displays the state of:

- Lane Keeping Assist system
- Smart Cruise Control
- Lane Following Assist
- Tire pressure

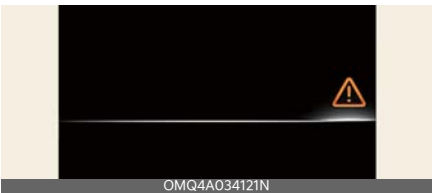
* For more details, refer to each system information in "Driver assistance guide" on page 6-4.

Turn By Turn (TBT) mode



This mode displays the state of the navigation.

Master warning mode



This mode informs you of the following situations:

- Driver assistance system malfunction, limitation or radar/camera blockage (if equipped)
- LED headlamp malfunction
- Lamp malfunction
- TPMS (Tire Pressure Monitoring System) failure, low tire pressure, etc.

The Master Warning icon () will appear. If the warning situation resolves, the master warning light will be turned off and the Master Warning icon will disappear.

LCD displays

LCD displays show the following information to drivers.

- Trip information
- LCD modes
- Warning messages

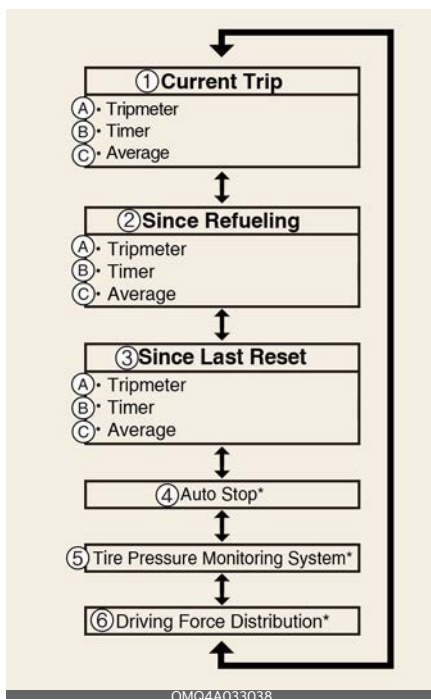
Trip information (trip computer)

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

* NOTICE

Some driving information stored in the trip computer resets if the battery is disconnected.

Trip Modes



A: **Tripmeter**

B: **Timer**

C: **Average**

1 Current Trip

2 Since Refueling

3 Since Last Reset

4 Auto Stop

5 Tire Pressure Monitoring System

6 Driving Force Distribution

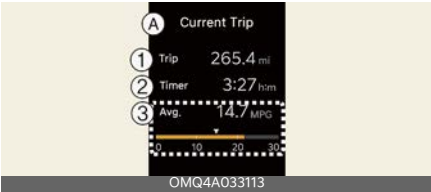
*: if equipped

To change the trip mode, scroll the toggle the switch (∧ / ∨) on the steering wheel.

Fuel economy

This information is always displayed at the bottom center of the Full LCD cluster.

Average Fuel Economy



A: Current Trip

- 1 Trip
- 2 Timer
- 3 Avg.

- The average fuel economy is calculated by the total driving distance and fuel consumption since the last average fuel economy resets.
 - Fuel economy range: 0 ~ 99.9 mpg or km/L, L/100 km

* NOTICE

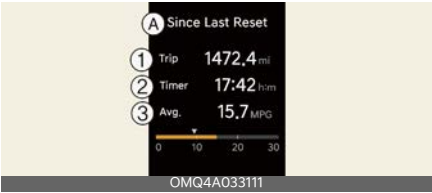
The average fuel economy is not displayed for more accurate calculation if the vehicle does not drive more than 10 seconds or 0.03 mi (50 m) since the ENGINE START/STOP button is turned to ON.

Instant Fuel Economy

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

Accumulated driving information mode

This display shows the accumulated trip distance, the average fuel efficiency, and the total driving time.



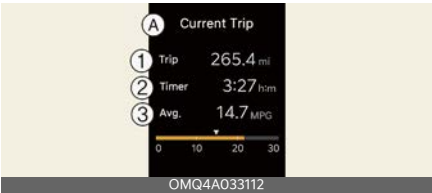
A: Since Last Reset

- 1 Trip
- 2 Timer
- 3 Avg.

- Accumulated information is calculated after the vehicle has run for more than 0.19 miles (300 m).
- 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.

Drive Info display

This display shows the trip distance, the average fuel efficiency, and the total driving time information once per one ignition cycle.



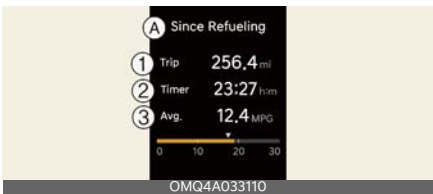
A: Current Trip

- 1 Trip
- 2 Timer

3 Avg.

- Fuel efficiency is calculated after the vehicle has run for more than 0.19 miles (300 m).
- The information will automatically reset when the driver's door is opened after the ignition is turned off, or approximately 3 minutes have passed after the ignition is turned off.
- If you press "OK" button for more than approximately 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.

Information since refueling



A: Since Refueling

- 1 Trip
- 2 Timer
- 3 Avg.

This display shows the trip distance, the average fuel efficiency, and the instant fuel efficiency (or the total driving time) since refueling.

- Information since refueling is calculated after the vehicle has run for more than approximately 0.19 miles (300 m).
- If you press "OK" button for more than 1 second after the information since refueling is displayed, the information will be reset.

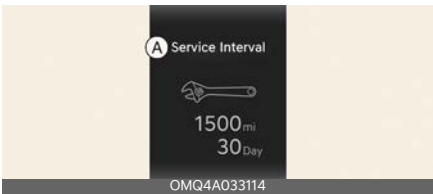
- When driving after refueling, the information will be automatically reset.
- If the engine is running, even when the vehicle is not in motion, the information will be accumulated.

* NOTICE

The vehicle must be driven for a minimum of 0.19 miles (300 m) since the last ignition cycle before the average accumulated driving information is recalculated.

Service mode

This mode reminds you of scheduled maintenance information.



A: Service Interval

Service Interval

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

If the remaining mileage or time reaches 900 miles (1,500 km) or 30 days, "Service interval" message is displayed for several seconds each time you set the ENGINE START/STOP Button to the ON position.

Service required

If you do not have your vehicle serviced according to the already inputted service interval, "Service required" message is displayed for several seconds each time you set the ENGINE START/STOP Button to the ON position.

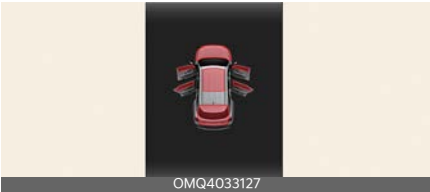
*** NOTICE**

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

- The battery cable is disconnected.
- The battery is discharged.

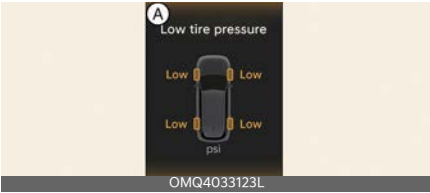
LCD display messages

Door, hood, liftgate, sunroof open



- This warning is displayed indicating which door, the hood, the liftgate or the sunroof is open.

Low pressure warning display

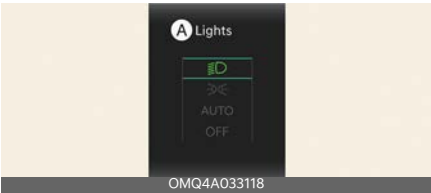


A: Low tire pressure

This warning message is displayed if the tire pressure is low. The corresponding tire on the vehicle will be appeared.

* For more details, refer to "Tire Pressure Monitoring System (TPMS)" on page 7-7.

Lights mode



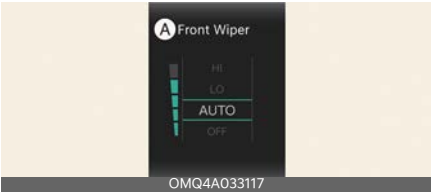
A: Lights

This indicator displays which exterior light is selected using the lighting control.

You can activate or deactivate Wiper/Lights Display function from the User Settings mode in the cluster LCD display.

4

Wiper mode

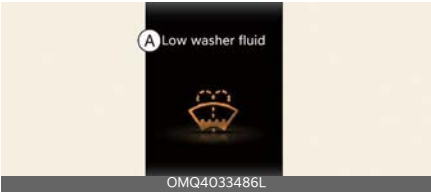


A: Front Wiper

This indicator displays which wiper speed is selected using the wiper control.

You can activate or deactivate Wiper/Lights Display function from the User Settings mode in the cluster LCD display.

Low washer fluid

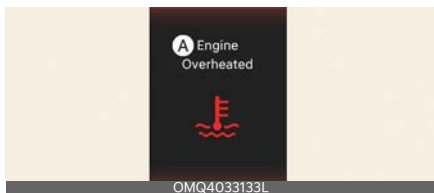


A: Low washer fluid

This warning message is displayed if the washer fluid level in the reservoir is nearly empty.

Refill the washer fluid reservoir.

Engine overheated

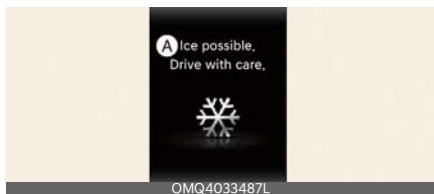


A: Engine Overheated

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

* If your vehicle is overheated, refer to "If the engine overheats" on page 7-6.

Icy road warning



A: Ice possible. Drive with care.

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

When the following conditions occur, the warning light (including outside temperature gauge) blinks 5 times and then remain on. A warning chime sounds once.

- The temperature on the outside temperature gauge is below approximately 40 °F (4 °C).

* NOTICE

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

Low engine oil

- This warning message appears when the engine oil level is insufficient.
- Refill the engine oil.

For more details, refer to "Engine oil and filter" on page 8-14.

⚠ WARNING

When the engine oil level warning light appears, check whether maintenance schedule (Engine oil replacement) in owner's manual has been followed before replenishing the oil. If not followed, the engine oil must be replaced.

Engine oil change due soon. Reset oil life after oil change

- This warning message appears when the remaining engine oil life reaches 5% or below.

For more details, refer to "Engine oil and filter" on page 8-14.

Engine oil change due now. Reset oil life after oil change

- This warning message appears when the remaining engine oil life reaches 1% or below.
- Replace engine oil immediately from an authorized Kia dealer.

For more details, refer to "Engine oil and filter" on page 8-14.

Low key battery (for smart key system)

- This warning message appears if the battery of the smart key is discharged when ENGINE START/STOP button changes to the OFF position.

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

- This warning message appears if the steering wheel does not unlock normally when 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 not locked (for smart key system)

- This warning message appears if the steering wheel does not lock when ENGINE START/STOP button changes to the OFF position.

Check steering wheel lock system (for smart key system)

- This warning message appears 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 appears if the smart key is not in the vehicle when you press the ENGINE START/STOP button.
- Always have the smart key with you.

Key not detected (for smart key system)

- This warning message appears if the smart key is not detected when you press the ENGINE START/STOP button.

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

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

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

- This warning message appears if the ENGINE START/STOP Button changes to the ACC position twice by pressing the button repeatedly without depressing the brake pedal.
- Depress the brake pedal to start the engine.

Battery discharging due to external electrical devices

The vehicle can detect self-discharge of the battery due to over-current that is generated by unauthorized electrical devices such as dashboard camera (dash cam).

If the warning continues even after external electrical devices are removed, have your vehicle inspected by an authorized Kia dealer.

Press START button again (for smart key system)

- This warning message appears if you cannot operate the ENGINE START/STOP button when there is a problem

with the ENGINE START/STOP button system.

- It means that you could start the engine by pressing the ENGINE START/STOP button once more.
- If the warning appears each time you press the ENGINE START/STOP button, have the vehicle inspected by an authorized Kia dealer.

Press START button with key (for smart key system)

- This warning message appears if you press the ENGINE START/STOP Button while the warning message "Key not detected" is illuminated.
- The immobilizer indicator light blinks.

Headlights are Off

This warning message appears if the headlights are off when the surrounding is dark.

Warning and indicator lights

The warning light and indicator light indicate a situation where the driver should be careful and whether the various functions are activated.

Warning lights

The warning light indicates situations that require the driver to pay extra attention.

* 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 immediate attention.

Air bag warning light

This warning light appears:

- Once you set the ENGINE START/STOP button to the ON position.
 - It illuminates for approximately 3 ~ 6 seconds and then goes off.
- When there is a malfunction with the SRS. Have the vehicle inspected by an authorized Kia dealer.

Seat belt warning light

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

* For more details, refer to "Seat belts" on page 3-21.

Parking brake & brake fluid warning light

This warning light appears:

- Once you set the ENGINE START/ STOP Button to the ON position.
 - It appears 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 appears with the parking brake released, the brake fluid level in the 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" on page 8-15). Then check all brake components for fluid leaks. If any leak on the brake system is still found, the warning light remains on, or the brakes do not operate properly, do not drive the vehicle.

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.

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.

* NOTICE

Parking brake & brake fluid warning light

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

Have your vehicle inspected by an authorized Kia dealer.

Anti-lock brake system (ABS) warning light

This warning light appears:

- Once you set the ENGINE START/ STOP button to the ON position.
 - It appears 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 ABS).

Have the vehicle inspected by an authorized Kia dealer.

EBD system warning light



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

- When the ABS and regular brake system are not working, have your vehicle inspected by an authorized Kia dealer.

WARNING

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.

Avoid high speed driving and abrupt braking.

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

Electronic Parking Brake (EPB) warning light (if equipped)

This warning light appears:

- Once you set the ENGINE START/STOP button to the ON position.
 - It appears for approximately 3 seconds and then goes off.
- When there is a malfunction with the EPB.

Have the vehicle inspected by an authorized Kia dealer.

NOTICE

EPB warning light

EPB warning light may appear 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).

Electric Power Steering (EPS) warning light

This warning light appears:

- Once you set the ENGINE START/STOP button to the ON position.
 - This indicator light comes on after the ENGINE START/STOP button is in the ON position and then goes out after approximately 3 seconds.
- When there is a malfunction with the EPS.
Have the vehicle inspected by an authorized Kia dealer.

Charging system warning light



This warning light appears:

- Once you set the ENGINE START/STOP button to the ON position.
- 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.

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

Malfunction Indicator Lamp (MIL)



This warning light appears:

- When you set the ignition switch or the ENGINE START/STOP button to the ON position.
 - The MIL appears for about 3 seconds and then goes off.
- Whenever there is a malfunction with either the emission control system or the engine or the vehicle powertrain. Have the vehicle inspected by an authorized Kia dealer.

CAUTION

MIL

- Driving with the MIL on may cause damage to the emission control systems which could affect drivability and/or fuel economy.
- If the enhanced engine protection system becomes activated due to lack of engine oil, engine power will be limited. If such condition continues, the MIL will appear.

CAUTION

If the oil pressure lowers due to insufficient engine oil, etc., the engine oil pressure warning light turns on and an enhanced engine protection system that limits the engine's power is activated. The engine warning light turns on if you continue driving.

CAUTION

If the MIL appears, potential catalytic converter damage is possible which could result in loss of engine power. Have the vehicle inspected by an authorized Kia dealer.

Engine oil pressure warning light



This warning light appears:

- Once you set the ENGINE START/STOP button to the ON position.
 - It remains on until the engine is started.
- When the engine oil pressure is low.

If the engine pressure is low:

- Drive carefully to the nearest safe location and stop your vehicle.
- Turn the engine off and check the engine oil level (For more details, refer to "Engine oil and filter" on page 8-14"). If the level is low, add oil as required.
- If the warning light remains on after adding oil or if oil is not available, have the vehicle inspected by an authorized Kia dealer. Continued driving with the warning light on may cause engine failure.

* NOTICE

- When engine oil pressure decreases due to insufficient engine oil, etc., the Engine Oil Pressure warning light will appear.
- The enhanced engine protection system which limits engine power will be activated. When the engine oil pressure is restored, the warning light and

the enhanced engine protection system will turn off after the engine is restarted.

⚠ CAUTION

Engine overheating

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

⚠ CAUTION

Engine damage

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

Exhaust system (GPF) warning light (Gasoline Engine)

This warning light appears:

- When there is a malfunction with Gasoline Particulate Filter (GPF) system.
- When this warning light appears, it may turn off after driving the vehicle:
 - The vehicle should be driven for more than 30 minutes at a speed of 50 mph (80 km/h) and faster.
 - Ensure the following conditions are all met: safe road conditions, transmission 3rd gear or above, and engine speed of 1,500 - 4,000 rpm.

If this warning light blinks despite following the procedure (at this time the LCD warning message will be displayed), have the GPF system checked by an authorized Kia dealer.

⚠ CAUTION

Gasoline engine with GPF (if equipped)

If you continue to drive with the GPF warning light blinking for a long time, the GPF system can be damaged and fuel consumption can worsen.

Low fuel level warning light

This warning light appears:

When the fuel tank is nearly empty.

If the fuel tank is nearly empty:

Add fuel as soon as possible.

⚠ CAUTION

Low fuel level

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

Master warning light

This indicator light appears:

- This warning light illuminates in the following situations
 - LED headlamp malfunction (if equipped)
 - Lamp malfunction
 - High Beam Assist malfunction (if equipped)

To identify the details of the warning look at the LCD display.

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

Low tire pressure warning light



This warning light appears:

- Once you set the ENGINE START/STOP button to the ON position.
 - It appears for approximately 3 seconds and then goes off.
- When one or more of your tires are significantly under inflated. (The location of any underinflated tire are displayed on the LCD display).

* For more details, refer to "Tire Pressure Monitoring System (TPMS)" on page 7-7.

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

- When there is a malfunction with the TPMS.
In this case, have the vehicle inspected by an authorized Kia dealer.

* For more details, refer to "Tire Pressure Monitoring System (TPMS)" on page 7-7.

WARNING

Low tire pressure

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

WARNING

Safe stopping

- The TPMS cannot alert you about 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.

LED headlamp warning light

This warning light appears:

- Once you set the ENGINE START/STOP button to the ON position.
 - It appears for approximately 3 seconds and then goes off.
- When there is a malfunction with the LED headlamp.

Have the vehicle inspected by an authorized Kia dealer.

This warning light blinks:

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

Have the vehicle inspected by an authorized Kia dealer.

CAUTION

LED headlamp warning light

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

Forward Safety warning light

This warning light appears:

- Once you set the ENGINE START/STOP button to the ON position.
 - It appears for approximately 3 seconds and then goes off.
- Yellow: When Forward Safety of Forward Collision-Avoidance Assist is deselected, disabled, or a malfunction is detected.

If the yellow warning light remains on after the sensor has been uncovered or unblocked when Forward Safety is set, have your vehicle be inspected by an authorized KIA dealer.

This warning light blinks:

- Red: When Forward Safety or Forward Cross-Traffic Safety function is operating.
- * For more details, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion)" on page 6-4.

Emergency Steering warning light (if equipped)

The warning light appears:

- Once you set the ENGINE START/STOP button to the ON position.
 - It appears for approximately 3 seconds and then goes off.
- Yellow: When Forward/Side Safety of Forward Collision-Avoidance Assist is deselected, disabled, or a malfunction is detected.

If the warning light remains on after the sensor has been uncovered or unblocked when Forward/Side Safety

is set, have your vehicle be inspected by an authorized KIA dealer.

This warning light blinks:

- Red: When Forward/Side Safety function is operating.
- * For more details, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion)" on page 6-4.

Icy Road Warning light (if equipped)

This warning light is to warn the driver the road may be icy. When the temperature on the outside temperature gauge is approximately below 39 °F (4 °C) the Icy Road Warning light and outside temperature gauge blinks and then appears. The warning chime sounds 1 time.

Washer Fluid Warning Light

This warning light appears:

- When the washer fluid level in the reservoir is nearly empty.
- In this case, you should refill the washer fluid.

Door Ajar Warning Light

This warning light appears:

When a door is not closed securely.

Liftgate Open Warning Light



This warning light appears:

When the liftgate is not closed securely.

Indicator lights

Electronic stability control (ESC) indicator light

This indicator light appears:

- Once you set the ENGINE START/STOP Button to the ON position.
 - It appears for approximately 3 seconds and then goes off.
- When there is a malfunction with the ESC system.
Have the vehicle inspected by an authorized Kia dealer.

This indicator light blinks:

While the ESC is operating.

* For more details, refer to "Electronic Stability Control (ESC) system" on page 5-43.

Electronic stability control (ESC) OFF indicator light

This indicator light appears:

- Once you set the ENGINE START/STOP Button to the ON position.
 - It appears 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) system" on page 5-43.

Auto stop indicator light

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

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

* For more details, refer to "Idle Stop and Go (ISG) system" on page 5-52.

* NOTICE

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

AUTO HOLD indicator light (if equipped)

This indicator light appears:

- **[White]** When you activate the auto hold system by pressing the AUTO HOLD button.
 - **[Green]** When you stop the vehicle completely by depressing the brake pedal with the auto hold system activated.
 - **[Yellow]** When there is a malfunction with the auto hold system. In this case, have the vehicle inspected by an authorized Kia dealer.
- * For more details, refer to "AUTO HOLD" on page 5-40.

Immobilizer indicator light (without smart key)

This indicator light appears:

- When the vehicle detects the immobilizer in your key properly while the ignition switch is ON.
 - 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.
Have the vehicle inspected by an authorized Kia dealer.

Immobilizer indicator light (with smart key)

This indicator light appears 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.
 - 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.
 - You can not start the engine.

This indicator light appears 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 the vehicle inspected by an authorized Kia dealer.

This indicator light blinks:

- When the battery of the smart key is weak.
 - At this time, you can not start the engine. However, you can start the engine if you press the ENGINE START/STOP Button with the smart key. (For more details, refer to "Immobilizer system" on page 4-12).
- When there is a malfunction with the immobilizer system.
Have the vehicle inspected by an authorized Kia dealer.

Turn signal indicator light

This indicator light blinks:

- When you turn the turn signal light on.
If any of the following occurs, there may be a malfunction with the turn signal system. Have the vehicle inspected by an authorized Kia dealer.
 - The indicator light does not blink, but appears.
 - The indicator light blinks more rapidly.
 - The indicator light does not appear at all.

Low beam indicator light

This indicator light appears:

- When the headlights are on.

High beam indicator light **This indicator light appears:**

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

High Beam Assist indicator light**This indicator light appears:**

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

* For more details, refer to "High Beam Assist (HBA)" on page 4-111.

Light ON indicator light **This indicator light appears:**

- When the taillights or headlights are on.

Front fog indicator light (if equipped)**This indicator light appears:**

- When the front fog lights are on.

Lane Safety indicator light **This indicator light appears:**

- Once you set the ENGINE START/STOP button to the ON position.

- It appears for approximately 3 seconds and then goes off.
- Gray: When Lane Keeping Assist operating conditions are not satisfied.
- Green: When Lane Keeping Assist operating conditions are satisfied.
- Yellow: When Lane Safety is disabled, or a malfunction is detected.

If the yellow warning light remains on after the sensor has been uncovered or unblocked when Lane Safety is set, have your vehicle be inspected by an authorized KIA dealer.

The indicator light blinks:

- Green: When Lane Keeping Assist is operating.
- * For more details, refer to "Lane Keeping Assist (LKA)" on page 6-28.

Cruise Control indicator light **This indicator light appears:**

- When the Smart Cruise Control system is enabled.
- * For more details, refer to "Smart Cruise Control (SCC)" on page 6-66.

Downhill Brake Control (DBC) indicator light **This indicator light appears:**

- When you set the ENGINE START/STOP Button to the ON position.
- It appears for approximately 3 seconds and then goes off.
- When you activate the system by pressing the DBC button.

This indicator light blinks:

- When the DBC is operating.

This indicator light appears yellow:

- When there is a malfunction with the DBC system.

Have your vehicle inspected by an authorized Kia dealer.

* For more details, refer to "Downhill Brake Control (DBC)" on page 5-46.

All Wheel Drive (AWD) LOCK indicator light (if equipped)**This indicator light appears:**

- Once you set the ENGINE START/STOP button to the ON position.
 - It appears 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.

*** NOTICE****AWD lock mode**

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

Drive mode indicator light (NORMAL/ECO/SPORT/SMART/SNOW) (if equipped)**This indicator light appears:**

- When you select each mode as drive mode.

For more details, refer to "Drive mode integrated control system" on page 5-57.

Inattentive Driving Warning light (if equipped)**This indicator light appears:**

- When the ENGINE START/STOP Button is in the ON position. It illuminates for about 3 seconds and then goes off.
- Yellow: When Driver Attention Warning is disabled or a malfunction is detected. If the yellow indicator light remains on after the front view camera has been uncovered or unblocked, have your vehicle inspected by an authorized Kia dealer.

This indicator light blinks:

- Yellow: Driver Attention Warning recommends to take a break.

* For more details, refer to "Driver Attention Warning (DAW)" on page 6-60.

Intelligent Speed Limit Assist indicator light (if equipped)

This indicator light appears:

- When the ENGINE START/STOP Button is in the ON position. It illuminates for about 3 seconds and then goes off.
- Yellow: When Intelligent Speed Limit Assist is off, disabled, or a malfunction is detected.
- While the Intelligent Speed Limit Assist system is in operation, indicates the speed limit and shows the speed limit in red when the vehicle is exceeding the speed limit.

* For more details, refer to "Intelligent Speed Limit Assist (ISLA) (if equipped)" on page 6-55.

Highway Lane Change Assist indicator light (if equipped)

This indicator light appears:

- Green: When Highway Lane Change Assist is ready for operation.
- Gray: When Highway Lane Change Assist is in standby.

This indicator light blinks:

- Green: When Highway Lane Change Assist is operating.
- White: When Highway Lane Change Assist is canceled.

* For more details, refer to "Highway Driving Assist (HDA) (if equipped)" on page 6-89.

Lane Following Assist indicator



This indicator light appears:

Lane Following Assist indicator will appear when you turn Lane Following Assist on by pressing Lane Driving Assist button.

If there is a problem with the function, the yellow Lane Following Assist indicator will appear.

* For more details, refer to "Lane Following Assist (LFA)" on page 6-85.

Lighting

This vehicle is equipped with a variety of lights to appear the interior and exterior of the vehicle.

CAUTION

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

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 after the engine is off and the driver's door is opened.

However, the position lamps stay ON even when the driver-side door is opened if the light switch is operated after the engine is turned off.

To keep the lights on turn the position lamps OFF and ON again using the headlamp switch on the steering column after the engine is turned off.

Headlight delay function

If you place the ENGINE START/STOP button in the ACC or OFF position with the headlamps ON, the headlamps (and/or parking lights) remain on for about 5 minutes. With the engine off if the driver's door is opened and closed, the headlamps (and/or parking lights) will turn off after 15 seconds.

The headlights (and/or parking lights) can be turned off by pressing the lock button on the smart key twice or turning the light switch to the OFF or AUTO position. However, if you turn the light switch to the AUTO position when it is

dark outside, the headlamps will not be turned off.

You can activate or deactivate the Headlamp Delay function from the User Settings Mode in the LCD display. For more details, refer to "LCD display modes" on page 4-83. If your vehicle is equipped with additional navigation, refer to the infotainment system manual separately supplied.

* NOTICE

If the driver exits the vehicle through door other than the driver's door, the battery saver function will not operate and the headlight delay function will not turn OFF automatically.

This may cause the battery to discharge. To avoid battery discharge, turn OFF the headlamps manually from the headlight switch before exiting the vehicle.

Daytime Running Light (DRL) (if equipped)

The DRL can make it easier for others to see the front of your vehicle during the day.

The DRL can be helpful in many different driving conditions, and it is especially helpful after dawn and before sunset.

The DRL will turn the dedicated lamp OFF when:

- The headlamps are ON.
- The vehicle is off.
- The taillight is ON.
 - It includes that the taillight is on in the dark when the light switch is in the auto light position.
- Engaging the parking brake.

Lighting control

The light switch has a headlight and a position lamp position.



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

1. OFF position
2. Auto light position
3. Position Lamp & Taillight
4. Headlightlamp position

Position Lamp & Taillight



When the light switch is in the lamp position, the front position lamp, taillight, and the license plate lamp will turn ON.

Headlight (Low Beam)



When the light switch is in the headlight position, headlight (low beam), taillight and license plate lamp will turn ON.

*** NOTICE**

The ENGINE START/STOP button must be in the ON position to turn on the headlights.

Auto light



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

⚠ CAUTION

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

Operating high beam



To turn on the high beam headlights:

- 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.

WARNING

High beams

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

To flash the headlights:

- Pull the lever towards you.



It will return to the normal (low beam) position when released. The headlight switch does not need to be on to use this flashing feature.

Operating turn signals and lane change signals



The ENGINE START/STOP button must be on for the turn signals to function.

To turn on the turn signals:

- Move the lever up or down (A).

The green arrow indicators on the instrument panel indicate which turn signal is operating.

They will self-cancel after a turn is completed. If the indicator continues to flash after a turn, manually return the lever to the OFF position.

To signal a lane change:

- Move the turn signal lever slightly and hold it in position (B).

The lever will return to the OFF position when released.

If an indicator stays on and does not flash or if it flashes abnormally, one of the turn signal bulbs may be burned out and will require replacement.

One-touch lane change function

To activate a one-touch lane change function, move the turn signal lever slightly and then release it. The lane change signals will blink 3, 5 or 7 times.

You can activate or deactivate the One Touch Turn Signal function or choose the number of blinking (3, 5, or 7) by selecting "User Settings → Lights → One Touch Turn Signal".

*** 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. The bulb may require replacement.

Operating front fog light (if equipped)

Fog lights are designed to provide improved visibility when visibility in 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 headlamp is turned on.

To turn off the fog lights:

- Turn the fog light switch (1) to the ON position.

⚠ CAUTION

When in operation, the fog lights consume large amounts of vehicle electrical power. Only use the fog lights when visibility is poor.

High Beam Assist (HBA)



High Beam Assist is a function that automatically adjusts the headlight range (switches between high beam and low beam) depending on the brightness of detected vehicles and certain road conditions.

Detecting sensor

Front view camera

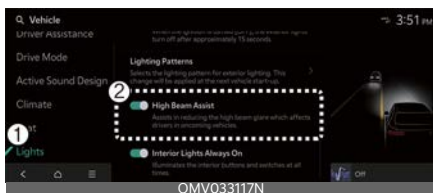


The front view camera is used as a detecting sensor to detect ambient light and brightness while driving. Refer to the picture above for the detailed location of the detecting sensor.

*** NOTICE**

- Always keep the front view camera in good condition to maintain optimal performance of High Beam Assist.
- For more details on the precautions of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion)" on page 6-4.

High Beam Assist setting



1. Lights

2. High Beam Assist

With the ENGINE START/STOP button in the ON position, select **Setup** → **Vehicle** → **Lights** → **High Beam Assist** from the Settings menu to turn on High Beam Assist function.

⚠ WARNING

For your safety, change the Settings after parking the vehicle at a safe location.

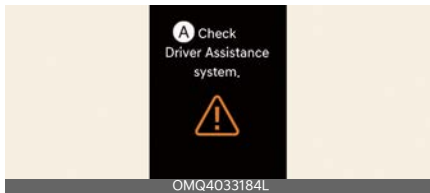
High Beam Assist operation

- After selecting 'High Beam Assist' in the Settings menu, High Beam Assist will operate by following the procedure below.
 - Place the headlight switch in the AUTO position and push the headlamp lever towards the instrument cluster. The High Beam Assist (⏏_{AUTO}) indicator light will appear on the cluster and the function will be enabled.
 - When the function is enabled, high beam will turn on when vehicle speed is above 20 mph (30 km/h). When vehicle speed is below 12 mph (20km/h), high beam will not turn on.
 - The High Beam (⏏_{AUTO}) indicator light will appear on the cluster when high beam is on.

- When High Beam Assist is operating, if the headlight lever or switch is used, the function operates as follow:
 - If the headlight lever is pulled towards you when the high beam is off, the high beam will turn on without High Beam Assist canceled. When you let go of the headlight lever, the lever will move to the middle and the high beam will turn off.
 - If you push the light switch towards the instrument cluster, high beam is turned on and High Beam Assist is released.
 - If the headlight switch is placed from AUTO to another position (headlight/position/off), High Beam Assist will turn off and the corresponding lamp will turn on.
- When High Beam Assist is operating, high beam switches to low beam if any of the following conditions occur:
 - When the headlight of an oncoming vehicle is detected.
 - When the taillight of a vehicle in front is detected.
 - When the headlight or taillight of a motorcycle or a bicycle is detected.
 - When the surrounding ambient light is bright enough that high beams are not required.
 - When streetlights or other lights are detected.

High Beam Assist Malfunction and limitations

High Beam Assist malfunction



A: Check Driver Assistance system.

When High Beam Assist is not working properly, the warning message will appear and the Master warning light (⚠) will appear on the cluster. Have the function be inspected by an authorized Kia dealer.

Limitations of High Beam Assist

High Beam Assist may not work properly in the following situations:

- Light from a vehicle is not detected because of lamp damage, or because it is hidden from sight, etc.
- Headlights are covered with dust, snow or water.
- Headlights are off but the fog lamps are on and etc.
- There is a lamp that has a similar shape as a vehicle's lamp.
- Headlights have been damaged or not repaired properly.
- Headlights are not aimed properly.
- Driving on a narrow curved road, rough road, uphill or downhill.
- Vehicle in front is partially visible on a crossroad or curved road.
- There is a traffic light, reflecting sign, flashing sign or mirror ahead.
- There is a temporary reflector or flash ahead (construction area).

- The road conditions are poor such as being wet, iced or covered with snow.
- A vehicle suddenly appears from a curve.
- The vehicle is tilted from a flat tire or is being towed.
- Light from a vehicle is not detected because of exhaust fume, smoke, fog, snow, etc.

* NOTICE

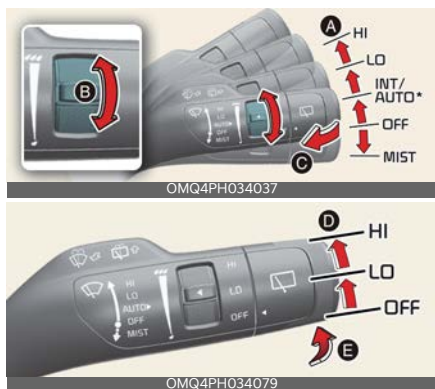
- At times, HBA may not work properly. The function is for your convenience only. It is the responsibility of the driver for safe driving practices and to always check the road conditions.
- When HBA does not operate normally, change the headlight position manually between high beam and low beam.

⚠ WARNING

- HBA may not turn off high beams every time. This function is for your convenience only. It is the responsibility of the driver to always check the road conditions and adjust headlights appropriately, including by using the manual controls. for your safety.
- It may not operate for 15 seconds after the vehicle is started, or the front view camera is initialized or restarted.
- If the high beam assistance is not operated properly, switch the headlights manually.

Wipers and washers

The wipers and washers remove foreign substances from the windshield and rear window, helping to maintain visibility.



A: Wiper speed control

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

B: Intermittent control wipe time adjustment/Auto control wipe time adjustment*

C: Wash with brief wipes (Pull lever towards you)

D: Rear wiper/washer control

- HI - Continuous wipe
- LO - Intermittent wipe
- OFF - Off

E: Wash with brief wipes (Rear/Push lever away from you)

*: if equipped

Windshield wipers

Operate as follows when ENGINE START/STOP button is ON.

- MIST: For a single wiping cycle, move the lever to this 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, do not drive and 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.

* INFORMATION

If you operate the wipers while driving on snowy roads, the wipers may stop due to snow buildup on your windshield. This is normal and not a failure because it is one of our safety features to prevent vehicle accidents and wiper damage from overloading the wiper motor. If the wipers stop, remove snow accumulated on the top or bottom of windshield before using them.

⚠ WARNING

Do not use the washer in freezing temperatures without first warming the windshield with the defrosters; the

washer solution could freeze on the windshield and obscure your vision.

Auto control (if equipped)



The rain sensor (A) located on the upper end of the windshield glass senses the amount of rainfall and controls the wiping cycle for the proper interval. The more it rains, the faster the wiper operates. When the rain stops, the wiper stops.

To vary the speed setting, turn the speed control knob (B).

If the wiper switch is set in AUTO mode when the ENGINE START/STOP button is ON, the wiper will operate once to perform a self-check of the system. Set the wiper to OFF position when the wiper is not in use.

⚠ WARNING

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

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

⚠ CAUTION

- When washing the vehicle, set the wiper switch in the OFF position to stop the auto wiper operation.

The wiper may operate and be damaged if the switch is set in the AUTO mode while washing the vehicle.

- Do not remove the sensor cover located on the upper end of the passenger side windshield glass. Damage to system parts could occur and may not be covered by your vehicle warranty.
- When starting the vehicle in winter, set the wiper switch in the OFF position. Otherwise, wipers may operate and ice may damage the windshield wiper blades. Always remove all snow and ice and defrost the windshield properly prior to operating the windshield wipers.
- 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 related parts.

Operating windshield washers



1. Move the wiper speed control switch to the OFF position.
2. 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 in the front of the engine compartment on the passenger side.

⚠ CAUTION

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

⚠ WARNING

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

⚠ CAUTION

- To prevent possible damage to the wipers or windshield, do not operate the wipers when the windshield is dry.
- To prevent damage to the wiper blades, do not use gasoline, kerosene, paint thinner, or other solvents on or near them.
- To prevent damage to the wiper arms and other components, do not attempt to move the wipers manually.
- To prevent possible damage to the wipers and washer system, use anti-freezing washer fluids in the winter season or cold weather.

Operating rear window wiper and washer switch

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 - Normal wiper operation
- LO - Intermittent wiper operation
- OFF - Wiper is not in operation
- Push the lever away from you to spray rear washer fluid and to run the rear wipers several times.



The spray and wiper operation will continue until you release the lever.

When the front wiper is activated and the gear is switched to R (Reverse) position, the rear wiper will be activated once to provide better visibility.

Welcome system (if equipped)

The welcome system is a function that displays the surroundings or the interior when the driver approaches or exits the vehicle.

Door handle lamp (if equipped)



When all the doors (and liftgate) are closed and locked, the door handle lamp will illuminate for about 15 seconds if any of the following is performed:

- When the door unlock button is pressed on the smart key.
- When the button of the outside door handle is pressed.
- When you approach the vehicle with the smart key in possession.

Headlight 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. If the driver's door is opened and closed, the headlights will turn 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 headlamp 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 cabin lamp will come on for 30 seconds if any of the following occurs:

- 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.

If you press the door lock button, the lamps will turn off immediately.

Interior lights

This vehicle is equipped with lights throughout the vehicle to illuminate the interior.

⚠ CAUTION

Do not use the interior lights for extended periods when the engine is not running.

It may cause battery discharge.

⚠ WARNING

Do not use the interior lights when driving in the dark. Accidents could happen because your view may be obscured by interior lights.

Automatic turn off function

The interior lights automatically turn off approximately 20 minutes after the ENGINE START/STOP button is turned off, if the lights are in the ON position.

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

Map lamp



- Press the lens (1) to turn ON the map lamp.

To turn the map lamp OFF press the lens (1) again.

-  (2): DOOR mode
 - The map lamp and cabin lamp illuminate when a door is opened. The

lamps turn off after approximately 30 seconds.

- The map lamp and room lamp come on for approximately 30 seconds when doors are unlocked with a smart key as long as the doors are not opened.
- The map lamp and cabin lamp will stay on for approximately 20 minutes if a door is opened with the ENGINE START/STOP button in the ACC or OFF position.
- The map lamp and cabin lamp will stay on continuously if the door is opened with the ENGINE START/STOP button in the ON position.
- The map lamp and cabin lamp will turn off immediately if the ENGINE START/STOP button is changed to the ON position or all doors are locked.
- To turn off the DOOR mode, press the DOOR button (2) once again (not pressed).
-  (3): Press this switch to turn the front and rear room lamps on and off.

* NOTICE

The DOOR mode and ROOM (cabin) mode cannot be selected at a time.

Room (cabin) lamp (if equipped)

Personal lamp



Press the switch to turn the room lamp on and off.

Luggage compartment lamp

-  : The lamp will always turn on when the liftgate is opened/closed.
-  : The lamp is on when the liftgate is opened, and off when the liftgate is closed.
-  : The lamp will always turn off when the liftgate is opened/closed.

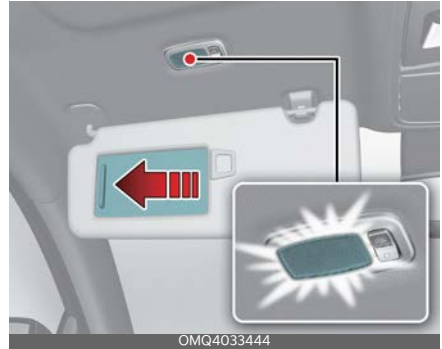


The luggage compartment lamp illuminates when the liftgate is opened.

CAUTION

The luggage room lamp comes on as long as the liftgate opens. To prevent unnecessary charging system drain,

close the liftgate securely after using the luggage room.

Vanity mirror lamp

Push the switch to turn the light on or off.

-  : The lamp will turn on if this button is pressed.
-  : The lamp will turn off if this button is pressed.

CAUTION**Vanity mirror lamp**

Always close the lid of the vanity mirror in the off position when the vanity mirror lamp is not in use. If the sun visor is closed with the lamp on, it may discharge the battery or damage the sun visor.

Glove box lamp



The glove box lamp illuminates when the glove box is opened.

* NOTICE

To prevent unnecessary charging system drain, close the glove box securely after using the glove box.

Climate control system

The climate control system uses cooling and heating to help maintain a pleasant environment inside the vehicle.

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 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 through the grilles just at the base of the windshield. Care should be taken that it is not blocked by leaves, snow, ice or other obstructions.
- To prevent fog from forming on the inside of the windshield:
 - Set the air intake control to the fresh air position and the fan speed to the desired position.
 - Turn on the air conditioning system, and adjust the temperature control to desired temperature.

Air conditioning (A/C)

Kia A/C systems are filled with R-1234yf refrigerant.

1. Start the vehicle. Press the A/C button.
2. Set the mode to the  position.
3. Set the air intake control to the outside-air or recirculated air position.
4. Adjust the fan speed control and temperature control to maintain maximum comfort.

CAUTION

- 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) should never be repaired or replaced with one removed from a used or salvaged vehicle and new replacement Mobile Air Conditioning (MAC) evaporators should be certified

(and labeled) as meeting SAE Standard J2842.

CAUTION

Excessive air conditioning use

When using the air conditioning system, monitor the temperature gauge closely while driving up hills or in heavy traffic when outside temperatures are high. A/C system operation may cause vehicle overheating. Continue to use the blower fan but turn off the A/C system if the temperature gauge indicates vehicle overheating.

CAUTION

The A/C system should only be used with the windows and sunroof closed to prevent condensation inside the vehicle that may cause damage to electrical components.

Air conditioning system operation tips

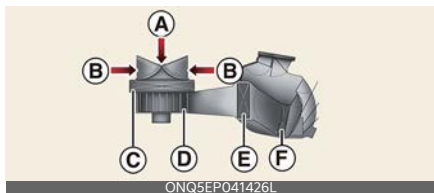
- If the vehicle has been parked in direct sunlight during hot weather, open the windows for a short time to let the hot air inside the vehicle escape.
- To help reduce moisture inside of the windows on rainy or humid days, decrease the humidity inside the vehicle by operating the air conditioning system.
- During air conditioning system operation, you may occasionally notice a slight change in vehicle speed as the air conditioning compressor cycles. This is normal.
- To ensure maximum system performance, the air conditioning system

should be run for a few minutes each month.

- 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 normal.
- Operating the A/C system in the recirculated air position provides maximum cooling; Continued 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 normal.

Climate control air filter

The climate control air filter installed behind the glove box filters the dust or other pollutants that enter the vehicle from the outside through the heating and air conditioning system.



A: Outside air

B: Recirculated air

C: Climate control air filter

D: Blower

E: Evaporator core

F: Heater core

If dust or other pollutants accumulate in the filter over time, the air flow from the air vents may decrease. This leads to moisture accumulating on the inside of the windshield even when the outside (fresh) air position is selected. Have the

climate control air filter replaced by an authorized Kia dealer.

* NOTICE

- Replace the filter according to the Maintenance Schedule. If the vehicle is being driven in severe conditions such as dusty or rough roads, more frequent air conditioner filter inspections and changes are required.
- When the air flow rate suddenly decreases, have the system checked by an authorized Kia dealer.

A/C refrigerant label (if equipped)



* The A/C refrigerant label in the vehicle may differ from the illustration.

Each symbol and specification on the A/C refrigerant label is represented below:

1. Classification of refrigerant
2. Amount of refrigerant
3. Classification of Compressor lubricant
4. Caution
5. Flammable Refrigerant
6. Requires a registered technician to service A/C system

The refrigerant label is inside the engine compartment.

Refer to "Refrigerant label" on page 9-13 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 impact on the air conditioning system.

If abnormal operation occurs, have the system inspected by an authorized Kia dealer.

WARNING

The oil and refrigerant in your vehicle's A/C system are under very high pressure. If proper service procedures are not followed, an explosion may result. To reduce the risk of **SERIOUS INJURY OR DEATH**, the A/C system in your vehicle should only be serviced by trained and certified Kia technicians.

CAUTION

It is important that the correct type and amount of oil and refrigerant is used, otherwise damage to the vehicle may occur. To prevent damage, the air conditioning system in your vehicle should only be serviced by trained and certified technicians.

WARNING

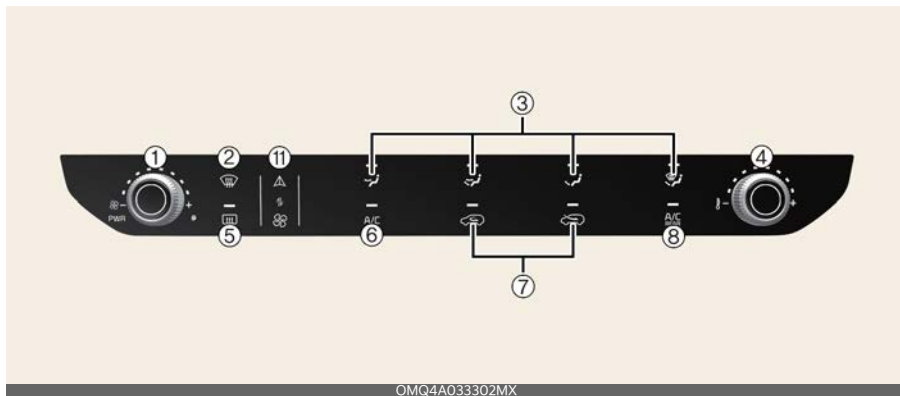
Vehicles equipped with R-1234yf



It is important that the correct type and amount of oil and refrigerant are used. All refrigerants should be reclaimed with proper equipment. Venting refrigerants directly to the atmosphere is harmful to individuals and the environment. Failure to heed these warnings can lead to serious injuries.

Manual climate control system (if equipped)

The manual climate control system uses cooling and heating to help maintain a pleasant environment inside the vehicle.



3rd row seat



1. Fan speed control knob
2. Front windshield defroster button
3. Mode selection button
4. Temperature control knob
5. Rear window defroster button
6. A/C button
7. Air intake control button
8. 3rd row Air conditioning (A/C) button (if equipped)
9. 3rd row seat Air conditioning Fan speed control knob (if equipped)
10. 3rd row seat Air conditioning ON/OFF button (if equipped)
11. Using the infotainment/climate switchable controller

⚠ CAUTION

Operating the blower when ENGINE START/STOP button is in the ON position could cause the battery to discharge. Operate the blower when the engine is running.

Using the infotainment/climate switchable controller



Press the button on the switchable controller to switch between infotainment system or climate control panel.
Press and hold the button to select the default mode for the control panel.

Switching between panels

Infotainment control panel



Climate control panel



Press the button on the switchable controller to select the desired control panel.
The selected control panel icon will be illuminated and the control panel will be changed.

- The knob display will be illuminated according to the selected control panel mode.

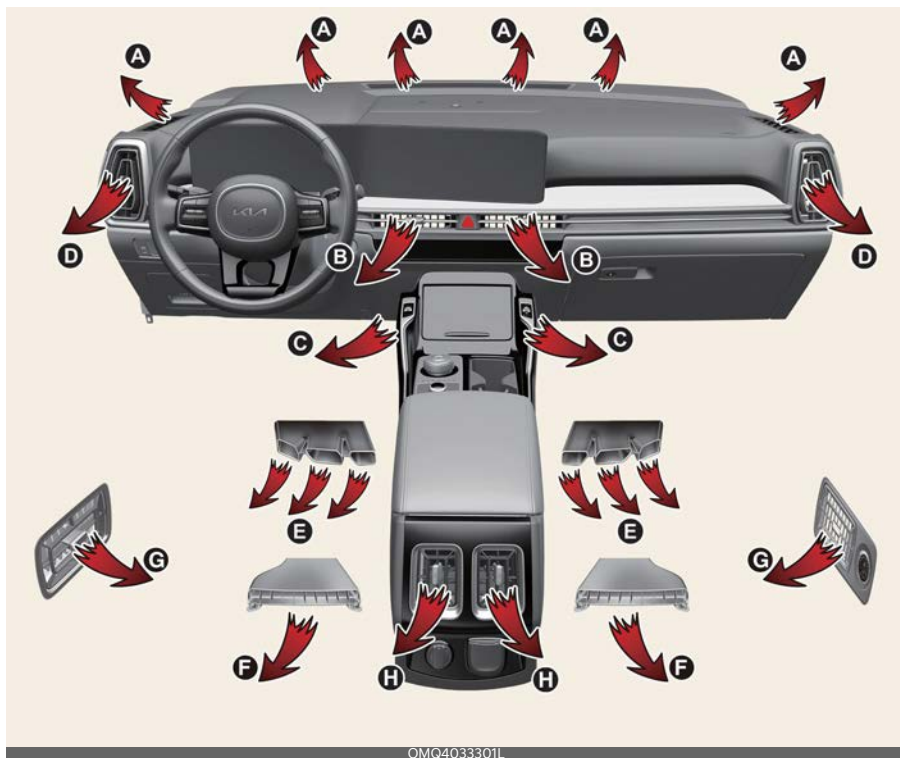
- When the vehicle is in the ACC position, only the infotainment system will be activated.

Setting the default mode



- Press and hold the button to select the default mode for the control panel.
- After the setting, the control panel will return to the default mode after a certain period of time even if the control panel is switched to the different mode.
 - If the mode is set to 'OFF', the control panel will display the mode used recently.

Heating and air conditioning



1. Start the engine.
2. Set the mode to the desired position.
To improve the effectiveness of heating and cooling;
 - Heating:
 - Cooling:
3. Set the temperature control to the desired position.
4. Set the air intake control to the outside (fresh) air position.
5. Set the fan speed control to the desired speed.
If air conditioning is desired, turn the air conditioning system on.

Mode selection

The mode selection buttons control the direction of the air flow through the ventilation system.



Air can be directed to the floor, dash-board outlets, or windshield. Five symbols are used to represent Face, Bi-Level, Floor, Floor-Defrost and Defrost air position.

 Face-Level (B, D, H, G)

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

 Bi-Level (B, C, D, E, F, H, G)

Air flow is directed towards the face and the floor.

 Floor-Level (A, C, D, E, F, H)

Most of the air flow is directed to the floor, with a small amount of the air being directed to the windshield, side window defrosters and side air vents.

 Floor/Defrost-Level (A, C, D, E, F, H)

Most of the air flow is directed to the floor and the windshield with a small amount directed to the side window defrosters and side air vents.

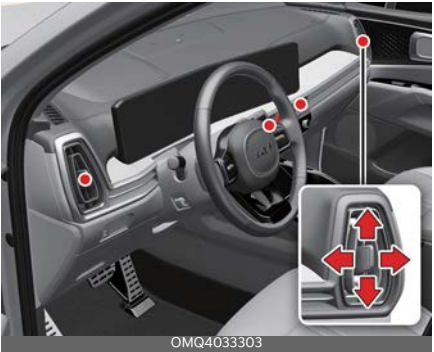
 Defrost-Level (A, D)

Most of the air flow is directed to the windshield with a small amount of air

directed to the side window defrosters and side air vents.

Instrument panel vents

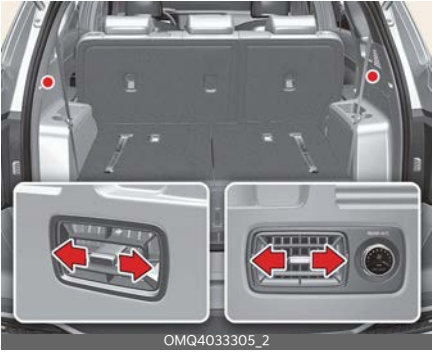
Front



Center



Rear



You can adjust the direction of air delivered from these vents using the vent control lever as shown.

Temperature control

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 for warm and hot air or to the left for cooler air.

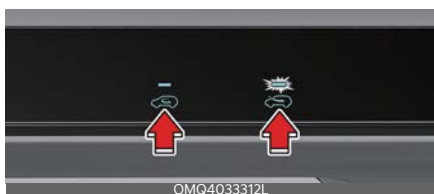
* NOTICE

When starting the vehicle in cold weather using manual temperature control, operate the system in the following method to improve heating:

- Turn off or lower the blower right after starting the engine.
- Allow the engine to warm up since the air flow from the heater is still cold.
- After a few minutes of engine warm up, turn on or set the fan to a higher level and adjust the temperature setting to hot.

Controlling air intake

The air intake control is used to select the outside (fresh) air position or recirculated air position.



To change the air intake control position.

- Push the desired control button

Recirculated air position



The indicator light on the button appears when the recirculated air position is selected.

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



The indicator light on the button will turn off when the outside (fresh) air position is selected.

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 make the air in the passenger compartment stale.

Prolonged use of the air conditioning with the re circulated air position selected will result in excessively dry air in the passenger compartment.

⚠ WARNING

- Continued climate control system in the recirculated air position may allow humidity to increase inside the vehicle which may fog the glass and obscure visibility.
- Do not sleep in a vehicle with the air conditioning or heating system on. It

may cause serious harm or death due to a drop in the oxygen level and/or body temperature.

- Continued 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) while driving.

Controlling fan speed

The fan speed control knob allows you to control the fan speed of the air flowing from the ventilation system.

The ENGINE START/STOP button must be in the ON position for fan operation.

- To change the fan speed:
- Turn the knob to the right for higher speed or left for lower speed.



To turn off the blowers:

- Turn the fan speed control knob to the "0" position.

Air conditioning (A/C)



- Press the A/C button to turn the air conditioning system on (indicator light will appear).

- Press the button again to turn the air conditioning system off.

3rd row air conditioning (if equipped)



To turn on the 3rd row air conditioning control system.

- You can operate the 3rd row air conditioning system from the first row control panel. When the front row air conditioning has been turned off and you want to stop the A/C in the third row, press the 3rd row air conditioning select button one more time. The 3rd row's A/C will also turn off.
- The 3rd 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 3rd row A/C control button in the front row will turn ON or OFF to inform the front row occupants.
- The fan speed of the 3rd row air conditioning can also be separately controlled by turning the fan speed control knob.

Automatic climate control system (if equipped)

The automatic climate control system uses cooling and heating to help maintain a pleasant environment inside the vehicle.



3rd row seat



1. Fan speed control button
2. Air intake control button
3. Mode selection button
4. Rear window defroster button
5. Front windshield defroster button
6. Driver's temperature control button
7. Air conditioning (A/C) button
8. 3rd row air conditioning ON/OFF button (if equipped)
9. 3rd row air conditioning fan speed control knob (if equipped)
10. SYNC button
11. 3rd row Air conditioning (A/C) button
12. Passenger's temperature control button
13. AUTO (automatic control) button
14. Using the infotainment/climate switchable controller

* NOTICE

Operating the blower when the ENGINE START/STOP button is in the ON position could cause the battery to discharge. Operate the blower when the engine is running.

Using the infotainment/climate switchable controller



Press the button on the switchable controller to switch between infotainment system or climate control panel.

Press and hold the button to select the default mode for the control panel.

Switching between panels

Infotainment control panel



Climate control panel



Press the button on the switchable controller to select the desired control panel.

The selected control panel icon will be illuminated and the control panel will be changed.

- The knob display will be illuminated according to the selected control panel mode.
- When the vehicle is in the ACC position, only the infotainment system will be activated.

Setting the default mode



Press and hold the button to select the default mode for the control panel.

- After the setting, the control panel will return to the default mode after a certain period of time even if the control panel is switched to the different mode.
- If the mode is set to 'OFF', the control panel will display the mode used recently.

Heating and air conditioning automatically

1. Press the AUTO button.

The modes, fan speeds, air intake and air-conditioning will be controlled automatically by setting the temperature.



Level	Indicator	LCD Display	Air flow
High			1 ~ 8 (EU) 2 ~ 8
Medium			1 ~ 6
Low			1 ~ 4

2. Turn the temperature control knob to the desired temperature.



* NOTICE

- To turn the automatic operation off, select any button of the following:
 - Mode selection button
 - Air conditioning button
 - Front windshield defroster button (Press the button one more time to deselect the front windshield defroster function. The AUTO sign

will appear on the information display once again.)

- Fan speed control knob

The selected function will be controlled manually while other functions operate automatically.

- To improve the effectiveness of the climate control, use the AUTO button and set the temperature to 72 °F (22 °C).

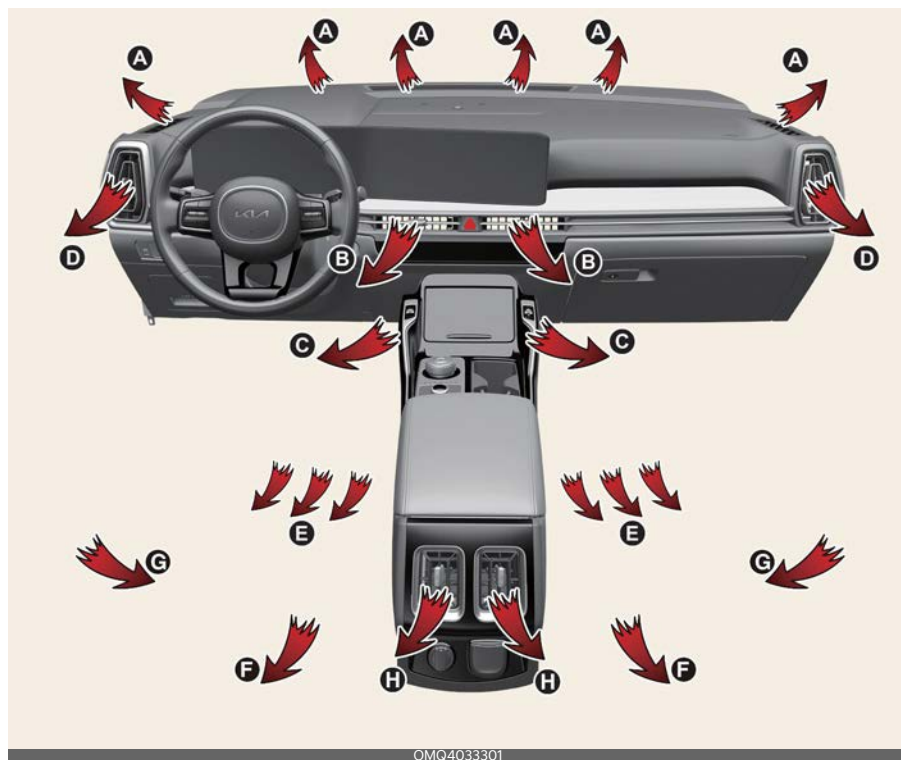
* NOTICE

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



Heating and air conditioning manually

The heating and cooling system can be controlled manually by touching buttons other than the AUTO button.



OMQ4033301

The system works sequentially according to the order of buttons selected.

1. Start the vehicle.
2. Set the mode to the desired position.
To 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.

If air conditioning is desired, turn the A/C system on.

Touch the AUTO button to convert to fully automatic control of the system.

Mode selection

The mode selection button controls the direction of the air flow through the ventilation system.



The air flow outlet ports are switched in the following sequence:



Face-Level (B, D, H, G)

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

Bi-Level (B, C, D, E, F, H, G)

Air flow is directed towards the face and the floor.

Floor-Level (A, C, D, E, F, H)

Most of the air flow is directed to the floor, with a small amount of the air being directed to the windshield, side window defrosters and side air vents.

Floor/Defrost-Level (A, C, D, E, F, H)

Most of the air flow is directed to the floor and the windshield with a small amount directed to the side window defrosters and side air vents.

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 and side air vents.

Instrument panel vents

Front



Center



Rear



You can adjust the direction of air delivered from these vents using the vent control levers as shown.

Temperature control



The temperature will increase to the maximum (HI) by turning the knob to the right.

The temperature will decrease to the minimum (Lo) by turning the knob to the left.

When set to the lowest temperature setting, the air conditioning will operate continuously.

Adjusting the driver and passenger side temperature equally



1. Touch 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.

2. Turn the driver side temperature control knob. The driver and passenger side temperature will be adjusted equally.
3. If you turn the passenger's temperature control knob, the SYNC button will turn off and the passenger side temperature can be operated individually.

Adjusting the driver and passenger side temperature individually

Touch the "SYNC" button again to adjust the driver and passenger side temperature individually. The button indicator will turn off.

Changing temperature scale

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.

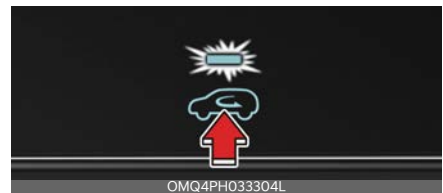
The display will change from Centigrade to Fahrenheit, or from Fahrenheit to Centigrade. If the battery has been discharged or disconnected, the temperature mode display will reset to Centigrade.

Controlling air intake

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

To change the air intake control position:

- Touch the desired 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.

Controlling fan speed

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

To change the fan speed:

- Touch right button for higher speed, or touch left button for lower speed.



To turn the fan speed control off:

- Press the temperature control knob of driver side.

Air conditioning (A/C)



- Press the A/C button to turn the air conditioning system on (indicator light will appear).
- Press the button again to turn the air conditioning system off.

Turning off the front air climate control



- Press the temperature control knob of driver side to turn off the air climate control system.

You can still operate the mode and air intake buttons as long as the ENGINE START/STOP button is in the ON position.

Clean Air (if equipped)

When the ENGINE START/STOP button is in the ON position, the clean air function turns on automatically.

The clean air function turns off automatically, when the ENGINE START/STOP button is in the OFF position.

3rd Row Air Conditioning (if equipped)



To turn on the 3rd row air conditioning control system:

1. You can operate the 3rd row air conditioning system from the front row control panel. Changing the front row's fan speed by touching 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 3rd row air conditioning select button one more time. Then, the third row's A/C will also turn off.

2. The 3rd row A/C system can be separately controlled by the control buttons in the 3rd row. When the A/C is ON or OFF, the 3rd row A/C control button in the front row will turn ON or OFF, informing the front passengers on the third row's status.
3. The fan speed of the 3rd row air conditioning can also be separately controlled by turning the fan speed control knob.

A/C Automatic Drying (if equipped)

A/C Automatic Drying feature dries the moisture in the air conditioner and reduces air conditioner odor. The blower motor automatically operates after 30 minutes of the vehicle being turned off.

Turning A/C Automatic Drying On or Off

The A/C Automatic Drying feature can be turned on and off by selecting **Setup → Climate → Climate Features → A/C Automatic Drying** from the infotainment system.

If the operating condition is satisfied, a message **Air Conditioning Automatic Drying will start in 30 minutes** and be displayed on the infotainment/climate switchable controller screen. The blower motor will automatically operate on schedule.

When the A/C Automatic Drying feature is activated, the air conditioner sets the fan speed to the third level, selects Fresh

mode, and directs the air flow to the floor.

* INFORMATION

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference guide.

Operating Conditions

The A/C Automatic Drying feature operates under the following conditions:

- The vehicle is turned off after operating the air conditioner for a certain period
- The 12-volt battery level is sufficient
- The outside temperature is above a certain level

Non-Operating Conditions

The A/C Automatic Drying feature stops operating under the following conditions:

- The A/C Automatic Drying feature has operated for 3 minutes
- The ENGINE START/STOP button is pressed, or the vehicle is ON
- The climate control system is operated remotely

* NOTICE

- The A/C Automatic Drying feature reduces air conditioner odors but may not remove all odors.
- The A/C Automatic Drying feature does not operate if the remaining battery level is insufficient to prevent battery discharge.

Smart Temperature Comfort Control System (for driver's seat) (if equipped)

The temperature of the driver's seat warmer, air ventilated seat, and heated steering wheel is automatically controlled depending on the inside and outside temperature of the vehicle when the vehicle is running. The heated steering wheel and seat warmer/ventilation defaults to the OFF position whenever the vehicle is restarted. If the auto. controls that use climate control settings is ON, the heated steering wheel and seat warmer/ventilation will turn on or off depending on the inside and outside temperature.

Operation

Select Settings → Vehicle → Seat → Heating/Ventilation → Auto. Controls That Use Climate Control Settings → Steering wheel warmer/ Seat warmer/ ventilation on the infotainment screen.

* INFORMATION

For detailed information, refer to Navigation Quick Reference Guide.

Vehicle Settings → Automatic Ventilation → Scheduled Ventilation' from the infotainment system screen. Also, the starting time can be set within 24 hours. Schedule Ventilation Control operates only once when the feature is set.

Scheduled Ventilation Control

The Scheduled Ventilation Control releases hot air in the vehicle to lower cabin temperature before getting in the vehicle.

Depending on the outside ambient temperature, the blower is operated for 5 to 15 minutes while the vehicle is parked.

Turning Schedule Ventilation Control On or Off

The Schedule Ventilation Control can be turned on and off by selecting 'Setup →

Windshield Defrosting and Defogging

If the windshield is covered with frost or moisture, visibility can be blurred, and you should remove the frost and moisture.

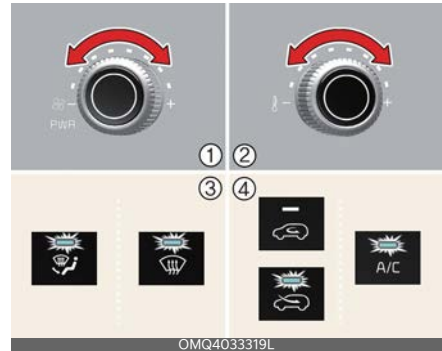
WARNING

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. Set the mode selection to the  position and fan speed control to the lower speed.

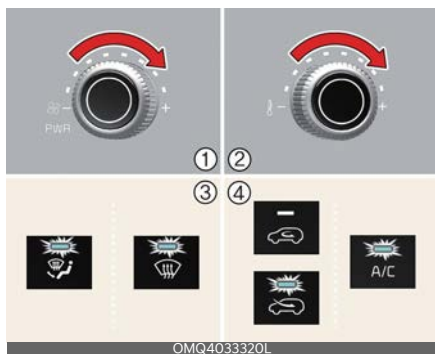
- For maximum defrosting, set the temperature control to the extreme right/hot position and the fan speed control to the highest speed.
- If warm air to the floor is desired while defrosting or defogging, set the mode to the floor-defrost position.
- Before driving, clear all snow and ice from the windshield, rear window, outside rear-view mirrors, and all side windows.
- Clear all snow and ice from the hood and air inlet in the cowl grille to improve heater and defroster efficiency and to reduce the probability of fogging up the inside of the windshield.

Defogging Inside Windshield with manual climate control system



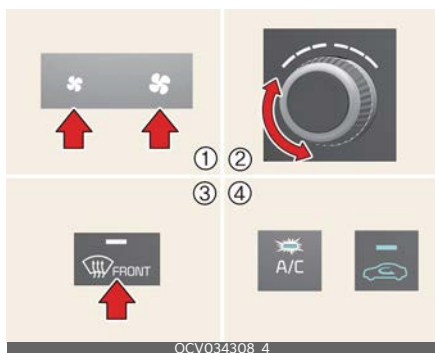
1. Select any fan speed except "0" position.
2. Select desired temperature.
3. Select the  or  position.
4. The outside (fresh) air and air conditioning will be selected automatically. If the air conditioning and outside (fresh) air position are not selected automatically, press the corresponding button manually.

Defrosting Outside Windshield with manual climate control system



1. Set the fan speed to the highest (extreme right) 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.

Defogging inside windshield with automatic climate control



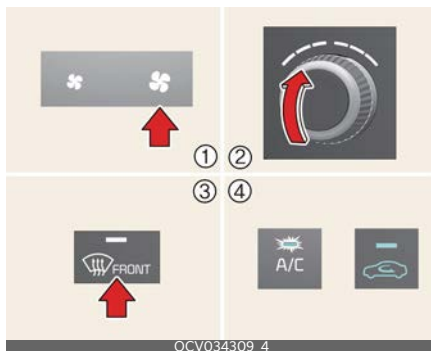
1. Set the fan speed to the desired position.
2. Select desired temperature.

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.

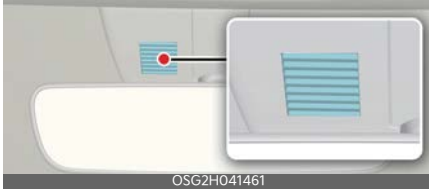
Defrosting outside windshield with automatic climate control



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.

Auto Defogging System (if equipped)

Auto defogging helps reduce the possibility of fogging up the inside of the windshield by automatically sensing the moisture on the inside windshield.



The auto defogging system operates when the heater or air conditioning is on.

When the auto defogging system is operating, the indicator will appear.

If high humidity is detected in the vehicle, the auto defogging system will be enabled.

The following steps will be performed automatically:

1. The A/C button will turn ON.
2. The air intake control will change to Fresh mode under low outside temperature.
3. The mode will change to defrost to direct airflow to the windshield.
4. The fan speed will be increased.

To cancel or reset the auto defogging system:

Press the front windshield defroster button for 3 seconds when ENGINE START/STOP button is in the ON position.

When the auto defogging system is canceled, the defrost button indicator will blink 3 times.

When the auto defogging system is reset, the defrost button indicator will blink 6 times without a signal.

* NOTICE

- If you try to turn off the air conditioning when the Auto Defogging System is on, the indicator will blink 3 times and the air conditioning will not be turned off.
- To maintain the effectiveness and efficiency of the auto defogging system, do not select Recirculation mode while the system is operating.
- When the auto defogging system is operating, the fan speed adjustment knob, temperature adjustment knob and air intake control button are all disabled.

* NOTICE

Do not remove the sensor cover located on the upper end of the driver side windshield glass.

Damage to system parts could occur and may not be covered by your warranty.

Defroster

The vehicle is equipped with a defroster for removing frost or fog from the rear window.

⚠ 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.

To defrost and defog the front windshield, refer to "Windshield Defrosting and Defogging" on page 4-139.

Operating Rear Window Defroster

The defroster heats the window to remove frost, fog and thin ice from the rear window while the engine is on.

If there is heavy accumulation of snow on the rear window, brush it off before operating the rear defroster.



To activate the rear window defroster:

- Press the rear window defroster button located in the heater control panel.

The indicator on the rear window defroster button appears when the defroster is ON.

The rear window defroster automatically turns off after approximately 20 minutes or when the ENGINE START/STOP button is turned off.

To turn off the defroster:

- Press the rear window defroster button again.

Outside Mirror Defroster (if equipped)

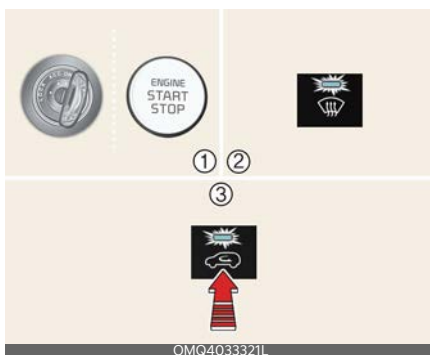
If your vehicle is equipped with the outside mirror defrosters, they will operate at the same time you turn on the rear window defroster.

Defogging Logic (if equipped)

To reduce the possibility of fogging up the inside of the windshield, the air intake or air conditioning is controlled automatically according to certain conditions such as  or  position.

To cancel automatic defogging logic or return to the automatic defogging logic, do the following.

Canceling/Returning Automatic Defogging Logic on manual climate control system

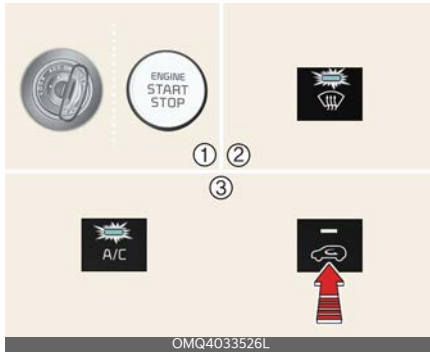


1. Turn the ENGINE START/STOP to the ON position.
2. Select the () position.
3. Within 10 seconds after setting DEFOG mode, press the intake button for at least 5 seconds and at least 3 seconds while pressing the air conditioner button (A/C).

The indicator light in the air intake control button will blink 3 times. 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.

Canceling/returning automatic defogging logic on automatic climate control system



1. Turn the ENGINE START/STOP button to the ON position.
2. Press the defroster button (windshield icon).
3. While pressing the A/C button, press the air intake control button at least 5 times within 3 seconds.

The recirculation indicator blinks 3 times in 0.5 second intervals. 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.

Storage Compartment

The 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 it cannot 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.

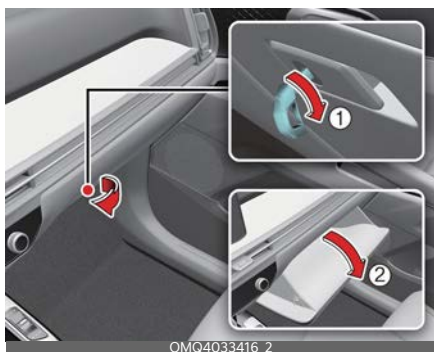
Center Console Storage



To open the center console storage:

- Pull up the lever.

Glove box



The glove box can be locked and unlocked with the mechanical key (1).

To open the glove box:

- Pull the handle and the glove box will automatically open (2).

Close the glove box after use.

⚠ WARNING

Glove box

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

⚠ CAUTION

Do not keep food in the glove box for an extended period of time.

*** NOTICE**

If the temperature control switch is in the warm or hot position, warm or hot air will flow into the glove box.

Interior Features

There are various features inside the vehicle for the convenience of the occupants.

Cup Holder

Front



Rear



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

⚠ WARNING

Hot Liquids

Do not place uncovered cups with hot liquid in the cup holders while the vehi-

cle is in motion. If the hot liquid spills, you could be burned. A burn to the driver could lead to loss of control of the vehicle.

WARNING

Keep cans or bottles out of direct sun light and do not put them in a vehicle that is hot. They could explode.

CAUTION

- Keep your drinks sealed while driving to prevent spillage. If liquid spills, it may get into the vehicle's electrical/ electronic system and damage electrical/electronic parts.
- When cleaning spilled liquids, do not use heat to dry the cup holders. This may damage the cup holder.

Seat Warmer (if equipped)

The seat warmer is provided to warm the front seats in cold weather.

Front seat



Rear seat



With ENGINE START/STOP button in the ON position:

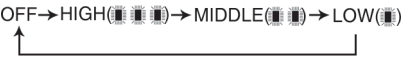
- Push either of the levers/switch to warm the driver's seat or the front passenger's seat.

During mild weather or under conditions where the operation of the seat warmer is not needed, keep the levers/switch in the "OFF" position.

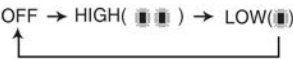
The seat warmer defaults to the OFF position whenever the ENGINE START/ STOP button is turned on.

Temperature Control (Manual)

- Each time you press the levers/switch, the temperature setting of the seat will change as follows:
 - Front seat

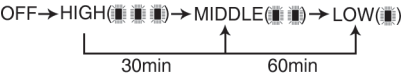


- Rear seat



Temperature Control (Automatic)

The seat warmer automatically controls the seat temperature in order to prevent low-temperature burns after being manually turned ON.



You may manually press the button to increase the seat temperature. However, it will revert to the automatic mode again after a short period of time.

- When pressing the levers/switch for more than 1.5 seconds with the seat warmer operating, the seat warmer will turn OFF.

* NOTICE

When the seat warmer levers/switch are in the ON position, the heating system in the seat turns off or on automatically depending on the seat temperature.

⚠ CAUTION

- When cleaning the seats, do not use an organic solvent such as paint thinner, benzene, alcohol or gasoline. It may damage the surface of the warmer or seats.
- To prevent overheating the seat warmer, do not place anything on the seats that insulate against heat, such as blankets, cushions or seat covers while the seat warmer is in operation.
- Do not place heavy or sharp objects on seats equipped with seat warmers. Damage to the seat warming components could occur.
- Do not change the seat cover. It may damage the seat warmer or air ventilation system.

⚠ WARNING

Seat Warmer Burns

Passengers should use extreme caution when using seat warmers due to the possibility of excess heating causing burns. The seat warmer may cause burns even at low temperatures, especially if used for long periods of time. The driver must exercise extreme care for the following types of passengers:

1. Infants, children, elderly, disabled persons, or hospital outpatients
2. Persons with sensitive skin or those that burn easily
3. Fatigued individuals

4. Intoxicated individuals
5. Individuals taking medication that can cause drowsiness or sleepiness (sleeping pills, cold tablets, etc.)

Air ventilation Seat (if equipped)



The temperature setting of the seat changes according to the levers position.

- To ventilate your seat cushion, push the levers.
Each time you push the levers, the air-flow will change as follows:

OFF → HIGH (■ ■ ■ ■) → MIDDLE (■ ■ ■) → LOW (■ ■)
↑

The seat warmer (with air ventilation) defaults to the OFF position whenever the ENGINE START/STOP button is turned ON.

* NOTICE

This function is designed to automatically change the temperature setting of the seat (High → Low) to maintain maximum comfort inside in case the engine is stopped by ISG (Idle Stop and Go) system (if equipped).

⚠ CAUTION

Seat Damage

- When cleaning the seats, do not use an organic solvent such as paint thinner, benzene, alcohol or gasoline. It 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 completely before using the air ventilation seat.

Sun Visor

Use the sun visor to block direct light through the front or side windows.



- To use the sun visor, pull it downward.
- To use the sun visor for the side window, pull it downward, unsnap it from the bracket (1) and swing it to the side (2). You can slide the sun visor if necessary (3).
- To use the vanity mirror, pull down the visor and slide the mirror cover (4).

Press the ON button (☀️) to turn on the lamp inside the sun visor when using the mirror. Before returning the sun visor to the original position, be sure to press the OFF button (○) to turn it off.

The ticket holder (5) is provided for holding a tollgate ticket.

⚠️ WARNING

Do not block your view when using the sun visor.

* NOTICE

Do not put several tickets in the ticket holder at the same time. This could cause damage to the ticket holder.

USB Charger (if equipped)

The USB charger is designed to recharge batteries of small size electrical devices using a USB cable.

Instrumental Panel



Cargo (if equipped)



The electrical devices can be recharged when the Engine Start/Stop button is in the ON or START position.

The battery charging state may be monitored on the electrical device.

Disconnect the USB cable from the USB port after use.

Rated output:

- A smartphone or a tablet PC may get warmer during the re-charging process. It does not indicate any malfunction with the charging system.
- A smartphone or a tablet PC, which adopts a different re-charging method, may not be properly re-charged. In this case, use an exclusive charger of your device.

- The charging terminal is only to recharge a device. Do not use the charging terminal either to turn ON an audio or to play media in the infotainment system.

* INFORMATION

Charging may not be possible when using a Type-C to A converter sold by a mobile phone manufacturer or commercially available.

* NOTICE

- Use the USB charger when the engine is running. Using the USB charger for prolonged periods of time with the engine off could cause the battery to discharge.
- To prevent damage to the USB charger:
 - Do not insert foreign objects or spill liquid into the outlet. The USB charging terminal may be damaged.
 - Do not use devices with working current exceeding 3,000 mA (3.0 A).

Power outlet

The power outlet is designed to provide power for mobile telephones or other devices designed to operate with vehicle electrical systems or other devices that are compatible with the power outlet and vehicle electrical system.

2nd row



3rd row



The devices should draw less than 15 amps with the vehicle ON.

* NOTICE

- Use the power outlet only when the vehicle is on and remove the accessory plug after use. Using the accessory plug for prolonged periods of time with the vehicle off could cause the battery to discharge.
- Only use 12 V electric accessories which are less than 15 A in electric capacity.
- Adjust the air-conditioner or heater to the lowest level when using the power outlet.
- Close the cover when not in use.
- Some electronic devices can cause electronic interference when plugged into a vehicle's power outlet. These devices may cause excessive audio static and malfunctions in other electronic systems or devices used in your vehicle.
- Push the plug in as far as it will go. If good contact is not made, the plug may overheat and the fuse may open.

- Plug in battery equipped electronic devices with reverse current protection. The current from the battery may flow into the vehicle's electrical/electronic system and cause system malfunction.

⚠ WARNING

Electric Shock

Do not put a finger or a foreign object (pen, etc.) into a power outlet and do not touch it with a wet hand. You may get an electric shock.

⚠ CAUTION

Do not connect another vehicle's Tire Mobility Kit (TMK) to the power outlet. The unmatched power requirement between the vehicle power outlet and the TMK can cause fire or circuit damage within the vehicle and the TMK.

AC Inverter (if equipped)

The AC inverter supplies 115V/150W electric power to operate electric accessories or equipment.



- Rated Voltage: AC 115V
- Maximum electric power: 150W
- To avoid an electrical system failure, electric shock, etc., be sure to read the vehicle's owner manual before use.
- Be sure to close the cover except when in use.

⚠ WARNING

To reduce the risk of serious or fatal injuries:

- Do not use a heated electric device such as a coffee pot, toaster, heater, iron, etc.
- Do not insert foreign objects into the outlet and do not touch the outlet to avoid a shock.

*** NOTICE**

- To prevent the battery from being discharged, do not use the AC inverter when the engine is not running.
- After using an electric accessory or equipment, pull out the plug. Leaving the accessory or equipment plugged in for a long time may cause battery discharge.
- Do not use an electric accessory or equipment that has a power consumption that is greater than 150W (115V).
- Some electric accessories or equipment can cause electronic interference. It may cause excessive noise and malfunction of other electric systems or devices.
- Do not use broken electric accessories or equipment. They may damage the AC inverter and electrical systems of the vehicle.
- Do not use two or more electric accessories or pieces of equipment at the same time. This may cause damage to the electrical systems.
- When the input voltage is lower, outlet LED will blink and the AC inverter will turn off automatically. When the input voltage returns to normal, the AC inverter will turn on.

Wireless Smart Phone Charging System (if equipped)

A wireless smart phone charging system is located in front of the center console.



[A]: Indicator, [B]: Charging pad

Firmly close all doors, and make sure to press the ENGINE START/STOP button. 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 smartphone equipped with Qi only. Please refer to the smartphone accessory cover or the smartphone manufacturer's homepage to check whether your smart phone supports Qi function.

WARNING

If any metallic object, such as a coin, is located between the wireless charging system and the smart phone, the charging may be disrupted. The metallic object may heat up.

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 when 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 Ultimate Stock Manifold (USM) on the instrument cluster. (Please refer to "Instrument cluster" on page 4-82 for details).

If the wireless charging does not work, gently move your smart phone around the pad until the charging indicator light turns yellow. Depending on the smart phone, the charging indicator light may not turn green even after the charging is complete.

If the wireless charging is not functioning properly, the orange light will blink and flash for ten seconds and then turn off. Remove the smart phone from the pad and replace it on the pad again, or double check the charging status.

If you leave the smart phone on the charging pad when the vehicle ignition is in OFF, the vehicle will alert you through warning messages and sound (applicable for vehicles with voice guidance function) after the 'Good bye' function on the instrument cluster ends.

For some manufacturers' smart phones, the system may not warn you even though the smart phone is left on the wireless charging unit. This is due to the characteristic of the smart phone and not a malfunction of the wireless charging system.

⚠ WARNING**Distracted Driving**

Driving while distracted can result in a loss of vehicle control that may lead to an accident, severe bodily injury or death. The driver's primary responsibility is in the safe and legal operation of a vehicle. Any use of handheld devices, other equipment, or vehicle systems that take the driver's eyes, attention, and focus away from the safe operation of a vehicle are not permissible by law. These should never be used during the operation of the vehicle.

⚠ CAUTION**Liquid in Wireless Charging System**

To prevent liquid from damaging the wireless smart phone charging system, be sure not to spill liquid over the charging system.

⚠ CAUTION**Metal in Wireless Charging System**

If any metallic object such as a coin is located between the wireless charging system and the smartphone, charging may be disrupted. 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.

⚠ CAUTION

- 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.

- Wireless charging may not function properly when there is a heavy accessory cover on the smart phone.
- Wireless charging will stop when using the wireless smart key search function to prevent radio wave disruption.
- Wireless charging will stop when the smart key is moved out of the vehicle with the vehicle engine ON.
- Wireless charging will stop when any of the doors are opened (applicable for vehicles equipped with smart keys).
- Wireless charging will stop when the vehicle is turned OFF.
- Wireless charging will stop when the smart phone is not in complete contact with the wireless charging pad.
- Items equipped with magnetic components such as a credit card, telephone card, bankbook, transportation ticket, etc. 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 smartphone is charged, it may heat up excessively.
- For smartphones without built-in wireless charging system, an appropriate accessory must be used.
- Certain smart phones may display messages on weak current. This is due to the characteristics of that smartphone, and is not a malfunction of the wireless charging system.
- The indicator light of some manufacturers' smart phones may still be orange after the smart phone is fully

charged. This is due to the characteristic of the smart phone and not a malfunction of the wireless charging system.

- When any smart phone without a wireless charging function or a metallic object is placed on the charging pad, a noise may be heard. This small noise 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.
- The wireless mobile phone charging system may not support certain mobile phones that, are not verified for the Qi specification ().
- When placing your smart phone on the charging pad, position the phone in the middle of the pad for maximum efficiency.
If your smart phone is off to the side, the charging speed may slow down and your smartphone may heat up.
- When charging some smart phones with a self-protection feature, the wireless charging speed may decrease, and the charging may stop.
- A smart phone that supports wireless charging can only be charged wirelessly.
- The wireless charging pad has an internal cooling system which can create noise to keep your phone cool while it charges.

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.

2. This device must accept any interference received, including interference that may cause undesired operation.

Coat Hook

A Coat hook is next to the rear grab handle.



* This actual feature may differ from the illustration.

⚠ CAUTION

Hanging Clothing

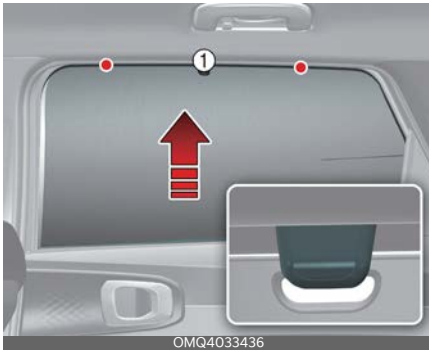
Do not hang heavy clothes, since they may damage the hook.

⚠ WARNING

Do not hang other objects such as hangers or hard objects except clothes. Do not put heavy, sharp or breakable objects in the clothing's pockets. In an accident or when the curtain air bag is inflated, it may cause vehicle damage or bodily injury.



Side Curtain (if equipped)



To use the side curtain:

1. Lift the curtain by the knob (1).
2. Hang the curtain on both sides of the hook.

* NOTICE

- Always hang both sides of the curtain on the hook. This could cause damage to the side curtain if only one side of the curtains is hooked.
- Do not let any foreign materials get between the door trim and side curtain. The side curtain may not lift up.

Floor Mat Anchors (if equipped)



When using a floor mat on the front floor carpet, make sure it attaches to the floor mat anchors in your vehicle. This keeps the floor mat from sliding forward.

⚠ WARNING

After market Floor Mat

- Do not install after market floor mats that cannot be securely attached to the vehicle's floor mat anchors. Unsecured floor mats can interfere with pedal operation.
- Use floor mats that are designed to be properly secured on the floor, and not too thick, to avoid interference with pedals. Make sure that when installing the floor mats the plastic film on the carpets are not removed, as this may damage or break the floor mat fixed rings, resulting in the mats to be unsecured.

The driver's seat floor mats should be especially checked, as unsecured mats may cause unintended acceleration/braking. Ensure to remove all the plastic film on the carpets before installing the mats.

The following must be observed when installing ANY floor mat to the vehicle.

- Ensure that the floor mats are securely attached to the vehicle's floor mat anchor(s) before driving the vehicle.
- Do not use ANY floor mat that cannot be firmly attached to the vehicle's floor mat anchors.
- Do not stack floor mats on top of one another (e.g., all-weather rubber mat on top of a carpeted floor mat). Only a single floor mat should be installed in each position.

Luggage Net Holder

To keep items from shifting in the cargo area, you can use the 4 holders located in the cargo area to attach the luggage net (if equipped), or you can fold the luggage net in half and attach it vertically by using the additional 2 holders located on each side.



If necessary, contact an authorized Kia dealer.

⚠ CAUTION

To prevent damage to cargo or the vehicle, be careful when carrying fragile or bulky objects in the luggage compartment.

⚠ WARNING

DO NOT over-stretch the luggage net and ALWAYS keep your face and body out of the luggage net's recoil path. Failure to comply with these instructions may result in severe facial injuries. DO NOT use the luggage net when the strap has visible signs of wear or damage.

Cargo Security Screen (if equipped)



Use the cargo security screen to hide items stored in the cargo area.

* NOTICE

Do not put luggage on the cargo security screen as it may damage it or may move around inside the vehicle and injure occupants during an accident or when braking.

⚠ WARNING

- Never allow anyone to ride in the luggage compartment. It is designed for luggage only.
- Maintain the vehicle balance and adjust the weight of goods as forward as possible.

To Use the Cargo Security Screen



1. Pull the cargo security screen towards the rear of the vehicle by the handle (1).
2. Insert the guide pin into the guide (2).

*** NOTICE**

Pull out the cargo security screen using the handle in the center to prevent the guide pin from falling out of the guide.

When the cargo security screen is not in use:

1. Pull the cargo security screen backward and up to release it from the guides.
2. The cargo security screen will automatically slide back in.

*** NOTICE**

The cargo security screen may not automatically slide back in if the cargo security screen is not fully pulled out. Fully pull it out and then let go.

To Remove the Cargo Security Screen

1. Push the guide pin in the direction as shown in the picture below.



2. While pushing the guide pin, pull out the cargo security screen.
3. Open the luggage tray and keep the cargo security screen in the tray.



To Remove the Cargo Security Screen from the Luggage Tray

1. Pull up the screen board.



2. Push the guide pin in the direction as shown in the picture below.



3. While pushing the guide pin, pull out the cargo security screen.



Luggage Board (cover)

The tools are located beneath the luggage board for easy access.



1. Grasp the handle on the top of the cover and lift it.
2. Fold the rear part of luggage board frontward.
3. Lift up the luggage board upward.

Luggage Tray

You can place a first aid kit, a reflector triangle (front tray), tools, etc. in the tray for easy access.

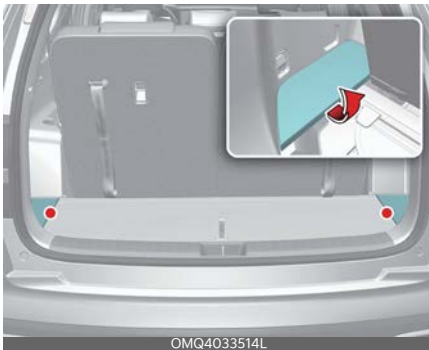
Front Tray



- Grasp the handle on the top of the cover and lift it.

Luggage Side Tray

The luggage side tray can be used for storing small items.



- To open the cover, pull up the handle and lift the cover.

Exterior Features

Roof rack (if equipped)

If your vehicle has a roof rack, you can load cargo and accessories (e.g., cargo carrier, roof tent) on top of your vehicle.



* The actual shape may differ from the illustration.

Cargo and accessories can be attached directly to the roof rack or to Kia cross members (available from an authorized Kia dealer).

* NOTICE

- The crossbars (if equipped) should be placed in the proper load carrying positions prior to placing items onto the roof rack.
- When the roof rack is not being used to carry cargo, the crossbars may need to be repositioned if wind noise is detected.

⚠ CAUTION

- When carrying cargo on the roof rack, make sure the cargo does not damage the roof of the vehicle.
- When carrying large objects on the roof rack, make sure they do not exceed the overall roof length or width.
- When carrying cargo on the roof rack, do not operate the sunroof. (if equipped)
- Never place load directly on the sunroof or the roof panels. They are not designed to carry loads and may

break. Never let anything interfere with the movement of the sunroof.

- Do not operate the sunroof when carrying cargo or roof accessories.

Load limits

The Kia roof rack can support up to 880 lbs. (400 kg.), evenly distributed (i.e., side to side and front to back), but only when the vehicle is parked.

Never drive the vehicle with more than 220 lbs. (100 kg) of cargo and accessories on the roof racks.

Never allow the combined weight of occupants and cargo to exceed the Gross Vehicle Weight Rating (GVWR) of your vehicle.

WARNING

- Never drive your vehicle when combined weight of occupants and cargo exceeds GVWR. That can cause loss of control and an accident.
- Never drive your vehicle with more than 220 lbs. (100 kg) of cargo on the roof rack. Heavier loads may result in loss of control and rollover.
- Loads on the roof rack raise your vehicle's center of gravity and may change the ways in which your vehicle handles. Avoid sudden starts and braking, sharp turns, abrupt maneuvers, and high speeds that may result in loss of control or rollover.
- 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.

- Failure to heed these warnings may lead to serious injury and death.

CAUTION

- Overloading the roof racks may also damage them.
- Overloading the vehicle may also damage the vehicle.

Securing items to the roof rack

Plan carefully before attempting to put cargo and accessories on the roof racks. Be sure the items can be secured and that you have the equipment to do so. Get help from those close to you whenever appropriate.

Be sure that the cargo and accessories will not extend too far forward, rearward, or sideways.

Do not allow anything to obscure the view out the windshield or the front view camera. Do not allow anything to obscure the High Mounted Stop Lamp. Obey applicable laws regarding flags and signals on cargo extending beyond the rear of your vehicle.

Be careful to account for the effects that wind may have on the cargo and accessories while moving. Flexible cargo, such as a mattress, can bend under wind loads. Wind effects from driving, passing vehicles, or natural causes can cause sudden upward or downward pressure, resulting in damage to the items, damage to the cross members or roof rack, damage to attachments, loss of visibility, distraction, and loss of control.

Park your vehicle on solid, level ground, place it in P (Park) and set the parking brake before loading and securing items.

If your cargo is covered, be sure that the cover is secure and will not blow off or distract the driver.

Check the security of the attachments after driving for a short distance, and from time to time during your journey.

Securing accessories

Before installing an accessory such as a cargo carrier or roof tent, make sure that the item is compatible with your Kia's roof racks.

Check the accessory manufacturer's manual and online information. Do not attempt to connect an accessory that the manufacturer deems incompatible.

Contact the manufacturer or your Kia dealer if you need additional information.

Follow the accessory manufacturer's instructions, warnings, and cautions in addition to those above.

Roof tents

In addition, when using a roof tent:

- Be sure that the weight of occupants does not exceed the load capacity of the roof racks.
- Confirm the roof tent is securely fastened to the cross bars and roof rails before using it.
- Never move the vehicle with occupants in a roof tent.
- Never leave the engine running with occupants in a roof tent. Never run an internal combustion engine (such as a generator), gas stove, gas lantern, or other device that burns fuel near an occupied roof tent or awning. Those emit carbon monoxide, which is colorless, odorless, and deadly.
- Follow the roof tent manufacturer's instructions, warnings, and cautions.

WARNING

Failure to follow the instructions, warnings and cautions above, and those of the accessory manufacturer, could result in damage to your vehicle, to your cargo, and to other road users. It could also result in an accident and in serious injury and death.

Infotainment system

Using the infotainment/climate switchable controller



Press the button on the switchable controller to switch between infotainment system or climate control panel.

Press and hold the button to select the default mode for the control panel.

Switching between panels

Infotainment control panel



Climate control panel



Press the button on the switchable controller to select the desired control panel. The selected control panel icon will be illuminated and the control panel will be changed.

- The knob display will be illuminated according to the selected control panel mode.

- When the vehicle is in the ACC position, only the infotainment system will be activated.

Setting the default mode



Press and hold the button to select the default mode for the control panel.

- After the setting, the control panel will return to the default mode after a certain period of time even if the control panel is switched to the different mode.
- If the mode is set to 'OFF', the control panel will display the mode used recently.

Over-The-Air (OTA) Software Update

The Over-The-Air software update feature allows you to wirelessly update software to the latest version. Using this feature, you can keep your vehicle system up to date with the latest software.

Downloading software

The latest software can be downloaded automatically while driving. After the latest software has been successfully downloaded, you will receive a notification on your phone or the vehicle screen that the software update is ready to install.

Approving software update



1 Update Now

2 Later

After the vehicle is turned off, the vehicle system will allow you to start the update.

- To start the update, press **Update Now** (1).
- To postpone the update, press **Later** (2).

Preparing software update



1 Update Now

2 Cancel Update

If you press the Start button on the screen, the vehicle will begin installing the update automatically. The following conditions must be satisfied:

- The vehicle must be off.
- The gear must be in P (Park).
- The Electronic Parking Brake (EPB) must be applied.
- The exterior lights must be turned off.
- The hood must be closed.
- The battery must be sufficient.
- The systems to be updated must not be running.

- To update immediately, press **Update Now**.
- To cancel the update, press **Cancel Update**.

*

INFORMATION

The battery and system status are automatically checked by the vehicle.

Updating software



1 Details

2 Close

You can see the progress of the update on the screen.

After the update is complete, you will receive a notification on your phone or the vehicle screen that the software update is complete.

* INFORMATION

- The screen turns off automatically after 3 minutes to save battery life. If the screen turns off automatically, you can check the update progress by pressing the ENGINE START/STOP button.
- After the update starts, you can exit the vehicle.
- The OTA software update feature is only available for Kia Connect service users.
- The update details may vary depending on the installed software version.
- Check the notice for the OTA software update on the Kia website.
- If the update fails, the update recovery will automatically proceed. If you want to retry the software update, even after a successful recovery, contact an authorized Kia call center.
- If the update or recovery fails, contacting an authorized Kia dealer.
- After the update is complete, it may provide new functions or improve-

ments. For more information, see "Over-The-Air Software Update" page on the Kia webpage, scan the QR code on the infotainment screen or refer to the user manual in the **Customer Center** → **Download Center**.

* NOTICE

- Observe the following restrictions during the update.
 - You cannot use the vehicle during the update. Be sure to have enough time for the update, and safely park the vehicle before starting the update process.
 - You cannot use remote features, including remote start.
 - The vehicle cannot be charged. Charge your vehicle after completing the update.
 - The Rear Occupant Alert may not work. Visually check if there are any occupant in the rear seat after the update starts.
 - If the digital key function is included in the update history, the door lock/unlock function through digital key or fingerprint authentication may not work. Check the notice and use the smart key button to lock or unlock the door if the digital key function is updated.
- The update will automatically cancel if any vehicle conditions required for the update are changed before starting the update.
- Once the update has started, you cannot cancel the update.

- You cannot use the OTA software update feature if you modify or replace any vehicle software.
- Do not open the hood or replace the battery in the vehicle during the update. The update may fail.
- Note that the high-voltage-related module for charging the 12 V battery may activate during the software update.
- If a diagnostic tool of any kind is connected to the vehicle On-board Diagnostic (OBD) terminal, the vehicle cannot be updated. The vehicle can be updated by removing the diagnostic tool connected to the OBD terminal and then restarting the vehicle.
- If the update is not complete successfully, contact Kia..
- Vehicle reception must be identified to safely install any downloaded software.
- Vehicle signal strength, must be strong (above -82 dB) to safely install any downloaded software.

Audio system

*** NOTICE**

If you install an aftermarket High Intensity Discharge (HID) headlight, your vehicle's audio and electronic device may malfunction.

* If your vehicle is equipped with an Infotainment system, refer to the separately supplied manual for detailed information.

Shark-fin antenna



The shark fin antenna transmits and receives wireless signals such as AM/FM, Sirius XM, GNSS, etc.

* The signals for which antenna can transmit and receive vary by the vehicle options.

USB port

Use the USB port to plug in an USB.



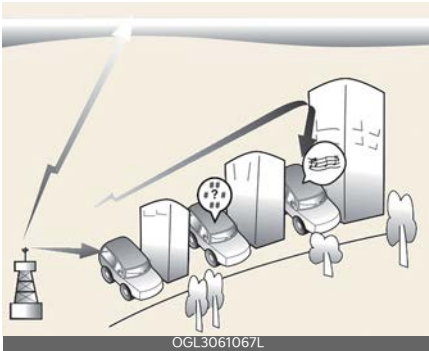
⚠ CAUTION

Depending on the size, length, or shape of the USB stick, if you forcibly close the tray cover, the USB device may be damaged, deformed or the cover may not reopen as the device might be stuck. If the USB stick is stuck, forcibly opening the cover can also cause damage to the device.

If the USB stick does not fit into the space, do not close the cover, and try another USB stick with different specifications.

How vehicle radio works

FM reception

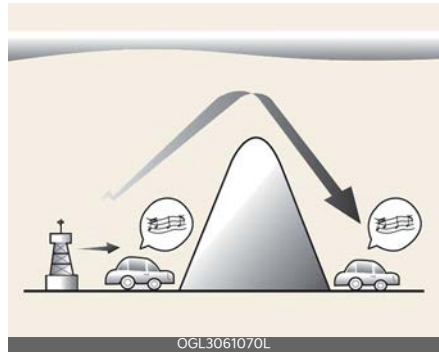


AM and FM radio signals are broadcast from transmitter towers located around your city. They are intercepted by the radio antenna on your vehicle. This signal is then processed by the radio and sent to your vehicle speakers.

In some cases the signal coming to your vehicle may not be strong and clear.

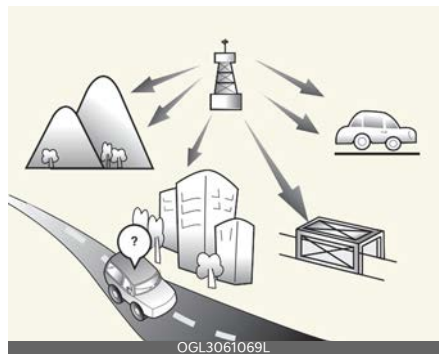
This can be due to several factors, such as the distance from the radio station, closeness of other strong radio stations or the presence of buildings, bridges or other large obstructions in the area.

AM reception



AM broadcasts can be received at greater distances than FM broadcasts. This is because AM radio waves are transmitted at low frequencies. These long distance, low frequency radio waves can follow the curvature of the earth rather than traveling straight. In addition, they curve around obstructions resulting in better signal coverage.

FM radio station

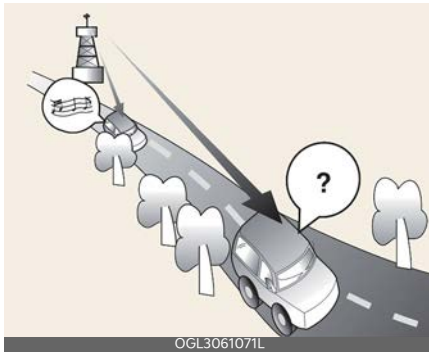


FM broadcasts are transmitted at high frequencies and do not bend to follow the earth's surface. Because of this, FM broadcasts generally begin to fade within short distances from the station. FM signals are easily affected by buildings, mountains, and obstructions. This

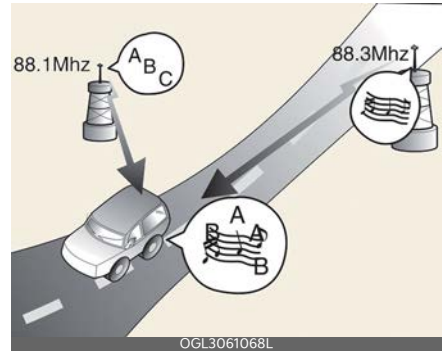
can lead to undesirable or unpleasant listening conditions which might lead you to believe a problem exists with your radio.

The following conditions are normal and do not indicate radio trouble:

- **Fading** - As your vehicle moves away from the radio station, the signal will weaken and sound will begin to fade. When this occurs, select another station with a stronger signal.



- **Flutter/Static** - Weak FM signals or large obstructions between the transmitter and your radio can disturb the signal causing static or fluttering noises to occur. Reducing the treble level may lessen this effect until the disturbance clears.
- **Station Swapping** - As an FM signal weakens, a more powerful signal near the same frequency may begin to play. This is because your radio is designed to lock onto the clearest signal. If this occurs, select another station with a stronger signal.



- **Multi-Path Cancellation** - Radio signals being received from several directions can cause distortion or fluttering. This can be caused by a direct and reflected signal from the same station, or by signals from two stations with close frequencies. If this occurs, select another station until the condition has passed.

Using a mobile phone or a two way radio

When a mobile phone is used inside the vehicle, noise may be produced from the audio system. This does not mean that something is wrong with the audio equipment. Operate mobile devices as far from the audio equipment as possible.

When using a communication system such as a mobile phone or a radio set inside the vehicle, a separate external antenna must be affixed. When a mobile phone or a radio set is used with only the internal antenna, it may interfere with the vehicle's electrical system and adversely affect the safe operation of the vehicle.

⚠ WARNING

Mobile phone use

Do not use a Mobile phone while driving. Stop at a safe location to use a Mobile phone.

⚠ WARNING

Distracted driving

Driving while distracted can result in a loss of control that may lead to an accident, severe bodily injury, or death. The driver's primary responsibility is in the safe and legal operation of a vehicle. Any use of handheld devices, other equipment, or vehicle systems that take the driver's eyes, attention, and focus away from the safe operation of a vehicle are not permissible by law. These should never be used during the operation of the vehicle.

Declaration of Conformity

FCC

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

⚠ CAUTION

Any changes or modifications to this device that is not explicitly approved by the manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

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

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum 8 in (20 cm) between the radiator and your body. This transmitter must not be collocated or operating in conjunction with any other antenna or transmitter unless authorized to do so by the FCC.

Be sure the exhaust system does not leak	5-4
Before driving	5-4
ENGINE START/STOP Button	5-6
• Illuminated ENGINE START/STOP button.....	5-6
• ENGINE START/STOP button position	5-6
• Starting the engine	5-8
Automatic transmission (Shift Lever)	5-10
• Automatic transmission operation	5-10
• Paddle shifter.....	5-14
• Shift lock system	5-14
• Good driving practices	5-15
Dual clutch transmission (DCT) (Shift Lever)	5-17
• Dual clutch transmission operation	5-17
• DCT warning messages	5-18
• Transmission ranges	5-19
• Paddle shifter.....	5-21
• Shift lock system	5-22
• Good driving practices	5-22
All Wheel Drive (AWD) system	5-24
• AWD (AWD/SNOW MODE)	5-25
• For safe All Wheel Drive (AWD) operation	5-28
Brake system	5-33
• Power brakes	5-33
• Parking brake (foot type)	5-34
• Electronic Parking Brake (EPB).....	5-36
• AUTO HOLD	5-40
• Anti-lock Brake System (ABS)	5-42
• Electronic Stability Control (ESC) system	5-43
• Downhill Brake Control (DBC)	5-46
• Hill-start Assist Control (HAC)	5-48
• Vehicle Stability Management (VSM) system.....	5-48

5 Driving your vehicle

• Trailer Stability Assist (TSA) system	5-49
• Brake Assistant System (BAS)	5-49
• Good braking practices	5-50
Vehicle Auto Shut-off system	5-51
• Requirements for activation	5-51
• Resetting the time	5-51
• Canceling your Kia Auto Shut-off system	5-51
Idle Stop and Go (ISG) system	5-52
• Auto stop	5-52
• Auto start	5-52
• Operating conditions	5-53
• Deactivating the ISG	5-53
• ISG malfunction	5-53
• Smart ISG features	5-54
Drive mode integrated control system	5-57
• Drive mode	5-57
Economical operation	5-60
Special driving conditions	5-62
Winter driving	5-66
Trailer towing	5-69
• Hitches	5-70
• Safety chains	5-71
• Trailer brakes	5-71
• Driving with a trailer	5-71
• Maintenance when trailer towing	5-74
• If you do decide to pull a trailer	5-74
Vehicle load limit	5-76
• Steps For Determining Correct Load Limit—	5-77
• Certification label	5-79

Vehicle weight	5-80
• Base curb weight.....	5-80
• Vehicle curb weight.....	5-80
• Cargo weight.....	5-80
• GAW (Gross axle weight).....	5-80
• GAWR (Gross axle weight rating)	5-81
• GVW (Gross vehicle weight).....	5-81
• GVWR (Gross vehicle weight rating)	5-81
• Overloading.....	5-81

Driving your vehicle

Be sure the exhaust system does not leak

The exhaust system should be checked whenever the vehicle is raised to change the oil or for any other purpose.

If you hear a change in the sound of the exhaust or if you drive over something that strikes the underneath side of the vehicle, have the exhaust system checked as soon as possible by an authorized Kia dealer.

WARNING

Engine exhaust

Do not inhale exhaust fumes or leave your engine running in an enclosed area for a prolonged time. Exhaust fumes contain carbon monoxide, a colorless and 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.

Before driving

Before getting into the vehicle, you should examine the vehicle and its surroundings. After getting into the vehicle, you should check a number of things 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 "Maintenance" on page 8-5.

WARNING

Distracted driving

Focus on the road while driving. The driver's primary responsibility is in the safe and legal operation of the vehicle. Use of any hand-held devices, other equipment or vehicle systems that distract the driver should not be used during vehicle operation.

Before starting

- Close and lock all doors.
- Position the seat so that all controls are easily reached.
- Buckle your seat belt.
- Adjust the inside and outside rear view mirrors.
- Be sure that all lights work.
- Check all gauges.
- Check the operation of warning lights when the ENGINE START/STOP button is turned to the ON position.
- Release the parking brake and make sure the brake warning light is not on.

For safe operation, be sure you are familiar with your vehicle and its equipment.

WARNING

When you intend to park or stop the vehicle with the engine on, be careful not to depress the accelerator pedal for a long period of time. It may overheat the engine or exhaust system and cause fire.

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 under the influence

Do not drive while under the influence of alcohol, drugs, or other impairing substances. 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 or other impairing substances is as dangerous as or more dangerous than driving drunk.

WARNING

Proper footwear

Always wear appropriate shoes when operating your vehicle. Unsuitable shoes (high heels, ski boots, sandals, etc.) may interfere with your ability to use the brake and accelerator pedals.

⚠ WARNING**California Proposition 65**

Engine exhaust and a wide variety of automobile components and parts, including components found in the interior furnishings in a vehicle, contain or emit chemicals known to the State of California to cause cancer and birth defects and reproductive harm. In addition, certain fluid 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.

ENGINE START/STOP Button (if equipped)**Illuminated ENGINE START/STOP button**

The light will go off after about 30 seconds when the door is closed. It will also go off immediately when the theft-alarm system is armed.

ENGINE START/STOP button position

Your vehicle is equipped with four different ignition positions.

OFF

To turn off the engine (START/RUN position) or vehicle power (ON position), press the ENGINE START/STOP button with the gear in the P (Park) position. When you press the ENGINE START/STOP button without the gear in the P (Park) position, the ENGINE START/STOP button will not change to the OFF position but to the ACC position.

Anti-theft steering column lock (if equipped)

The steering wheel locks when the ENGINE START/STOP button is in the OFF position to protect you against theft.

It locks when the door is opened.

If the steering wheel is not locked properly when you open the driver's door, the warning chime will sound. Try locking

the steering wheel again. If the problem is not solved, have the system checked by an authorized Kia dealer.

In addition, if the ENGINE START/STOP button is in the OFF position after the driver's door is opened, the steering wheel will not lock and the warning chime will sound. In such a situation, close the door. Then the steering wheel will lock and the warning chime will stop.

* NOTICE

If the steering wheel doesn't unlock properly, the ENGINE START/STOP button will not work. Press the ENGINE START/STOP button while turning the steering wheel right and left to release the tension.

* NOTICE

You can turn off the engine (START/RUN) or vehicle power ON, only when your Kia is not in motion.

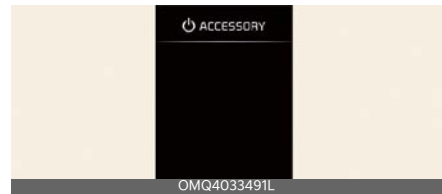
⚠ CAUTION

In an emergency while your Kia 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 repeatedly within 3 seconds.

If your Kia is still moving, to restart your Kia :

- Press the ENGINE START/STOP button when vehicle speed is 3 mph (5 km/h) or higher.

ACC (Accessory)



When your Kia is in ACC, the electrical systems will operate. Bear in mind that using electrical systems with the engine off will drain the battery.

To put your Kia into ACC, press the ENGINE START/STOP button while it is in the OFF position without depressing the brake pedal.

The steering wheel unlocks and electrical accessories are operational.

If the ENGINE START/STOP button is in the ACC position for more than 1 hour, the button is turned off automatically to prevent battery discharge.

ON

When your Kia is ON, the engine is running. To turn your Kia ON, press the ENGINE START/STOP button while it is in the ACC position without depressing the brake pedal.

The warning lights can be checked before the engine is started. Do not leave the ENGINE START/STOP button in the ON position for a long time. The battery may discharge, because the engine is not running.

START/RUN

To start the engine, depress the brake pedal and press the ENGINE START/STOP button with the gear in the P (Park) or the N (Neutral) position. For your safety, start the engine with the gear in the P (Park) position.

* NOTICE

If you press the ENGINE START/STOP button without pressing the brake pedal, the engine will not start and the ENGINE START/STOP button changes as follow: OFF → ACC → ON → OFF or ACC

⚠ WARNING

- Never press the ENGINE START/STOP button while your Kia is in motion. This will result in loss of directional control and braking function, which could cause an accident.
- Before leaving the driver's seat, always make sure the gear is shifted to P (Park) position, set the parking brake fully and shut the engine off. Unexpected and sudden vehicle movement may occur if these precautions are not taken.
- Never reach for the ENGINE START/STOP button or any other controls through the steering wheel while the vehicle is in motion. The presence of your hand or arm in the area could cause loss of vehicle control, an accident and serious bodily injury or death.
- Do not place any movable objects around the driver's seat as they may move while driving, interfere with the driver and lead to an accident.

Starting the engine

⚠ WARNING

- Do not start the vehicle with the accelerator pedal engaged. The vehicle can move and lead to an accident.
- Wait until the engine rpm is normal. The vehicle may suddenly move if the brake pedal is released when the rpm is high.

Starting the engine with smart key

When your Kia doors are opened or when the ENGINE START/STOP button is pressed your Kia will check for the smart key.

If the smart key is not in your Kia, the "🔑" indicator and a message "Key is not in your Kia" will appear on the instrument cluster and LCD window. If all doors are closed, the chime will sound for 5 seconds. The indicator or warning will turn off while your Kia is moving. Always have the smart key with you.

⚠ WARNING

The engine will start only when the smart key is in your Kia. Never allow children, or any person who is unfamiliar with your Kia touch the ENGINE START/STOP button or related parts. Pushing the ENGINE START/STOP button while the smart key is in your Kia may result in unintended engine activation and/or unintended vehicle movement.

⚠ CAUTION

If the engine stalls while your Kia is in motion, do not attempt to move the gear to the P (Park) position. If traffic and road conditions permit, you may put the gear in the N (Neutral) position while

your Kia is still moving and press the ENGINE START/STOP button in an attempt to restart the engine.

* NOTICE

- If the battery is weak or the smart key does not work correctly, you can start the engine by pressing the ENGINE START/STOP button with the smart key.

When you press the ENGINE START/STOP button directly with the smart key, the smart key should contact the button at a right angle.



- If the stop light fuse is blown, you cannot start the engine normally. Replace the fuse with a new one. If 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 pressing the brake pedal, but for your safety, always depress the brake pedal before starting the engine.

⚠ CAUTION

- Do not press the ENGINE START/STOP button for more than 10 seconds except when the stop light fuse is blown.

Starting the engine

1. Carry the smart key or leave it inside the vehicle.
2. Make sure the parking brake is firmly applied.
3. Make sure the gear is shifted to P (Park) position. Depress the brake pedal fully.
4. Press the ENGINE START/STOP button.

It should be started without depressing the accelerator pedal.

5. Do not wait for the engine to warm up while your Kia remains stationary. Start driving at moderate engine speeds. (Steep accelerating and decelerating should be avoided.)

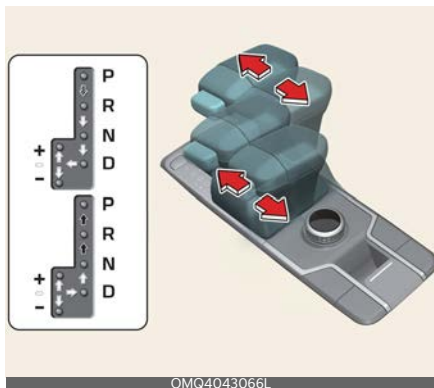
Starting and stopping the engine for turbocharger intercooler

1. Do not race or accelerate the engine immediately after starting.
If the engine is cold, idle for several seconds to allow sufficient lubrication is applied in the turbocharger unit.
2. After high speed or extended driving, which puts strain on the engine load, idle the engine about 1 minute before turning it off.
This idle time will allow the turbocharger to cool prior to shutting the engine off.

⚠ CAUTION

Do not turn the engine off immediately after it has been subjected to a heavy load. Doing so may cause severe damage to the engine or turbocharger unit.

Automatic transmission (Shift Lever) (if equipped)



OMQ4043066L

➡ Depress the brake pedal and the lock release button when shifting.

➡ Press the unlock button when shifting.

➡ The shift lever can be shifted freely.

Automatic transmission operation

The automatic transmission has 8 forward speeds and one reverse speed. The individual speeds are selected automatically, depending on the balance between the fuel economy and the power.

* NOTICE

The first few shifts on a new vehicle may be somewhat abrupt if the battery has been disconnected. 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 when shifting from N (Neutral) to a forward or reverse gear.

⚠ WARNING

Automatic transmission

- Always check the surrounding areas near your vehicle for people, especially children, before shifting a vehicle into D (Drive) or R (Reverse).
- Before leaving the driver's seat, always make sure the shift lever is in the P (Park) position; then set the parking brake fully and shut the engine off. Unexpected and sudden vehicle movement can occur if these precautions are not followed in the order identified.
- Do not use the engine brake (shifting from a high gear to lower gear) rapidly on slippery roads.

The vehicle may slip causing an accident.

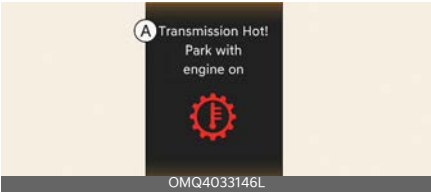
⚠ CAUTION

- To avoid damage to your transmission, do not accelerate the engine in R (Reverse) or any forward gear position with the brakes on.
- Do not shift from N (Neutral) or P (Park) into D (Drive) or R (Reverse) when the engine is above idle speed.
- When stopped on an incline, do not hold your Kia stationary with engine power. Use the service brake or the parking brake.
- Do not rely on the transmission to keep your Kia parked on an incline. Use the parking brake.

LCD display for warning message

A warning message is displayed on the LCD in a warning condition.

Transmission overheated



A: Transmission Hot! Park with engine on

- When driving under severe conditions such as repeated sudden starts and sudden acceleration, the transmission may overheat, and a warning sound and a warning message appear on the instrument cluster due to the self-protection mode.
- If this occurs, pull over to a safe location, stop the vehicle with the engine running, apply brakes and shift the gear to P (Park), and allow the transmission to cool.
- If the warning message continues to appear, have the system checked by an authorized Kia dealer to prevent unexpected accidents.

Vehicle power limited



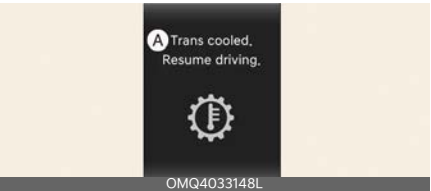
A: Vehicle Power limited due to high transmission temperature

- If the transmission continues to drive overheating and reaches its maxi-

um temperature, the above warning message appears. In this case, the vehicle limits transmission power by its self protection mode.

- When such a situation occurs, normal driving is restricted until the transmission goes down to normal temperature, so after moving the vehicle to a safe place, shift the gear to P (Park) with the engine running and wait several minutes until the warning on the screen disappears.
- If the warning message continues to appear, have the system checked by an authorized Kia dealer to prevent unexpected accidents.

Transmission cooled



A: Trans cooled. Resume driving.

- When the message "Trans cooled. Resume driving" appears you can continue to drive your vehicle.

Transmission ranges

The indicator in the instrument cluster displays the shift lever position when the ENGINE START/STOP button 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.

⚠ WARNING

- Shifting into P (Park) while your Kia is in motion will cause the drive wheels to lock. This can damage the transmission and cause you to lose control of your Kia.
- Do not use the P (Park) position in place of the parking brake. Always make sure the shift lever is latched in the P (Park) position and set the parking brake fully.
- Never leave a child unattended in a vehicle.

⚠ CAUTION

The transmission may be damaged if you shift into P (Park) while the vehicle is in motion.

R (Reverse)

Use this position to drive your Kia backward.

⚠ CAUTION

Always come to a complete stop before shifting into or out of R (Reverse); you may damage the transmission if you shift into R while your Kia is moving forward, except as explained in "Rocking your Kia" on page 5-63.

N (Neutral)

The wheels and transmission are not engaged. Your Kia will roll freely even on the slightest incline unless the parking brake or service brakes is applied.

⚠ WARNING

Do not drive or park with the shift lever in N (Neutral).

The engine brake will not work and lead to an accident.

⚠ CAUTION

- Always park the vehicle in "P" (Park) for safety and engage the parking brake. If left in "N" (Neutral), the vehicle may move and cause serious damage and injury.
- After the ENGINE START/STOP button has been turned off, the Electronic Parking Brake (EPB) cannot be disengaged.
- For EPB 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. The 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 8 gear sequence, providing the best fuel economy and power.

For extra power when passing another vehicle or climbing grades, depress the accelerator fully, at which time the transmission will automatically downshift to the next lower gear.

* NOTICE

Always come to a complete stop before shifting into D (Drive).

Manual mode



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, manual mode allows gearshifts with the accelerator pedal depressed.

- Up (+): Push the lever forward once to shift up one gear.
- Down (-): Pull the lever backwards once to shift down one gear.

* NOTICE

- The driver must execute upshifts in accordance with conditions, taking care to keep the engine speed below the red zone.
- Only the 8 forward gears can be selected. To reverse or park your Kia, move the shift lever to the R (Reverse) or P (Park) position as required.
- Downshifts are made automatically when your Kia slows down. When your Kia stops, 1st gear is automatically selected.

- 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.

Paddle shifter (if equipped)

The paddle shift function is available when the shift lever is in the D (Drive) position or the manual mode.



With the shift lever in the D position

The paddle shift function will operate when your Kia speed is more than 6 mph (10 km/h).

Pull the [+] or [-] paddle shifter once to shift up or down one gear and the system changes from automatic mode to manual mode.

To change back to automatic shift mode from manual shift mode, do one of the following:

- Pull the [+] paddle shifter for more than one second
- Move the shift lever from D (Drive) to manual gate and return it to D position again

The manual shift mode also changes back to automatic shift mode in one of the following situations

- When the accelerator pedal is gently depressed for more than 6 seconds while driving
- When your Kia stops

With the shift lever in the manual mode

Pull the [+] or [-] paddle shifter once to shift up or down one gear.

* NOTICE

If you pull the [+] and [-] paddle shifters at the same time, you cannot shift the 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):

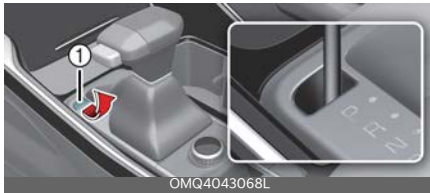
1. Depress and hold the brake pedal.
2. Start the engine or turn the ENGINE START/STOP button to the ON position.
3. Move the shift lever.

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

⚠ WARNING

Always fully depress the brake pedal before and while shifting out of the P (Park) position to avoid inadvertent motion of your Kia which could injure persons in or around your Kia.

Shift-lock override



If the shift lever cannot be moved from the P (Park) position to the R (Reverse) position with the brake pedal depressed, continue to depress the brake, then do the following:

1. Place the ENGINE START/STOP button in the LOCK/OFF position.
2. Apply the parking brake.
3. Carefully remove the cap (1) covering the shift-lock release access hole.
4. Insert a tool (e.g., flathead screwdriver) into the access hole and press down on the tool.
5. Move the shift lever.
6. Remove the tool from the shift lock override access hole then install the cap.

If the shift lever does not move even after performing this procedure, have the system inspected by an authorized Kia dealer.

Good driving practices

- Never move the shift lever from P (Park) or N (Neutral) to any other position with the accelerator pedal depressed.
- Never move the shift lever into P (Park) when your Kia is in motion.
- Be sure the vehicle is completely stopped before you attempt to shift into R (Reverse) or D (Drive).
- Never take your Kia out of gear and coast down a hill. This may be

extremely hazardous. Always leave your Kia in gear when moving.

- Do not "ride" the brakes. This can cause them to overheat and malfunction. When driving down a long hill, slow down and manually shift to a lower gear. When you do this, engine braking will help slow down your Kia.
- Slow down before shifting to a lower gear. Otherwise, the lower gear may not be engaged.
- Exercise extreme caution when driving on a slippery surface. Be especially careful when braking, accelerating or shifting gears. On a slippery surface, an abrupt change in vehicle speed can cause the drive wheels to lose traction and you may lose your Kia control.
- Optimum vehicle performance and economy is obtained by smoothly depressing and releasing the accelerator pedal.

⚠ WARNING

- When driving uphill or downhill, always shift to D (Drive) for driving forward or shift to R (Reverse) for driving backwards, and check the gear position indicated on the cluster before driving. Driving in the opposite direction of the selected gear can lead to a dangerous situation by shutting off the engine and affecting the braking performance.
- Always buckle-up! In a collision, an unbelted occupant is significantly more likely to be seriously injured or killed than a properly belted occupant.
- Avoid high speeds when cornering or turning.

- Do not make quick steering wheel movements, such as sharp lane changes or fast, sharp turns.
- The risk of a rollover is greatly increased if you lose control of your vehicle at highway speeds.
- Losing control often occurs if two or more wheels drop off the roadway and the driver oversteers to reenter the roadway.
- In the event your vehicle leaves the roadway, do not steer sharply. Instead, slow down before gradually reentering the travel lanes. Abruptly steering to regain the road risks loss of control, serious injury, and death.
- Never exceed posted speed limits.

⚠ WARNING

If your vehicle becomes stuck in snow, mud, sand, etc., you may attempt to rock your Kia free by moving it forward and backward. Do not attempt this procedure if people or objects are anywhere near your Kia. During the rocking operation your Kia may suddenly move forward or backward as it becomes unstuck, causing injury or damage to nearby people or objects.

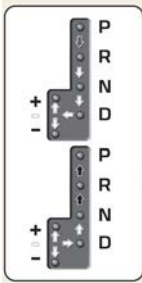
Moving up a steep grade from a standing start

To move up a steep grade from a standing start:

- Depress the brake pedal, shift the shift lever to D (Drive).

Select the appropriate gear depending on load weight and steepness of the grade and release the parking brake. Depress the accelerator gradually after releasing the service brakes.

Dual clutch transmission (DCT) (Shift Lever) (if equipped)



OMQ4043066L

➡ Depress the brake pedal and the lock release button when shifting.

➡ Press the unlock button when shifting.

➡ The shift lever can be freely shifted.

* To move the shift lever from/to P (Park) or between R (Reverse) and D (Drive), you must depress the brake pedal for your Kia to stand still.

Dual clutch transmission operation

The dual clutch transmission has 8 forward speeds and one reverse speed.

The individual speeds are selected automatically in the D (Drive) position.

⚠ WARNING

To reduce the risk of serious injury or death:

- ALWAYS check the surrounding areas near your vehicle for people, especially children, before shifting a vehicle into D (Drive) or R (Reverse).
- Before leaving the driver's seat, always make sure the shift lever is in

the P (Park) position, then set the parking brake, and place the ENGINE START/STOP button in the LOCK/OFF position. Unexpected and sudden vehicle movement can occur if these precautions are not followed.

- When using Manual Shift Mode, use caution when shifting from a higher gear to a lower gear on slippery roads. This could cause the tires to slip and may result in an accident.
- To avoid damage to your transmission, do not try to accelerate with the shift lever in R (Reverse) or any forward gear position with the brake engaged.
- When stopped on a slope, do not hold the vehicle with accelerator pedal. Engage the service brake or the parking brake.

The Dual Clutch Transmission gives the driving feel of a manual transmission yet provides the ease of a fully automatic transmission. Unlike a traditional automatic transmission, the gear shifting can be felt (and heard) on the dual clutch transmission

- Shift into Drive range and have fully automatic shifting, similar to a conventional automatic transmission.
- Dual clutch transmission adopts wet type dual clutch, which is different from the torque converter of Automatic Transmissions, and has better acceleration performance when driving. However, initial launch may be a little bit slower than an Automatic Transmission.
- When rapidly accelerating at low vehicle speed, the engine could rev to a high rpm depending on vehicle drive condition.

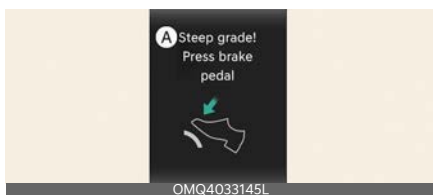
- For a smooth launch uphill, depress the accelerator pedal smoothly.
- If you release the accelerator pedal at low vehicle speeds, you may feel a strong engine brake, which is similar to a manual transmission.
- When driving downhill, you may use Sports Mode to downshift to a lower gear to control your speed without using the brake pedal excessively.
- When turning the engine on and off, you may hear clicking sounds as the system goes through a self-test. These are normal sounds for the Dual Clutch Transmission.
- Always come to a complete stop before shifting into D (Drive) or R (Reverse).
- Do not put the shift lever in N (Neutral) while driving.

WARNING

If there is a transmission failure, your Kia may not move, and the position indicator (D, R) will blink on the cluster. At this time, have the system checked by an authorized Kia dealer.

DCT warning messages

This warning message is displayed when vehicle is driven slowly on a grade, and the vehicle detects that the brake pedal is not applied.



A: Steep grade! Press brake pedal

Steep grade

Driving up hills or on steep grades:

- To hold your Kia on an incline use the foot brake or the parking brake.
- When in stop-and-go traffic on an incline, keep some distance ahead before moving your Kia forward. Then hold your Kia on the incline with the foot brake.
- If your Kia is held on a hill by applying the accelerator pedal or by creeping with brake pedal disengaged, the clutch and transmission may over-heat, which can result in damage. At this time, a warning message will appear on the LCD display.
- If the LCD warning is active, the foot brake must be applied.
- Ignoring the warnings can lead to damage to the transmission.

Transmission high temperature



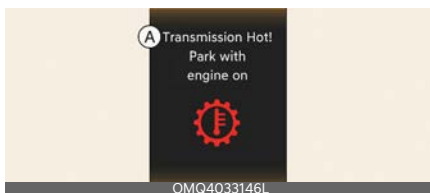
A: Transmission temp. is high! Stop safely.

- Under certain conditions, such as repeated stop-and-go launches on steep grades, sudden acceleration, or other harsh driving conditions, the transmission clutch temperatures will increase quickly. This may cause the transmission clutch to overheat.
- When the clutch is overheated, the safe protection mode engages and the gear position indicator on the cluster blinks with a chime. "Transmis-

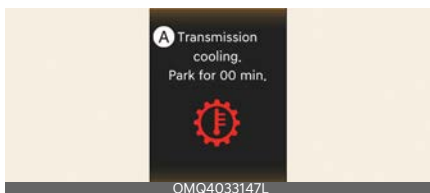
sion temp. is high! Stop safely" warning message will appear on the LCD display and driving may not be smooth.

- Pull over to a safe location, stop the vehicle with the engine running, apply the brakes to shift the vehicle to P (Park), and allow the transmission to cool.
- If you ignore this warning, driving condition may worsen. You may experience abrupt or frequent shifts, or jerkiness. To return to the normal driving condition, stop your Kia and apply the foot brake or shift into P (Park). Allow the transmission to cool for a few minutes with the engine on before driving off.
- When possible, drive your Kia smoothly.

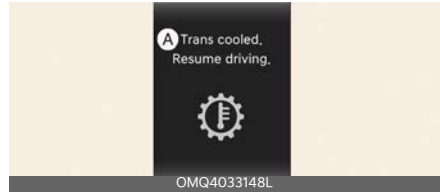
Transmission overheated



A: Transmission Hot! Park with engine on



A: Transmission cooling. Park for 00 min.



A: Trans cooled. Resume driving.

- If you continue to drive your Kia continues and the clutch temperatures reach the maximum temperature limit, the "Transmission Hot! Park with engine on" warning will be displayed. When this occurs, the clutch is disabled until the clutch cools to normal temperatures.
- The warning will display a time to wait for the transmission to cool.
- Pull over to a safe location, stop your Kia with the engine running, apply the brakes and shift your Kia to P (Park), and allow the transmission to cool.
- When the message "Trans cooled. Resume driving." appears, you can drive your vehicle.
- When possible, drive your Kia smoothly.

If any of the warning messages in the LCD display continue to blink, have the system checked by an authorized Kia dealer.

Transmission ranges

The indicator in the instrument cluster displays the shift lever position when the ENGINE START/STOP button is in the ON position.

P (Park)

Always come to a complete stop before shifting into P (Park).

To shift from P (Park), you must depress firmly on the brake pedal and make sure your foot is off the accelerator pedal.

The shift lever must be in P (Park) before turning the engine off.

⚠ WARNING

- Shifting into P (Park) while the vehicle is in motion may cause you to lose control of the vehicle.
- After the vehicle has stopped, always make sure the shift lever is in P (Park), apply the parking brake, and turn the engine off.
- Do not use the P (Park) position in place of the parking brake.

R (Reverse)

Use this position to drive the vehicle backward.

⚠ CAUTION

Always come to a complete stop before shifting into or out of R (Reverse); you may damage the transmission if you shift into R (Reverse) while the vehicle is in motion.

N (Neutral)

The wheels and transmission are not engaged.

⚠ WARNING

Do not shift into gear unless your foot is firmly on the brake pedal. Shifting into gear when the engine is running at high speed can cause the vehicle to move

very rapidly. You could lose control of the vehicle and hit people or objects.

⚠ WARNING

Do not drive with the shift lever in N (Neutral).

The engine brake will not work and lead to an accident.

⚠ CAUTION

- After the ENGINE START/STOP button 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 driving position. The transmission will automatically shift through a 8 gear sequence, providing the best fuel economy and power.

For extra power when passing another vehicle or driving uphill, depress the accelerator pedal further until you feel the transmission downshift to a lower gear.

To stop the vehicle during driving, please press brake pedal fully to prevent unintended movement.

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, Manual mode allows gearshifts with the accelerator pedal depressed.

- Up (+): Push the lever forward once to shift up one gear.
- Down (-): Pull the lever backwards once to shift down one gear.

* NOTICE

- The driver must execute upshifts in accordance with road conditions, taking care to keep the engine speed below the red zone.
- Only the 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.
- Downshifts are made automatically when the vehicle slows down. When the vehicle stops, 1st gear is automatically selected.
- 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.

Paddle shifter (if equipped)

The paddle shift function is available when the shift lever is in the D (Drive) position or the manual mode.



With the shift lever in the D position

The paddle shift function will operate when the vehicle speed is more than 6 mph (10 km/h).

Pull the [+] or [-] paddle shifter once to shift up or down one gear, and the system changes from automatic mode to manual mode.

To change back to automatic shift mode from manual shift mode, do one of the followings:

- Pull the [+] paddle shifter for more than one second
- Move the shift lever from D (Drive) to manual gate and return it to D position again

The manual shift mode also changes back to automatic shift mode in one of following situations

- When the accelerator pedal is gently depressed for more than 6 seconds while driving
- When the vehicle stops

With the shift lever in the manual mode

Pull the [+] or [-] paddle shifter once to shift up or down one gear.

* NOTICE

If you pull the [+] and [-] paddle shifters at the same time, you cannot shift the gear.

Shift lock system (if equipped)

For your safety, the Dual clutch 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):

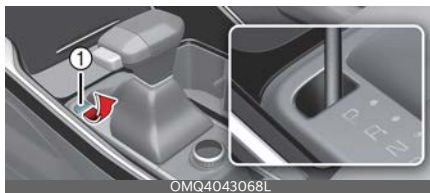
1. Depress and hold the brake pedal.
2. Start the engine or turn the ENGINE START/STOP button to the ON position.
3. Move the shift lever.

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

⚠ WARNING

Always fully depress the brake pedal before and while shifting out of the P (Park) position into another position to avoid inadvertent motion of the vehicle which could injure persons in or around the vehicle.

Shift-lock override



If the shift lever cannot be moved from the P (Park) position into R (Reverse) position with the brake pedal depressed, continue depressing the brake, and then do the following:

1. Place the ENGINE START/STOP button in the LOCK/OFF position.
2. Apply the parking brake.
3. Press the shift-lock release button.
4. Press and hold the lock release button on the shift lever.
5. Move the shift lever.

If the shift lever does not move even after performing this procedure, have the system inspected by an authorized Kia dealer.

Good driving practices

- Never move the shift lever from P (Park) or N (Neutral) to any other position with the accelerator pedal depressed.
- Never move the shift lever into P (Park) when the vehicle is in motion.

- Be sure the vehicle is completely stopped before you attempt to shift into R (Reverse) or D (Drive).
- Never take the vehicle out of gear and coast down a hill. This may be extremely hazardous. Always leave the vehicle in gear when moving.
- Do not "ride" the brakes. This can cause them to overheat and malfunction. Instead, when you are driving down a long hill, slow down and shift to a lower gear. When you do this, engine braking will help slow the vehicle.
- Slow down before shifting to a lower gear. Otherwise, the lower gear may not be engaged.
- Always use the parking brake. Do not depend on placing the transmission in P (Park) to keep the vehicle from moving.
- Exercise extreme caution when driving on a slippery surface. Be especially careful when braking, accelerating or shifting gears. On a slippery surface, an abrupt change in vehicle speed can cause the drive wheels to lose traction and the vehicle to go out of control.
- Optimum vehicle performance and economy is obtained by smoothly depressing and releasing the accelerator pedal.
- off the engine and affecting the braking performance.
- Always buckle-up! In a collision, an unbelted occupant is significantly more likely to be seriously injured or killed than a properly belted occupant.
- Avoid high speeds when cornering or turning.
- Do not make quick steering wheel movements, such as sharp lane changes or fast, sharp turns.
- The risk of rollover is greatly increased if you lose control of your vehicle at highway speeds.
- Loss of control often occurs if two or more wheels, drop off the roadway, and the driver oversteers to re-enter the roadway.
- In the event your vehicle leaves the roadway, do not steer sharply. Instead, slow down before pulling back into the travel lanes.
- Never exceed posted speed limits.

WARNING

- When driving uphill or downhill, always shift to D (Drive) for driving forward or shift to R (Reverse) for driving backwards, and check the gear position indicated on the cluster before driving. Driving in the opposite direction of the selected gear can lead to a dangerous situation by shutting

WARNING

If your vehicle becomes stuck in snow, mud, sand, etc., then you may attempt to rock the vehicle free by moving it forward and backward. Do not attempt this procedure if people or objects are anywhere near the vehicle. During the rocking operation the vehicle may suddenly move forward or backward as it becomes unstuck, causing injury or damage to nearby people or objects.

Moving up a steep grade from a standing start

To move up a steep grade from a standing start, depress the brake pedal:

- Shift the shift lever to D (Drive).

Select the appropriate gear depending on load weight and steepness of the grade, and release the parking brake. Depress the accelerator gradually after releasing the brake pedal.

All Wheel Drive (AWD) system (if equipped)

The All Wheel Drive (AWD) system delivers engine power to front and rear wheels for maximum traction.

AWD is useful when extra traction is required, such as when driving slippery, muddy, wet, or snow-covered roads.

If the system determines there is a need for all wheel drive, the engine's driving power will be distributed to all four wheels automatically.

WARNING

Off road driving

This vehicle is designed primarily for on road use although it can operate effectively off road. However, it was not designed to drive in challenging off-road conditions. Driving in conditions that exceed the vehicle's intended design or the driver's experience level may result in severe injury or death.

NOTICE

If the AWD warning light () stays on the instrument cluster, your vehicle may have a malfunction with the AWD system. When the AWD warning light () appears, have your vehicle checked by an authorized Kia dealer.

WARNING

To reduce the risk of SERIOUS INJURY or DEATH:

- Do not drive in conditions that exceed the vehicle's intended design such as challenging off-road conditions.
- Avoid high speeds when cornering or turning.

- Do not make quick steering wheel movements, such as sharp lane changes or fast, sharp turns.
 - The risk of a rollover is greatly increased if you lose control of your vehicle at highway speeds.
 - Loss of control often occurs if two or more wheels drop off the roadway, and the driver oversteers to re-enter the roadway.
 - In the event your vehicle leaves the roadway, do not steer sharply. Instead, slow down before pulling back into the travel lanes.
-

AWD (AWD/SNOW MODE)

AWD helps the vehicle to maintain its best driving performance by controlling the 4 wheels, the engine, the transmission and vehicle braking based on current road conditions such as snow, mud, sand, etc.

Advantages of AWD

- Enhanced safety when driving straight.
- Improved performance when cornering.
- Ensures operability in tough driving conditions such as snow, rain, sand, etc.

Switching from/to SNOW MODE



You can switch from DRIVE MODE to SNOW mode by turning the knob. If you turn the DRIVE/SNOW mode button again, your Kia will return to DRIVE MODE.

AWD transfer mode selection

Transfer mode	Selection mode		Description
DRIVE MODE	-		• DRIVE MODE 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 DRIVE MODE display mode is selected, the cluster displays the status of how four wheels' traction forces are distributed.
SNOW			SNOW mode is used to appropriately distribute the vehicle's traction forces and prevent wheel slippage when driving on snowy or slippery road.
AWD LOCK		 (Indicator light appears)	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.

⚠ CAUTION

Normal road conditions

- Maintain DRIVE 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.
- When you turn off AWD Lock mode, it can lead to little shocks but this is a normal phenomenon that lasts until the traction forces on the front and rear wheels of the vehicle are released.

 CAUTION**Normal road conditions**

- Maintain DRIVE mode when driving on roads in normal conditions.
 - Driving in TERRAIN mode on normal roads may damage the AWD system and cause mechanical vibration or noise.
 - When driving in normal road conditions (especially when cornering) in AWD Lock mode, you may sense mechanical vibration or noise. This is normal phenomenon and, not a malfunction. When AWD Lock mode is released, the noise or vibration will stop.
 - When you turn off AWD Lock mode, you may sense little shocks, but this is a normal phenomenon that lasts until the traction forces on the front and rear wheels of your Kia are released.
-

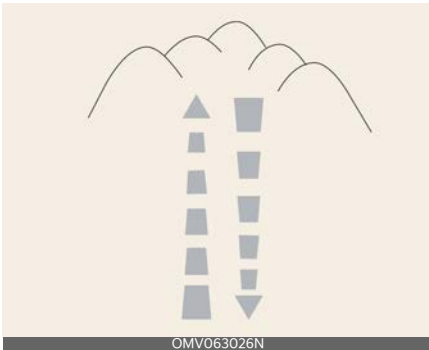
For safe All Wheel Drive (AWD) operation

* NOTICE

AWD

The on-road or off-road conditions that dictate All Wheel Drive use expose your vehicle to extreme stress compared to normal road conditions. Slow down and be ready for changes in the composition and traction of the surface under your tires. If you have any doubt about the safety of the conditions you are driving on, stop and consider the best way to proceed.

- Do not 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 your Kia.



- When you are driving up or down hills drive as straight as possible. Use extreme caution in going up or down steep hills, since your vehicle may roll over depending on the grade, terrain, and water/mud conditions.



⚠ WARNING

Hills

Traversing steep hills can be extremely dangerous. This danger can come from slight changes in the wheel angle which can destabilize your Kia. Even if your Kia maintains stability under power, it can become unstable if your Kia stops its forward motion. Your vehicle may roll over without warning and without time for you to correct a mistake that could cause serious injury or death.

- You must learn how to corner in a AWD vehicle. Do not rely on your experience in conventional Front Wheel Drive (FWD) vehicles when cornering your Kia in AWD mode. You must drive slower in AWD.

⚠ 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.



⚠ WARNING

Steering wheel

Do not grab the inside of the steering wheel when you are driving on unpaved roads. You may hurt your arm by a sudden steering maneuver or from steering wheel rebound due to impact with objects on the ground. You could lose control of the steering wheel.

- Always hold the steering wheel firmly when you are driving on unpaved roads.
- Make sure all passengers are wearing seat belts.

⚠ WARNING

Wind danger

If you are driving in heavy wind, your Kia's higher center of gravity decreases your steering control capacity and requires you to drive more slowly.

⚠ WARNING

Driving through water

Drive slowly. If you are driving too fast in water, the water can get into the engine compartment and wet the ignition system, causing your vehicle to suddenly stop. If this happens and your vehicle is in a tilted position, your vehicle may roll over.

*** NOTICE**

- Do not drive in water if the level is higher than the bottom of your Kia.
- Check your brake condition once you are out of mud or water. Press the brake pedal several times as you move slowly until you feel normal braking forces return.
- Shorten your scheduled maintenance interval if you drive in offroad conditions such as sand, mud or water (refer to "Maintenance under severe usage conditions" on page 8-13). Always wash your vehicle thoroughly after off-road use, especially the underside of your Kia.
- Since the driving torque is always applied to the 4 wheels, the performance of the AWD vehicle is greatly affected by the condition of the tires. Be sure to equip your Kia with four tires of the same size and type.
- A full time AWD vehicle cannot be towed by an ordinary tow truck. Make sure that your Kia is placed on a flat-bed truck for moving.

⚠ WARNING

AWD driving

- Avoid high cornering speed.
- Do not make quick steering wheel movements, such as sharp lane changes or fast, sharp turns.
- The risk of rollover is greatly increased if you lose control of your vehicle at high speed.
- In a collision, an unbelted person is significantly more likely to die compared to a person wearing a seat belt.
- Loss of control often occurs if two or more wheels drop off the roadway and the driver over-steers to re-enter

the roadway. If your vehicle leaves the roadway, do not steer sharply. Instead, slow down before pulling back into the travel lanes.

⚠ CAUTION

Mud or Snow

If one of the front or rear wheels begins to spin in mud, snow, etc., your Kia can sometimes be driven out by engaging the accelerator pedal further; however, avoid revving the engine continuously at high rpm because doing so could damage the AWD system.

Driving in sand or mud

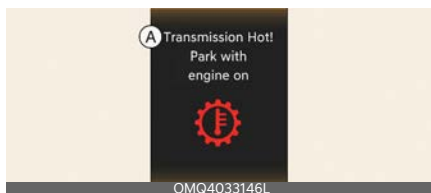
- Maintain slow and constant speed. Depress the accelerator pedal slowly to ensure safe driving (wheel-slip prevention).
- Keep sufficient distance between your vehicle and your Kia in front of you.
- Reduce speed and always check the road condition.
- Avoid speeding, rapid acceleration, sudden brake application, and sharp turns to prevent getting stuck.
- When your Kia is stuck in snow, sand or mud, the tires may not operate. This is to protect the transmission and not a malfunction.

* NOTICE

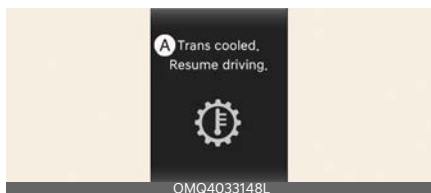
Moving your Kia forcibly to get out of mud or sand can cause damages and overheat the engine or damage/break-down the transmission, differential or AWD systems, as well as damage to the tires. If excessive wheel slip occurs after entering a sandy/muddy road, the vehicle may fall into the sand/mud. If this happens, put a stone or a tree branch

under the tire, and then try to pull out the vehicle, or try to get it unstuck by repeatedly moving forwards and backwards.

Transmission overheated



A: Transmission Hot! Park with engine on



A: Trans cooled. Resume driving.

- When driving on extremely muddy and sandy roads, the transmission can overheat.
- When the transmission overheated, the safe protection mode engages and the "Transmission Hot! Park with engine on" warning message will appear on the LCD display with a chime.
- Pull over to a safe location, stop your Kia with the engine running, apply the brakes, shift your Kia to P (Park), and allow the transmission to cool.
- If you ignore this warning, the driving condition may worsen. You may experience abrupt shifts, frequent shifts, or jerkiness. To return to the normal driving condition, stop your Kia by applying the brake, and shift into P (Park).

Allow the transmission to cool for a few minutes with engine on, before driving off.

- When the message "Trans cooled. Resume driving" appears, you can continue to drive your vehicle.

If the warning messages in the LCD display continue to blink, have the system checked by an authorized Kia dealer.

Tire Precautions

Always pay attention to tires for AWD vehicles.

When driving in all-wheel drive, driving force is applied to all tires and the driving performance of your Kia is greatly affected by the degree of tire wear:

- When replacing tires, be sure to equip all four tires with the same size, type, tread, brand and load-carrying capacity. Do not use tires and wheels with different sizes and types 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.
- Rotate the front and rear tire positions every 6,000 miles (10,000 km).
- Each tire should be checked monthly when cold and inflated to inflation pressure recommended your Kia on your Kia placard or tire inflation pressure label.
- For AWD vehicles, install the chains on the driven wheels. However, this may damage the AWD system, so keep the travel distance as short as possible.

* Refer to "Tire chains" on page 5-66.

Towing precautions

AWD vehicle



FWD vehicle



An AWD vehicle should never be towed with the wheels on the ground. Your vehicle must be towed with a wheel lift and dollies or flatbed equipment with all the wheels off the ground.

* Refer to "Trailer towing (if equipped)" on page 5-69.

⚠ CAUTION

The AWD vehicle cannot be towed with sling-type equipment. Use wheel lift or flatbed equipment.

⚠ WARNING

Your vehicle is equipped with tires designed to provide safe ride and handling capability. Do not use tires and wheels that are different in size and type from the originally installed ones. 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.

⚠ 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.

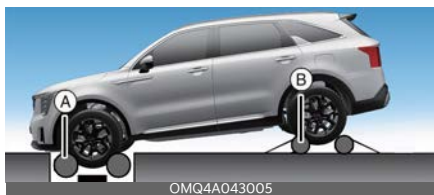
There is a danger that rotating tires touching the ground could cause your Kia to move the jack and jump forward.

- Full-time AWD vehicles must be tested on a special four-wheel chassis dynamometer.

* NOTICE

Never engage the parking brake while performing these tests.

- 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:



[A]: Roll tester

[B]: Temporary free roller

1. Check the tire pressures recommended for your vehicle.
2. Place the driven wheels on the roll tester (A) for a speedometer test.
3. Release the parking brake.
4. Place the non-driven wheels on the temporary free roller (B).

⚠ WARNING

Dynamometer testing

Keep away from the front of your Kia while the vehicle is in gear on the dynamometer. This is very dangerous as the vehicle can jump forward and cause serious injury or death.

⚠ CAUTION

- When lifting up the vehicle, do not operate front and rear wheels separately. All four wheels should be operated.
- If you need to operate the front wheel and rear wheel when lifting your Kia, you should release the parking brake.

Brake system

Your vehicle has power-assisted brakes, parking brake, and various braking systems for safe driving.

Power brakes

Your vehicle has power-assisted brakes that adjust automatically through normal usage.

If 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.

* NOTICE

- When stepping on the brake pedal under a certain driving or weather condition, you may hear a sound or some other noises. This is not a brake malfunction.
- When driving on the road to which deicing chemicals are applied, vehicle noises may be heard from the brake or abnormal abrasion of tires. You should operate additional braking so that you can remove the deicing chemicals on the brake disk and pad under a safe traffic condition.

⚠ 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 your Kia's ability to safely slow down; your Kia may 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 your Kia is in motion, you can make an emergency stop with the parking brake. The stopping distance, however, will be much greater than normal.

⚠ WARNING

Parking brake

Avoid applying the parking brake to stop your Kia while it is moving except in an emergency. Applying the parking brake while your Kia is moving at normal speeds can cause a sudden loss of con-

trol of your Kia. If you must use the parking brake to stop your Kia, use great caution.

Brake over accelerator

In the event the accelerator pedal becomes stuck or entrapped, apply steady and firm pressure to the brake pedal to slow your Kia and reduce engine power.

If you experience this condition, take the following steps:

1. Apply the brakes and bring your vehicle to a safe stop.
2. Move the transmission to P (Park), switch the engine off and apply the parking brake.
3. Inspect the accelerator pedal for any interference.

If none are found and the condition persists, have your vehicle towed to an authorized Kia dealer.

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 or rear brakes. You may hear this sound come and go or it may occur whenever you press the brake pedal.

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.

* NOTICE

Brake dust may accumulate on the wheels, even under normal driving conditions. Some dust is inevitable as the brakes wear and contributes to brake noise.

Parking brake (foot type)

Applying the parking brake



Always set the parking brake before leaving your Kia.

To apply the parking brake:

1. Firmly depress the brake pedal.
2. Depress the parking brake pedal down as far as possible.

WARNING

To reduce the risk of SERIOUS INJURY or DEATH, do not operate the parking brake while your Kia is moving except in an emergency. It could damage the brake system and lead to an accident.

Releasing the parking brake



To release the parking brake:

1. Firmly depress the brake pedal.
2. Depress the parking brake pedal and it will release automatically.

If the parking brake does not release or does not release all the way, have your vehicle checked by an authorized Kia dealer.

⚠ WARNING

- Whenever leaving your Kia or parking, always come to a complete stop and continue to depress the brake pedal. Make sure the gear is shifted to P (Park) position, apply the parking brake, and place the ENGINE START/STOP button in the LOCK/OFF position.

Vehicles with the parking brake not fully engaged are at risk for moving inadvertently and causing injury to yourself or others.

- NEVER allow anyone who is unfamiliar with your Kia to touch the parking brake. If the parking brake is released unintentionally, serious injury may occur.
- Only release the parking brake when you are seated inside your Kia with your foot firmly on the brake pedal.

* NOTICE

- Do not apply the accelerator pedal while the parking brake is engaged. If you depress the accelerator pedal with the parking brake engaged, a warning will sound. Damage to the parking brake may occur.
- Driving with the parking brake on can overheat the braking system and cause premature wear or damage to brake parts. Make sure the parking brake is released and the Brake Warning Light is off before driving.

⚠ WARNING

- Never allow a passenger to touch the parking brake. If the parking brake is released unintentionally, serious injury may occur.

(P) (I) BRAKE

Check the brake warning light by turning the ENGINE START/STOP button to ON (do not start the engine). This light will appear when the parking brake is applied with the ENGINE START/STOP button 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 engine is running, there may be a malfunction in the brake system. Immediate attention is necessary.

If possible, cease driving your Kia immediately. If that is not possible, use extreme caution while operating your Kia and only continue to drive your Kia

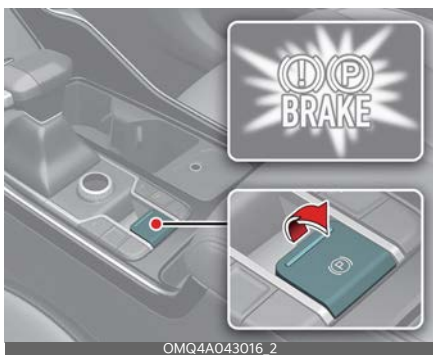
until you can reach a safe location or repair shop.

Electronic Parking Brake (EPB)

After parking your Kia, apply the EPB to prevent your Kia from being moved by an external force.

Applying the parking brake

Applying the parking brake with EPB switch



1. Depress the brake pedal.
2. Pull up the EPB switch.

Make sure the warning light comes on. The EPB is applied automatically if the Auto Hold button is on when your Kia is turned off. If you pull up the EPB switch after your Kia is turned off, the EPB will be applied.

⚠ WARNING

Never leave children or animals unattended in your Kia. If you leave children unaccompanied in the vehicle, they may be able to set your Kia in motion by, for example:

- Releasing the parking brake.
- Shifting the transmission out of P (Park) position.
- Starting the engine.

Operating vehicle equipment.

*** NOTICE**

On a steep incline or when pulling a trailer, if your Kia 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 EPB while your Kia is moving except in an emergency.

*** NOTICE**

A click or electric brake motor whine sound may be heard while operating or releasing the EPB.

These conditions are normal and indicate that the EPB is functioning properly.

Automatic application of EPB

The EPB is applied automatically under the following conditions:

- Shift to P (Park) on a slope
- Engine OFF while AUTO HOLD is enabled
- When your Kia moves a bit in P (Park) position
- Conditions while AUTO HOLD is activated
 - Driver's door is opened
 - Hood is opened
 - Liftgate is opened
 - Vehicle stops for more than approximately 10 minutes on a steep slope
- Requested by other systems

* NOTICE

For EPB equipped vehicles with AUTO HOLD function used while driving, if the ENGINE START/STOP button has been turned OFF, the EPB will be engaged automatically. Therefore, the AUTO HOLD function should be turned off before the ENGINE START/STOP button is turned off.

Emergency braking with the EPB switch

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 EPB while your Kia is moving except in an emergency. Applying the EPB while your Kia is moving at normal speeds can cause a sudden loss of control of your Kia. If you must use the EPB to stop your Kia, use great caution in applying the brake.

* NOTICE

During emergency braking by the EPB, the parking brake warning light will appear 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.

Releasing the parking brake with EPB switch



Releasing the parking brake with EPB switch,

1. Have the ENGINE START/STOP button in the ON position.
2. Press the brake pedal.
3. Press the EPB switch.
4. Make sure the brake warning light goes off.

Automatic release of EPB (if Shift by Wire (SBW) not equipped)

The EPB is released automatically under following conditions.

- Gear in P (Park)
 - With the engine running, engage the brake pedal and shift out of P (Park) to R (Reverse) or D (Drive).
- Gear in N (Neutral)
 - With the engine running, engage the brake pedal and shift out of N (Neutral) to R (Reverse) or D (Drive).
- Automatic transmission
 1. Start the engine.
 2. Fasten the driver's seat belt.
 3. Close the driver's door, hood and liftgate.
 4. Press the accelerator pedal while the gear is in (Reverse), D (Drive), or Sports mode.

Make sure the brake warning light turn off.

* NOTICE

- You can engage the EPB even though the ENGINE START/STOP button is in the OFF position, but you cannot release it.
- Press the brake pedal and release the parking brake manually with the EPB switch when you drive downhill or when backing up your Kia.

Do not follow the above procedure when driving on a flat level ground. Your Kia may suddenly move forward.

* NOTICE

If the parking brake warning light remains on even though the EPB has been released, have the system checked by an authorized Kia dealer.

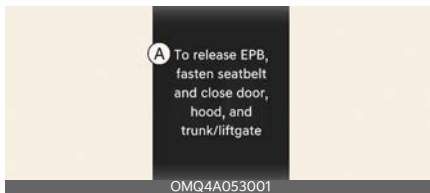
⚠ CAUTION

Do not drive your vehicle with the EPB applied. It may cause excessive brake pad and brake rotor wear.

EPB warning

The EPB will display a warning message with sound under certain conditions:

- If you try to drive while engaging 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 your Kia hood, driver's door or liftgate is opened, a warning will sound and a message will appear.



A: To release EPB, fasten seatbelt and close door, hood, and trunk/liftgate

- If there is a problem with your Kia, a warning may sound and a message may appear.

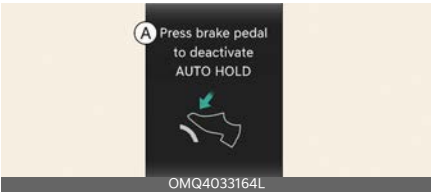
Press the brake pedal and release EPB by pressing the EPB switch.

⚠ WARNING

Parking brake use

- Never allow a passenger to touch the parking brake. If the parking brake is released unintentionally, serious injury may occur.
- All vehicles should always have the parking brake fully engaged when parked to avoid inadvertent movement of your Kia which can injure occupants or pedestrians.
- A click or electric brake motor whine sound may be heard while operating or releasing the EPB. This is normal and indicates 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 pressing the accelerator pedal, press it slowly.

When the conversion from Auto Hold to EPB is not working properly a warning will sound and a message will appear.

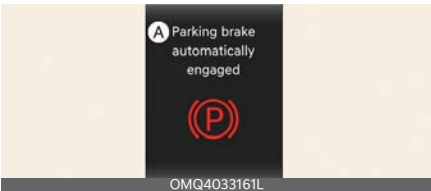


A: Press brake pedal to deactivate AUTO HOLD

*** NOTICE**

Engage the brake pedal when the above message appears for the Auto Hold and EPB may not activate.

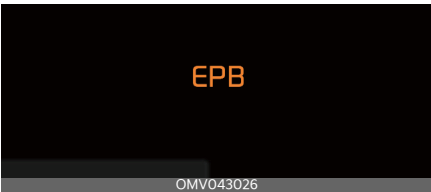
If the EPB is applied while Auto Hold is activated because of an ESC signal, a warning will sound and a message will appear.



A: Parking brake automatically engaged

EPB malfunction indicator

This warning light appears if the ENGINE START/STOP button is changed to the ON position and goes off in approximately 3 seconds if the system is operating normally.



If the EPB malfunction indicator remains on, comes on while driving, or does not come on when the ENGINE START/STOP button is changed to the ON position, this indicates that the EPB may have malfunctioned.

Have your vehicle checked by an authorized Kia dealer.

The EPB malfunction indicator may appear 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.

*** NOTICE**

The EPB warning light may appear if the EPB switch operates abnormally. Shut the engine off and turn it on again after a few minutes. The warning light will turn off and the EPB switch will operate normally. If the EPB warning light remains on, have the system checked by an authorized Kia dealer.

If the EPB warning light does not appear or blinks even though the EPB switch was pulled up, the EPB is not applied. If the EPB warning light blinks when the EPB warning light is on, press the EPB switch, then pull it up. Press it back to its original position and pull it back up. If the EPB warning does not turn off, have the system checked by an authorized Kia dealer.

When the EPB is not released

If the EPB does not release normally, take your vehicle to an authorized Kia dealer by loading the vehicle on a flat-bed tow truck and have the system checked.

AUTO HOLD

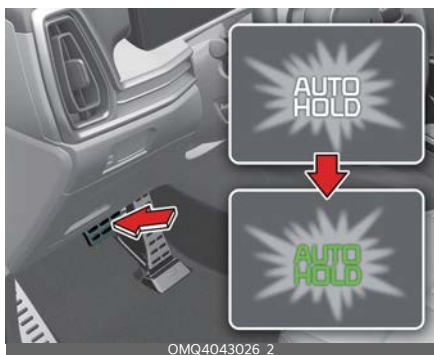
The Auto Hold is designed to maintain your Kia in a standstill even though the brake pedal is not pressed after you bring your Kia to a complete stop by pressing the brake pedal.

Applying Auto Hold function

1. Press the brake pedal and start your Kia.
2. Press the Auto Hold button. The white AUTO HOLD indicator will come on indicating the system is in standby.



Before the Auto Hold will engage, the driver's door and engine hood must be closed.



When coming to a complete stop by pressing the brake pedal, the AUTO HOLD indicator changes from white to

green indicating the AUTO HOLD is engaged. Your Kia will remain at a standstill even if you release the brake pedal.

If EPB is applied, Auto Hold will be released.

If you press the accelerator pedal with the gear in D (Drive) or Manual mode, the Auto Hold will be released automatically and your Kia 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 from Auto Hold by pressing the accelerator pedal, always check your surrounding.

Slowly press the accelerator pedal for a smooth launch.

Canceling Auto Hold function



- To cancel the Auto Hold operation, press the Auto Hold switch. The AUTO HOLD indicator will turn off.
- To cancel the Auto Hold operation when your Kia is at a standstill, press the Auto Hold switch while pressing 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 standby):
 - The driver's door is opened
 - The engine hood is opened
 - The gear is in P (Park)

- The EPB is applied
- 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 door is opened.
 - The engine hood is opened.
 - Your Kia is in a standstill for more than 10 minutes.
 - Your Kia is standing on a steep slope.
 - Your Kia moved for a few seconds.

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 again, press foot brake pedal, check your surrounding 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 and have the system checked by an authorized Kia dealer.

WARNING

To reduce the risk of an accident, do not activate Auto Hold while driving downhill, backing up, or parking your vehicle.

If there is a malfunction with the driver's door or engine hood open detection system, the Auto Hold may not work properly.

Have the system checked by an authorized Kia dealer.

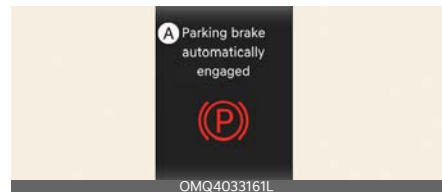
NOTICE

A click or electric brake motor whine sound may be heard while operating or releasing the EPB, but these conditions are normal and indicate that the EPB is functioning properly.

Warning messages

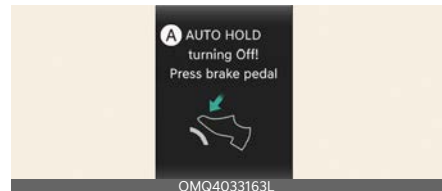
The Auto Hold function will display a warning message with sound under certain conditions.

When the EPB is applied from Auto Hold.



A: Parking brake automatically engaged

When the conversion from Auto Hold to EPB is not working properly.

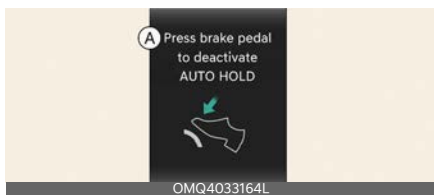


A: AUTO HOLD turning Off! Press brake pedal

NOTICE

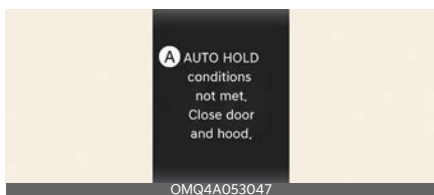
When this message is displayed, the Auto Hold and EPB may not operate. For your safety, press the brake pedal.

If you do not apply the brake pedal when you release the Auto Hold by pressing the [AUTO HOLD] switch, a warning will sound and a message will appear.



A: Press brake pedal to deactivate AUTO HOLD

When you press the [AUTO HOLD] switch, if the driver's door and engine hood are open, a warning will sound and a message will appear.



A: AUTO HOLD conditions not met. Close door and hood.

Press the AUTO HOLD button after closing the driver's door and engine hood.

Anti-lock Brake System (ABS)

ABS prevents the wheels from locking so your Kia remains stable and can still be steered.

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. Your Kia should be driven at reduced speeds in the following circumstances:

- When driving on rough, gravel or snow-covered roads
- When driving with tire chains installed

- When driving on roads where the road surface is pitted or has different surface heights.

Driving in these conditions increases the stopping distance for your vehicle.

The ABS continuously senses the speed of the wheels. If the wheels are going to lock, the ABS 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.

To obtain the maximum benefit from your ABS in an emergency, do not attempt to modulate your brake pressure and do not try to pump your brakes. Press your brake pedal as hard as possible to allow the ABS to control the force being delivered to the brakes.

* NOTICE

A click sound may be heard in the engine compartment when your Kia begins to move after your Kia is started. These conditions are normal and indicate that the Anti-lock Brake System is functioning properly.

Even with the ABS, your vehicle still requires sufficient stopping distance. Always maintain a safe distance from a your Kia.

Always slow down when cornering. The ABS cannot prevent accidents resulting from excessive speeds.

On loose or uneven road surfaces, operation of the ABS may result in a longer stopping distance than for vehicles equipped with a conventional brake system.

The ABS warning light will stay on for approximately 3 seconds after the ENGINE START/STOP button is ON.



The ABS will go through self-diagnosis and the light will turn off if everything is normal. If the light stays on, there may be a problem with the ABS. Contact and visit an authorized Kia dealer.

When you drive on a road having poor traction, such as an icy road, and have operated your brakes continuously, the ABS will be continuously active and the ABS warning light may appear. Pull your vehicle over to a safe place and stop your Kia.

Restart your Kia. If the ABS warning light turns off, then your ABS is normal. If it remains on you may have a problem with the ABS. Contact and visit an authorized Kia dealer.

* NOTICE

When you jump start your vehicle because of a drained battery, your Kia 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 the ABS has malfunctioned.

- Do not pump your brakes!
- Have the battery recharged before driving your Kia.

Electronic Stability Control (ESC) system

The ESC is designed to stabilize your Kia during cornering maneuvers.



ESC applies the brakes on individual wheels and intervenes with your Kia management system to stabilize the vehicle.

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 your Kia to lose traction. Even with ESC installed, always follow all the normal precautions for driving - including driving at safe speeds for the conditions.

⚠ WARNING

For maximum protection, always wear your seat belt. No system, no matter how advanced, can compensate for all driver error and/or driving conditions. Always drive responsibly.

The ESC 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 cor-

ner 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 your Kia compartment when your Kia begins to move after your Kia is started. This is normal and is functioning properly.

ESC operation

ESC ON condition

- When the ENGINE START/STOP button is turned ON, ESC and ESC OFF indicator lights appear for approximately 3 seconds, then ESC is turned on.
- Press the ESC OFF button for at least half a second after turning your Kia ON to turn ESC off. (ESC OFF indicator will appear). To turn the ESC on, press the ESC OFF button (ESC OFF indicator light will go off).
- When starting your Kia, 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 ESC is operating properly, you can feel a slight pulsation in your Kia. This is normal.

When moving out of the mud or driving on a slippery road, pressing the accelerator pedal may not cause your Kia rpm (revolutions per minute) to increase.

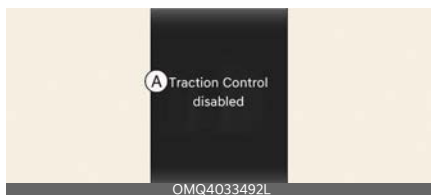
ESC operation off



OFF

This vehicle has 2 kinds of ESC off states.

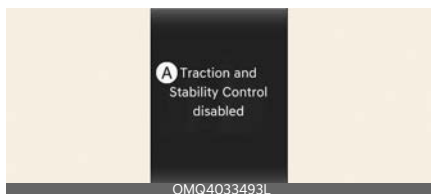
If your Kia stops when ESC is off, ESC remains off. Upon restarting your Kia, the ESC will automatically turn on.



A: Traction Control disabled

ESC off state 1

To turn off the traction control function and only operate the brake control function of the ESC, press the ESC OFF button (ESC OFF  OFF) for less than 3 seconds and the ESC OFF indicator light (ESC OFF  OFF) will appear.



A: Traction and Stability Control disabled

ESC off state 2

To turn off the traction control function and the brake control function of the ESC, press the ESC OFF button (ESC

OFF  for more than 3 seconds. ESC

OFF indicator light (ESC OFF ) will appear and ESC OFF warning chime will sound. The ESC function will not operate.

Indicator light

ESC indicator light



ESC OFF indicator light



When ENGINE START/STOP button is turned ON, the indicator light appears, then turn off if the ESC system is operating normally.

The ESC indicator light blinks whenever ESC is operating or appears when ESC fails to operate.

The ESC OFF indicator light comes on when the ESC is turned off with the button.

 WARNING

ESC

Drive carefully even though your vehicle has ESC. It can only assist you in maintaining control under certain circumstances.

ESC OFF usage

When driving

- ESC should be turned on 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 active (ESC indicator light blinks). If ESC is turned off while ESC is active, your Kia may lose control.

 NOTICE

- When operating the vehicle on a dynamometer, ensure that the ESC is turned off (ESC OFF light appeared). 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.

Downhill Brake Control (DBC)



The DBC feature assists the driver to descend down a steep hill without having to depress the brake pedal.

The system automatically applies the brakes to maintain your Kia speed 2.5mph (4 km/h) ~ 25 mph (40 km/h) and allows the driver to concentrate on steering your Kia downhill.

Always turn off the DBC on normal roads. The DBC might activate inadvertently from the standby mode when driving through speed bumps or making sharp curves.

* NOTICE

The DBC defaults to the OFF position whenever the ENGINE START/STOP button is placed in the ON position.

Noise or vibration may occur from the brakes when the DBC is activated. The rear stop light comes on when DBC is activated.

DBC operation

Mode	Indicator light	Description
Standby	 appeared	Press the DBC button when vehicle speed is under 38 mph (60 km/h). The DBC system will turn ON and enter the standby mode. The system does not turn ON if vehicle speed is over 38 mph (60 km/h).
Activated	 blinks	In the standby mode, It enters the operating mode when the following conditions are met. • The road surface should be more than a certain angle of inclination • The accelerator pedal must not be depressed. • Your Kia speed should be within 2.5 mph (4 km/h) ~ 25 mph (40 km/h) - 1.5 mph (2.5 km/h) ~ 5 mph (8 km/h) in case of backward movement Within operating vehicle speed 2.5 mph (4 km/h) ~ 25 mph (40 km/h), the driver can lower or raise your Kia speed by stepping on the brake pedal or accelerator pedal.
Temporarily deactivated	 appeared	In the activated mode, the DBC will temporarily deactivate under the following conditions: • The hill is not steep enough. • The accelerator pedal is depressed. • When your Kia speed is in the range of 25 mph (40 km/h) ~ 38 mph (60 km/h) If the above conditions are not met, the DBC will automatically activate again.
OFF	 not appeared	The DBC will turn OFF under the following conditions: • The DBC button is pressed again. • When the accelerator pedal is depressed and your Kia speed exceeds 38 mph (60 km/h)

* NOTICE

- The DBC may not deactivate on steep inclines even though the brake or accelerator pedal is depressed.
- The DBC does not operate when:
 - The gear is in P (Park).
 - The ESC is activated.
- If the DBC yellow indicator light appears, the system may have overheated or have malfunctioned. When the warning light appears even though the DBC system has cooled off, have your vehicle checked by an authorized Kia dealer as soon as possible.

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 HAC prevents your Kia from rolling back by applying the brakes automatically for about 2 seconds.

The brakes are released when the accelerator pedal is engaged or after about 2 seconds.

The HAC is activated for about 2 seconds, so when your Kia is starting, always engage 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 sufficient brake pressure to prevent your vehicle from rolling backward and causing an accident. Don't release the brake pedal until you are ready to accelerate.

Vehicle Stability Management (VSM) system

Your Kia VSM system provides further enhancements to vehicle stability and steering responses under the following conditions:

- when driving on a slippery road or
- when a change in the coefficient of friction between left and right wheels is detected.

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 tires or wheel sizes may diminish any supplemental safety benefits of the VSM system.

VSM operation

When the VSM is operating properly, you can feel a slight pulsation in your Kia and/or abnormal steering responses (EPS). This is normal.

The VSM does not operate when:

- Driving on a banked road such as a gradient or incline
- Driving in reverse
- ESC OFF indicator light () remains on the instrument cluster
- EPS indicator light remains on the instrument cluster

VSM operation off

If you press the ESC OFF button to turn off the ESC, the VSM will also cancel and the ESC OFF indicator light () appears.

To turn on the VSM, press the button again. The ESC OFF indicator light turns off.

WARNING

VSM Management

Drive carefully even though your vehicle has VSM. It can only assist you in maintaining control of your Kia under certain circumstances.

Malfunction indicator

The VSM may 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 and have the system checked by an authorized Kia dealer.

The VSM 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 a your Kia ahead. Always hold the steering wheel firmly while driving.

Your vehicle is designed to activate according to the driver's intention, even with installed VSM. Always follow all the normal precautions for driving at safe speeds for the conditions - including driving in inclement weather on a slippery road.

WARNING

For maximum protection, always wear your seat belt. No system, no matter how advanced, can compensate for all driver error and/or driving conditions. Always drive responsibly.

Trailer Stability Assist (TSA) system

The TSA is operated as a vehicle stability control system. The TSA is designed to stabilize your Kia and trailer when the trailer sways or oscillates. There are various factors that make your Kia sway or oscillate.

Such incidents mostly happen at high speed, but there is also a risk of swaying when the trailer is affected by crosswinds, buffeting, or improper overloading.

Factors of swaying include:

- High speed
- Strong crosswinds
- Improper overloading
- Sudden control of steering wheel

- Uneven road

The TSA continuously analyzes the vehicle and trailer instability. When the TSA detects some sway, the brakes are applied automatically to stabilize your Kia. When the vehicle becomes stable, the TSA stops.

Brake Assistant System (BAS)

The BAS provides additional pressure when the brake pedal is momentarily and strongly depressed in a situation where sudden braking is required while driving.

The BAS reduces the time for ABS control to activate, and consequently reduces the braking distance, by providing additional pressure up to the point of ABS intervention.

BAS operation

- When your Kia speed is more than 20 mph (30 km/h) and the ABS control is not activated.
- When the brake pedal is fully depressed over a certain level.
- When the friction of the road surface is above a certain level.

BAS operation off

- Your Kia speed is below 6 mph (10 km/h).
- The brake pedal is depressed over a certain road condition.
- The friction of the road surface is below a certain level.

WARNING

The system operates depending on driver's driving habit, vehicle speed, the degree to which the brake pedal is

depressed and the road surface condition.

Good braking practices

Good braking practices help keep occupants safe and extend brake life.

- Check to be sure the parking brake is not engaged, and the parking brake indicator light is off before driving.
- Driving through water may wet the brakes. They can also get wet when your Kia is washed. Wet brakes can be dangerous! Your vehicle will not stop as quickly if the brakes are wet. Wet brakes may cause your Kia to pull to one side.

To dry the brakes, apply the brakes lightly until the braking action returns to normal, taking care to your Kia always keep your Kia under control. If the braking action does not return to normal, stop as soon as it is safe to do so and visit an authorized Kia dealer.

- Don't coast down hills with your Kia out of gear. This is extremely hazardous. Keep your Kia. Always keep your Kia in gear, use the brakes to slow down, then shift to a lower gear so that vehicle 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 your Kia 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.

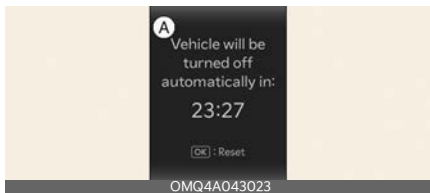
- Be cautious when parking on a hill. Firmly engage the parking brake and place the shift lever in P. If your vehicle is facing downhill, turn the drive wheels into the curb to help keep your Kia from rolling.

If your vehicle is facing uphill, turn the drive wheels away from the curb to help keep your Kia from rolling. If there is no curb or if it is required by other conditions to keep your Kia from rolling, block the wheels.

- Under some conditions your parking brake can freeze in the engaged position. This is most likely 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 (Parking) and block the rear wheels so your Kia cannot roll. Then release the parking brake.
- Do not hold your Kia on an incline with the accelerator pedal. This can cause the transmission to overheat. Always use the brake pedal or parking brake.

Vehicle Auto Shut-off system

Your Kia auto shut-off system is designed to automatically shut off your Kia after a certain time the driver sets to reduce fuel consumption and energy consumption of your Kia and to prevent carbon monoxide (CO) poisoning.



A: Vehicle will be turned off automatically in:

Requirements for activation

This system can be activated, when all of the following requirements are satisfied:

- The ENGINE START/STOP button is in ON position.
- Your Kia is stopped and in P (Park) position.
- The driver's seat belt is unfastened.
- The door is opened.
- The passenger's seat is not occupied.

* NOTICE

- The default setting is 60 minutes.

Resetting the time

The system can be initialized and restarted under the following conditions:

- When pressing and releasing the brake pedal.
- When the accelerator pedal is depressed.
- When manually resetting the timer.
- When manually pressing the OK button on the steering wheel.

Canceling your Kia Auto Shut-off system

The system will be canceled automatically when:

- Your Kia speed is over 2 mph (3 km/h).
- Your Kia is shifted to D (Drive), R (Reverse) or N (Neutral).
- Your seat belt is fastened.

Idle Stop and Go (ISG) system

The ISG system reduces fuel consumption by automatically shutting down the engine when your Kia is at a standstill. (For example; red light, stop sign and traffic jam)

The engine starts automatically as soon as the starting conditions are met.

The ISG is ON whenever the engine is running.

* NOTICE

When the engine automatically starts by the ISG system, some warning lights (ABS, ESC, ESC OFF, EPS or Parking brake warning light) may turn on for a few seconds.

This happens because of low battery voltage. It is not a malfunction.

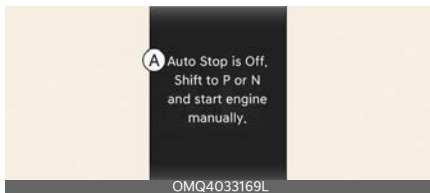
Auto stop

If you depress the brake pedal and your Kia comes to a stop with the ISG ON, the engine will stop automatically.

Stop your Kia completely by pressing the brake pedal when the gear is in the D (Drive) or N (Neutral) position.



The engine will stop and the green AUTO STOP (A) indicator on the instrument cluster will appear.

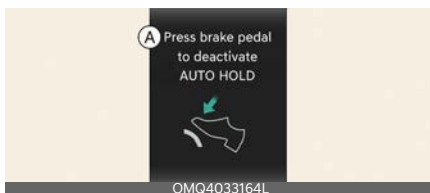


A: Auto Stop is Off. Shift to P or N and start engine manually.

* NOTICE

If you open the engine hood in auto stop mode, the following will happen:

- The ISG system will deactivate (the light on the ISG OFF button will appear).
- A message will appear on the LCD display.



A: Press brake pedal to deactivate AUTO HOLD

- If you shift the gear from N to D (Manual mode) or R without depressing the brake pedal after stopping engine automatically, the engine does not restart automatically and a warning chime sounds. Press the brake pedal for auto start.

Auto start

When the engine stops automatically by ISG, the engine will restart if one of the following driver actions.

- Release the brake pedal.
- Move the shift gear to the R (Reverse) position or the Manual mode while depressing the brake pedal.

The engine will start and the green AUTO STOP indicator (A) on the instrument cluster will go out.

The engine will also restart automatically without any driver actions if the following occurs:

- The brake vacuum pressure is low.
- The engine has stopped for about 5 minutes.
- The air conditioning is ON with the fan speed set to the highest position.
- The front defroster is ON.
- The battery is weak.
- The cooling and heating performance of the climate control system is unsatisfactory.
- Your Kia is shifted to P (Park) when Auto Hold is activated.
- The door is opened or the seatbelt is unfastened when Auto Hold is activated.
- The EPB switch is pressed when Auto Hold is activated.

Operating conditions

The ISG will operate under the following condition:

- The driver's seatbelt is fastened.
- The driver's door and hood are closed.
- The brake vacuum pressure is adequate.
- The battery sensor is activated and the battery is sufficiently charged.
- Outside temperature is not too low or too high.
- Your Kia is driven over a constant speed and stops.
- The climate control system satisfies the conditions.
- Your Kia is sufficiently warmed up.

- The incline is gradual.
- The steering wheel is turned less than 180 degrees and then the vehicle stops.

* NOTICE

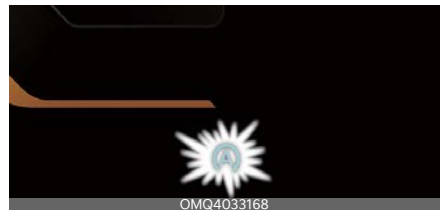
- If the ISG system does not meet the operating conditions, the ISG system is deactivated. The light on the ISG OFF button will appear and a message "Auto Stop conditions not met" will appear on the LCD display.
- If the light or warning message appears continuously, please check the operating conditions.

Deactivating the ISG



- If you wish to deactivate the ISG, press the ISG OFF button. The light on the ISG OFF button will appear.
- If you press the ISG OFF button again, the ISG will be activated and the light on the ISG OFF button will turn off.

ISG malfunction



The ISG may not operate when an ISG related sensor or system error occurs.

The following will happen:

- The yellow AUTO STOP ((A)) indicator on the instrument cluster will stay on after blinking for 5 seconds.
- The light on the ISG OFF button will appear.

When the engine is in Idle Stop mode, it's possible to restart the engine without taking any action. Before leaving your Kia or doing anything in the engine compartment, stop the engine by the ENGINE START/STOP button to the OFF position.

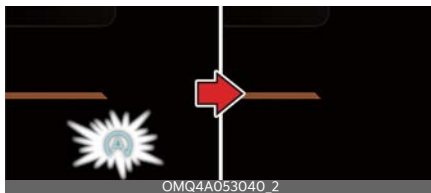
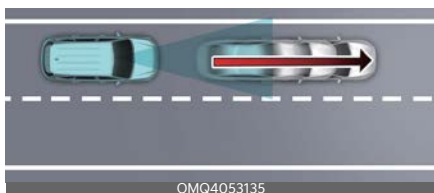
* NOTICE

If the Absorbent Glass Mat (AGM) battery is reconnected or replaced, ISG function will not operate immediately. If you want to use the ISG function, the battery sensor needs to be calibrated for approximately 4 hours with the ignition off. After calibration, turn the engine on and off 2 or 3 times.

Smart ISG features

Early Engine Restart

If the engine was stopped automatically by ISG, Early Engine Restart can automatically restart the engine from ISG without driver action when the vehicle ahead pulls away and the front view camera detects the preceding vehicle's movement.



If the engine restarts automatically by the Early Engine Restart function, a message will appear on the LCD display (if equipped) when the "AUTO STOP" page on the instrument cluster is selected.



- A: **Timer**
23:27:43
- B: **Auto Start: vehicle ahead is driving away**

* NOTICE

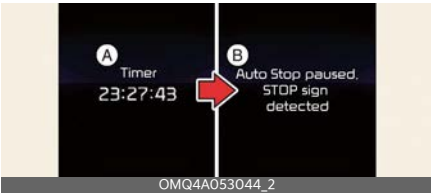
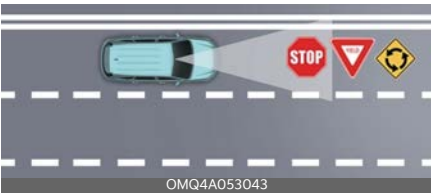
- Even when the preceding vehicle drives away, the Early Engine Restart function may not restart the engine in case of limitations of the front view camera which can detect the preceding vehicle's movement.
- Regarding the limitations of the front view camera, please refer to Limitations of Smart ISG features
- If the engine was turned off by ISG, it can be restarted anytime by releasing the brake pedal, regardless of Early Engine Restart.

ISG inhibition at traffic signs (STOP/YIELD/Roundabout)

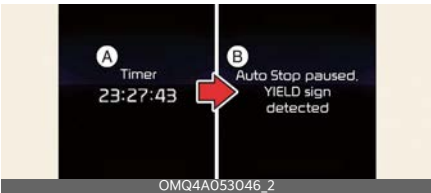
ISG inhibition at traffic signs can deactivate the ISG system and keep the engine on when stopped at certain traffic signs (STOP/YIELD/Roundabout).



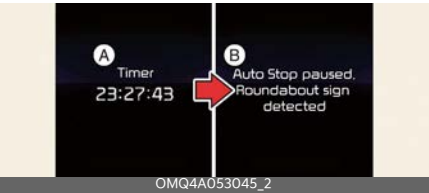
If a STOP, YIELD or Roundabout sign is detected and the ISG system is deactivated by ISG inhibition at traffic signs, a message will appear on the LCD display (if equipped) when the "AUTO STOP" page on the instrument cluster is selected.



- A: **Timer**
- B: **Auto Stop paused. STOP sign detected**



- A: **Timer**
- B: **Auto Stop paused. YIELD sign detected**



- A: **Timer**
- B: **Auto Stop paused. Roundabout sign detected**

* **NOTICE**

- Even when stopped at a STOP, YIELD, or Roundabout sign, this feature may not deactivate the ISG system in case of limitations of the front view camera which is able to detect traffic signs ahead.
- Regarding the limitations of the front view camera, please refer to Limitations of Smart ISG features.

WARNING

Limitations of Smart ISG features

- Smart ISG features may not operate normally, or may operate unexpectedly, under the following circumstances:
 - The detecting sensor or the surroundings are contaminated or damaged
 - The temperature around the front view camera is high or low due to surrounding environment
 - The camera lens is contaminated due to tinted, filmed or coated windshield, damaged glass, or sticky foreign material (sticker, bug, etc.) on the glass

- Moisture is not removed or frozen on the windshield
- Driving in heavy rain or snow, or thick fog
- The field of view of the front view camera is obstructed by sun glare
- Street light or light from an oncoming vehicle is reflected on the wet road surface, such as a puddle on the road
- Your vehicle is being towed
- The surroundings are very bright
- The surroundings are very dark.
- The brightness changes suddenly, for example when entering or exiting a tunnel
- The brightness outside is low, and the headlamps are not on or are not bright
- Only part of the vehicle is detected
- The vehicle in front is a bus, heavy truck, truck with a unusually shaped luggage, trailer, etc.
- The vehicle in front has no tail lights, tail lights are located unusually, etc.
- The rear of the front vehicle is small or the vehicle does not look normal, such as when the vehicle is tilted, overturned, or the side of the vehicle is visible, etc.
- The front vehicle's ground clearance is low or high
- A vehicle, pedestrian or cyclist suddenly cuts in front
- The vehicle in front is detected late
- The vehicle in front is suddenly blocked by an obstacle
- The vehicle in front suddenly changes lane or suddenly reduces speed
- The vehicle in front is bent out of shape
- The vehicle in front steers in the opposite direction of your vehicle to avoid a collision
- With a vehicle in front, your vehicle changes lane at low speed
- The vehicle in front is covered with snow
- You are departing or returning to the lane
- Unstable driving
- You are on a roundabout and the vehicle in front is not detected
- You are continuously driving in a circle
- The vehicle in front has an unusual shape
- Some traffic signs may not be detected by the front view camera under the following circumstances:
 - If located uphill or downhill away from the vehicle
 - If located multiple lanes away from the vehicle
 - If partially or entirely blocked or covered by another vehicle, tree, or any obstacles
 - If damaged or alternated by stickers, graffiti, etc.
 - If turned away from the vehicle

Drive mode integrated control system

Drive mode

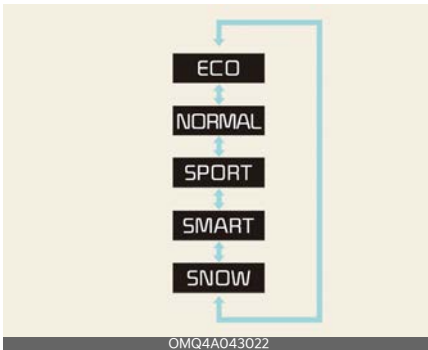
The drive mode may be selected according to the driver's preference or road condition.

AWD



The Drive mode is activated by turning the knob.

The Drive mode is changes whenever the knob is turned.



- **SMART mode:**
SMART mode automatically adjusts the driving mode in accordance with the driver's driving habits.
- **SPORT mode:**
SPORT mode provides sporty but firm riding.
- **ECO mode:**
ECO mode helps improve fuel efficiency for eco-friendly driving.
- **NORMAL mode:**

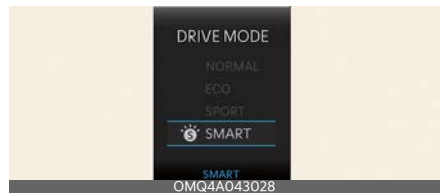
NORMAL mode provides smooth driving and comfortable riding.

- **SNOW mode:**

SNOW mode provides appropriately distribute your Kia's traction forces and prevent wheel slippage when driving on snowy or slippery road.

When restarting from ECO mode, the ECO mode is maintained, and when restarting from another mode, the mode is changed to NORMAL mode.

SMART mode



SMART mode selects the proper driving mode among ECO, NORMAL, and SPORT by determining the driver's driving habits (i.e., Economic or Aggressive (Sport)) from the brake pedal depression or the steering wheel operation.

- Turning the knob to activate SMART mode. When SMART mode is activated, the indicator appears on the instrument cluster.
- Whenever the engine is restarted, the Drive Mode will revert back to NORMAL mode. If SMART mode is desired, re-select SMART mode by turning the knob.
- SMART mode automatically controls your Kia driving, such as gear shifting patterns and engine torque, in accordance with the driver's driving habits.

* NOTICE

- When driving conservatively your Kia in SMART mode, the driving mode

changes to ECO mode to improve fuel efficiency. However, the actual fuel efficiency may differ in accordance with the driving situations (i.e., upward/downward slope, vehicle deceleration/acceleration).

- When you drive your Kia in SMART mode and abruptly decelerate or sharply turning the driving mode changes to SPORT mode. This 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, when you gently depress the accelerator pedal. (Your driving is determined to be economic.)
- The driving mode automatically changes from SMART ECO mode to SMART NORMAL mode after a certain period, when you sharply or repetitively depress the accelerator pedal.
- The driving mode automatically changes to SMART NORMAL mode with the same driving patterns, when your Kia is driven on an upward slope of a certain angle. The driving mode automatically returns to SMART ECO mode, when your Kia returns a level road.
- The driving mode automatically changes to SMART SPORT, when you abruptly accelerate your Kia or repetitively operate the steering wheel. (Your driving is determined to be sporty.) In this mode, your vehicle drives in a lower gear for abrupt accelerating/decelerating and

increases the engine brake performance.

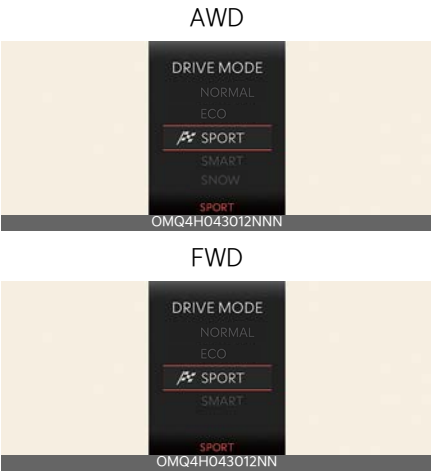
- You may still sense the engine braking performance, even when you release the accelerator pedal in SMART SPORT mode. This is because your vehicle remains in lower gear over a certain period for next acceleration. It is normal and not a malfunction.
- The driving mode automatically changes to SMART SPORT mode in harsh driving situations. Under normal driving situations, the driving mode sets to be either in SMART ECO mode or in SMART NORMAL mode.

Limitation of SMART mode

The SMART mode may be limited in following situations. (The OFF indicator appears.)

- Cruise Control or Smart Cruise Control is activated:
Cruise Control or Smart Cruise Control may deactivate the SMART mode when your Kia is controlled by the set speed of Cruise Control or Smart Cruise Control. (SMART mode is not deactivated just by activating Cruise Control or Smart Cruise Control.)
- The transmission oil temperature is either extremely low or extremely high:
The SMART mode can be active under normal driving situations. However, an extremely high/ low transmission oil temperature may temporarily deactivate the SMART mode, because the transmission condition is no longer in normal operation condition.

SPORT mode



SPORT mode manages the driving dynamics by automatically adjusting the steering effort, the engine and transmission control logic for enhanced driver performance.

- When SPORT mode is activated, the indicator appears on the instrument cluster.
- Whenever the engine is restarted, the Drive Mode will revert back to NORMAL mode. If SPORT mode is desired, reselect SPORT mode by turning the knob.
- 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



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 activated, the indicator appears on the instrument cluster.
- Whenever the engine is restarted, the drive mode remains in ECO mode.

*** NOTICE**
Fuel efficiency depends on your driving habit and road condition.

When ECO mode is activated:

- The acceleration response may be slightly reduced as 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 ECO indicator.

- When the coolant temperature is low:
The system will be limited until engine performance returns to normal.
- When driving up hill:
The system will be limited to gain power when driving uphill because engine torque is restricted.
- When the accelerator pedal is fully depressed for a few seconds:
The system will be limited, determining that the driver wants to speed up.

Economical operation

Your vehicle's fuel economy depends mainly on your driving style, where you drive and when you drive.

Each of these factors affects how many miles (kilometers) you can achieve from a gallon (a 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. 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.
- 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 "Scheduled maintenance service" on page 8-9. If you drive your vehicle in severe conditions, more frequent maintenance is required (Refer to "Maintenance under severe usage conditions" on page 8-13).
- 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.
- Don't "lug" or "over-rev" the engine. Lugging is driving too slowly in too high a gear resulting in the engine bucking. If this happens, shift to a lower gear. Over-revving is racing the engine beyond its safe limit. This can be avoided by shifting at the recommended speeds.
- 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 the function checked by an authorized Kia dealer.

WARNING

Engine off during motion

Never turn the engine off to coast down hills or anytime your Kia 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 steering. Keep the engine on and downshift to an appropriate gear for engine braking.

Special driving conditions

If driving conditions deteriorate due to poor weather or road conditions, you should pay even more attention than usual to your driving.

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.
- Do not pump the brake pedal on a vehicle equipped with ABS.
- If stalled in snow, mud, or sand, use the second gear. Accelerate slowly to avoid spinning the drive wheels.
- Use sand, rock salt, or other nonslip material under the drive wheels to provide traction when stalled in ice, snow, or mud.

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. SUVs have higher ground clearance and a narrower track to make them capable of performing in a wide variety of offroad 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 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 SUVs, failure to operate this vehicle correctly may result in loss of control, an accident or vehicle rollover.

- SUVs 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.
 - An SUV is not designed for cornering at the same speeds as conventional vehicles.
 - Avoid sharp turns or abrupt maneuvers.
 - In a rollover collision, an unbelted person is significantly more likely to die than a person wearing a seat belt. Make sure everyone in your Kia is properly buckled up.
-

⚠ WARNING

Your vehicle is equipped with tires designed to provide safe ride and handling capability. Do not use tires and wheels that are different in size and type from the originally installed ones. 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.

Rocking your Kia

If it is necessary to rock your Kia to free it from snow, ice, sand, or mud, first turn the steering wheel right and left to clear the area around your drive wheels. Shift back and forth between R (Reverse) and any forward gear.

Do not race the engine or spin the wheels. If you are still stuck after a few tries, have your Kia 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 your Kia if people or objects are nearby. Your Kia may suddenly move forward or backwards as it becomes unstuck.

⚠ CAUTION**Vehicle rocking**

Prolonged rocking may cause vehicle 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 your Kia is stationary could over-heat and damage tires, and the rotating wheels may disengage and injure bystanders.

*** NOTICE**

ESC should be turned OFF prior to rocking your Kia.

Smooth cornering

Avoid braking or gear changing in corners, especially when roads are wet. Ideally, corners should always be taken under gentle acceleration. If you follow these suggestions, tire wear will be held to a minimum.

Driving at night



Because night driving presents more hazards than driving in the daylight, follow these important tips:

- 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 headlamps.
- Keep your headlights clean and properly aimed on vehicles not equipped with the automatic headlamp aiming feature. Dirty or improperly aimed headlamps 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.

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 headlamps 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 your brakes are wet, apply them lightly while driving until normal braking operation returns.

Hydroplaning

If the road is wet enough and you are going fast enough, your vehicle may have little or no contact with the road surface and ride on the water. The best advice is **SLOW DOWN** when the road is wet.

The risk of hydroplaning increases as the depth of tire tread decreases, refer to "Tires and wheels" on page 9-8.

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 your Kia is moving slowly.

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. Under inflated or overinflated tires can cause poor handling, loss of vehicle control, and sudden tire failure, leading to accidents, injuries, and death. For proper tire pressures, refer to "Tires and wheels" on page 9-8.

⚠ 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" on page 9-8.

Fuel, engine coolant and engine oil

High speed travel consumes more fuel than urban driving. 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 results in greater tire 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, fully use engine braking. Sudden brake applications on snowy or icy roads may cause skidding. Keep sufficient distance between you and your Kia ahead. Apply the brakes gently. 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 using tire chains.

Snow tires

If you mount snow tires on your vehicle, make sure they are radial tires of the same size and load range as the original tires. Mount snow tires on all four wheels to balance your vehicle's handling in all weather conditions. Keep in mind that the traction provided by snow tires on dry roads may not be as high as your vehicle's original equipment tires. You

should drive cautiously even when the roads are clear. Check with the tire dealer for maximum speed recommendations.

Do not install studded tires without first checking local, state and municipal regulations for possible restrictions against their use.

WARNING

Snow tire size

Snow tires should be equivalent in size and type to your Kia's standard tires. Otherwise, the safety and handling of your vehicle may be adversely affected.

Tire chains

Wire type



Fabric type



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

fabric-type chains for 20 inch tires or wire-type chains for 17 or 18 inch tires with a thickness of less than 0.47 in (12 mm).

Damage to your vehicle caused by improper snow chain use is not covered by your warranty.

When using tire chains, attach them to the drive wheels as follows.

* FWD/AWD: Front Wheel Drive

- FWD vehicles move the front wheel as a power source. Snow chains must be mounted to front tires.
- AWD vehicles must mount snow chains to front tires only. Minimize driving distance in order to prevent damage to the AWD system.
- After mounting snow chains, drive slowly. If you hear noise caused by chains contacting your Kia, slow down until the noise stops and remove the chain as soon as you begin driving on cleared roads to prevent damage.
- Wrong sized chains or improperly installed chains can damage your vehicle's brake lines, suspension, body and wheels. When installing snow chain, follow the manufacturer's instructions and mount them as tightly as possible. Drive slowly (less than 20 mph (30 km/h)) with chains installed.

CAUTION

- Make sure the snow chains are the correct size and type for your tires. Incorrect snow chains can cause damage to your Kia body and suspension and may not be covered by your vehicle manufacturer warranty. The snow chain connecting hooks may be damaged from contacting vehicle components causing the chains to come

loose from the tire. Make sure the snow chains are SAE class "S" certified.

- Always check chain installation for proper mounting after driving approximately 0.3 to 0.6 miles (0.5 to 1 km) to ensure safe mounting. Retighten or remount the chains if they are loose.
- Fabric-type chains must be used on your Kia with 20 inch (255/45R20) tires.

Use high quality ethylene glycol coolant

Your vehicle is delivered with high quality ethylene glycol coolant. 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 8.

Before winter, have your coolant tested to assure that its freezing point is sufficient for the temperatures anticipated during the winter.

Check battery and cables

Winter puts additional burdens on the battery system. Visually inspect the battery and cables as described in section 8. Have the level of charge in your battery checked by an authorized Kia dealer.

Change to "winter weight" oil if necessary

In some climates it is recommended that a lower viscosity "winter weight" oil be used during cold weather. See "Recommended lubricants and capacities" on page 9-9. 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 "Scheduled maintenance service" on page 8-9 and replace them if necessary. 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

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, temporarily apply it with the gear in P (Park). Block the rear wheels in advance, so your Kia will not 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 your Kia to be sure the movement of the drive 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 these items include tire chains, tow straps or chains, flashlight, emergency flares, sand, shovel, jumper cables, window scraper, gloves, ground cloth, coveralls, blanket, etc.

Do not place objects or materials in the engine compartment

Putting objects or materials in the engine compartment may cause an engine failure or combustion, because they may block the engine cooling. Such

damage will not be covered by your warranty.

Drive your vehicle when water vapor condenses and accumulates inside the exhaust pipes

When your Kia is stopped for a long time in winter while the engine is running, water vapor may condense and accumulate inside the exhaust pipes.

Water in the exhaust pipes may cause noise, etc., but it is drained when driving at medium/high speed.

Trailer towing (if equipped)

If you are considering towing with your vehicle, you should first check with your state's Department of Motor Vehicles (DMV) 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.

⚠ WARNING

Towing a trailer

If you don't use the correct equipment and drive improperly, you can lose control when you pull a trailer. For example, if the trailer is too heavy, the brakes may not work well - or even at all. You and your passengers could be seriously or fatally injured. Pull a trailer only if you have followed all the steps in this section.

⚠ WARNING

Weight limits

Before towing, make sure the total trailer weight, gross combination weight, gross vehicle weight, gross axle weight and trailer tongue load are all within the limits.

*** NOTICE**

- The technically permissible maximum load on the rear axle(s) may be exceeded by not more than 15 % and the technically permissible maximum laden mass of your Kia may not be exceeded by more than 10 % or 220 lbs (100 kg), whichever value is lower. Do not exceed 60 mph (100 km/h) for category M1 vehicles or 50 mph (80 km/h) for category N1 vehicles.

- When towing a trailer, the additional load at the trailer coupling device may cause the rear tire maximum load ratings to be exceeded, but should not be more than 15%. Do not exceed 60 mph (100 km/h), and the rear tire pressure should be at least 0.2 bar (20 kPa) above the tire pressure(s) as recommended for normal use (i.e. without a trailer attached).

⚠ CAUTION

Pulling a trailer improperly can damage your vehicle and result in costly repairs not covered by your warranty. To pull a trailer correctly, follow the advice in this section.

Your vehicle can tow a trailer. To identify what your Kia trailering capacity is for your vehicle, refer to "Weight of the trailer" on page 5-75.

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 must be used properly.

This section contains many time tested, important trailering tips and safety rules. Many of these are important safety. 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 considerable wind resistance, increasing pulling requirements.



* NOTICE

Location of trailer mounting

The mounting holes for hitches are located on both sides of the underbody behind the rear tires.

Hitches

It's important to have the correct hitch equipment. Crosswinds, large trucks near by and rough roads are a few reasons why you'll need the right hitch.

Rules to follow:

- If you have to make any holes in the body of your vehicle when you install a trailer hitch, be sure to seal the holes after you remove the hitch.
If you don't seal them, deadly carbon monoxide (CO) from your exhaust can enter 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. Use only a frame-mounted hitch that does not attach to the bumper.
- Any part of the rear number plate or lighting devices of your Kia must not be obscured by the mechanical coupling device. If the rear license plate and/or lighting devices can be obscured partially by any part of the mechanical coupling device, mechanical coupling devices that cannot be easily removed or repositioned without use of any tool, except a release

key which is supplied by the manufacturer of the coupling device, are not permitted for use. Note that the mechanical coupling device that is affixed and not in use must always be removed or repositioned if the rear license plate and/or rear lighting devices are obscured by any part of the mechanical coupling device.

- A 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 their recommendations for attaching safety chains. Always leave just enough slack so you can turn with your trailer. Never allow safety chains 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 weighs more than the maximum trailer weight without trailer brakes loaded, it needs its own brakes and they must be adequate. Read and follow the instructions for the trailer brakes so you'll be able to install, adjust and maintain them properly.

- Don't tap into your vehicle's brake system.

WARNING

Trailer brakes

Do not use a trailer with its own brakes unless you are 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 on 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. Always keep in mind that your Kia you are driving is now a good deal longer and not nearly as 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, occasionally check that the load is secure, and that the lights and trailer brakes are still working.

Following distance

Stay at least twice as far behind your Kia 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. Because of the increased vehicle length, you'll need to go much farther beyond the passed vehicle before you can return to your lane.

Backing up

Hold the bottom of the steering wheel with one hand. Then, to move the trailer to the left, move your hand to the left. To move the trailer to the right, move your hand to the right. Always back up slowly and, if possible, have someone guide you.

Making turns

When you're turning with a trailer, make wider turns than normal. Do this so your trailer won't strike soft shoulders, curbs, road signs, trees, or other objects. Avoid jerky or sudden maneuvers. Signal well in advance.

Turn signals when towing a trailer

When you tow a trailer, your vehicle must have its own 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. You may think drivers behind you are seeing your signals when they are not. It's important to occasionally check to be sure the trailer bulbs are

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.

Obtain assistance by an authorized Kia dealer to install the wiring harness.

Visit an authorized Kia dealer.

WARNING

Failure to use an approved trailer wiring harness could result in damage to your Kia electrical system and/or personal injury.

Detection of trailer light connection

This functionality is only given with genuine accessories (tow bar and wiring harness) that recognize when a trailer is connected and consequently inform your Kia systems. Trailer recognition works as follows: when a trailer socket is plugged in, either the brake pedal should be pushed or turn signal lights activated; the electronic control unit will detect the trailer because of the power consumption by the trailer lighting and inform your Kia systems. When the trailer is disconnected, the brake pedal should be pushed again or turn signal lights activated for the control unit to be able to detect that there is no power consumption anymore by trailer lighting; the assistance systems that were turned off will automatically turn on again.

It is the driver's responsibility to ensure that all electrical connections are working and all trailer lights are operating

before and during towing. You must perform manual checks.

⚠ CAUTION

Use only genuine electrical connections. Do not attempt to arbitrarily splice or directly connect the trailer wiring using any other methods. Doing so may damage your Kia's electrical system, resulting in malfunctions.

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.

⚠ CAUTION

- 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) (or 260 °F/130 °C)", 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 the 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 unexpectedly roll down hill.

⚠ WARNING

Parking on a hill

Parking your vehicle on a hill with a trailer attached could cause serious injury or death, should the trailer break loose.

If you must park your trailer on a hill, here's how to do it:

1. Pull your Kia into the parking space. Turn the steering wheel in the direction of the curb (right if headed down hill, left if headed up hill).
2. Set the parking brake and shut off your Kia.
3. Place chocks under the trailer wheels on the downhill side of the wheels.
4. Start your Kia, hold the brakes, shift to neutral, release the parking brake and slowly release the brakes until the trailer chocks absorb the load.
5. Reapply the brakes, reapply the parking brake.
6. Shut off your Kia and release your Kia brakes but leave the parking brake set.

⚠ WARNING

Parking brake

It can be dangerous to get out of your vehicle if the parking brake is not firmly set.

If you have left the engine running, your Kia can move suddenly. You or others could be seriously or fatally injured.

When you are ready to leave after parking on a hill

1. 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, axle lubricant and cooling system fluid. Brake condition is another important item to frequently checked. Each item is covered in this manual, and the Index will help you find them quickly. If you're trailering, review these sections before you start your trip.

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

- Due to higher load during trailer usage, overheating might occur in hot days or during uphill driving. If the coolant gauge indicates overheating, switch off the A/C and stop your Kia in a safe area to cool down the engine.
 - When towing, check the transmission fluid more frequently.
 - If your vehicle is not equipped with an air conditioner, you should install a condenser fan to improve engine performance when towing a trailer.
-

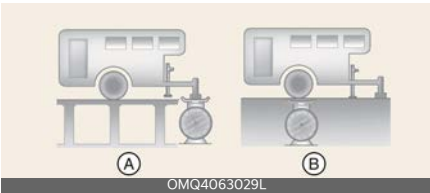
If you do decide to pull a trailer

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 tow 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, consult an authorized Kia dealer 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:

Item			Smartstream G2.5 GDi	Smartstream G2.5 T-GDi		
				Standard	X-Line	X-Pro
Maximum-trailer weight	With brake system	Standard	2,000 lbs. (907 kg)	2,000 lbs. (907 kg)	2,000 lbs. (907 kg)	2,000 lbs. (907 kg)
		Package	-	2,000 lbs. (907 kg)	3,500 lbs. (1,588 kg)	4,500 lbs. (2,041 kg)
	Without brake system		1,650 lbs. (750 kg)	1,650 lbs. (750 kg)	1,650 lbs. (750 kg)	1,650 lbs. (750 kg)
Maximum tongue weight			280 lbs. (127 kg)	351 lbs. (159 kg)	351 lbs. (159 kg)	351 lbs. (159 kg)

Weight of the trailer



- A: Tongue Load
- B: Total Trailer Weight

The maximum safe weight should never exceed the maximum trailer weight with trailer brakes. Even that may 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



- A: Gross Axle Weight (GVW)
- B: Gross Vehicle Weight

The tongue load of any trailer is an important weight to measure because it affects the total GVW of your vehicle. This weight includes the curb weight of your Kia, any cargo you may carry and the people who will be riding in your Kia. If you 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 trailer tongue load permissible.

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

- Never load a trailer with more weight in the rear than in the front. The front should be loaded with approximately 60% of the total trailer load; the rear should be loaded with approximately 40% of the total trailer load.
- Never exceed the maximum weight limits of the trailer or trailer towing equipment. Improper loading can result in damage to your vehicle and/or personal injury. Check weights and loading at a commercial scale or highway patrol office equipped with scales.
- An improperly loaded trailer can cause loss of control.

Vehicle load limit

Your Kia load limit is displayed on the tire and loading information label on the driver's door.

Tire and loading information label

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.

Example for spare tire



Vehicle capacity weight:

- 6 seats: 1,032 lbs. (468 kg)
- 7 seats: 1,204 lbs. (546 kg)

Vehicle capacity weight is the maximum combined weight of occupants and cargo. If your vehicle is equipped with a trailer, the combined weight includes the tongue load.

Seating capacity:

Total: 6/7 persons (Front seat: 2 persons, Rear seat: 4/5 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 the occupants and the weight of the cargo being carried or towed.

Do not overload your Kia as there is a limit to the total weight or load limit, including occupants and cargo, your Kia can carry.

Towing capacity:

- Smartstream G2.5 GDi
 - Without trailer brakes: 1,650 lbs. (750 kg)
 - With trailer brakes: 2,000 lbs. (907 kg)
- Smartstream G2.5 T-GDi
 - Without trailer brakes: 1,650 lbs. (750 kg)
 - With trailer brakes: 2,000 lbs. (907 kg)
 - With trailer package:
 - Standard:** 2,000 lbs. (907 kg)
 - X-Line:** 3,500 lbs. (1,588 kg)
 - X-Pro:** 4,500 lbs. (2,041 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.

Steps For Determining Correct Load Limit—

1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle's placard.
2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
3. Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.
4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals 1400 lbs. and there will be five 150 lbs passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400-750 (5x150) = 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.

cle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

⚠ WARNING

Loose cargo

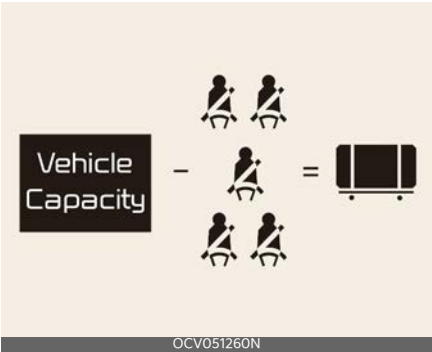
Do not travel with unsecured blunt objects in the passenger compartment of your vehicle (e.g., suitcases or unsecured child seats). These items may strike an occupant during a sudden stop or crash.

Example 1



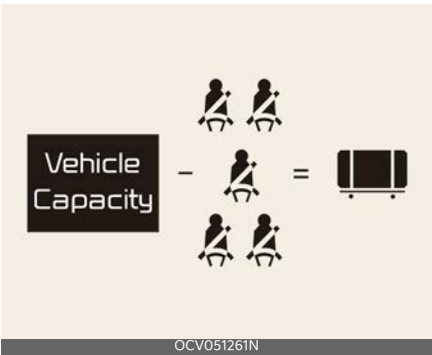
Item	Description	Total
A	Vehicle Capacity Weight	849 lbs. (385 kg)
B	Subtract Occupant Weight 150 lbs. (68 kg)×2	300 lbs. (136 kg)
C	Available Cargo and Luggage weight	549 lbs. (249 kg)

Example 2



Item	Description	Total
A	Vehicle Capacity Weight	849 lbs. (385 kg)
B	Subtract Occupant Weight 150 lbs. (68 kg)×5	750 lbs. (340 kg)
C	Available Cargo and Luggage weight	99 lbs. (45 kg)

Example 3



Item	Description	Total
A	Vehicle Capacity Weight	849 lbs. (385 kg)
B	Subtract Occupant Weight 161 lbs. (73 kg)×5	805 lbs. (365 kg)
C	Available Cargo and Luggage weight	44 lbs. (20 kg)

Refer to your vehicle's tire and loading information label for specific information about your vehicle's capacity weight and seating positions. The combined weight of the driver, passengers and cargo should never exceed your vehicle's capacity weight.

Certification label

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 your Kia, all occupants 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

Overloading

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 your Kia. If you must 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

Overloading

Do not overload your vehicle. Overloading your vehicle can cause heat buildup in your vehi-

cle's tires and possible tire failure, increased stopping distances and poor vehicle handling--all of which may result in a crash.

*** NOTICE**

Overloading your vehicle may cause damage. Repairs would not be covered by your warranty. Do not overload your vehicle.

Vehicle weight

This section will guide you in the proper loading of your vehicle to keep your loaded vehicle weight within its design rating capability. Properly loading your vehicle will provide maximum return of your Kia design performance. Before loading your vehicle, familiarize yourself with the following terms for determining your vehicle's weight ratings, from your Kia's specifications and the certification label:

Base curb weight

This is the weight of your Kia 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 after-market 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 (or front passenger's) door sill.

Overloading **WARNING****Vehicle weight**

The gross axle weight rating (GAWR) and the gross vehicle weight rating (GVWR) for your vehicle are on the certification label attached to the driver's (or front passenger's) door. Exceeding these ratings can cause an accident or vehicle damage. You can calculate the weight of your load by weighing the items (and

people) before putting them in your Kia. Be careful not to overload your vehicle.

Forward Collision-Avoidance Assist (FCA) (Sensor Fusion)....6-4

- Forward Collision-Avoidance Assist settings 6-7
- Forward Collision-Avoidance Assist operation 6-10
- Forward Collision-Avoidance Assist malfunction and limitations 6-21

Lane Keeping Assist (LKA)..... 6-28

- Lane Keeping Assist settings 6-28
- Lane Keeping Assist operation..... 6-29
- Lane Keeping Assist malfunction and limitations..... 6-31

Blind-Spot Collision-Avoidance Assist (BCA) 6-34

- Blind-Spot Collision-Avoidance Assist settings..... 6-35
- Blind-Spot Collision-Avoidance Assist operation 6-37
- Blind-Spot Collision-Avoidance Assist malfunction and limitations 6-39

Safe Exit Warning (SEW) 6-44

- Safe Exit Warning settings 6-44
- Safe Exit Warning operation 6-45
- Safe Exit Warning malfunction and limitations 6-46

Safe Exit Assist (SEA) 6-48

- Safe Exit Assist settings..... 6-49
- Safe Exit Assist operation..... 6-50
- Safe Exit Assist malfunction and limitations 6-51

Manual Speed Limit Assist (MSLA) 6-53

- Manual Speed Limit Assist operation..... 6-53

Intelligent Speed Limit Assist (ISLA).....6-55

- Intelligent Speed Limit Assist settings..... 6-56
- Intelligent Speed Limit Assist operation..... 6-56
- Intelligent Speed Limit Assist malfunction and limitations..... 6-58

Driver Attention Warning (DAW) 6-60

- Driver Attention Warning settings 6-61

6 Driver assistance guide

• Driver Attention Warning operation	6-61
• Driver Attention Warning malfunction and limitations	6-62
Blind-Spot View Monitor (BVM)	6-65
• Blind-Spot View Monitor settings	6-65
• Blind-Spot View Monitor operation.....	6-65
• Blind-Spot View Monitor malfunction.....	6-66
Smart Cruise Control (SCC)	6-66
• Smart Cruise Control settings	6-67
• Smart Cruise Control operation.....	6-68
• Smart Cruise Control malfunction and limitations.....	6-75
Navigation-based Smart Cruise Control (NSCC)	6-80
• Navigation-based Smart Cruise Control settings	6-81
• Navigation-based Smart Cruise Control operation	6-81
• Navigation-based Smart Cruise Control limitations	6-82
• This device complies with Part 15 of the FCC rules.....	6-85
• Radio frequency radiation exposure information:	6-85
Lane Following Assist (LFA)	6-85
• Lane Following Assist settings	6-85
• Lane Following Assist operation.....	6-86
• Lane Following Assist malfunction and limitations.....	6-88
Highway Driving Assist (HDA)	6-89
• Highway Driving Assist settings	6-90
• Highway Driving Assist operation	6-91
• Highway Driving Assist malfunction and limitations.....	6-97
• This device complies with Part 15 of the FCC rules.....	6-99
• Radio frequency radiation exposure information:	6-99
Rear View Monitor (RVM).....	6-100
• Rear View Monitor settings	6-100
• Rear View Monitor operation.....	6-101
• Rear View Monitor malfunction and limitations.....	6-103

Surround View Monitor (SVM)	6-103
• Surround View Monitor settings.....	6-103
• Surround View Monitor operation	6-105
• Surround View Monitor malfunction and limitations	6-107
Rear Cross-Traffic Collision-Avoidance Assist (RCCA)	6-108
• Rear Cross-Traffic Collision-Avoidance Assist settings.....	6-109
• Rear Cross-Traffic Collision-Avoidance Assist operation	6-110
• Rear Cross-Traffic Collision-Avoidance Assist malfunction and limitations	6-112
Forward/Reverse Parking Distance Warning (PDW)	6-116
• Forward/Reverse Parking Distance Warning settings.....	6-117
• Forward/Reverse Parking Distance Warning operation	6-117
• Forward/Reverse Parking Distance Warning malfunction and precautions	6-119
Forward/Side/Reverse Parking Distance Warning (PDW) ..	6-122
• Forward/Side/Reverse Parking Distance Warning settings	6-122
• Forward/Side/Reverse Parking Distance Warning operation ..	6-123
• Forward/Side/Reverse Parking Distance Warning malfunction and precautions	6-126
Reverse Parking Collision-Avoidance Assist (PCA)	6-128
• Reverse Parking Collision- Avoidance Assist settings	6-128
• Reverse Parking Collision- Avoidance Assist operation	6-129
• Reverse Parking Collision- Avoidance Assist malfunction and limitations	6-130
Declaration of conformity	6-134

Driver assistance guide

* INFORMATION

The description of the driver assistance system displayed on the screen may differ from the content of the owner's manual depending on the infotainment software version.

Forward Collision-Avoidance Assist (FCA) (Sensor Fusion)

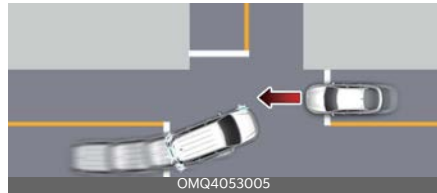
Basic function



Forward Collision-Avoidance Assist detects a vehicle, a powered two-wheeler, a pedestrian, or a cyclist ahead on the road and may warn you of a possible collision with a warning message on the instrument cluster and a warning sound. Also, Forward Collision-Avoidance Assist may assist with braking your vehicle to help reduce collision speed or avoid a collision.

Forward Collision-Avoidance Assist can detect vehicles ahead and adjacent lanes even at high speeds. If the driver makes a lane change at those speeds, your vehicle can apply emergency braking to mitigate or avoid a collision. (if equipped)

Junction Turning function



Junction Turning function can help avoid a collision with an oncoming vehicle, powered two-wheeler and cyclist in an oncoming lane when turning left at a crossroad with the turn signal on by applying emergency braking.

Direct Oncoming function



[A]: Oncoming vehicle

Direct Oncoming function can help reduce the speed at the collision when with a vehicle or powered two-wheeler approaching from the opposite side is detected.

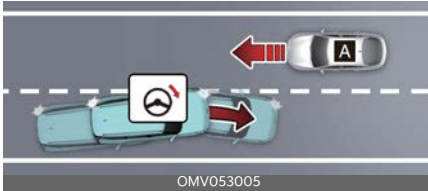
Junction Crossing function (if equipped)



Junction Crossing function can help mitigate or avoid a collision with oncoming vehicles on the left or right side when

crossing an intersection by applying emergency braking.

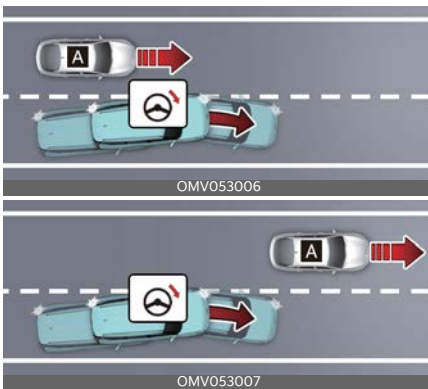
Lane-Change Oncoming function (if equipped)



[A]: Oncoming vehicle

Lane-Change Oncoming function can help mitigate or avoid a collision with oncoming vehicles or powered two-wheelers when changing lanes by assisting the driver's steering.

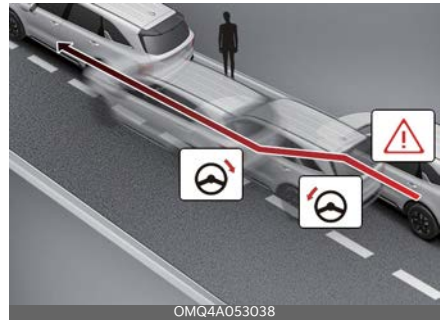
Lane-Change Side function (if equipped)



[A]: Approaching car from side

Lane-Change Side function can help mitigate or avoid a collision with vehicles or powered two-wheelers in the next lane when changing lanes by assisting the driver's steering.

Evasive Steering Assist function (if equipped)



- Driver steering assist
If a possible collision with a vehicle ahead, pedestrian, cyclist, etc. is detected and you steer to avoid the collision, Evasive Steering Assist can assist the driver in steering.
- Evasive steering assist
Evasive Steering Assist function can help mitigate or avoid a collision with pedestrian or cyclist in the same lane in front of you. When a risk of collision is detected, Evasive Steering Assist function can warn you and assist your steering if you move the steering wheel.

Detecting sensor

Front view camera



Front radar



Front corner radar (if equipped)



Rear corner radar (if equipped)



Refer to the picture above for the detailed location of the detecting sensors.

⚠ CAUTION

- Never disassemble the detecting sensor or sensor assembly, or cause any damage to it.
- If the detecting sensors have been replaced or repaired, have the vehicle inspected by an authorized Kia dealer.
- If the radar or around the radar experiences an impact, Forward Collision-Avoidance Assist may not operate properly even if a warning message is not displayed on the cluster. Visit an authorized Kia dealer.
- Never install any accessories or stickers on the windshield, or tint the windshield.
- Pay extreme caution to keep the front view camera dry.
- Never place any reflective objects (for example, white paper, mirror) over the instrument panel.
- Do not place any objects near the windshield or install any accessories on the windshield. It can affect the performance of the defogging and defrosting function of the climate control system, which may prevent the Driver Assistance systems from operating.
- Do not apply license plate frame or objects, such as a bumper sticker, film or a bumper guard, near the front radar cover.
- Always keep the front radar and cover clean and free of dirt and debris.
Use only a soft cloth to wash the vehicle. Do not spray pressurized water directly on the sensor or sensor cover.
- The genuine Kia front/front corner/rear corner radar sensor covers are parts with quality and performance ensured. If arbitrarily applying paint

- on or changing the cover, Forward Collision-Avoidance Assist may not function properly.
- Use only Kia Genuine Parts or those of an equivalent standard with proven quality and performance to repair or replace the radar sensor covers.
- Do not apply objects, such as a bumper sticker or a bumper guard, near the wide angle cameras or ultrasonic sensors or apply paint to the bumper.
 - The function may not work properly when the bumper has been replaced, or the surroundings of the front corner radar or rear corner radar has been damaged or paint has been applied.
 - If a trailer, carrier, etc. is installed, it may adversely affect the performance of Forward Collision-Avoidance Assist may not operate properly.

Forward Collision-Avoidance Assist settings

Forward Safety



- 1 Driver Assistance
- 2 Driving Safety
- 3 Forward Safety

With the vehicle on, select **Setup** → **Vehicle** → **Driver Assistance** → **Driving Safety** on the infotainment system. The initial warning activation timing of Forward Collision-Avoidance Assist can be changed.

- **Forward safety:** Collision warning or emergency braking will operate in a collision-imminent situation. If you deselect the setting, Forward safety will turn off and the Forward Safety warning light (🚗) will appear on the cluster.

Forward Cross-Traffic Safety (if equipped)



- 1 Driver Assistance
- 2 Driving Safety
- 3 Forward Cross-Traffic Safety

With the vehicle on, select **Setup** → **Vehicle** → **Driver Assistance** → **Driving Safety** → **Forward Cross-Traffic**

Safety from the infotainment system screen to turn on Junction Crossing function and deselect to turn off the function.

Forward/Side Safety (if equipped)



1 Driver Assistance

2 Driving Safety

3 Forward/Side Safety

With the vehicle on, select **Setup** → **Vehicle** → **Driver Assistance** → **Driving Safety** → **Forward/Side Safety** on the infotainment system.

- **Forward/Side Safety:** Collision warning or emergency steering will assist the driver in a collision-imminent situation. If you deselect the setting, Forward safety will turn off and the Emergency steering warning light (🚨) will appear on the cluster.

The driver can monitor Forward Collision-Avoidance Assist On/Off status from the Settings menu. If the Forward Safety warning light (🚨) or Emergency steering warning light (🚨) remains ON when Forward safety or Forward/side safety is selected, have the vehicle inspected by an authorized Kia dealer.

⚠ WARNING

When the vehicle is restarted, Forward Collision-Avoidance Assist will always turn on. However, if **Forward safety** is deselected, the driver should always be

aware of the surroundings and drive safely.

⚠ CAUTION

- Steering wheel vibration can be turned on or off.
- Forward safety settings include 'Basic function', 'Junction Turning function', and 'Direct On coming function'. Forward Cross-Traffic Safety include 'Junction Crossing function', Forward/Side Safety includes 'Lane change oncoming function', 'Lane change side function' and 'Evasive Steering Assist function'. (if equipped)
- If Forward safety is set to Off, Even if Forward Cross-Traffic safety and Forward/Side Safety is selected, 'Junction Crossing function' will not operate. (if equipped)
- When the trailer's connector is plugged into your vehicle, Forward/Side Safety function of Forward Collision-Avoidance Assist automatically turns off. In this case, you cannot get help from Forward Collision-Avoidance Assist. Pay extra attention when you drive when the function is inactive. (If a Kia genuine Trailer Kit that can determine whether a trailer is connected is used)

Forward Safety Warning Timing



- 1 Driver Assistance
- 2 Driving Safety
- 3 Forward Safety Warning Timing

With the vehicle on, select **Setup** → **Vehicle** → **Driver Assistance** → **Driving Safety** → **Forward Safety Warning Timing** on the infotainment system to change the initial warning activation timing of Forward Collision-Avoidance Assist.

- Use **Standard** in normal driving conditions. If the Warning Timing seems sensitive, change it to **Late**.
- If **Late** is selected, Forward Collision-Avoidance Assist, warns the driver more slowly.

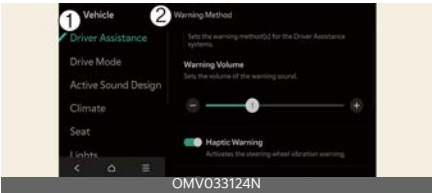
CAUTION

- Even though **Standard** is selected for Warning Timing, if the front vehicle suddenly stops, the warning may seem late.
- Select **Late** for Warning Timing when traffic is light and when driving speed is slow.

INFORMATION

- Forward/side safety does not provide the warning timing setting.
- The warning timing you have set will be maintained even if the vehicle is restarted

Warning Methods



- 1 Driver Assistance
- 2 Warning Methods

our vehicle may allow you to change the **Warning Methods** setting. To do so, select **Setup** → **Vehicle** → **Driver Assistance** → **Warning Methods** in the infotainment system to change the following settings:

- **Warning Volume:** Adjusts the volume of the warning sound. If you turn off the **Warning Volume**, for your safety, the function may warn you with a low volume.
- **Haptic Warning:** Activate the steering wheel vibration warning.
- **Driving Safety Priority:** Lowers all other audio volumes when the Driving Safety system sounds a warning.

INFORMATION

- Ensure that **Warning Methods** you have set may apply to the **Warning Methods** of other driver assistance systems.
- The **Warning Methods** will maintain their last settings when the vehicle is restarted.
- The setting menu may not be available for your vehicle depending on the vehicle features and specifications.
- The **Warning Volume** and **Haptic Warning** cannot be turned off at the

same time. When one of the warning is turned off the other is activated.

Forward Collision-Avoidance Assist operation

Basic function

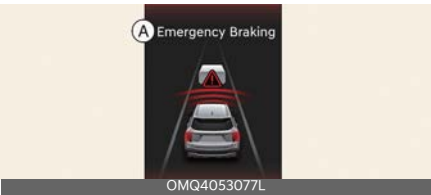
The basic function for Forward Collision-Avoidance Assist is warned and controlled in the following way.

- Collision warning
- Emergency braking
- Stopping vehicle and ending brake control

The collision warning operates under the following vehicle speed conditions, depending on the vehicle in front.

- Vehicle or powered two-wheeler: 6~124 mph (10~200 km/h)
- Pedestrian or cyclist: 6~53 mph (10~85 km/h)

Emergency Braking



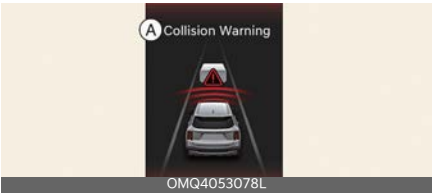
A: Emergency Braking

Emergency braking will alert the driver with the Forward Safety warning light (🚨) blinking, warning message, an audible warning and steering wheel vibration.

Emergency braking will be activated to help avoid a collision with a vehicle ahead, pedestrian, cyclist and powered two-wheeler.

- Vehicle or powered two-wheeler:

Collision Warning



A: Collision Warning

Collision Warning can alert the driver with the Forward Safety warning light (🚨) blinking, warning message, an audible warning and steering wheel vibration.

-	Driving target	Stopped target
Weak braking power	6~124 mph (10~200 km/h)	
Strong braking power	6~80 mph (10~130 km/h)	6~47 mph (10~75 km/h) (6~62 mph (10~100 km/h))*

*: If Forward Collision Avoidance Assist judges that avoiding a collision is difficult even by changing the driving lane. The function operate range may decrease due to surroundings of the vehicle. (if equipped)

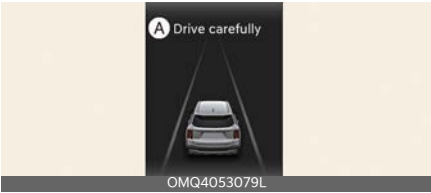
- Pedestrian or cyclist: 6~40 mph (10~65 km/h)

CAUTION

- The function operation range may decrease due to the front traffic condition or the surroundings of the vehicle.
- When driving at night, the performance of powered two-wheeler recognition is decreased, so the Forward Collision-Avoidance Assist system

may be temporarily limited or may not work.

Stopping vehicle and ending brake control



A: Drive carefully

When the vehicle is stopped due to emergency braking, the warning message will appear on the cluster.

For your safety, the driver should depress the brake pedal immediately and check the surroundings.

- Brake control will end after the vehicle is stopped by emergency braking for approximately 2 seconds.

* NOTICE

The warning sound during collision warning and emergency braking can be switched off by pressing the hazard warning light.

Junction Turning function

The Junction turning function is warned and controlled in the following way.

- Collision Warning
- Emergency Braking
- Stopping vehicle and ending brake control

Collision Warning



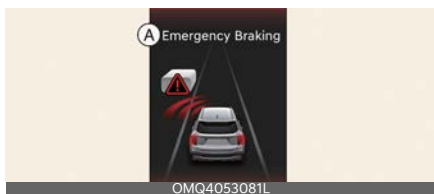
A: Collision Warning

Collision Warning can alert the driver with the Forward Safety warning light (⚠️) blinking, warning message, an audible warning and steering wheel vibration.

Collision warning will be activated in the following conditions:

- Your driving speed: Approximately 6-19 mph (10-30 km/h)
- Oncoming vehicle speed: Approximately 19-44 mph (30-70 km/h)
- Powered two-wheeler and cyclist speed: Approximately 9-44 mph (15-70 km/h)

Emergency Braking



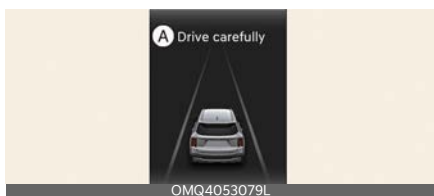
A: Emergency Braking

Emergency braking can alert the driver with the Forward Safety warning light (🚨) blinking, warning message, an audible warning and steering wheel vibration. The brake assist can be activated and to help avoid a collision with an oncoming vehicle and powered two-wheeler.

Emergency braking will be activated in the following conditions.

- Your driving speed: 6~19 mph (10~30 km/h)
- Oncoming vehicle speed: Approximately 19~44 mph (30~70 km/h)
- Powered two-wheeler and cyclist speed: Approximately 9~44 mph (15~70 km/h)

Stopping vehicle and ending brake control



A: Drive carefully

When the vehicle is stopped due to emergency braking, a warning message will appear on the cluster.

For your safety, the driver should depress the brake pedal immediately and check the surroundings.

- Brake control will end after the vehicle is stopped by emergency braking for approximately 2 seconds.

* NOTICE

The warning sound during collision warning and emergency braking can be switched off by pressing the hazard warning light.

* INFORMATION

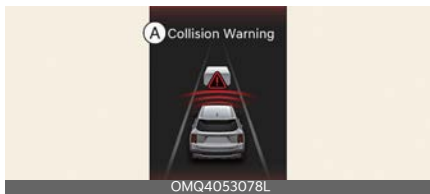
When turning right (left-hand drive) or left (right-hand drive) at an intersection, braking is assisted to reduce or avoid collisions if there is a collision risk with a cyclist approaching at the speed of 9 to 12 mph (15 to 20 km/h) from the opposite side.

Direct Oncoming function

The Direct Oncoming function is warned and controlled in the following way.

- Collision Warning
- Emergency Braking
- Stopping vehicle and ending brake control

Collision Warning



A: Collision Warning

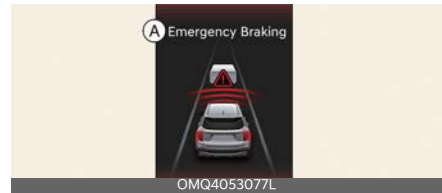
Collision warning can alert the driver with the Forward Safety warning light (🚗) blinking, warning message, an audible warning and steering wheel vibration.

The brake assist will be activated and to help avoid a collision with an oncoming vehicle and powered two-wheeler.

Collision Warning will be activated in following conditions.

- Your driving speed: Approximately 19~80 mph (30~130 km/h) (*if equipped: 6~80mph (10~130 km/h))
- Crossing vehicle speed: Approximately above 6 mph (10 km/h)

Emergency braking



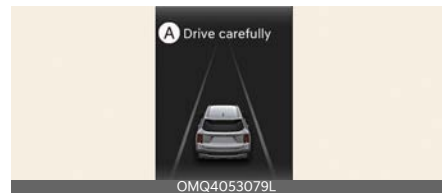
A: Emergency Braking

Emergency braking can alert the driver with the Forward Safety warning light (🚗) blinking, warning message, an audible warning and steering wheel vibration.

Emergency braking will be activated in following conditions.

- Your driving speed: Approximately 19~80 mph (30~130 km/h)
- Crossing vehicle speed: Approximately above 6 mph (10 km/h)

Stopping vehicle and ending brake control



A: Drive carefully

When the vehicle is stopped due to emergency braking, a warning message will appear on the cluster.

For your safety, the driver should depress the brake pedal immediately and check the surroundings.

- Brake control will end after the vehicle is stopped by emergency braking for approximately 2 seconds

⚠ CAUTION

- If your vehicle, powered two-wheeler or the oncoming vehicle is not driving straight, Front Oncoming function warning and control may be late or may not operate.
- When driving at night, the performance of t powered two-wheeler recognition is decreased, so the Forward Collision-Avoidance Assist system may be temporarily limited or may not work.

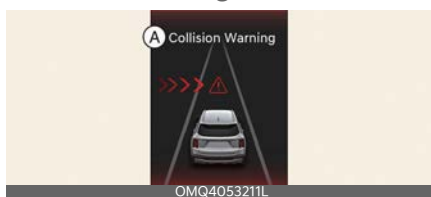
*** NOTICE**

The warning sound during collision warning and emergency braking can be switched off by pressing the hazard warning light.

Junction Crossing function (if equipped)

The Junction Crossing function is warned and controlled by the following level.

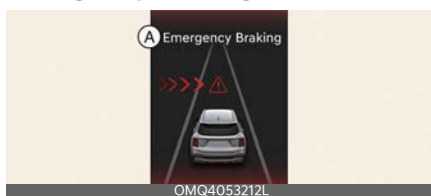
- Collision Warning
- Emergency Braking
- Stopping vehicle and ending brake control

Collision Warning**A: Collision Warning**

Collision Warning can alert the driver with the Forward Safety warning light (A) blinking, warning message, an audible warning and steering wheel vibration.

Forward collision warning will be activated in the following conditions.

- Your driving speed: Approximately 6-34 mph (10-55km/h)
- Crossing vehicle speed: Approximately 6-37 mph (10-60km/h)

Emergency Braking**A: Emergency Braking**

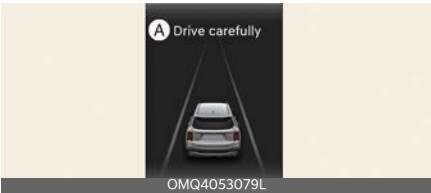
The Forward Safety warning light (A) blinking, warning message, an audible warning and the steering wheel vibration

that emergency braking will be assisted. The brake assist can be activated and help mitigate or avoid a collision with a vehicle, pedestrian cyclist, or powered two-wheeler.

Emergency braking will be activated in the following conditions.

- Your driving speed: Approximately 6-34 mph (10-55km/h)
- Crossing vehicle speed: Approximately 6-25 mph (10-40km/h)

Stopping vehicle and ending brake control



A: Drive carefully

When the vehicle is stopped due to emergency braking, a warning message will appear on the cluster.

For your safety, the driver should depress the brake pedal immediately and check the surroundings.

- Brake control will end after the vehicle is stopped by emergency braking for approximately 2 seconds.

 CAUTION

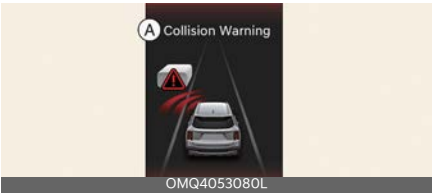
If the collision angle with the crossing vehicle is beyond a certain range, Junction Crossing Warning and control may be late or may not operate.

Lane-Change Oncoming function (if equipped)

The Lane-change oncoming function is warned and controlled in the following way.

- Collision Warning
- Emergency Steering

Collision Warning



A: Collision Warning

Collision warning can alert the driver with the Emergency steering warning light (🚨) blinking, warning message, an audible warning and steering wheel vibration.

Collision warning will be activated in the following conditions.

- Your driving speed: Approximately 25~90 mph (40~145 km/h)
- Oncoming vehicle or powered two-wheeler speed: Approximately above 6 mph (10 km/h)
- Relative speed: Approximately below 124 mph (200 km/h)

Emergency Steering



A: Emergency Steering

Emergency steering can alert the driver with the Emergency steering warning light (🚨) blinking, warning message, an audible warning and steering wheel vibration. The steering assist will be activated to help mitigate or avoid a collision with an oncoming vehicle or powered two-wheelers.

Emergency steering will be activated in following conditions.

- Your driving speed: Approximately 25~90 mph (40~145 km/h)
- Oncoming vehicle or powered two-wheeler speed: Approximately above 6 mph (10 km/h)
- Relative speed: Approximately below 124 mph (200 km/h)

Lane-Change Side function (if equipped)

Lane-change side function is warned and controlled in the following way.

- Collision Warning
- Emergency Steering

Collision Warning



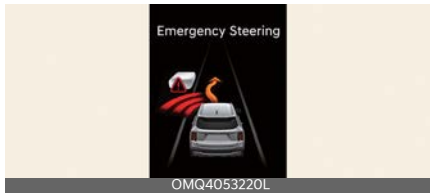
A: Collision Warning

Collision warning will alert the driver with the emergency steering warning light (🚨) blinking, warning message, an audible warning and steering wheel vibration. The warning light will appear on the outside rear-view mirror when the vehicle either on a right or left lane is detected from the rear.

Collision warning will be activated in following conditions.

- Your driving speed: Approximately 25~90 mph (40~145 km/h)

Emergency Steering



A: Emergency Steering

To warn the driver that emergency steering will be assisted, the emergency steering warning light (🚨) blinking, warning message will appear on the cluster, an audible warning will sound and the steering wheel will vibrate.

The warning light on the outside rear-view mirror will appear when the vehicle on both lanes is detected from the rear. Steering will be assisted to avoid collision.

Emergency steering will be activated in following conditions.

- Your driving speed: Approximately 25~90 mph (40~145 km/h)

⚠ CAUTION

- Lane-Change Side function does not operate if the oncoming vehicle from the front side is stopped.
- These functions do not work when a flanking car or two-wheeled vehicle is stationary.
- The detection range of the front-side and rear-side radars is based on the standard road width of ordinary roads. On narrow roads, warnings may be triggered by a vehicle or powered two-wheeler driving in the next lane. Conversely, on wide roads, radars may fail to recognize a vehicle or powered two-wheeler driving in the next lane and not issue warnings.

- The lateral approaching vehicle response function is deactivated in the following situations:
 - If you drive more than a certain distance into the next lane
 - If you move away from the direction where there is a risk of collision
 - If the steering wheel is rotated rapidly
 - If you step on the brake pedal
 - If Forward Collision-Avoidance Assist is activated
- After the lateral approaching vehicle response function has been triggered or after changing lanes, be sure to move into the center of the lane. If you continue to drive along the edge of the lane without moving to the lane's center, the lateral approaching vehicle response function will be deactivated.

* NOTICE

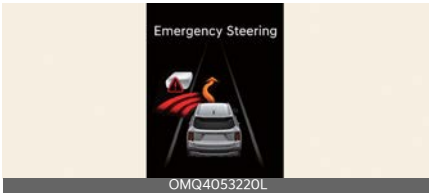
- If an additional accident is expected due to emergency steering, only a collision warning will be issued to notify of the danger.
- If the driver's seat is on the left, a collision warning may be issued when turning left; if the driver's seat is on the right, a collision warning may be issued when turning right.

Evasive Steering Assist function (if equipped)

The Evasive Steering Assist function is warned and controlled in the following way.

- Emergency Steering

Emergency Steering (Driver steering assist)



A: Emergency Steering

Emergency steering will alert the driver with the emergency steering warning light (🚨) blinking, warning message, an audible warning and steering wheel vibration.

If there is a risk of collision with a vehicle, a pedestrian, a cyclist, or a powered two-wheeler in front, the steering will be assisted to help prevent collision when the driver steers the vehicle to avoid collision.

Emergency Steering can be activated in following conditions.

- Your driving speed: Approximately 25~53 mph (40~85 km/h)

Emergency Steering (Evasive steering assist)



A: Emergency Steering

Emergency steering will alert the driver with the emergency steering warning light (🚨) blinking, warning message, an audible warning and steering wheel vibration.

If there is a risk of collision with a pedestrian, a cyclist, or a powered two-wheeler in front and your vehicle already exceeded the emergency braking speed limit, the steering will be assisted to help prevent collision when the driver steers the vehicle to avoid collision.

Emergency Steering will be activated in following conditions.

- Your driving speed: Approximately 40~47 mph (65~75 km/h)

⚠ CAUTION

- The steering wheel may turn automatically when emergency steering is operating.
- Emergency steering will automatically cancel when risk factors disappear. If necessary, the driver must steer the vehicle.
- Emergency steering may not operate or may cancel during operation if the steering wheel is held tight or steered in the opposite direction.
- When steering is assisted to avoid collision with a vehicle, pedestrian and cyclist, Evasive steering assist will be canceled if collisions with other objects (vehicle, powered two-wheeler, pedestrians, or cyclists) are expected.
- Evasive steering assist may not operate if space to avoid collision in the driving lane is insufficient.
- When driving at night, the performance of powered two-wheeler recognition is decreased, so the Forward Collision-Avoidance Assist system may be temporarily limited or may not work.

*** NOTICE**

For more details on warning messages, refer to "Collision Warning" on page 6-10.

⚠ WARNING

- For your safety, change the Settings after parking the vehicle at a safe location.
- Forward Collision-Avoidance Assist does not operate in all situations or cannot avoid all collisions.
- The driver should hold the responsibility to control the vehicle. Do not solely depend on Forward Collision-Avoidance Assist. Rather, maintain a safe braking distance, and if necessary, depress the brake pedal to reduce driving speed or to stop the vehicle.
- Never deliberately operate Forward Collision-Avoidance Assist on people, objects, etc. It may cause serious injury or death.
- Forward Collision-Avoidance Assist may not operate if the driver depresses the brake pedal to avoid collision.
- Depending on the road and driving conditions, Forward Collision-Avoidance Assist may warn the driver late or may not warn the driver.
- During Forward Collision-Avoidance Assist operation, the vehicle may stop suddenly injuring passengers and shifting loose objects. Always have the seat belt on and keep loose objects secured.
- If any other function's warning message is displayed or audible warning is generated, Forward Collision-Avoidance Assist warning message may not be displayed and audible warning may not be generated.
- You may not hear the warning sound of Forward Collision-Avoidance Assist if the surrounding is noisy.

- Forward Collision-Avoidance Assist may turn off or may not operate properly or may operate unnecessarily depending on the road conditions and the surroundings.
 - During emergency braking, braking control by Forward Collision-Avoidance Assist will automatically cancel when the driver excessively depresses the accelerator pedal or sharply steers the vehicle.
-

CAUTION

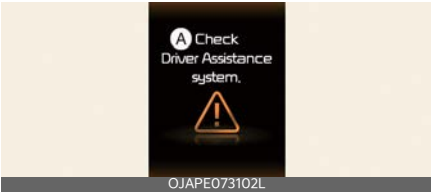
- The surroundings and pedestrians, cyclists and powered two-wheeler or other vehicles in front of you may affect the speed or detection range to operate Forward Collision-Avoidance Assist, resulting in Forward Collision-Avoidance Assist temporarily limited or disabled.
 - Forward collision avoidance assistance operates under specific conditions, taking into account the status of the oncoming vehicle and powered two-wheeler, driving direction, speed, and surrounding environment to judge the level of risk.
 - The function may be limited or deactivated in cases where the driving speed is excessively high or there is a significant speed difference between the oncoming vehicle powered two-wheelers.
 - When a collision with a surrounding vehicle is expected, Lane-change oncoming, Lane-change side and Evasive steering assist functions will only warn the driver.
-

NOTICE

- When a collision is imminent, the Forward Collision-Avoidance Assist may assist the driver with brakes if the driver fails to brake enough.
 - The images or colors on the instrument cluster may be different from those in this manual.
-

Forward Collision-Avoidance Assist malfunction and limitations

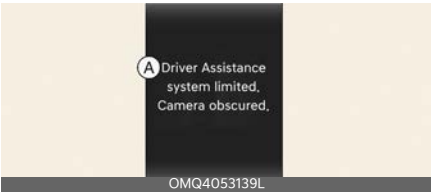
Forward Collision-Avoidance Assist malfunction



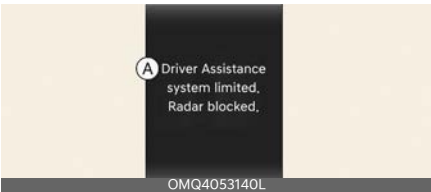
A: Check Driver Assistance system

When Forward Collision-Avoidance Assist is not working properly, the warning message will appear, and the Forward Safety warning light (⚠️), the Emergency Steering warning light (⚠️) and the Master warning light (⚠️) will appear on the cluster. Visit an authorized Kia dealer.

Forward Collision-Avoidance Assist disabled



A: Driver Assistance system limited. Camera obscured.



A: Driver Assistance system limited. Radar blocked.

When the windshield where the front view camera is located, front radar

cover, bumper or sensor is covered with foreign material, such as snow or rain, it can reduce the detecting performance and temporarily limit or disable Forward Collision-Avoidance Assist.

If this occurs a warning message, and the Forward Safety warning light (⚠️), the Emergency Steering warning light (⚠️) and the Master warning light (⚠️) will appear on the cluster.

Forward Collision-Avoidance Assist will operate properly when snow, rain or foreign material is removed.

If Forward Collision-Avoidance Assist does not operate properly after obstruction (snow, rain, or foreign material) is removed (including trailer, carrier, etc. from the rear bumper), have the vehicle inspected by an authorized Kia dealer.

⚠️ WARNING

Even though the warning message or warning light does not appear on the cluster, Forward Collision-Avoidance Assist may not properly operate.

*** NOTICE**

You can check it in the service message of the utility information view of the cluster display window.

Limitations of Forward Collision-Avoidance Assist

Forward Collision-Avoidance Assist may not operate normally, or it may operate unexpectedly under the following circumstances:

- A sensor or the its surroundings are contaminated or damaged
- The temperature around the front-view camera is extremely high or low
- The camera lens is obscured by a tinted, filmed or coated windshield, by damaged glass, or by foreign material (sticker, bug, etc.) on the glass
- There is moisture or ice on the windshield
- Heavy rain, snow, or fog obscure the camera's view
- The field of view of the front view camera is obstructed by sun glare
- Light is reflected off a wet road surface, such as a puddle in the road
- An object is placed on the instrument panel
- The surroundings are very bright (e.g., glare) or very dark (e.g., in a tunnel).
- The light changes suddenly, (e.g., when entering or exiting a tunnel)
- Dark conditions, when the headlamps are not on or are obscured, or the other vehicle has no taillights
- Only part of the vehicle, powered two-wheeler, pedestrian or cyclist is detected
- The vehicle in front is a bus, heavy truck, truck with an unusually shaped cargo, trailer, etc.
- The vehicle or powered two-wheeler in front has no taillights or its, taillights are in unusual positions
- The rear of the front vehicle is small or the vehicle does not look normal, such as when the vehicle is tilted or overturned Clarify
- The other vehicle's ground clearance is extremely low or high
- A vehicle, powered two-wheeler, pedestrian or cyclist suddenly cuts in front
- The front radar or its surroundings are impacted, damaged, or out of position
- The temperature around the front radar is high or low
- The temperature of the front radar is extremely high or low
- Driving in areas where there are few vehicles or structures (for example, desert, meadow, etc.)
- Driving near areas containing metal substances, such as a construction zone, railroad, metal plates on the road.
- A material is near that reflects very well on the front radar, such as a guardrail, nearby vehicle.
- The cyclist in front is on a bicycle made of material that does not reflect on the front radar's signal
- The vehicle or powered two-wheeler appears suddenly
- The view of the vehicle or powered two-wheeler is suddenly blocked
- The vehicle or powered two-wheeler in front suddenly changes a lane or suddenly reduces speed
- The vehicle in front is covered with snow
- You are departing or returning to the lane
- Unstable driving

- You are on a roundabout and the vehicle or powered two-wheeler in front is not detected
- You are continuously driving in a circle
- The vehicle or powered two-wheeler in front has an unusual shape
- The vehicle or powered two-wheeler in front is on a steep hill, out of range of the camera and radar



The illustration above shows the kinds of images that the front view camera and front radar are capable of detecting as a vehicle, powered two-wheeler, pedestrian and cyclist. The system may not detect a pedestrian or cyclist that is:

- leaning over or is not fully walking upright
- The pedestrian or cyclist is wearing clothing or equipment that makes it difficult to detect
- The pedestrian or cyclist in front is moving very quickly
- The pedestrian or cyclist in front is short or is posing a low posture
- The pedestrian or cyclist in front has impaired mobility or moving intersected with the driving direction
- There is a group of pedestrians, cyclists or a large crowd in front
- The pedestrian or cyclist is wearing clothing that easily blends into the background, making it difficult to detect
- The pedestrian or cyclist is difficult to distinguish from the similarly shaped structure in the surroundings
- You are driving by a pedestrian, cyclist, traffic signs, structures, etc., near the intersection
- When driving in the following places
 - Driving through steam, smoke, or shadow
 - Driving through a tunnel or iron bridge
 - Driving in large areas where there are few vehicles or structures (i.e., desert, meadow, suburb, etc.)
 - Driving in a car park
 - Driving through tollgate, construction areas, partially paved roads, bumpy roads, speed bumps, etc.
 - Driving near areas containing metal substances, such as a construction zone, railroad, etc.
 - Driving on an inclined road, curved road, etc.
 - Driving through a roadside with trees or street lights
 - Driving through a narrow road where trees or grass are overgrown
 - There is interference by electromagnetic waves, such as driving in an area with strong radio waves or electrical noise
- A snow chain, spare tire, or wheel of a different size is installed

Junction Crossing, Lane-Change Oncoming, Lane-Change Side, Evasive Steering Assist function (if equipped)

- The temperature around the front corner radar or rear corner radar is high or low
- A trailer or carrier is installed around the rear corner radar
- The front corner radar or rear corner radar is covered with snow, rain, dirt, etc.
- The bumper around the front corner radar or rear corner radar is covered with objects, such as a bumper sticker, bumper guard, bike rack, etc.
- The bumper around the front corner radar or rear corner radar is impacted, damaged or the radar is out of position
- The front corner radar or rear corner radar is blocked by other vehicles, walls or pillars
- Driving on a highway (or motorway) ramp
- Driving on a road where the guardrail or wall is in double structure
- The other vehicle or powered two-wheeler drives very close behind your vehicle, or the other vehicle passes by your vehicle in close proximity
- The speed of the other vehicle or powered two-wheeler is very fast that it passes by your vehicle in a short time
- Your vehicle passes by the other vehicle or powered two-wheeler
- Your vehicle has started at the same time as the vehicle or powered two-wheeler next to you and has accelerated
- The vehicle or powered two-wheeler in the next lane moves two lanes away from you, or when the vehicle two lanes away moves to the next lane from you
- A motorcycle or bicycle is detected
- A vehicle such as a flat trailer is detected
- A big vehicle such as a bus or truck is detected
- A small moving obstacle such as a pedestrian, animal, shopping cart or a baby pushchair is detected
- A vehicle with low height such as a sports car is detected
- The lane is difficult to see due to foreign material, such as rain, snow, dust, sand, oil and water puddles
- The color of the lane marking is not distinguishable from the road
- There are markings on the road near the lane or the markings on the road looks similar to the lane markings
- The shadow is on the lane marking by a median strip, trees, guardrail, noise barriers, etc.
- The lane number increases or decreases, or the lane markings are crossing
- There are more than two-lane markings on the road
- The lane markings are complicated or a structure substitutes for the lines, such as a construction area
- There are road markings, such as zig-zag lanes, crosswalk markings and road signs
- The lane suddenly disappears, such as at the intersection
- The lane is very wide or narrow
- There is a curb or road edges without a lane

- The vehicle in front is driving with one side on the lane marking
- The distance to the front vehicle is extremely short

* NOTICE

For more details on the limitations of detecting rear corner vehicles and cautions regarding the rear corner sensor, please refer to the "Blind-Spot Collision-Avoidance Assist (BCA) (if equipped)" on page 6-34.

⚠ WARNING

- Driving on a curved road



Forward Collision-Avoidance Assist may not detect other vehicles, powered two-wheelers, pedestrians or cyclists in front of you when driving on curved roads. This may result in no warning, braking assist or steering assist when necessary.

When driving on a curve, you must maintain a safe braking distance, and if necessary, steer the vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

Forward Collision-Avoidance Assist may detect a vehicle, powered two-wheeler, pedestrian or cyclist in the next lane or outside the lane when driving on a curved road.

If this occurs, Forward Collision-Avoidance Assist may unnecessarily warn the driver and control the brake or steering. Always check the traffic conditions around the vehicle.

- Driving on an inclined road



Forward Collision-Avoidance Assist may not detect other vehicles, powered two-wheelers, pedestrians or cyclists in front of you while driving uphill or downhill, adversely affecting the performance of the sensors.

This may not help warning, braking or steering when necessary.

Also, vehicle speed may rapidly decrease when a vehicle, powered two-wheeler, pedestrian or cyclist ahead is suddenly detected.

Always have your eyes on the road while driving uphill or downhill and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

- Changing lanes



[A]: Your vehicle

[B]: Lane changing vehicle or powered two-wheelers

When a vehicle or powered two-wheelers (B) moves into your lane from an adjacent lane, it cannot be detected by the sensor until it is in the sensor's detection range.

Forward Collision-Avoidance Assist may not immediately detect a vehicle or powered two-wheelers when a vehicle or powered two-wheelers changes lanes abruptly. In this case, you must maintain a safe braking distance, and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.



[A]: Your vehicle

[B]: Lane changing vehicle or powered

two-wheelers

[C]: Same lane vehicle

When a vehicle (B) in front of you merges out of the lane, Forward Collision-Avoidance Assist may not immediately detect a vehicle or powered two-wheelers (C) that is now in front of you. In this case, you must maintain a safe braking distance, and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

- Detecting a vehicle



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. Forward Collision-Avoidance Assist 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, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain distance.

⚠ WARNING

- When you are towing a trailer or another vehicle, we recommend that Forward Collision-Avoidance Assist is turned off due to safety reasons.
- Forward Collision-Avoidance Assist may operate if objects that are similar in shape or characteristics to vehicles, powered two-wheelers, pedestrians and cyclists are detected.
- Forward Collision-Avoidance Assist does not operate on carts, bicycles, suitcases, strollers, etc., which are pulled or pushed by pedestrians or cyclists.
- Forward Collision-Avoidance Assist may not operate normally if interfered by strong electromagnetic waves.
- Forward Collision-Avoidance Assist may not operate for 15 seconds after the vehicle is started, or the front view camera is initialized.

*** NOTICE**

For more details on the limitations of detecting rear corner vehicles and cautions regarding the rear corner sensor, please refer to "Blind-Spot Collision-Avoidance Assist (BCA) (if equipped)" on page 6-34.

This device complies with Part 15 of the FCC rules.

Operation is subject to the following three conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.
3. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

Radio frequency radiation exposure information:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 8 in (20 cm) between the radiator (antenna) and your body.

This transmitter must not be colocated or operating in conjunction with any other antenna or transmitter.

Lane Keeping Assist (LKA)

While driving over a certain speed, Lane Keeping Assist can detect lane markings (or road edges) and may warn you if your vehicle leaves the lane without using the turn signal and may assist with steering to prevent your vehicle departing from its travel lane.

Detecting sensor

Front view camera



The front view camera is used as a detecting sensor to detect lane markings (or road edges).

CAUTION

For more details on the precautions of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion)" on page 6-4.

Lane Keeping Assist settings

Lane Safety



1 Driver Assistance

2 Driving Safety

3 Lane Safety

With the vehicle on, select **Setup** → **Vehicle** → **Driver Assistance** → **Driving Safety** on the infotainment system.

- **Lane Safety:** When lane departure is detected, the system assists with steering to prevent leaving the lane, and if lane departure occurs, it alerts the driver with an audible sound and steering wheel vibration. If Lane safety is deselected, the indicator light () will be turned off.

WARNING

- Lane Keeping Assist does not control the steering wheel when the vehicle is driven in the middle of the lane.
- The driver should always be aware of the surroundings and steer the vehicle if **Lane safety** is deselected.

CAUTION

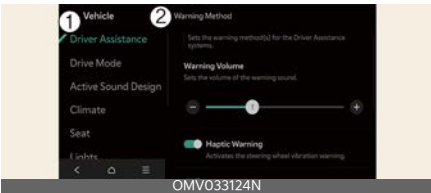
When the trailer's connector is plugged into your vehicle, Lane Keeping Assist automatically turns off. In this case, you cannot get help from Lane Keeping Assist. Pay extra attention when you drive when the function is inactive. (If a Kia genuine Trailer Kit that can deter-

mine whether a trailer is connected is used)

*** NOTICE**

By pressing the Lane Driving Assist button (🚗), the Lane Keeping Assist will be turned off, and it will also deactivate the Lane Safety.

Warning Methods



- 1 Driver Assistance
- 2 Warning Methods

Warning Methods can be set with the vehicle on. Select **Setup** → **Vehicle** → **Driver Assistance** → **Warning Methods** from the settings menu in the infotainment system to change the following settings:

- **Warning Volume:** Adjusts the volume of the warning sound.
- **Haptic Warning:** Activate the steering wheel vibration warning.
- **Lane Safety Audible Warning Off:** Turns off the Lane Safety Audible Warning, even when both warning volume and haptic warning are on.
- **Driving Safety Priority:** Lowers all other audio volumes when the Driving Safety system sounds a warning.

*** INFORMATION**

- Ensure that **Warning Methods** you have set may apply to the **Warning Methods** of other driver assistance systems.

- **Warning Methods** will maintain its last setting even if the vehicle is restarted.
- The setting menu may not be available for your vehicle depending on the vehicle features and specifications.
- The **Warning Volume** and **Haptic Warning** cannot be turned off at the same time. When one of the warning is turned off the other is activated.
- The **Lane Safety Audible Warning Off** can be set when both the Warning Volume and the Haptic Warning are on

Lane Keeping Assist operation
Turning Lane Keeping Assist On/Off



With the vehicle on, press and hold the Lane Driving Assist button (🚗) located on the steering wheel to turn on and off Lane Keeping Assist.

The gray or green indicator (🚗) on the cluster will light up if you turn on Lane Keeping Assist.

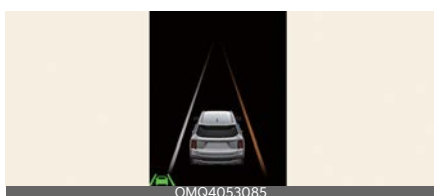
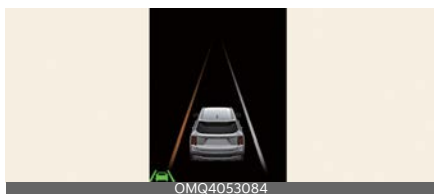
*** NOTICE**

- If Lane Keeping Assist is standby, the gray indicator (🚗) will appear on the cluster.
- if Lane Keeping Assist is ready to operate, the green indicator (🚗) will appear on the cluster.

Warning and control

The Lane Keeping Assist function is warned and controlled in the following way.

- Lane Departure Warning
- Lane Keeping Assist



Lane Departure Warning

Lane departure warning is issued through a green indicator light on the cluster, a blinking indicator in the direction you departed from, a warning sound, and the steering wheel will vibrate.

Lane Departure Warning will be activated in the following conditions.

- Your driving speed: Approximately 40~120 mph (60~200 km/h)

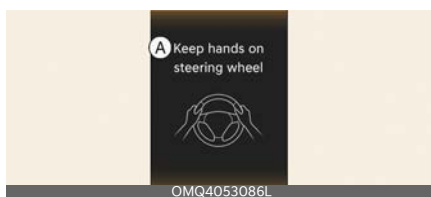
Lane Keeping Assist

The green () indicator light will blink on the cluster, and the steering wheel makes adjustments to keep vehicle inside the lane.

Lane Keeping Assist will be activated in the following conditions.

- Your driving speed: Approximately 40~120 mph (60~200 km/h)

Hands-off warning



A: Keep hands on steering wheel

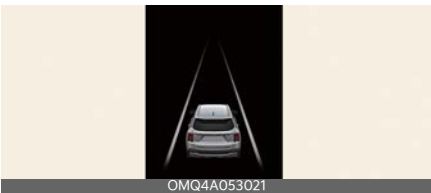
If the driver takes their hands off the steering wheel for several seconds, a warning message will appear on the cluster, and an audible warning will sound in stages.

⚠ WARNING

- The steering wheel may not be assisted if the steering wheel is held very tight or the steering wheel is steered over a certain degree.
- Lane Keeping Assist does not operate at all times. It is the responsibility of the driver to safely steer the vehicle and to maintain the vehicle in its lane.
- The hands-off warning message may appear late depending on road conditions. Always have your hands on the steering wheel while driving.
- If the steering wheel is held very lightly, the hands-off warning message may appear because Lane Keeping Assist may not recognize that the driver has their hands on the steering wheel.
- If you attach objects to the steering wheel, the hands-off warning may not work properly.

*** NOTICE**

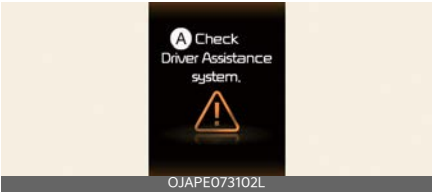
- Even though the steering is assisted by Lane Keeping Assist, the driver may control the steering wheel.
- The steering wheel may feel heavier or lighter when the steering wheel is assisted by Lane Keeping Assist than when it is not.
- If you select Highway Lane Change Assist, the green lane will appear on the cluster. (if equipped)



- The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the settings menu.
- For more details on the instrument cluster, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion)" on page 6-4.

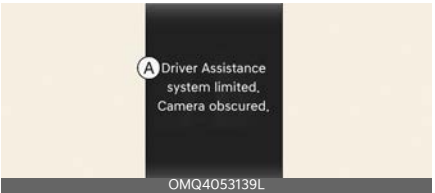
Lane Keeping Assist malfunction and limitations

Lane Keeping Assist malfunction



A: Check Driver Assistance system
When Lane Keeping Assist is not working properly, a warning message will appear, the Master warning light (⚠), and the yellow (🚗) indicator light will appear on the instrument cluster. If this occurs, have the function inspected by an authorized Kia dealer.

Lane Keeping Assist disabled



A: Driver Assistance system limited. Camera obscured.
If foreign materials such as snow or rain block the sensors or the windshield where the front view camera is located, the detecting performance may be reduced, resulting in Lane Keeping Assist temporarily limited or disabled. In this case, a warning message is displayed with the Master warning light (⚠) and the Lane safety warning lights (🚗) on the cluster. This is normal operation.

Lane Keeping Assist will operate properly after cleaning snow, rain or foreign materials. Always keep it clean.

If Lane Keeping Assist still does not operate properly after cleaning foreign materials (snow, rain, etc.) or removing obstructions (including trailer, carrier, etc. from the rear bumper), have the vehicle inspected by an authorized Kia dealer.

WARNING

- Even though a warning message or warning light does not appear on the cluster, Lane Keeping Assist may not properly operate.
- Even after starting the vehicle again, Lane Keeping Assist may not function properly when the obstruction or malfunction condition persists.

NOTICE

You can check it in the service message of the utility information view of the cluster display window.

Limitations of Lane Keeping Assist

Lane Keeping Assist may not operate properly or may operate unexpectedly under the following circumstances:

- The lane is contaminated or difficult to detect because:
 - The lane markings (or road edges) are covered with rain, snow, dirt, oil, etc.
 - The color of the lane marking (or road edges) is not distinguishable from the road
 - There are markings (or road edges) on the road near the lane or the markings (or road edges) on the road look similar to the lane markings (or road edges)
 - The lane marking (or road edges) is indistinct or damaged
 - When the shadow of objects around the road (central reservation, crash barrier, noise barrier, surrounding bushes, etc.) or the shadow of a vehicle covers the lane.
- The lane number increases or decreases, or the lane markings (or road edges) are crossing
- There are more than two lane markings (or road edges) on the road
- The lane markings (or road edges) are complicated or a structure substitutes for the lines, such as a construction area
- There are road markings, such as zig-zag lanes, crosswalk markings and road signs
- The lane suddenly disappears, such as at the intersection
- The lane (or road width) is very wide or narrow

- There is a road edge without a lane
- There is a boundary structure in the roadway, such as a tollgate, sidewalk, curb, etc.
- The distance to the front vehicle is extremely short or the vehicle in front is covering the lane marking (or road edge)

NOTICE

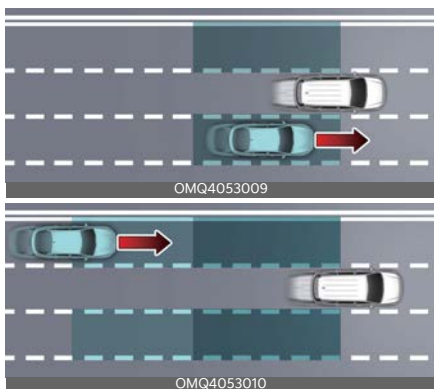
For more details on the limitations of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion)" on page 6-4.

WARNING

- The driver should hold the responsibility to safely drive and control the vehicle. Do not solely rely on Lane Keeping Assist and drive dangerously.
- The operation of Lane Keeping Assist can be canceled or not work properly depending on road conditions and surroundings. Always be cautious while driving.
- Refer to "Lane Keeping Assist malfunction and limitations" on page 6-31, if the lane is not detected properly.
- When you are towing a trailer or another vehicle, turn off Lane Keeping Assist for safety reasons.
- If the vehicle is driven at high speed, the steering wheel will not be controlled. The driver must always follow the speed limit when using Lane Keeping Assist.
- If any other function's warning message is displayed or audible warning is generated, Lane Keeping Assist warning message may not be displayed and audible warning may not be generated.
- You may not hear the warning sound of Lane Keeping Assist if the surrounding is noisy. Adjust the vehicle volume moderately and always pay attention to the surrounding.
- If you attach objects to the steering wheel, steering may not be assisted properly.
- Lane Keeping Assist may not operate for approximately 15 seconds after the vehicle is started, or the front view camera is initialized.
- Lane Keeping Assist will not operate when:
 - The turn signal or hazard warning flasher is turned on.
 - The vehicle is not driven in the center of the lane when Lane Keeping Assist is turned on or right after changing a lane.
 - ESC (Electronic Stability Control) or VSM (Vehicle Stability Management) is activated.
 - The vehicle is turning quickly on a curved road.
 - Vehicle speed is below 35 mph (55 km/h) or above 130 mph (210 km/h).
 - The vehicle makes sharp lane changes.
 - The vehicle brakes suddenly.
- Loading freight exceeding the maximum load or placing freight unevenly may undermine driving safety. This may also prevent Lane Keeping Assist from operating properly.

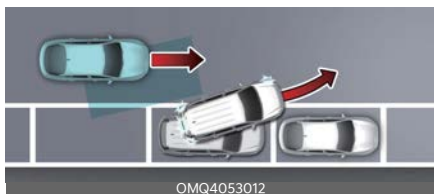
Blind-Spot Collision-Avoidance Assist (BCA) (if equipped)

Blind-Spot Collision-Avoidance Assist can detect approaching vehicles in the driver's blind spot areas and warn you of a possible collision with a warning light and a warning sound. If there is a collision risk when exiting a parallel space, Blind-Spot Collision-Avoidance Assist may assist with braking your vehicle to help avoid a collision.



Blind-Spot Collision-Avoidance Assist can help detect and informs the driver that a vehicle is approaching at high speed from the blind spot area.

Blind-Spot Collision-Avoidance Assist can help detect and informs the driver that a vehicle is in the blind spot.



When you are driving forward out of a parking space, if Blind-Spot Collision-Avoidance Assist determines that there is a collision risk with an approaching

vehicle in the blind spot, it can help avoid collision by applying the brake.

⚠ CAUTION

- The detecting range may vary depending on the speed of your vehicle. Even if there is a vehicle in the blind spot area, Blind-Spot Collision-Avoidance Assist may not warn you when you pass by at high speeds.
- Warning timing may vary depending on the speed of the vehicle approaching at high speed.

Detecting sensor

Rear corner radar



⚠ CAUTION

- Never disassemble the detecting sensor assembly, or cause any damage to it.
- If the detecting sensor or near the sensor has been damaged or impacted in any way, even though a warning message does not appear on the cluster, Blind-Spot Collision-Avoidance Assist may not operate properly. Have the function inspected by an authorized Kia dealer. Visit an authorized Kia dealer.
- If the detecting sensors have been replaced or repaired, have the vehicle inspected by an authorized Kia dealer.
- The genuine Kia rear bumpers which the Rear corner radar sensors are mounted are parts with quality and

- performance ensured. If arbitrarily applying paint on or changing the bumper, the Blind-Spot Collision-Avoidance Assist may not function properly. Use only Kia Genuine Parts or those of an equivalent standard with proven quality and performance to repair or replace the bumper.
- Do not apply license plate frame or objects, such as a bumper sticker, film or a bumper guard near the rear corner radar.
 - Blind-Spot Collision-Avoidance Assist may not work properly if the bumper has been replaced, or the surroundings of the rear corner radar has been damaged or paint has been applied.
 - If a trailer, carrier, etc., is installed, it may adversely affect the performance of the rear corner radar or Blind-Spot Collision-Avoidance Assist may not operate.

Blind-Spot Collision-Avoidance Assist settings

Blind-Spot Safety



- 1 Driver Assistance
- 2 Driving Safety
- 3 Blind-Spot Safety

With the vehicle on, select **Setup** → **Vehicle** → **Driver Assistance** → **Blind-Spot Safety** on the infotainment system.

- **Blind-Spot Safety:** Blind-Spot Collision-Avoidance Assist will warn and braking assist will be applied depending on the collision risk levels.



A: Blind-Spot Safety System is Off

When activating Blind-Spot Collision-Avoidance Assist or restarting the vehicle with this function activated, the warning light on the outside rear-view mirror will appear for approximately 3 seconds.

When the vehicle is restarted with Blind-Spot Collision-Avoidance Assist inactivated, a warning message will appear on the cluster.

⚠ WARNING

If **Blind-Spot Safety** is deselected, the driver should always be aware of the surroundings and drive safely.

⚠ CAUTION

When the trailer's connector is plugged into your vehicle, Blind-Spot Collision-Avoidance Assist automatically turns off. In this case, you cannot get help from Blind-Spot Collision-Avoidance Assist. Pay extra attention when you drive when the function is inactive. (If a Kia genuine Trailer Kit that can determine whether a trailer is connected is used)

*** NOTICE**

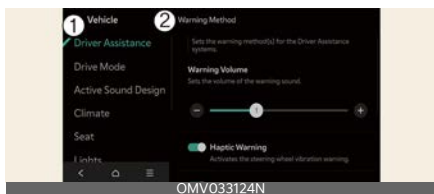
If the vehicle is restarted, Blind-Spot Collision-Avoidance Assist will maintain the last setting.

- **Driving Safety Priority:** Lowers all other audio volumes when the Driving Safety system sounds a warning.

*** INFORMATION**

- Ensure that **Warning Methods** you have set may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** will maintain its last setting even if the vehicle is restarted.
- The setting menu may not be available for your vehicle depending on the vehicle features and specifications.
- The **Warning Volume** and **Haptic Warning** cannot be turned off at the same time. When one of the warnings is turned off the other is activated.

Warning Methods



1 Driver Assistance

2 Warning Methods

Warning Methods can be set with the vehicle on. Select **Setup** → **Vehicle** → **Driver Assistance** → **Warning Methods** from the settings menu in the infotainment system to change the following settings:

- **Warning Volume:** Adjusts the volume of the warning sound.
- **Haptic Warning:** Activate the steering wheel vibration warning.

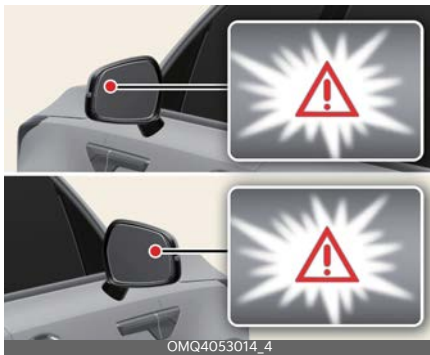
Blind-Spot Collision-Avoidance Assist operation

Blind-Spot Collision-Avoidance Assist will warn and control as following operation.

- Collision warning (while driving)
- Collision-avoidance assist (while departing)

Collision warning (while driving)

Type A



The warning light on the cluster, outside rear-view mirror and head-up display (if equipped) will appear when the vehicle on both lanes is detected from the rear. A vehicle is detected in the following conditions.

- Your driving speed: Above 12 mph (20 km/h)
- The speed of the vehicle in your blind spot area: Above 7 mph (10 km/h)

With the vehicle detection in use, Collision warning will alert the driver when the turn signal is activated to make a lane change with an adjacent car in the blind spot area.

- Collision warning will alert the driver with the warning light on the cluster, outside rear-view mirror and head-up

display (if equipped), audible warning and steering wheel vibration.

- When the turn signal is turned off or you move away from the lane, the collision warning will be canceled and the function will return to Vehicle detection state.

Collision Warning operate in the following conditions.

- Your driving speed: Above 25 mph (40 km/h)
- The speed of the vehicle in your blind spot area: Above 7 mph (10 km/h)

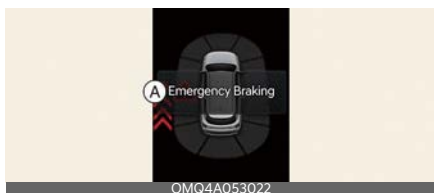
⚠ WARNING

- The detecting range of the front corner radar or rear corner radar is determined by a standard road width, therefore, on a narrow road, Blind-Spot Collision-Avoidance Assist may detect other vehicles two lanes over and warn you. In contrast, on a wide road, Blind-Spot Collision-Avoidance Assist may not be able to detect a vehicle driving in the next lane and may not warn you.
- When the hazard warning flasher is on, the collision warning by the turn signal will not operate.

*** NOTICE**

- If the driver's seat is on the left side, the collision warning may occur when you turn left. If the driver's seat is on the right side, the collision warning may occur when you turn right. Maintain a proper distance with the vehicles in the lane.
- Images or colors may be displayed differently depending on the instrument cluster specifications or theme.

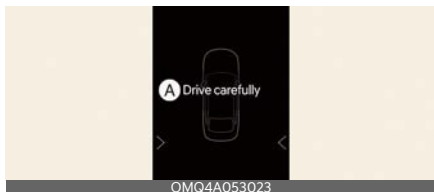
Collision-Avoidance Assist (while departing)



The warning light on the outside rear-view mirror, head-up display (if equipped), an audible warning and the steering wheel vibration will warn the driver of a collision. It assists in braking control to prevent a collision with a vehicle approaching from the blind spot area.

Collision-Avoidance Assist will be activated in the following conditions.

- Your driving speed: Below 2 mph (3 km/h)
- Speed of the vehicle in your blind spot area: Above 3 mph (5 km/h)



A: Drive carefully

When the vehicle is stopped due to emergency braking, a warning message will appear on the instrument cluster. For your safety, the driver should depress the brake pedal immediately and check the surroundings.

- Brake control will end after the vehicle is stopped by emergency braking for approximately 2 seconds.

⚠ WARNING

- For your safety, change the Settings after parking the vehicle at a safe location.
- If any other function's warning message is displayed or audible warning is generated, BCA warning message may not be displayed and audible warning may not be generated.
- You may not hear the warning sound of Blind-Spot Collision-Avoidance Assist if the surroundings are noisy. Always pay attention and keep the vehicle volume at a moderate level.
- Blind-Spot Collision-Avoidance Assist may not operate if the driver applies the brake pedal to avoid collision.
- When Blind-Spot Collision-Avoidance Assist is operating, braking control by the function will automatically cancel when the driver excessively depresses the accelerator pedal or sharply steers the vehicle.
- During Blind-Spot Collision-Avoidance Assist operation, the vehicle may stop suddenly injuring passengers and shifting loose objects. Always have the seat belt on and keep loose objects secured.
- Even if there is a problem with Blind-Spot Collision-Avoidance Assist, the vehicle's basic braking performance will operate properly.
- Blind-Spot Collision-Avoidance Assist may not operate in all situations, and even if it works, it may not be able to avoid collisions.
- Blind-Spot Collision-Avoidance Assist may warn the driver late or may not warn the driver depending on the road and driving conditions.

- The responsibility for safe operation lies with the driver. Do not rely solely on Blind-Spot Collision-Avoidance Assist for driving and always check the surrounding conditions directly and drive safely.
- Never operate Blind-Spot Collision-Avoidance Assist on people, animal, objects, etc. It may cause serious injury or death.

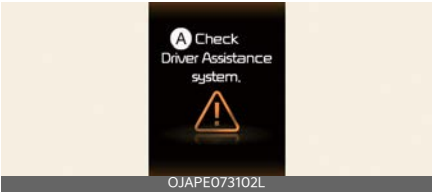
⚠ WARNING

The brake control may not operate properly depending on the status of ESC (Electronic Stability Control). There will only be a warning when:

- The ESC (Electronic Stability Control) warning light is on
- ESC (Electronic Stability Control) is engaged in a different function

Blind-Spot Collision-Avoidance Assist malfunction and limitations

Blind-Spot Collision-Avoidance Assist malfunction



A: Check Driver Assistance system.

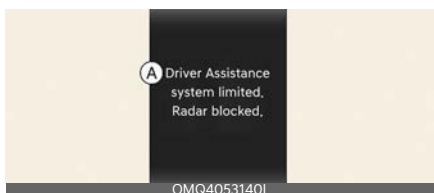
When Blind-Spot Collision-Avoidance Assist is not working properly, a warning message will appear on the cluster for several seconds, and the Master warning light (⚠) will appear on the cluster. If this occurs, have Avoidance Assist inspected by an authorized Kia dealer.



A: Check side-view mirror warning light

When the outside rear-view mirror warning light is not working properly, a warning message will appear on the cluster for several seconds, and the Master warning light (⚠) will appear on the cluster. If this occurs, have Blind Spot Collision Avoidance Assist inspected by an authorized Kia dealer.

Blind-Spot Collision-Avoidance Assist disabled



A: Driver Assistance system limited. Radar blocked.

Covering the rear bumper around the rear corner radar or sensor with foreign materials, such as snow or rain, or installing a trailer or carrier can reduce the detecting performance, resulting in Blind-Spot Collision-Avoidance Assist temporarily limited or disabled.

A warning message and the Master warning light (⚠) are displayed on the cluster display, but it does not indicate a malfunction of Blind-Spot Collision-Avoidance Assist.

Blind-Spot Collision-Avoidance Assist will operate properly when such foreign material or trailer, etc., is removed, and then the vehicle is restarted.

If Blind-Spot Collision-Avoidance Assist does not operate properly after it is removed, have Blind Spot Collision Avoidance Assist inspected by an authorized Kia dealer.

⚠ WARNING

- Even though the warning message does not appear on the cluster, Blind-Spot Collision-Avoidance Assist may not properly operate.
- Blind-Spot Collision-Avoidance Assist may not properly operate in an area (for example, open terrain) where any objects are not detected right after the vehicle is turned on, or when the

detecting sensor is blocked with foreign material right after the vehicle is turned on.

⚠ CAUTION

Turn off Blind-Spot Collision-Avoidance Assist to install or remove a trailer, carrier, or another attachment. Turn on Blind-Spot Collision-Avoidance Assist when finished.

* NOTICE

You can check it in the service message of the utility information view of the cluster display window.

Limitations of Blind-Spot Collision-Avoidance Assist

Blind-Spot Collision-Avoidance Assist may not operate properly, or it may operate unexpectedly under the following circumstances:

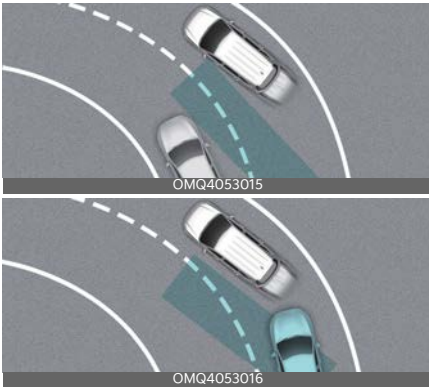
- There is inclement weather, such as heavy snow and rain.
- The detecting sensor is covered with snow, rain, dirt, etc.
- The ambient temperature around the detecting sensor is high or low.
- The detecting sensor is blocked while driving near a vehicle, pillar, or wall.
- Driving on a highway ramp or through a tollgate.
- The pavement abnormally contains metallic components (such as subway construction).
- There are fixed objects near the vehicle, such as sound barriers, guardrails, central dividers, entry barriers, street lights, signs, tunnels, walls, etc.
- Driving on a narrow road with overgrown foliage.
- Driving in wide open areas where there are few vehicles or structures
- Driving on a wet road surface.
- Other vehicles are moving very close behind you, or are passing.
- Other vehicles are moving very fast when passing.
- You pass another vehicle.
- You change lane.
- Your accelerate at the same time as a vehicle next to you.
- A vehicle in the next lane moves two lanes away from you, or when the vehicle two lanes away moves to the next lane from you
- A trailer or carrier is installed around the rear corner radar
- The bumper around the rear corner radar is covered with objects, such as a bumper sticker, bike rack, etc.
- The bumper around the rear corner radar is impacted, damaged or the radar is out of position
- Your vehicle height is low or high due to heavy loads, abnormal tire pressure, etc.
- When the following objects are detected:
 - A motorcycle or bicycle is detected
 - A vehicle such as a flat-bed trailer is detected
 - A large vehicle such as a bus or truck is detected
 - A moving obstacle such as a pedestrian, animal, shopping cart or baby carriage is detected
 - A vehicle with low height such as a sports car is detected

Pay extra attention. Braking control may not operate under the following conditions:

- The vehicle severely vibrates while driving over a bumpy road or pothole.
- Driving on a slippery surface such as snow, water, ice, etc.
- Tire pressure is low or is damaged
- The braking system has been modified
- When steering abruptly

⚠ WARNING

- Driving on a curved road



Blind-Spot Collision-Avoidance Assist may not operate properly on a curved road. Blind-Spot Collision-Avoidance Assist may not detect the vehicle in the next lane.

Always pay attention to road and driving conditions.

Blind-Spot Collision-Avoidance Assist may not operate properly when driving on a curved road.

Always pay attention to road and driving conditions while driving.

- Driving on an inclined road



- Driving where the road is merging/dividing



Blind-Spot Collision-Avoidance Assist may not operate properly when driving on a slope. The function may not detect the vehicle in the next lane or may incorrectly detect the ground or structure.

Always pay attention to road and driving conditions while driving.

Blind-Spot Collision-Avoidance Assist may not operate properly when driving where the road merges or divides. The function may not detect the vehicle in the next lane.

Always pay attention to road and driving conditions while driving.

- Driving where the heights of the lanes are different



Always pay attention to road and driving conditions while driving.

Blind-Spot Collision-Avoidance Assist may not operate properly when driving where the heights of the lanes are different. The function may not detect the vehicle on a road with different lane heights (underpass joining section, grade separated intersections, etc.).

WARNING

- When you are towing a trailer or another vehicle, make sure that you turn off Blind-Spot Collision-Avoidance Assist.
- Blind-Spot Collision-Avoidance Assist may not operate properly if interfered by strong electromagnetic waves.
- Blind-Spot Collision-Avoidance Assist may not operate for approximately 3 seconds after the vehicle is started, or the front view camera or rear corner radars are initialized.

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.

Safe Exit Warning (SEW) (if equipped)



While your vehicle is stopped, and if Safe Exit Warning detects a vehicle approaching the rear corner of your vehicle and a passenger opens a door, Safe Exit Warning may warn you with a warning message and a warning sound to help avoid a collision.

⚠ CAUTION

Warning timing may vary depending on the speed of the approaching vehicle.

Detecting sensor

Rear corner radar



⚠ CAUTION

For more details on the precautions of the rear corner radars, refer to "Blind-Spot Collision-Avoidance Assist (BCA) (if equipped)" on page 6-34.

Safe Exit Warning settings

Safe Exit



1 Driver Assistance

2 Driving Safety

3 Safe Exit

With the vehicle on, select **Setup** → **Vehicle** → **Driver Assistance** → **Driving Safety** → **Safe Exit** on the infotainment system.

⚠ WARNING

If **Safe Exit** is deselected, Safe Exit Warning cannot warn you. The driver should always be aware of unexpected and sudden situations that may occur.

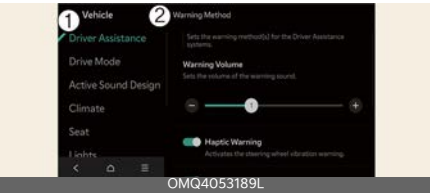
⚠ CAUTION

When the trailer's connector is plugged into your vehicle, Safe Exit Warning automatically turns off. In this case, you cannot get help from Safe Exit Warning. Pay extra attention when you drive when the function is inactive. (If a Kia genuine Trailer Kit that can determine whether a trailer is connected is used)

* NOTICE

If the vehicle is restarted, Safe Exit Warning will maintain the last setting.

Warning Methods



1 Driver Assistance

2 Warning Methods

Warning Methods can be set with the vehicle on. Select **Setup** → **Vehicle** → **Driver Assistance** → **Warning Methods** from the settings menu in the infotainment system to change the following settings:

- **Warning Volume:** Adjusts the volume of the warning sound. If you turn off the **Warning Volume**, for your safety, the function may warn you with a low volume.
- **Driving Safety Priority:** Lowers all other audio volumes when the Driving Safety system sounds a warning.

* INFORMATION

- Ensure that **Warning Methods** you have set may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** will maintain its last setting even if the vehicle is restarted.
- The setting menu may not be available for your vehicle depending on the vehicle features and specifications.

Safe Exit Warning operation

Warning and control

Safe Exit Warning warns the following actions.

- Collision warning when exiting vehicle

Collision warning when exiting vehicle



A: Collision Warning

The warning light on the outside rear view mirror will blink and a warning message will appear on the cluster, and an audible warning will sound.

- Safe Exit Warning will warn under the following circumstances:
 - Your driving speed: below 2 mph (3 km/h)
 - The speed of the approaching vehicle from the rear: above 4 mph (6 km/h)

⚠ WARNING

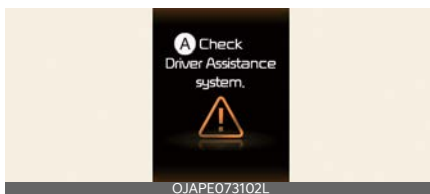
- For your safety, change the Settings after parking the vehicle at a safe location.
- If any other function's warning message is displayed or audible warning is generated, Safe Exit Warning message may not be displayed and audible warning may not be generated.
- You may not hear the warning sound of Safe Exit Warning if the surroundings are noisy.
- Safe Exit Warning does not operate in all situations or cannot prevent all collisions.
- Safe Exit Warning may warn the driver late or may not warn the driver depending on the vehicle and driving conditions. Always check vehicle surroundings.
- You and your passengers are responsible for accidents that occur while exiting the vehicle. Always check the surroundings before you exit the vehicle.

* NOTICE

- After the vehicle is turned off, Safe Exit Warning operates for approximately 3 minutes, but turns off immediately if the doors are locked.
- Images or colors may be displayed differently depending on the instrument cluster specifications or theme.

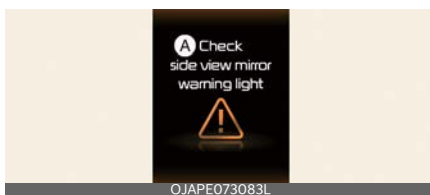
Safe Exit Warning malfunction and limitations

Safe Exit Warning malfunction



A: Check Driver Assistance system.

When Safe Exit Assist is not working properly, a warning message will appear on the instrument cluster for several seconds, and the Master warning light (⚠) will appear on the cluster. If there is a malfunction in Safe Exit Assist, a warning message will be displayed on the instrument cluster display for a certain period, and the Master warning light (⚠) will turn on. If it does not work properly, visit an authorized Kia dealer.



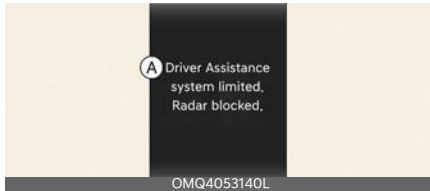
A: Check side-view mirror warning light

When the outside rear-view mirror warning light is not working properly, a warning message will appear on the instrument cluster for several seconds, and the Master warning light (⚠) will appear on the instrument cluster. Have Safe Exit Assist inspected by an authorized Kia dealer.

Safe Exit Assist disabled

When the rear bumper around the rear corner radar or sensor is covered with

foreign material, such as snow, rain, a trailer or carrier, it can reduce the detecting performance and temporarily limit or disable Safe Exit Assist.



A: Driver Assistance system limited. Radar blocked.

A warning message and the Master warning light (A) are displayed on the instrument cluster, but it does not indicate a malfunction of Safe Exit Assist.

Safe Exit Assist will operate properly when such foreign material or trailer, etc., is removed, and then the vehicle is restarted.

If Safe Exit Assist does not operate properly after it is removed, visit an authorized Kia dealer.

⚠ WARNING

- Even though a warning message does not appear on the instrument cluster, Safe Exit Assist may not properly operate.
- Safe Exit Assist may not properly operate in an open terrain where any objects are not detected or when the detecting sensor is blocked with foreign material immediately after the vehicle is turned on, or when the detecting sensor is blocked with foreign material.

*** NOTICE**

You can check it in the service message of the utility information view of the instrument cluster display window.

⚠ CAUTION

Turn off Safe Exit Assist to install or remove a trailer, carrier, or another attachment. Turn on Safe Exit Assist when finished.

Limitations of Safe Exit Warning

Safe Exit Warning may not operate normally, or Safe Exit Warning may operate unexpectedly under the following conditions:

- Exiting the vehicle where there is overgrown foliage
- Exiting the vehicle where the road is wet
- An approaching vehicle is moving very fast or very slow

* NOTICE

For more details on the precautions of the rear corner radars, refer to "Blind-Spot Collision-Avoidance Assist (BCA) (if equipped)" on page 6-34.

⚠ WARNING

- Safe Exit Warning may not operate normally if interfered with by strong electromagnetic waves.
- Safe Exit Warning may not operate for approximately 3 seconds after the vehicle is restarted, or the rear corner radars are initialized.
- Even after starting the vehicle again, Safe Exit Warning may not function properly if the obstruction or malfunction condition persists.

Safe Exit Assist (SEA) (if equipped)



While your vehicle is stopped, and if Safe Exit Warning detects a vehicle approaching the rear corner of your vehicle and a passenger opens a door, Safe Exit Warning may warn you with a warning message and a warning sound to help avoid a collision.



When the electronic child safety lock button is in the LOCK position and an approaching vehicle from the rear is detected, the electronic child safety lock (👤) button will not unlock even if the driver presses the button to unlock the rear doors.

⚠ CAUTION

Warning timing may vary depending on the speed of approaching vehicle.

Detecting sensor

Rear corner radar



OMQ4A053034

CAUTION

For more details on the precautions of the rear corner radars, refer to "Blind-Spot Collision-Avoidance Assist (BCA) (if equipped)" on page 6-34.

Safe Exit Assist settings

Safe Exit



1 Driver Assistance

2 Safe Exit

With the vehicle on, select **Setup** → **Vehicle** → **Driver Assistance** → **Driving Safety** → **Safe Exit** on the infotainment system.

WARNING

The driver should always be aware of his or her surroundings. If **Exit Safety** is deselected, Safe Exit Assist cannot assist you.

CAUTION

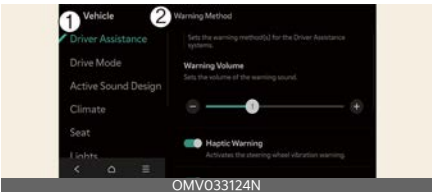
When the trailer's connector is plugged into your vehicle, Safe Exit Assist automatically turns off. In this case, you can-

not get help from Safe Exit Assist. Pay extra attention when you drive when the function is inactive. (If a Kia genuine Trailer Kit that can determine whether a trailer is connected is used)

* NOTICE

If the vehicle is restarted, Safe Exit Assist will maintain the last setting.

Warning Methods



1 Driver Assistance

2 Warning Methods

Warning Methods can be set with the vehicle on. Select **Setup** → **Vehicle** → **Driver Assistance** → **Warning Methods** from the settings menu in the infotainment system to change the following settings:

- **Warning Volume:** Adjusts the volume of the warning sound. If you turn off the **Warning Volume**, the function may warn you with a low volume.
- **Driving Safety Priority:** Lowers all other audio volumes when the Driving Safety system sounds a warning.

* INFORMATION

- Ensure that **Warning Methods** you have set may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** will maintain its last setting even if the vehicle is restarted.

- The setting menu may not be available depending on the vehicle features and specifications.

Safe Exit Assist operation

Warning and control

Safe Exit Assist warns under the following actions.

- Collision warning when exiting vehicle
- Safe Exit Assist linked to Electronic child safety lock

Collision warning when exiting vehicle



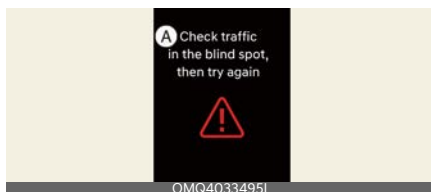
1 Collision Warning

The warning light on the outside rear-view mirror will blink and a warning message will appear on the instrument cluster, and an audible warning will sound.

- Collision warning when exiting vehicle will warn under the following circumstances:

- Your driving speed: below 2 mph (3 km/h)
- The speed of an approaching vehicle from the rear is above 4 mph (6 km/h)

Safe Exit Assist linked to Electronic child safety lock



A: Check traffic in the blind spot, then try again

The warning light on the outside rear-view mirror will blink and a warning message will appear on the instrument cluster.

- Safe Exit Assist linked to Electronic child safety lock will operate in the following conditions:
 - Your driving speed is below 2 mph (3 km/h)
 - The speed of an approaching vehicle from the rear: above 4 mph (6 km/h)

* NOTICE

For more details on Electronic child safety lock button, refer to "Electronic child safety lock system (if equipped)" on page 4-19.

⚠ WARNING

If the driver presses the Electronic child safety lock button again within 10 seconds after a warning message appears, Safe Exit Assist determines that the driver has unlocked the doors acknowledging the rear status. The electronic

child safety lock will turn off (button indicator OFF) and the rear doors will unlock. Always check the surroundings before turning off the Electronic child safety lock button.

* NOTICE

If a rear door is open from the outside, it will open regardless of Safe Exit Assist operation.

⚠ WARNING

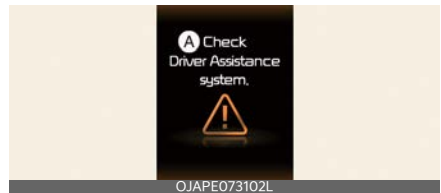
- Change the Settings after parking at a safe location.
- If any other function's warning message is displayed or audible warning is generated, Safe Exit Assist warning message may not be displayed and audible warning may not be heard.
- You may not hear the warning sound in surroundings.
- Safe Exit Assist does not operate in all situations or cannot prevent all collisions.
- Safe Exit Assist may warn the driver late or may not warn the driver depending on the road and driving conditions. Always check vehicle surroundings.
- You and your passengers are responsible for accidents that occur while exiting the vehicle. Always check the surroundings before you exit the vehicle.
- Never deliberately operate Safe Exit Assist. Doing so may lead to serious injury or death.

* NOTICE

- After the vehicle is turned off, Safe Exit Assist operates approximately for 3 minutes, but turns off immediately if the doors are locked.
- The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the settings menu.

Safe Exit Assist malfunction and limitations

Safe Exit Assist malfunction



A: Check Driver Assistance system.

When Safe Exit Assist is not working properly, a warning message will appear on the instrument cluster for several seconds, and the Master warning light (⚠) will appear. If there is a malfunction in Safe Exit Assist, a warning message will be displayed on the instrument cluster for a certain period, and the Master warning light (⚠) will turn on. If it does not work properly, Have Safe Exit Assist inspected by an authorized Kia dealer.



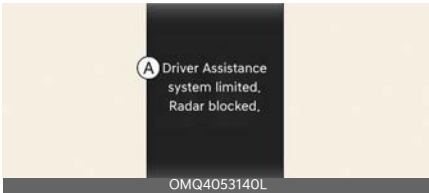
A: Check side-view mirror warning light

When the outside rear-view mirror warning light is not working properly, a warning message will appear on the instrument cluster for several seconds, and the Master warning light (⚠) will appear on the cluster.

Have Safe Exit Assist inspected by an authorized Kia dealer.

Safe Exit Assist disabled

When the rear bumper around the rear corner radar or sensor is covered with foreign material, such as snow, a trailer or carrier, it can reduce the detecting performance and temporarily limit or disable Safe Exit Assist.



A: Driver Assistance system limited. Radar blocked.

A warning message and the Master warning light (⚠) are displayed on the instrument cluster, but does not indicate a malfunction of Safe Exit Assist.

Safe Exit Assist will operate properly when such foreign material is removed and the vehicle is restarted.

If Safe Exit Assist does not operate properly after it is removed, have the vehicle inspected by an authorized Kia dealer.

⚠ WARNING

- Even though a warning message does not appear on the instrument cluster, Safe Exit Assist may not properly operate.
- Safe Exit Assist may not properly operate in an open area where objects are not detected or when the detect-

ing sensor is blocked with foreign material immediately after the vehicle is turned on.

* NOTICE

You can check it in the service message of the utility information view of the instrument cluster display window.

⚠ CAUTION

Turn off Safe Exit Assist to install or remove a trailer, carrier, or other attachment. Turn on Safe Exit Assist when finished.

Limitations of Safe Exit Assist

Safe Exit Assist may not operate properly, or it may operate unexpectedly under the following circumstances:

- Existing the vehicle where there is overgrown foliage
- Exiting the vehicle where the road is wet
- An approaching vehicle is moving very fast or very slow

*** NOTICE**

For more details on the limitations of the rear corner radar, refer to "Blind-Spot Collision-Avoidance Assist (BCA) (if equipped)" on page 6-34.

⚠ WARNING

- Safe Exit Assist may not operate properly if interfered with by strong electromagnetic waves.
- Safe Exit Assist may not operate for approximately 3 seconds after the vehicle is started, or the rear corner radars are initialized.
- Even after starting the engine again, Safe Exit Warning not function properly when the obstruction or malfunction condition persists.
- Even after starting the vehicle again, Safe Exit Assist may not function properly when the obstruction or malfunction condition persists.

Manual Speed Limit Assist (MSLA)



- 1 Speed Limit indicator
- 2 Set speed

You can set the speed limit when you do not want to drive over a specific speed. If you drive over the preset speed limit, Manual Speed Limit Assist operates (set speed limit will blink and chime will sound) until the vehicle speed returns within the speed limit.

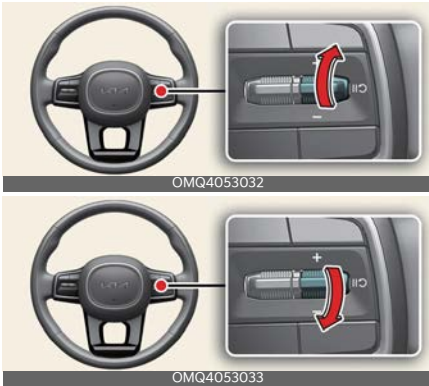
Manual Speed Limit Assist operation

Setting speed limit

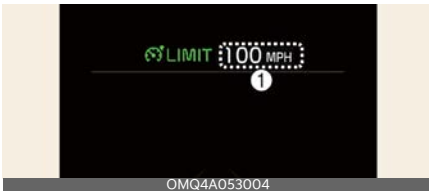
1. Press and hold Driving Assist (⚡) button at the desired speed. The Speed Limit (LIMIT) indicator will appear on the cluster.



2. Push the (+) switch up or (-) switch down and release it at the desired speed.
Push the (+) switch up or (-) switch down and hold it. The speed will increase or decrease to the nearest multiple of 5 mph (10 in km/h) at first, and then increase or decrease by 5 mph (10 km/h).



3. The set speed limit will be displayed on the instrument cluster.
If you would like to drive over the pre-set speed limit, depress the accelerator pedal.
The set speed limit will blink and chime will sound until you return the vehicle speed to the set limit.



* NOTICE

- When the accelerator pedal is not depressed beyond the pressure point, vehicle speed will maintain the set speed.
- The set speed may differ depending on the vehicle specifications. You may not increase the set speed above the maximum set speed.

Temporarily pausing Manual Speed Limit Assist



Press the (|||) switch to temporarily pause the set speed limit. The set speed limit will turn off but the Speed Limit (LIMIT) indicator will stay on.

Resuming Manual Speed Limit Assist



To resume Manual Speed Limit Assist after the function was paused, operate the (+), (-), (|||) switch.

If you push the (+) switch up or (-) switch down, vehicle speed will be set to the current speed on the instrument cluster.

If you press the (|||) switch, vehicle speed will resume to the preset speed.

Turning off Manual Speed Limit Assist



Press the Driving Assist (🚗) button to turn Manual Speed Limit Assist off. The Speed Limit (🚗LIMIT) indicator will go off.

⚠️ WARNING

Take the following precautions when using Manual Speed Limit Assist:

- Always set the vehicle speed under the posted speed limit.
- Keep Manual Speed Limit Assist off when the function is not in use, to avoid inadvertently setting a speed. Check that the Speed Limit (🚗LIMIT) indicator is off.
- Manual Speed Limit Assist does not substitute for proper and safe driving. It is the responsibility of the driver to always drive safely and to be aware of unexpected and sudden situations. Pay attention to the road conditions at all times.

Intelligent Speed Limit Assist (ISLA) (if equipped)

Intelligent Speed Limit Assist uses information from the detected road signs and uses the navigation system data to inform you of the posted speed limit and to help you maintain it.

⚠️ CAUTION

- Intelligent Speed Limit Assist may not operate properly if the function is used in other countries.
- If a navigation is applied to your vehicle, the navigation needs to be regularly updated for Intelligent Speed Limit Assist to operate properly.

Detecting sensor

Front view camera



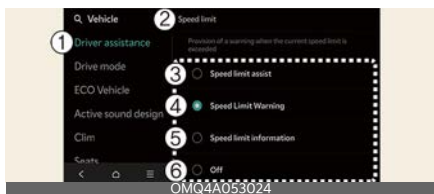
Refer to the picture above for the detailed location of the detecting sensor.

⚠️ CAUTION

For more details on the precautions of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion)" on page 6-4.

Intelligent Speed Limit Assist settings

Speed Limit



1 Driver Assistance

2 Speed Limit

3 Speed Limit Assist

4 Speed Limit Warning

5 Speed Limit Information

6 Off

With the vehicle on, select **Setup** → **Vehicle** → **Driver Assistance** → **Speed Limit** on the infotainment system.

- **Country Selection:** If navigation is not enabled, you can manually select the country from the menu. Please select the country you are currently driving in for proper functionality.
- **Speed Limit Assist:** Intelligent Speed Limit Assist will inform the driver of speed limit and additional road signs and warn the driver when the vehicle is driven faster than the speed limit. Intelligent Speed Limit Assist will also inform the driver to change set speed of Manual Speed Limit Assist or Smart Cruise Control to help the driver stay within the speed limit.
- **Speed Limit Warning:** Intelligent Speed Limit Assist will inform the driver of speed limit and additional road signs. Intelligent Speed Limit Assist will also warn the driver when the vehicle is driven faster than the posted speed limit.

- **Speed Limit information:** Provides information on speed limits and additional signs.
- **Off:** Intelligent Speed Limit Assist will turn off.

⚠ WARNING

Be sure to park in a safe place before setting Intelligent Speed Limit Assist.

* NOTICE

- Speed limit and Speed warning function operates based on an offset value added to the speed limit. Set the offset value to '0' to change or warn the speed according to the posted speed limit.
- The setting of Speed limit offset is not reflected in Navigation-based Smart Cruise Control.

Intelligent Speed Limit Assist operation

Warning and control

Intelligent Speed Limit Assist is warned and controlled by the following level.

- Displaying speed limit
- Speeding warning
- Changing set speed
- Auto set speed change

* NOTICE

- Intelligent Speed Limit Assist warning and control are described based on the Offset adjust to '0'. For details on Offset setting, refer to "Intelligent Speed Limit Assist (ISLA) (if equipped)" on page 6-55.

Displaying speed limit



Speed limit information is displayed on the instrument cluster.

*** NOTICE**

- If speed limit information of the road cannot be recognized, '---' sign will be displayed. Please refer to "Intelligent Speed Limit Assist malfunction and limitations" on page 6-58 if the road signs are difficult to recognize.
- Intelligent Speed Limit Assist provides additional road sign information in addition to speed limit. Additional road sign information provided may vary according to your region.
- The images and colors in the instrument cluster may differ depending on the instrument cluster type or theme selected from the settings menu.

Speeding warning



When driving at a speed higher than the displayed speed limit, the red speed limit indicator will appear.

Changing set speed



If the speed limit of the road changes during the operation of Manual Speed Limit Assist or Smart Cruise Control, an arrow in the direction of up or down is displayed to inform the driver that the set speed needs to be changed. The driver can change the set speed according to the speed limit by using the (+) or (-) switch on the steering wheel.

Auto set speed change (if equipped with the navigation)



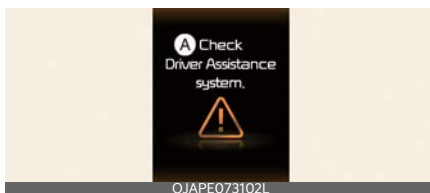
When operating Manual Speed Limit Assist or Smart Cruise Control, if the speed set by the driver is the same as the speed limit on the road, the set speed is automatically adjusted accordingly the speed limit afterwards. The auto set speed change function operates on roads with a speed limit of above 45 mph (70 km/h). When the function is activated, the set speed on the instrument cluster is displayed in green.

⚠ WARNING

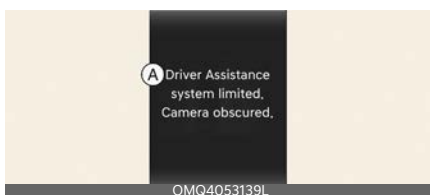
- When driving at a speed lower than the speed limit, set the offset under '0', or press (-) switch to decrease your set speed.
- Even after changing the set speed according to the speed limit of the road, the vehicle can still be driven over the speed limit. If necessary, depress the brake pedal to reduce your speed.
- If the posted speed limit is under 20 mph (30 km/h), the set speed change and auto set speed change function will not work.
- Intelligent Speed Limit Assist operates using the speed unit in the instrument cluster set by the driver. If the speed unit is set to a unit other than the speed unit used in your country, Intelligent Speed Limit Assist may not operate properly. (Except Australia/Russia)

*** NOTICE**

- For more details on Manual Speed Limit Assist operation, refer to "Manual Speed Limit Assist (MSLA)" on page 6-53.
- For more details on Smart Cruise Control operation, refer to "Smart Cruise Control (SCC)" on page 6-66.

Intelligent Speed Limit Assist malfunction and limitations**Intelligent Speed Limit Assist malfunction****A: Check Driver Assistance system.**

When Intelligent Speed Limit Assist is not working properly, a warning message will appear on the cluster for several seconds, and the Master warning light (⚠) the Intelligent Speed Limit Assist indicator light (⏏) will appear on the cluster. If this occurs, have the vehicle inspected by an authorized Kia dealer.

Intelligent Speed Limit Assist disabled**A: Driver Assistance system limited. Camera obscured.**

When the windshield where the front view camera is located is covered with foreign material, such as snow or rain, it can reduce the detecting performance and temporarily limit or disable Intelligent Speed Limit Assist. If this occurs, a warning message and the Intelligent Speed Limit Assist indicator light (⏏) will appear on the cluster.

Intelligent Speed Limit Assist will operate properly when snow, rain or foreign material is removed. Always keep it clean.

If Intelligent Speed Limit Assist does not operate properly after it is removed, have your vehicle checked by an authorized Kia dealer.

WARNING

- Even though a warning message or warning light does not appear on the cluster, Intelligent Speed Limit Assist may not operate properly.
- Even if restarting the vehicle with the sensors blocked or malfunctioned, Intelligent Speed Limit Assist may not properly operate as the function maintains the broken/covered state.

NOTICE

You can check it in the service message of the utility information view of the cluster display window.

Limitations of Intelligent Speed Limit Assist

Intelligent Speed Limit Assist may not operate properly, or it may operate unexpectedly under the following circumstances:

- The road sign is contaminated or indistinguishable
 - The road sign is difficult to see due to bad weather, such as rain, snow, fog.
 - The road sign is partially obscured by surrounding objects or shadow
- The road signs do not conform to the standard
 - The text or picture on the road sign is different from the standard
- The road sign is installed between the main line and the exit road or between diverging roads
- A sign is attached to another vehicle
- The distance between the vehicle and the road signs is far
- The vehicle encounters illuminating road signs
- Intelligent Speed Limit Assist incorrectly recognizes numbers or pictures in the street signs or other signs as the speed limit
- A road sign near the road you are driving is detected
- Multiple signs are installed close together
- The minimum speed limit sign is mis-recognized
- The minimum speed limit sign is on the road
- The brightness changes suddenly, for example when entering or exiting a tunnel or passing under a bridge
- Headlamps are not used or the brightness of the headlamps are weak at night or in the tunnel
- The field of view of the front view camera is obstructed by sun glare
- Road signs are difficult to recognize due to the reflection of sunlight, street lights, or oncoming vehicles
- The navigation information or GPS information contains errors.
- The driver does not follow the guide of the navigation.
- Driving on a road that is sharply curved or continuously curved
- Driving through speed bumps, or driving up and down or left to right on steep inclines

- The vehicle is shaking heavily
- Driving on a new road
- When driving on a road under construction.
- When the navigation software updates during driving

⚠ WARNING

- Intelligent Speed Limit Assist is a supplemental function that can help the driver to comply with the speed limit on the road, and may not display the correct speed limit or control the driving speed properly.
- It is the responsibility of the driver to follow the speed limit.
- It may not operate for 15 seconds after the vehicle is started, or the front view camera is initialized or restarted.

*** NOTICE**

For more details on the limitations of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion)" on page 6-4.

Driver Attention Warning (DAW)

Inattentive Driving Warning function

Driver Attention Warning monitors your driving pattern while driving. When the driver's attention level is below a certain level, Driver Attention Warning recommends a break to help with safe driving.

Leading Vehicle Departure Alert function

Leading Vehicle Departure Alert function will inform the driver when a detected vehicle in front departs from a stop.

Detecting sensor

Front view camera



Refer to the picture above for the detailed location of the detecting sensor.

⚠ CAUTION

- Always keep the front view camera in good condition to maintain optimal performance of DAW.
- For more details on the precautions of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion)" on page 6-4.

Driver Attention Warning settings

Leading Vehicle Departure Alert



- 1 Driver Assistance
- 2 Driver Attention Warning
- 3 Leading Vehicle Departure Alert

With the vehicle on, select **Setup** → **Vehicle** → **Driver Assistance** → **Driver Attention Warning** → **Leading Vehicle Departure Alert** on the infotainment system.

- **Leading Vehicle Departure Alert:** Driver Attention Warning will inform the driver when a detected vehicle in front departs from a stop.

Driver Attention Warning operation

Inattentive Driving Warning function

The basic function of Driver Attention Warning is as follows.

- Taking a break

Taking a break



A: Consider taking a break

The Inattentive Driving Warning light (☕) blinking and warning message will

appear on the instrument cluster and an audible warning will sound to suggest that the driver take a break, when the driver's attention level is below a certain level.

- Driver Attention Warning will not suggest a break when the total driving time is shorter than 4 minutes or 4 minutes has not passed after the last break was suggested.

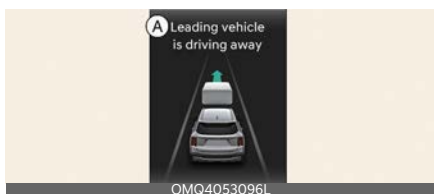
WARNING

For your safety, change the Settings after parking the vehicle at a safe location.

CAUTION

- Driver Attention Warning may suggest a break depending on the driver's driving pattern or habits, even if the driver doesn't feel fatigue.
- Driver Attention Warning is a supplemental function and may not be able to determine whether the driver is inattentive.
- If you feel fatigued, you should take a break at a safe location, even though there is no break suggestion by Driver Attention Warning.

Leading Vehicle Departure Alert function



A: Leading vehicle is driving away

When a detected vehicle in front departs from a stop, Leading Vehicle Departure Alert will inform the driver by displaying a warning message on the cluster and an audible warning will sound.

WARNING

- If any other function's warning message is displayed or audible warning is generated, Leading Vehicle Departure Alert's warning message may not be displayed and audible warning may not be generated.
- The driver should hold the responsibility to safely drive and control the vehicle.

CAUTION

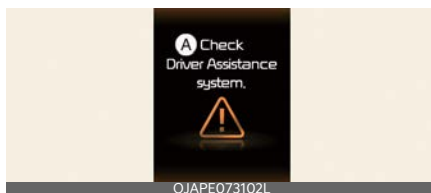
- Leading Vehicle Departure Alert is a supplemental function and may not alert the driver whenever the front vehicle departs from a stop.
- Always check the front of the vehicle and road conditions before departure.

NOTICE

The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the settings menu.

Driver Attention Warning malfunction and limitations

Driver Attention Warning malfunction

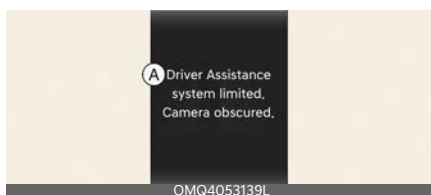


A: Check Driver Assistance system.

When Driver Attention Warning is not working properly, a warning message will appear on the cluster for several seconds, and the Master warning light (⚠) will appear on the cluster.

If this occurs, have Driver Attention Warning inspected by an authorized Kia dealer.

Driver Attention Warning disabled



A: Driver Assistance system limited. Camera obscured.

When the windshield (where the front view camera is located), front radar cover, bumper or sensor is covered with foreign material, such as snow or rain, it can reduce the detecting performance and temporarily limit or disable Driver Attention Warning.

A warning message, and the Master warning light (⚠) will appear on the cluster. This is normal operation.

Driver Attention Warning will operate properly when snow, rain or foreign material is removed.

If Driver Attention Warning does not operate properly after obstruction (snow, rain, or foreign material) is removed (including trailer, carrier, etc. from the rear bumper), visit an authorized Kia dealer.

⚠ WARNING

- Even though a warning message or warning light does not appear on the instrument cluster, Driver Attention Warning may not properly operate.
- Driver Attention Warning may not properly operate in an open area where there is nothing to detect or the detecting sensor is covered with foreign material after turning ON the vehicle.

*** NOTICE**

You can check it in the service message of the utility information view of the instrument cluster display window.

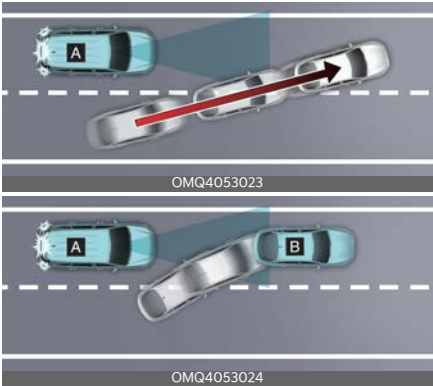
Limitations of Driver Attention Warning

Driver Attention Warning may not work properly in the following situations:

- The vehicle is driven violently
- The vehicle intentionally crosses over lanes frequently
- The vehicle is controlled by Driver Assistance system, such as Lane Keeping Assist

Leading vehicle departure alert function

- When a vehicle cuts in



[A]: Your vehicle, [B]: Front vehicle
If a vehicle cuts in front of you, Leading Departure Alert may not operate properly.

- When the vehicle ahead sharply steers



[A]: Your vehicle, [B]: Front vehicle
If a vehicle in front makes a sharp turn, such as to turn left or right or making a U-turn, etc., Leading Vehicle Departure Alert may not operate properly.

- When the vehicle ahead abruptly departs



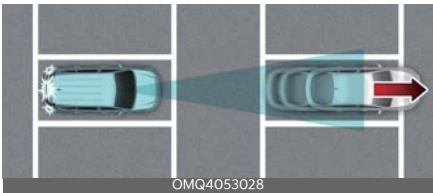
If the vehicle in front abruptly departs, Leading Vehicle Departure Alert may not operate properly.

- When a pedestrian or bicycle is between you and the vehicle ahead



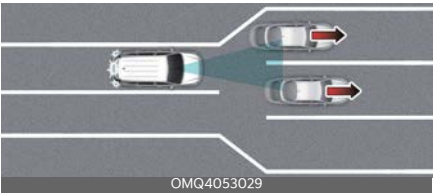
If there is a pedestrian(s) or bicycle(s) in between you and the vehicle in front, Leading Vehicle Departure Alert may not operate properly.

- When in a parking lot



If a vehicle parked in front drives away from you, Leading Vehicle Departure Alert may alert you that the parked vehicle is driving away.

- When driving at a tollgate or intersection



If you pass a tollgate or intersection with lots of vehicles or you drive where lanes are merged or divided frequently, Leading Vehicle Departure Alert may not operate properly.

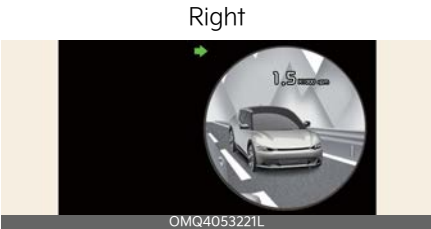
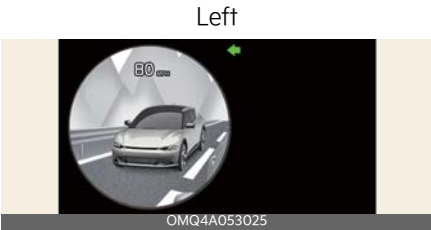
**WARNING**

Driver Attention Warning may not operate for 15 seconds after the vehicle is started, or the front view camera is initialized.

**NOTICE**

For more details on the precautions of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion)" on page 6-4.

Blind-Spot View Monitor (BVM) (if equipped)



Blind-Spot View Monitor displays rear blind spots in the instrument cluster when the turn signal is turned on to help safely change lanes.

Detecting sensor



Refer to the picture above for the detailed location of the detecting sensor.

Blind-Spot View Monitor settings
Wide-rear view camera



1 Driver Assistance
2 Driving Safety
3 Blind-Spot View Monitor
With the vehicle on, select **Setup** → **Vehicle** → **Driver Assistance** → **Driving Safety** → **Blind-Spot View Monitor** from the infotainment system screen to turn on Blind-Spot View Monitor and deselect to turn off the function.

Blind-Spot View Monitor operation

Turn signal lever



Blind-Spot View Monitor will turn on and off when the turn signal is turned on and off.

Blind-Spot View Monitor

Operating conditions

- When the left or right turn signal turns on, the image on the instrument cluster will turn on.

Off conditions

Blind-Spot View Monitor will turn off when one of the following conditions are satisfied:

- When the turn signal is turned off.
- When the hazard warning flasher is on.
- When another important warning is displayed on the instrument cluster.

Blind-Spot View Monitor malfunction

When Blind-Spot View Monitor is not working properly, the instrument cluster display flickers, or the camera image does not display normally, have Blind-Spot View Monitor inspected by an authorized Kia dealer.

WARNING

- Blind-Spot View Monitor may display objects at a different distance from what is shown on the screen due to the correction of the wide-side view camera images. Make sure to visually check the surroundings for safety.
- If the camera lens is covered with foreign material, Blind-Spot View Monitor may not operate normally. Always keep the camera lens clean. However, do not use chemical solvents such as strong detergents containing high alkaline or volatile organic solvents (gasoline, acetone etc.). This may damage the camera lens.

Smart Cruise Control (SCC)

Basic function

Smart Cruise Control detects a vehicle ahead and can help maintain the distance from the vehicle ahead and the set speed.

Overtake Acceleration Assist function

When Smart Cruise Control judges you are attempting to overtake a vehicle in front, Smart Cruise Control helps with accelerating.

Based On Driving Style function (if equipped)

Smart Cruise Control will operate based on the driver's driving style, such as inter-vehicle distance, acceleration, reaction speed.

Detecting sensor

Front view camera



Front radar



Front corner radar (if equipped)



Refer to the picture above for the detailed location of the detecting sensor.

⚠ CAUTION

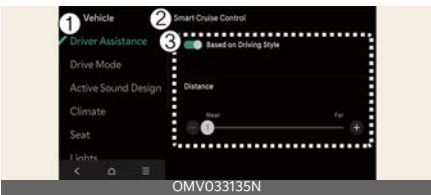
- Always keep the front view camera and front radar in good condition to maintain optimal performance of Smart Cruise Control.
- For more details on the precautions of the front view camera and front radar, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion)" on page 6-4.

Smart Cruise Control settings

Smart Cruise Control

With the vehicle on, select **Setup** → **Vehicle** → **Driver Assistance** → **Smart Cruise Control** on the infotainment system to set the distance, acceleration and the reaction speed.

Based on driving style



- 1 Driver Assistance
- 2 Smart Cruise Control
- 3 Based on Driving Style

With the vehicle on, if **Setup** → **Vehicle** → **Driver Assistance** → **Smart Cruise**

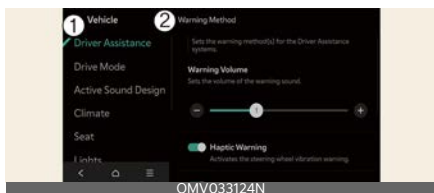
Control → **Based on Driving Style** is selected from the infotainment system screen, Smart Cruise Control will operate based on the driver's driving style, such as vehicle distance, acceleration, reaction speed.

The driving style can be adjusted manually.

*** NOTICE**

- If equipped with Based on Driving Style, Based on driving mode and Based on driving style can be selected from the infotainment system screen by selecting **Setup** → **Vehicle** → **Driver Assistance** → **Smart Cruise Control**.
- While Smart Cruise Control is operating with Based on driving style selected, if you press and hold the Vehicle Distance (🚗) button, based on driving mode will disabled. Press and hold the Vehicle Distance (🚗) button to change Smart Cruise Control to Based on driving style mode.
- Smart Cruise Control learns your driving styles only when drive the vehicle.
- When Based On Driving Style is disabled, your driving style (inter-vehicle distance, acceleration, response speed) remains at the same level as the Based On Driving Style.
- When the Based On Driving Style is enabled or disabled, the displayed driving style (including inter-vehicle distance, acceleration, and response speed) may vary between different controlled styles.

Warning Methods



1 Driver Assistance

2 Warning Methods

The **Warning Methods** can be set with the vehicle on. Select **Setup** → **Vehicle** → **Driver Assistance** → **Warning Methods** → **Warning Volume** from the settings menu in the infotainment system to change the following settings:

- **Warning Volume:** Adjusts the volume of the warning sound. If you turn off the **Warning Volume**, for your safety, the function may warn you with a low volume.
- **Haptic Warning:** Activate the steering wheel vibration warning.
- **Driving Safety Priority:** Lowers all other audio volumes when the Driving Safety system sounds a warning.

* INFORMATION

- Ensure that **Warning Methods** you have set may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** will maintain its last setting even if the vehicle is restarted.
- The setting menu may not be available for your vehicle depending on the vehicle features and specifications.
- The **Warning Volume** and **Haptic Warning** cannot be turned off at the

same time. When one of the warnings is turned off another is activated.

Smart Cruise Control operation

Operating conditions

Basic function

Smart Cruise Control operates when the following conditions are satisfied.

- The gear is in D (Drive)
- Your driving speed is within the operating speed range
 - 5~110 mph (10~180 km/h): when there is no vehicle in front
 - 0~110 mph (0~180 km/h): when there is a vehicle in front
- ESC (Electronic Stability Control) or ABS is on

Smart Cruise Control does not operate in the following conditions.

- The driver's door is open
- Engine RPM is high
- EPB (Electronic Parking Brake) is applied
- ESC (Electronic Stability Control) or ABS is controlling the vehicle
- Forward Collision-Avoidance Assist brake control is operating
- Remote Smart Parking Assist brake control is operating (if equipped)

* NOTICE

When stopped behind another vehicle, you can turn on Smart Cruise Control while the brake pedal is depressed.

Overtake Acceleration Assist function

Overtaking Acceleration Assist will operate when the turn signal indicator is turned on to the left (left-hand drive) or turned on to the right (right-hand drive) while Smart Cruise Control is operating, and the following conditions are satisfied:

- Your driving speed is above 40 mph (60 km/h)
- A vehicle is detected in front of you

Overtaking Acceleration Assist does not operate in the following conditions.

- The hazard warning flasher is on
- Vehicle speed is reduced to maintain distance with a vehicle in front

⚠ WARNING

- When the turn signal indicator is turned on to the left (left-hand drive) or turned on to the right (right-hand drive) while there is a vehicle ahead, the vehicle may accelerate temporarily. Always pay attention to the road conditions.
- Regardless of your country's driving direction, Overtaking Acceleration Assist will operate when the conditions are satisfied. When using the function in countries with different driving direction, always check the road conditions.

Turning on Smart Cruise Control



Press the Driving Assist button to turn on Smart Cruise Control. The speed will be set to the current speed on the cluster.

- If there is no vehicle in front of you, the set speed will be maintained.
- If there is a vehicle in front of you, the speed may be adjusted to maintain the distance to the vehicle ahead. If the vehicle ahead accelerates, your vehicle will travel at a steady cruising speed after accelerating to the set speed.

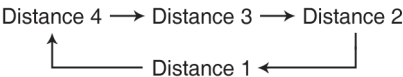
*** NOTICE**

If your vehicle speed is between 0~20 mph (0~30 km/h) when you press the Driving Assist button, the Smart Cruise Control speed will be set to 20 mph (30 km/h).

Setting vehicle distance



Each time the button is pressed, the headway changes as follows:



For example, if you drive at 56 mph (90 km/h), the distance is maintained as follows:

- Distance 4: approximately 172 ft (52.5 m)
- Distance 3: approximately 130 ft (40 m)
- Distance 2: approximately 106 ft (32.5 m)
- Distance 1: approximately 82 ft (25 m)

* NOTICE

The distance is set to the last set distance when the vehicle is restarted, or when Smart Cruise Control was temporarily canceled.

Increasing set speed



- Push the (+) switch up and release it immediately. The set speed will increase by 1 mph (1 km/h) each time the switch is operated in this manner.
- Push the (+) switch up and hold it. The set speed will increase by 5 mph (10 km/h) each time the switch is operated in this manner.

You can increase the set speed to 110 mph (180 km/h).

⚠ WARNING

Check the driving condition before using the (+) switch. Driving speed may sharply increase when you push up and hold the (+) switch.

Decreasing set speed



- Push the (-) switch down and release it immediately. The set speed will decrease by 1 mph (1 km/h) each time the switch is operated in this manner.
 - Push the (-) switch down and hold it. The set speed will decrease by 5 mph (10 km/h) each time the switch is operated in this manner.
- You can decrease the set speed to 20 mph (30 km/h).

Temporarily canceling Smart Cruise Control



Press the (||) switch or depress the brake pedal to temporarily cancel Smart Cruise Control.

Resuming Smart Cruise Control



To resume Smart Cruise Control after the function was canceled, operate the (+), (-) or (||) switch.

If you push the (+) switch up or (-) switch down, the set speed will be set to the current speed on the cluster.

If you press the (|||) switch, vehicle speed will resume to the preset speed.

⚠ WARNING

Check the driving condition before using the (|||) switch. Driving speed may sharply increase or decrease when you press the (|||) switch.

Turning off Smart Cruise Control



Press the Driving Assist button to turn Smart Cruise Control off.

*** NOTICE**

If your vehicle is equipped with Manual Speed Limit Assist, press and hold the Driving Assist button to turn off Smart Cruise Control. However, Manual Speed Limit Assist will turn on.

⚠ WARNING

Do not use the switches and buttons at the same time. Smart Cruise Control may not operate properly.

Smart Cruise Control display and control

You can see the status of the Smart Cruise Control operation in the Driving Assist view on the instrument cluster. Refer to "LCD display modes" on page 4-88.

Smart Cruise Control will be displayed as below depending on the status of the function.



Smart Cruise Control will be displayed as below depending on the status of the function.

- When operating
 1. Whether there is a vehicle ahead and the selected distance level
 2. The set speed
 3. Whether there is a vehicle ahead and the target vehicle distance
- When temporarily canceled
 1. Your vehicle (gray)
 2. Previous set speed (gray)
 3. Whether there is a vehicle ahead (gray) (if equipped)

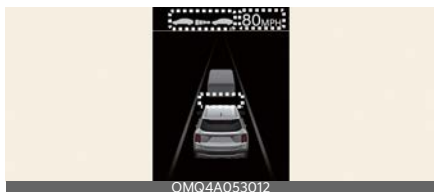
*** NOTICE**

- The distance of the front vehicle on the instrument cluster is displayed according to the actual distance between your vehicle and the vehicle ahead.
- The target distance may vary according to the vehicle speed and the set distance level. If vehicle speed is low, even though the vehicle distance has

changed, the change of the target vehicle distance may be small.

- The images or colors displayed on the cluster may vary depending on the instrument cluster specifications or themes.

Accelerating temporarily



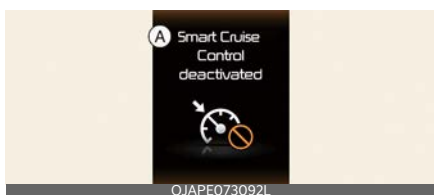
If you want to speed up temporarily without altering the set speed while Smart Cruise Control is operating, depress the accelerator pedal. While the accelerator pedal is depressed, the set speed, distance level and target distance will blink on the instrument cluster.

However, if the accelerator pedal is depressed insufficiently, the vehicle may decelerate.

⚠ WARNING

Be careful when accelerating temporarily as, because the speed and distance is not controlled automatically even if there is a vehicle in front of you.

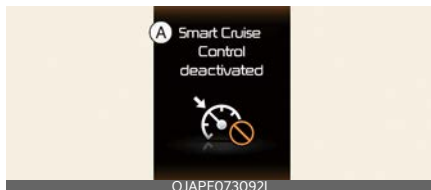
Based on Driving Style operating



When the Based on Driving Style is enabled, the instrument cluster will show the set vehicle distance level and target

vehicle distance in white. It will also display the distance level and target distance based on your driving behavior.

Temporarily canceling Smart Cruise Control



A: Smart Cruise Control deactivated

If Smart Cruise Control is temporarily canceled automatically, a warning message will appear on the instrument cluster, and an audible warning will sound to warn the driver.

Smart Cruise Control will be temporarily canceled automatically when:

- Your driving speed is above 120 mph (190 km/h)
- The vehicle is stopped for a certain period
- The accelerator pedal is continuously depressed for a certain period
- The conditions for the Smart Cruise Control to operate are not satisfied

*** NOTICE**

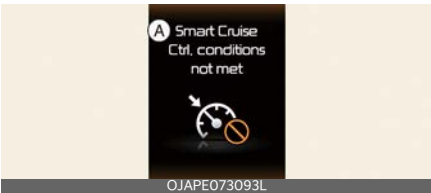
If Smart Cruise Control is temporarily canceled while the vehicle is at a standstill with the function activated, EPB (Electronic Parking Brake) maybe applied.

⚠ WARNING

When Smart Cruise Control is temporarily canceled, the distance to a vehicle in front will not be maintained. Always have your eyes on the road and, if nec-

essary, depress the brake pedal to reduce your speed to maintain a safe distance.

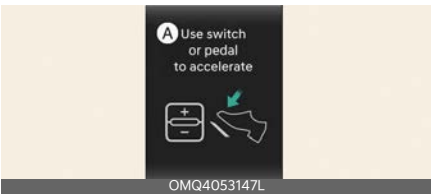
Smart Cruise Control conditions not satisfied



A: Smart Cruise Ctrl. conditions not met

If the Driving Assist button, (+) switch, (-) switch or (⏏) switch is operated when Smart Cruise Control operating conditions are not satisfied, a warning message will appear on the instrument cluster and an audible warning will sound.

In traffic situation

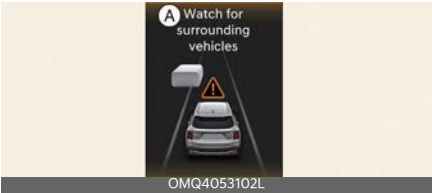


A: Use switch or pedal to accelerate

In traffic, your vehicle will stop if the vehicle ahead of you stops. If the vehicle ahead starts moving, your vehicle will start as well.

After the vehicle has stopped and a certain time has passed, a warning message will appear on the instrument cluster. Depress the accelerator pedal or operate the (+) switch, (-) switch or (⏏) switch to start driving.

Warning road conditions ahead



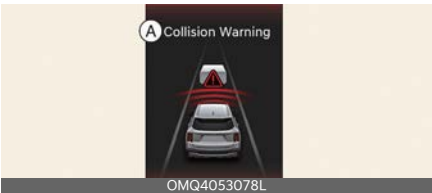
A: Watch for surrounding vehicles

In the following situation, a warning message will appear on the instrument cluster, and an audible warning will sound to warn the driver of road conditions ahead.

⚠ WARNING

Always pay attention to vehicles or objects that may suddenly appear in front of you, and if necessary, depress the brake pedal to reduce your speed to maintain a safe distance.

Collision Warning



A: Collision Warning

While Smart Cruise Control is operating, when a collision risk with a vehicle ahead is high, a warning message will appear on the cluster, an audible warning will sound and the steering wheel will vibrate to warn the driver.

Always have your eyes on the road and, if necessary, depress the brake pedal to reduce your speed in order to maintain a safe distance.

⚠ WARNING

In the following situations, Smart Cruise Control may not warn the driver of a collision.

Always pay attention to road conditions.

- The distance from a vehicle ahead is near or the speed of the vehicle in front is faster or similar to yours
- The speed of a vehicle in front is very slow or is at a standstill
- The accelerator pedal is depressed right after Smart Cruise Control is turned on

⚠ WARNING

- Smart Cruise Control does not substitute for proper and safe driving. It is your responsibility to always check the speed and distance to a vehicle ahead.
- Smart Cruise Control may not recognize unexpected, sudden or complex situations, so always pay attention to driving conditions and control your vehicle speed.
- Keep Smart Cruise Control off when the function is not in use to avoid inadvertently setting a speed.
- Do not open the door or leave the vehicle when Smart Cruise Control is operating, even if the vehicle is stopped.
- Always be aware of the selected speed and distance ahead.
- Keep a safe distance according to road conditions and vehicle speed. If the distance is too close when driving at high speed, a serious collision may result.
- When maintaining distance with a vehicle ahead, if that vehicle disap-

pears from view, Smart Cruise Control may suddenly accelerate to the set speed. Always be aware of unexpected and sudden situations.

- Vehicle speed may decrease on an upward slope and increase on a downward slope.
- Always be aware of emergent situations such as when a vehicle cuts in suddenly.
- When towing a trailer or something similar, your vehicle may experience frequent shifting and high RPM and the performance of Smart Cruise Control may be compromised. Always drive with caution.
- Turn off Smart Cruise Control when your vehicle is being towed.
- Smart Cruise Control may not operate properly if interfered with by strong electromagnetic waves.
- Smart Cruise Control may not detect an obstacle in front and lead to a collision. Always look ahead to prevent unexpected and sudden situations from occurring.
- Vehicles moving in front of you with frequent lane changes may cause a delay in Smart Cruise Control reaction or may cause Smart Cruise Control to react to a vehicle that is actually in an adjacent lane. Always drive cautiously to prevent unexpected and sudden situations from occurring.
- Always be aware of the surroundings and drive safely, even though a warning message does not appear or an audible warning does not sound.
- If any other function's warning message is displayed or warning sound is generated, Smart Cruise Control warning message may not be dis-

- played and warning sound may not be heard.
- You may not hear the warning sound of Forward Collision-Avoidance Assist if the surrounding is noisy.
 - The vehicle manufacturer is not responsible for any traffic violation or accident caused by the driver.
 - Always set the vehicle speed under the posted speed limit.
 - If your driving style changes, distance, acceleration and reaction speed may change.

⚠ CAUTION

- Your vehicle must be driven sufficiently to analyze your actual driving style, such as vehicle distance, acceleration and reaction speed.
- Based on Driving Style may not reflect the driver's driving style or driving conditions which could affect driving safety.
- If you are driving in special conditions, such as snow, rain, fog or steep hills, your vehicle may not be driven according to your driving style.

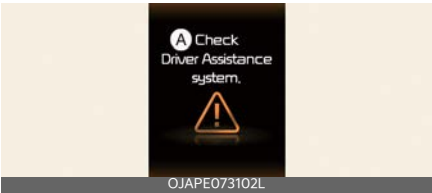
*** NOTICE**

- Smart Cruise Control may not operate for a few seconds after the vehicle is restarted or the front view camera or front radar is initialized.
- You may hear a sound when the brake is controlled by Smart Cruise Control.
- Based on Driving Style may not reflect your driving style if it's not safe such as rapid acceleration.
- Based on Driving Style does not reflect any driving style other than

vehicle distance, acceleration and reaction speed.

Smart Cruise Control malfunction and limitations

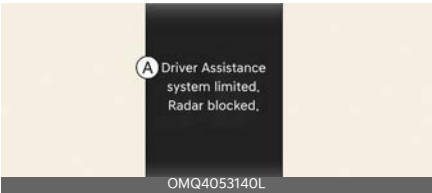
Smart Cruise Control malfunction



A: Check Driver Assistance system

If there is a malfunction in Smart Cruise Control, a warning message will be displayed on the instrument cluster (and turned off after a certain period), and the Master warning light (⚠) will turn on. Have Smart Cruise Control inspected by an authorized Kia dealer.

Smart Cruise Control disabled



A: Driver Assistance system limited. Radar blocked.

When the front radar cover or sensor is covered with snow, rain, or foreign material, it can reduce the detecting performance and temporarily limit or disable Smart Cruise Control.

A warning messages and the Master warning light (⚠) are displayed on the instrument cluster (and turn off after a certain period). This does not indicate a malfunction of Smart Cruise Control.

Smart Cruise Control will operate properly when snow, rain or foreign material is removed. Always keep it clean.

WARNING

Even though a warning message does not appear on the instrument cluster, Smart Cruise Control may not properly operate.

CAUTION

Smart Cruise Control may not properly operate in an open area where there is nothing to detect, or the detecting sensor is covered with foreign material after turning ON your vehicle.

NOTICE

You can check it in the service message of the utility information view of the instrument cluster display window.

Limitations of Smart Cruise Control

Smart Cruise Control may not operate normally under the following circumstances:

- The detecting sensor or the surroundings are contaminated or damaged
- Washer fluid is continuously sprayed, or the wiper is on
- The camera lens is contaminated due to tinted, filmed or coated windshield, damaged glass, or sticky foreign material (sticker, bug, etc.) on the glass
- Moisture is not removed or frozen on the windshield
- The field of view of the front view camera is obstructed by sun glare
- Streetlights or light from an oncoming vehicle is reflected on a wet road.
- The temperature around the front view camera is high or low
- An object is placed on the instrument panel
- The surroundings are very bright
- The surroundings are very dark, such as in a tunnel, etc.
- The brightness changes suddenly, for example when entering or exiting a tunnel
- The brightness outside is low, and the headlight are not on or are not bright
- Driving in heavy rain, snow or thick fog
- Driving through steam, smoke or shadows
- Only part of a vehicle is detected
- A vehicle in front has no taillights, taillights are atypically located, etc.
- The brightness outside is low, and the taillights are not on or are not bright
- The rear of a front vehicle in front is small or does not look normal (for example, tilted, overturned, etc.)
- A front vehicle's ground clearance is low or high
- A vehicle suddenly cuts in front
- Your vehicle is being towed
- An object reflects off the front radar such as a guardrail, nearby vehicle, etc.
- The bumper around the front radar is impacted, damaged, or the front radar is out of position
- The temperature around the front radar is high or low
- The vehicle in front is made of material that does not reflect on the front radar

- Driving near a highway, interchange or tollgate
- Driving on a slippery surface due to snow, rain, ice, etc.
- Driving on a curved road
- A vehicle in front is detected late
- A vehicle in front is suddenly blocked by an obstacle
- A vehicle in front suddenly changes a lane or suddenly reduces speed
- A vehicle in front is bent out of shape
- A vehicle in front's speed is fast or slow
- With a vehicle in front, you change lane suddenly
- A vehicle in front is covered with snow
- Unstable driving
- You are on a roundabout (rotary) and a vehicle in front is not detected
- You are continuously driving in a circle
- Adverse road conditions cause excessive vehicle vibration
- Your vehicle height is low or high due to heavy loads, abnormal tire pressure, etc.
- Driving in the following places
 - Driving in a parking lot
 - Driving through a construction area, unpaved road, partially paved road, uneven road, speed bumps, etc.
 - Driving on an inclined road, curved road, etc.
 - Driving through a roadside with trees or streetlights
 - Driving through a narrow road with overgrown foliage
 - There is interference from electromagnetic waves, such as driving in an area with strong radio waves or electrical noise
- Driving on a curved road
- Driving through a tunnel or on an iron bridge
- Driving near areas containing metal substances, such as a construction zone, railroad, etc.
- Driving in wide open areas where there are few vehicles or structures
 - Driving through steam, smoke, or shadow
 - Driving near a highway interchange or tollgate
- Driving on a curved road



On curves, Smart Cruise Control may not detect a vehicle in the same lane and may accelerate to the set speed. Vehicle speed may rapidly decrease when a vehicle ahead is detected suddenly.

Select the appropriate set speed on curves and apply the brake pedal or accelerator pedal according to the road and driving conditions ahead.



Your vehicle speed can reduce due to a vehicle in an adjacent lane. Check that the road conditions permit safe operation of Smart Cruise Con-

control and if necessary, depress the brake pedal to reduce your driving speed to maintain a safe distance

- Driving on an inclined road



During uphill or downhill driving, the Smart Cruise Control may not detect a moving vehicle in your lane and cause your vehicle to accelerate to the set speed. Vehicle speed will rapidly decrease when a vehicle ahead is detected suddenly.

Select the appropriate set speed on inclines and apply the brake pedal or accelerator pedal according to the road and driving conditions ahead.

- Changing lanes



1. Your vehicle,
2. Lane changing vehicle

When a vehicle (2) moves into your lane from an adjacent lane, it cannot be detected by the sensor until it is in the sensor's detection range. Smart Cruise Control may not immediately detect the vehicle when the vehicle changes lanes abruptly. 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.

- Detecting a vehicle



In the following cases, some vehicles in your lane cannot be detected by the sensor:

- Vehicles offset to one side
- Slow-moving vehicles or sudden-decelerating vehicles
- Vehicles with higher ground clearance or vehicles carrying loads that stick out of the back of the vehicle

- Vehicles that have the front lifted due to heavy loads
- Vehicles within approximately 6 ft (2m) from your vehicle
- Oncoming vehicles
- Stopped vehicles
- Vehicles with small rear profile, such as trailers
- Narrow vehicles, such as motorcycles or bicycles
- Specialty vehicles
- Animals and pedestrians



In the following cases, the vehicle in front cannot be detected by the sensor. Always pay attention to the road and driving conditions and drive safely. If necessary, adjust your vehicle speed.

- You are steering your vehicle
- Driving on narrow or sharply curved roads

- When a vehicle ahead disappears from view at an intersection



When a vehicle ahead disappears from view at an intersection, your vehicle may accelerate.

Always pay attention to road and driving conditions while driving.

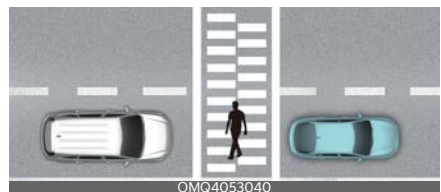
- When a vehicle in front of you merges out of the lane



When a vehicle in front of you merges out of the lane, Smart Cruise Control may not immediately detect the new vehicle that is now in front of you.

Always pay attention to road and driving conditions while driving.

- Always look out for pedestrians



Always look out for pedestrians when your vehicle is maintaining a distance with the vehicle ahead.

This device complies with Part 15 of the FCC rules.

Operation is subject to the following three conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.
3. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

Radio frequency radiation exposure information:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 8 in (20 cm) between the radiator (antenna) and your body.

This transmitter must not be colocated or operating in conjunction with any other antenna or transmitter.

Navigation-based Smart Cruise Control (NSCC) (if equipped)

Navigation-based Smart Cruise Control can help maintain safe speed depending on the road conditions by using information from the navigation system when driving on highways while Smart Cruise Control is operating.

*** NOTICE**

- Navigation-based Smart Cruise Control is available only on controlled access road of certain highways.
 - * Controlled access road indicates roads with limited entrances and exits that allow uninterrupted high speed traffic flow. Only passenger cars and motorcycles are allowed on controlled access roads.
- Additional highways may be added by future navigation updates.

*** NOTICE**

Navigation-based Smart Cruise Control operates on main roads and highways, and does not operate on interchanges or junctions.

⚠ WARNING

Navigation-based Smart Cruise Control (NSCC) is a supplemental system and is not a substitute for safe driving. It is your responsibility to always check the speed and distance to the vehicle ahead. Always drive safely and use caution.

Highway Curve Zone Auto Slow-down

If vehicle speed is high, Highway Curve Zone Auto Slowdown function will temporarily decelerate your vehicle or limit acceleration to help you drive safely on a curve based on the curve information from the navigation.

Navigation-based Smart Cruise Control settings

Auto Highway Speed Change



1 Driver Assistance

2 Driving Convenience

3 Auto Highway Speed Change

With the vehicle on, select **Setup** → **Vehicle** → **Driver Assistance** → **Auto Highway Speed Change** on the infotainment system.

* NOTICE

If there is a problem with Navigation-based Smart Cruise Control, the function cannot be set from the Settings menu.

Navigation-based Smart Cruise Control operation

Operating conditions

Navigation-based Smart Cruise Control is ready to operate if all the following conditions are satisfied:

- Smart Cruise Control is operating
- Driving on main roads of highways (or motorways)

* NOTICE

For more details on how to operate Smart Cruise Control, refer to "Smart Cruise Control (SCC)" on page 6-66.

Navigation-based Smart Cruise Control display and control



When Navigation-based Smart Cruise Control operates, it will be displayed on the instrument cluster as follows:

Navigation-based Smart Cruise Control standby

If all the operating conditions are satisfied, the green (NAV) indicator will appear.

Navigation-based Smart Cruise Control operating

During speed control, the green (NAV) indicator will blink.

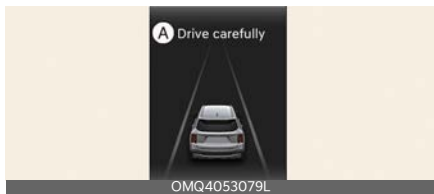
Navigation-based Smart Cruise Control pause/driver operation

If Smart Cruise Control cannot be operated due to pause or rerouting, the gray (NAV) indicator will appear on the instrument cluster.

If the accelerator pedal is depressed, the white (NAV) indicator will blink on the instrument cluster.

⚠ WARNING

A warning message will appear in the following circumstances:



A: Drive carefully

- Navigation-based Smart Cruise Control is not able to slow down your vehicle to a safe speed

* NOTICE

The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the settings menu.

Highway Curve Zone Auto Slow-down

Depending on the curve ahead on the highway, the vehicle will decelerate, and after passing the curve, the vehicle will accelerate to Smart Cruise Control set speed.

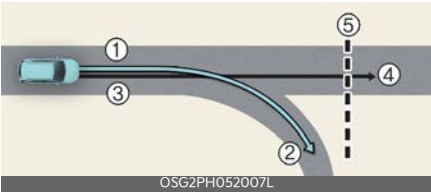
* NOTICE

The starting point of deceleration depends on the vehicle's driving speed and the curvature of the road. The higher the driving speed, the earlier the deceleration start point.

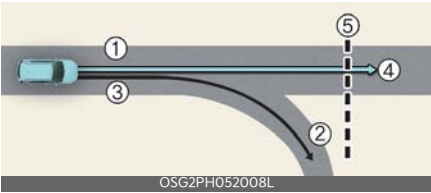
Navigation-based Smart Cruise Control limitations

Navigation-based Smart Cruise Control may not operate normally under the following circumstances:

- The navigation is not working properly
- Speed limit and road information in the navigation is not updated
- Map information is not transmitted due to infotainment system's abnormal operation
- The map information and the actual road is different because of real-time GPS data or map information error
- The navigation searches for a route while driving
- GPS signals are blocked in areas such as a tunnel
- A road that divides into two or more roads and rejoins
- The driver goes off course the route set in the navigation
- The route to the destination is changed or canceled by resetting the navigation
- The vehicle enters a service station or rest area
- Android Auto or CarPlay is operating
- The navigation cannot detect the current vehicle position (for example, elevated roads, including overpasses adjacent to general roads or nearby parallel roads)
- The navigation is updating while driving
- The navigation is restarting while driving
- The speed limit of some sections of the road changes
- Driving on a road under construction
- Driving on a controlled road
- Driving in bad weather, such as heavy rain or snow.
- Driving on a sharply curved road



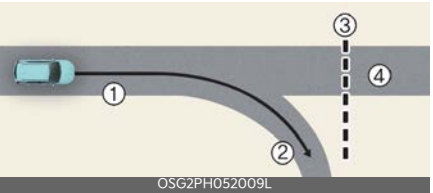
- 1 Set route
- 2 Branch line
- 3 Driving route
- 4 Main road
- 5 Curved road section
- When there is a difference between the navigation set route (branch line) and the driving route (main road), Highway Curve Zone Auto Slowdown function may not operate until the driving route is recognized as the main road.
- When the vehicle's driving route is recognized as the main road by maintaining the main road instead of the navigation set route, Highway Curve Zone Auto Slowdown function will operate. Depending on the distance to the curve and the current vehicle speed, vehicle deceleration may be insufficient or decelerate rapidly.



- 1 Main road
- 2 Branch line
- 3 Driving route
- 4 Set route
- 5 Curved road section
- When there is a difference between the navigation route (main road) and

the driving route (branch line), Highway Curve Zone Auto Slowdown function will operate temporarily based on the curve information on the main road.

- When it is determined that you are driving out of the route by entering the highway interchange or junction, Highway Curve Zone Auto Slowdown function will not operate.



- 1 Driving route
- 2 Branch line
- 3 Curved road section
- 4 Main road
- If there is no destination set on the navigation, Highway Curve Zone Auto Slowdown function will operate based on the curve information on the main road.
- Even if you depart from the main road, Highway Curve Zone Auto Slowdown function may temporarily operate due to navigation information of the highway curve section.

⚠ WARNING

- Navigation-based Smart Cruise Control is not a substitute for safe driving practices, but a convenience function. Always have your eyes on the road, and it is the responsibility of the driver to avoid violating traffic laws.
- The navigation's speed limit information may differ from the actual speed limit information on the road. It is your

responsibility to check the speed limit on the actual driving road or lane.

- Navigation-based Smart Cruise Control will automatically be canceled when you leave the highway main road. Always pay attention to road and driving conditions while driving.
- Navigation-based Smart Cruise Control may not operate due to the presence of lead vehicles and their driving conditions. Always pay attention to road and driving conditions while driving.
- When towing a trailer or something similar, your vehicle's deceleration may be insufficient. Always drive with caution.
- After you pass through a tollgate on a highway, Navigation-based Smart Cruise Control will operate based on the first lane. If you enter one of the other lanes, Navigation-based Smart Cruise Control might not operate properly.
- Your vehicle will accelerate if you depress the accelerator pedal while Navigation-based Smart Cruise Control is operating. The function will not decelerate your vehicle. If you depress the accelerator pedal too lightly, the vehicle may decelerate.
- If the driver accelerates and releases the accelerator pedal while Navigation-based Smart Cruise Control is operating, the vehicle may not decelerate sufficiently or may rapidly decelerate to a safe speed.
- If the curve is too large or too small, Navigation-based Smart Cruise Control may not operate.
- Navigation-based Smart Cruise Control is a supplemental function and is not a substitute for safe driving. It is

your responsibility to always check the speed and distance to the vehicle ahead. Always drive safely and use caution.

*** NOTICE**

- A time gap could occur between the navigation's guidance and when Navigation-based Smart Cruise Control operation starts and ends.
 - The speed information on the instrument cluster and navigation may differ.
 - Even if you are driving at a speed lower than Smart Cruise Control set speed, acceleration may be limited by curved road sections ahead.
 - If Navigation-based Smart Cruise Control is operating while leaving the main road to enter an interchange, junction, rest area, etc., the function may operate for a certain period.
 - Deceleration by Navigation-based Smart Cruise Control may feel it is not sufficient due to road conditions such as uneven road surfaces and narrow lanes.
-

This device complies with Part 15 of the FCC rules.

Operation is subject to the following three conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.
- 3. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

Radio frequency radiation exposure information:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 8 in (20 cm) between the radiator (antenna) and your body.

This transmitter must not be colocated or operating in conjunction with any other antenna or transmitter.

Lane Following Assist (LFA)

Lane Following Assist can detect lane markings and/or a vehicle ahead on the road and center your vehicle in the lane.

Detecting sensor

Front view camera



The front view camera is used as a detecting sensor to detect lane markings and front vehicles.

Refer to the picture above for the detailed location of the detecting sensor.

CAUTION

For more details on the precautions of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion)" on page 6-4.

6

Lane Following Assist settings

Warning Methods



- 1 Driver Assistance
- 2 Warning Methods

The **Warning Methods** can be set with the vehicle on. Select **Setup** → **Vehicle** → **Driver Assistance** → **Warning Methods** from the settings menu in the info-

tainment system to change the following settings:

- **Warning Volume:** Adjusts the volume of the warning sound. If you turn off the **Warning Volume**, for your safety, the function may warn you with a low volume.
- **Driving Safety Priority:** Lowers all other audio volumes when the Driving Safety system sounds a warning.

⚠ CAUTION

When the trailer's connector is plugged into your vehicle, Lane Following Assist automatically turns off. In this case, you cannot get help from Lane Following Assist. Pay extra attention when you drive when the function is inactive. (If a Kia genuine Trailer Kit that can determine whether a trailer is connected is used)

* INFORMATION

- Ensure that **Warning Methods** you have set may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** will maintain its last setting even if the vehicle is restarted.
- The setting menu may not be available for your vehicle depending on the vehicle features and specifications.

Lane Following Assist operation

Turning Lane Following Assist On/Off



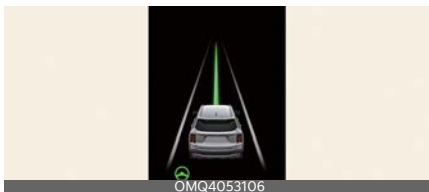
With the vehicle on, shortly press the Lane Driving Assist button located on the steering wheel to turn on Lane Following Assist. The gray or green (LFA) indicator light will appear on the cluster. Press the Lane Driving Assist button again to turn off Lane Following Assist.

Warning and control

* NOTICE

- The following warning message will appear on the LCD display.
For more details, refer to the warning and control section of the function.
 - **Keep hands on steering wheel**
 - **Lane Following Assist Canceled**

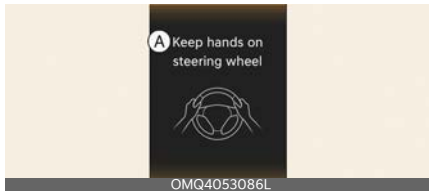
Lane Following Assist



If the vehicle ahead and/or both lane markings are detected and Your driving speed is below 110 mph (180 km/h), the green (LFA) indicator light appears on the instrument cluster, and Lane Following Assist can help center the vehicle in the lane by assisting the steering wheel.

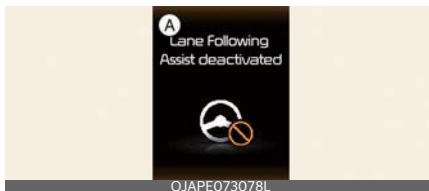
⚠ CAUTION

When the steering wheel is not assisted, the white (⚠) indicator light blinks and changes to gray.

Hands-off warning**A: Keep hands on steering wheel**

When the driver takes off their hands from the steering wheel for a few seconds, a warning message will appear and an audible warning will sound in stages.

- First stage: Warning message
- Second stage: Warning message (red steering wheel) and audible warning

**A: Lane Following Assist deactivated**

If the driver still does not have their hands on the steering wheel after the hands-off warning message will appears and Lane Following Assist be automatically canceled.

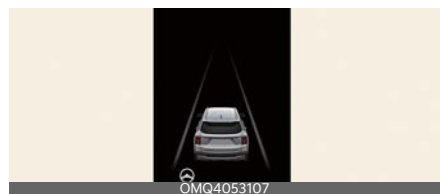
⚠ WARNING

- The steering wheel may not be assisted if the steering wheel is held very tight or the steering wheel is steered over a certain degree.
- Lane Following Assist does not operate at all times. It is the responsibility of the driver to safely steer the vehicle and to maintain the vehicle in its lane.
- The hands-off warning message may appear late depending on road conditions. Always have your hands on the steering wheel while driving.
- If you attach objects to the steering wheel, the hands-off warning may not work properly.
- If gloves are worn or the steering wheel is held lightly, it may be perceived as not being held, resulting in the Hands-Off Warning being displayed.

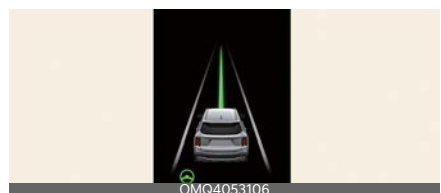
*** NOTICE**

- When both lane markings are detected, the lane lines on the cluster will change from gray to white.

Lane undetected



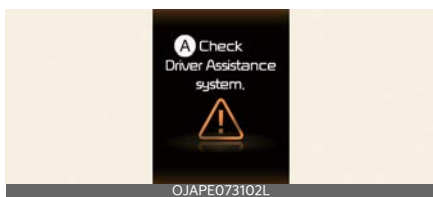
Lane detected



- The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the settings menu.
- If lane markings are not detected, steering wheel control by Lane Following Assist can be limited depending on whether a vehicle is in front or the driving conditions of the vehicle.
- Even though the steering is assisted by Lane Following Assist, the driver may control the steering wheel.
- The steering wheel may feel heavier or lighter when the steering wheel is assisted by Lane Following Assist than when it is not.

Lane Following Assist malfunction and limitations

Lane Following Assist malfunction



A: Check Driver Assistance system

When Lane Following Assist is not working properly, a warning message will appear and the Master warning light (⚠) will appear on the instrument cluster.

If this occurs, have Lane Following Assist inspected by an authorized Kia dealer.

* NOTICE

You can check it in the service message of the utility information view of the cluster display window.

Limitations of Lane Following Assist

For more details on Lane Following Assist limitations, refer to "Lane Keeping Assist (LKA)" on page 6-28.

⚠ WARNING

- For more details on Lane Following Assist warnings, refer to "Lane Keeping Assist (LKA)" on page 6-28.
- Loading freight exceeding the maximum load or placing freight unevenly may undermine driving safety. This may also prevent Lane Following Assist from operating properly.

Highway Driving Assist (HDA)
(if equipped)

Highway Driving Assist



Highway Driving Assist detect lanes and vehicles ahead and help maintain the distance from the vehicle ahead and the set speed and center your vehicle in the lane while driving on the highway.

Highway Lane Change Assist (if equipped)



Highway Lane Change Assist function can help change lanes to the direction you operate the turn signal switch if the function determines that lane change is possible.

*** NOTICE**

- Highway Driving Assist is available only on controlled access roads of certain highways.
- A controlled access road indicates roads with limited entrances and exits that allow uninterrupted high speed traffic flow. Only passenger cars and motorcycles are allowed on controlled access roads.
- Additional highways may be added by future navigation updates.

Highway Driving Assist operates on main roads of highways and does not operate on interchanges or junctions.

Detecting sensor

Front view camera



Front radar



Front corner radar (if equipped)



Rear corner radar (if equipped)



Refer to the pictures above for the detailed location of the detecting sensors.

⚠ CAUTION

For more details on the precautions of the detecting sensors, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion)" on page 6-4.

Highway Driving Assist settings**1 Driver Assistance****2 Driving Convenience****3 Highway Driving Assist**

With the vehicle on, touch or select **Setup** → **Vehicle** → **Driver Assistance** → **Driving Convenience** on the infotainment system to set whether to use each function.

- If **Highway Driving Assist** is selected, it can help maintain distance from the vehicle ahead, maintain the set speed, and can help center the vehicle in the lane.

Highway Lane Change Assist (if equipped)

- If **Highway Lane Change Assist** is selected, it can help change lanes safely.

⚠ WARNING

For your safety, change the Settings after parking the vehicle at a safe location.

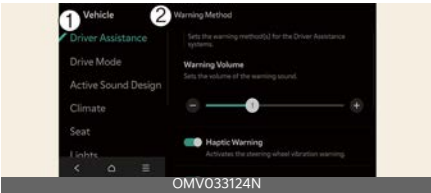
⚠ CAUTION

When the trailer's connector is plugged into your vehicle, Highway Driving Assist automatically turns off. In this case, you cannot get help Highway Driving Assist. Pay extra attention when you drive when the function is inactive. (If a Kia genuine Trailer Kit that can determine whether a trailer is connected is used)

*** NOTICE**

- Highway Driving Assist should be selected to use Highway Lane Change Assist.
- If there is a problem with the function, the settings cannot be changed. Have the function inspected by an authorized Kia dealer.
- If the vehicle is restarted, the functions will maintain their last settings.

Warning Methods



1 Driver Assistance

2 Warning Methods

The **Warning Methods** can be set with the vehicle on. Select **Setup** → **Vehicle** → **Driver Assistance** → **Warning Methods** from the settings menu in the infotainment system to change the following settings:

- **Warning Volume:** Adjusts the volume of the warning sound. If you turn off the **Warning Volume**, for your safety, the function may warn you with a low volume.
- **Driving Safety Priority:** Lowers all other audio volumes when the Driving Safety system sounds a warning.

* INFORMATION

- Ensure that **Warning Methods** you have set may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** will maintain its last setting even if the vehicle is restarted.
- The setting menu may not be available for your vehicle depending on the vehicle features and specifications.

Highway Driving Assist operation

Highway Driving Assist

Display operating status

You can see the status of the Highway Driving Assist operation in the Driving Assist view on the instrument cluster. Refer to "LCD display modes" on page 4-88.

Operating State



Standby State



Highway Driving Assist will be displayed as below depending on the status of the function.

- 1 Highway Driving Assist indicator, whether there is a vehicle ahead and the selected distance level is displayed.
 - Highway Driving Assist indicator
 - Green HDA: Operating state
 - Gray HDA: Standby state
 - White HDA blink: Accelerator depressed state
 - None: Off state
- 2 Set speed
- 3 Lane Following Assist indicator
- 4 Whether there is a vehicle ahead and the selected headway

5 Whether the lane is detected or not

* NOTICE

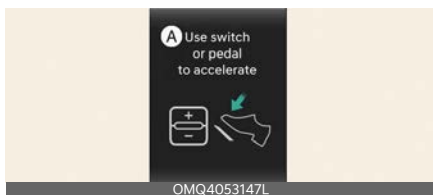
- For more details on the display, refer to "Lane Following Assist (LFA)" on page 6-85.
- For more details on the display refer to "Smart Cruise Control (SCC)" on page 6-66.
- The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the settings menu.

Turning on Highway Driving Assist

Highway Driving Assist operates when:

- When driving on available roads, press Drive Assist button to turn on Highway Driving Assist.
- When entering the main roads of highways while Smart Cruise Control is operating, Driving Assist will not turn on if Lane Following Assist is turned off.

Restarting after stopping

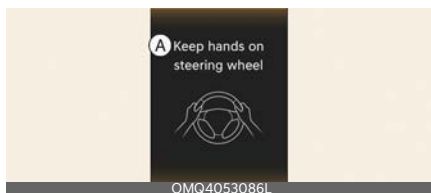


A: Use switch or pedal to accelerate

When Highway Driving Assist is operating, your vehicle will stop if a vehicle ahead of you stops. If a vehicle ahead of you starts moving within 30 seconds after the stop, your vehicle will start as well. In addition, after the vehicle has stopped and 30 seconds have passed, a message will appear on the instrument

cluster. Depress the accelerator pedal or operate the (+) switch, (-) switch or (HDA) switch to start driving.

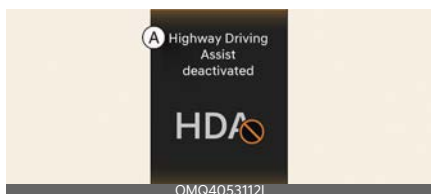
Hands-off warning



A: Keep hands on steering wheel

If you take your hands off the steering wheel for several seconds, a warning message will appear and an audible warning will sound in stages.

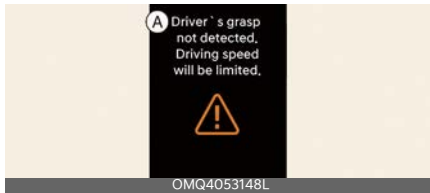
- First stage: Warning message
- Second stage: Warning message (red steering wheel) and audible warning



A: Highway Driving Assist deactivated

If the driver still does not have their hands on the steering wheel after the hands-off warning, a warning message will appear and Highway Driving Assist will be automatically canceled.

Driving speed limit



A: Driver's grasp not detected. Driving speed will be limited

When Highway Driving Assist is canceled by the hands-off warning, the driving speed will be limited.

While Driving Speed Limit function is operating, a warning message will appear on the cluster, and an audible warning will sound continuously.

Driving to one side within lane (if equipped)



When your vehicle speed is above 40 mph (60 km/h), if a vehicle around you is driving at a close distance, your vehicle will control steering in the opposite direction of the vehicle to assist in safe driving. If there are vehicles in both sides of the lane that are driving close to you, the function will not veer to the opposite side of the lane.

Highway Driving Assist standby

When the Smart Cruise Control is temporarily canceled while Highway Driving Assist is operating, Highway Driving Assist will be in the standby state. At this time, Lane Following Assist will operate properly.

* NOTICE

- Driving Speed Limit can help you drive below 40 mph (60 km/h). Your vehicle decelerates due to the vehicle ahead. After your vehicle has decelerated, it cannot automatically accelerate.
- Driving Speed Limit will cancel in the following circumstances:
 - When you grasp the steering wheel again
 - When you turn on Lane Following Assist by pressing the Lane Driving Assist button
 - When (+), (-), (⏮), (⏭) switch or (🚗) button is operated, or the accelerator pedal or the brake pedal is depressed

Highway Lane Change Assist (if equipped)

Display and control

You can see the status of the Highway Lane Change Assist function operation in the Driving Assist view on the instrument cluster. Refer to "LCD display modes" on page 4-83.

Highway Lane Change Assist function will be displayed as below depending on the status of the function.

Ready/Operating



Standby/Canceled



1 Highway Lane Change Assist indicator

- Green (🚗➡️) on: Ready state
- Green (🚗➡️) blink: Operating state
- Gray (🚗➡️) on: Standby state
- White (🚗➡️) blink: Canceled state (display only a certain time)

2 Lane line

The lane line is displayed identical to Highway Lane Change Assist indicator (1). However, the lane detection availability will be showed on Standby state.

3 Green arrow and shade

The green arrow is displayed when a certain amount of time has passed after the function has started operating, and until the lane change has completed.

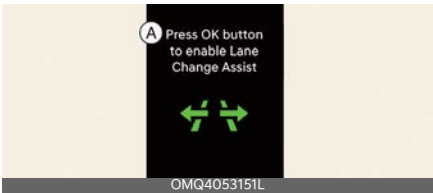
4 Message

- Message is displayed when the function does not operate even though the turn signal lever is used.
- Message is displayed when the function is canceled while operating.

Highway Lane Change Assist function will turn on when the following conditions are satisfied.

- The Driving Assist button or Lane Driving Assist button is used to turn on Highway Driving Assist.

Turning on Highway Lane Change Assist



A: Press OK button to enable Lane Change Assist

While Highway Lane Change Assist function is on, the function will be ready to operate when all the following conditions are satisfied:

- Highway Driving Assist is operating
- Lane Following Assist is operating
- A vehicle behind your vehicle is detected more than once after your vehicle is turned on
- Your driving speed is above 20 mph (30 km/h)

- When driving at low speeds (20~40 mph (30~60 km/h)), your vehicle can only be operated if vehicles in the left and right adjacent lanes are recognized, and there is no risk of collision when changing lanes.
- Hands-off warning is not displayed on the instrument cluster
- Hazard warning flasher is off

* NOTICE

- While Lane Change Assist function is turned on (indicator on), Lane Following Assist will not cancel even if the turn signal indicator or hazard warning flasher is operating.
- Lane Change Assist function turns off automatically when driven in the following road conditions:
 - One driving lane
 - Roads lacking physical center separation structures (such as guard-rails)
 - There is a pedestrian or cyclist on the road ahead
- If the driving speed slows down to less than 15 mph (25 km/h) when it is in ready state, it will change to standby state.
- When driving at low speeds (20~40 mph (30~60 km/h)), the vehicle will change to standby state if it is not recognized by vehicles in the left and right adjacent lanes.
- If a risk of collision is detected, the system will change to standby state.
- The images or colors may be displayed differently depending on the specifications of the instrument cluster or theme.

⚠ WARNING

When Highway Lane Change Assist function turns off while operating, steering assist will be temporarily canceled. Always be cautious while driving.

Highway Lane Change Assist operating



Highway Lane Change Assist function will operate, when you push the turn signal lever to (A) or (B) position while the function is in the ready state (⚡⚡ indicator is green), and all the following conditions are satisfied:

- Your hands are on the steering wheel
- There is no collision risk in the direction of lane change
- There is a two-lane road with broken lines of any colors in the direction of the lane change
- There are no Forward Collision-Avoidance Assist and Blind Spot Collision-Avoidance Assist warnings
- You are driving in the middle of the lane (should not be driving close to one side of the lane)
- The road you are driving on, or the road you are about to change lane is a road that the function can operate

* NOTICE

- When the turn signal lever is placed at (A) position, the Highway Lane Change Assist function is performed. After that, if the turn signal lever is

placed in neutral, Highway Lane Change Assist function is canceled before stepping on the lane.

The Highway Lane Change Assist function is not canceled after stepping on the lane, but when the lane change is complete, it is canceled and the turn signal turns off.

- When the turn signal lever is placed at B position for a certain period, the green arrow will appear. Even when the lever is released and returns to its original position, lane change will still be assisted.
- While lane change is occurring, the turn signal indicator will blink even when not holding the turn signal lever. The turn signal indicator will turn off when the lane change is complete.

Highway Lane Change Assist standby

Highway Lane Change Assist function will be in the standby state when one of the ready state conditions is not satisfied, or when entering or driving on one of the following roads:

- Road within a certain distance from the tollgate on the main road of the highway (or motorway)
- Road ahead ends without an interchange or junction
- Road with sharp curves
- Road with narrow lanes

Canceling Highway Lane Change Assist

The function will be canceled when:

- The turn signal lever is turned in the opposite direction of lane change
- The steering wheel is steered sharply

- If the turn signal switch is moved to position (A) while the Lane Change Assist is operating and then returned to the N (Neutral) position before changing lanes

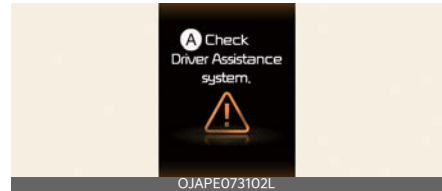
WARNING

- While the function is operating, it will cancel if one of the following occurs:
 - Highway Driving Assist is turned off
 - Lane Following Assist or Smart Cruise Control is turned off or temporarily canceled
 - Hands-off warning message is displayed on the instrument cluster
 - The turn signal lever is placed at (A) position
 - The hazard warning flasher is turned on
 - Forward Collision-Avoidance Assist or Blind-Spot Collision-Avoidance Assist warning message is displayed
 - Possible collision is detected in the next lane, even though there are no Forward Collision-Avoidance Assist and Blind Spot Collision-Avoidance Assist warning
 - The target lane disappears
 - The target lane is not detected
 - There is a problem with turn signal lights
 - Highway Lane Change Assist function is off. (The function turns off when: it is turned off from the settings menu; when the road changes to a one-way road; when there is an intersection or crosswalk ahead; when you enter a road with no structure, such as a median strip, guardrail, etc., or; when there is a pedestrian or cyclist in the driving lane.)

- If the driving speed slows down to less than 15 mph (25 km/h) when it is in ready state, it will change to standby state.
- When driving at low speeds (20~40 mph (30~60 km/h)), the vehicle will change to standby state if it is not recognized by vehicles in the left and right adjacent lanes.
- If a risk of collision is detected
- While the function is operating, if it is canceled, depending on the driving conditions, the vehicle may drive to the middle of the driving lane or steering assist may stop. Always pay attention to the road and driving conditions.
- The function may not operate normally on roads with pedestrians or cyclists, such as an intersection or crosswalk. Always pay attention to the road and driving conditions.

Highway Driving Assist malfunction and limitations

Highway Driving Assist malfunction



A: Check Driver Assistance system

When Highway Driving Assist is not working properly, a warning message will appear, and the Master warning light (⚠) will appear on the instrument cluster.

Have Highway Driving Assist inspected by an authorized Kia dealer.

⚠ WARNING

- You are responsible for controlling the vehicle for safe driving.
- Always have your hands on the steering wheel while driving.
- Highway Driving Assist is a supplemental function that assists you in driving the vehicle. It is not a complete autonomous driving system. Always check road conditions take appropriate actions to drive safely.
- Always have your eyes on the road. It is your responsibility to avoid violating traffic laws. Kia is not responsible for any traffic violations or accidents caused by you.
- Highway Driving Assist may not be able to recognize all traffic situations. Highway Driving Assist may not detect possible collisions due to its limitations. Always be aware of its limitations. Obstacles such as vehicles,

- motorcycles, bicycles, pedestrians, or unspecified objects or structures such as guardrails, tollgate, etc., that may collide with your vehicle may not be detected.
- Highway Driving Assist will turn off automatically under the following situations:
 - Driving on roads that Highway Driving Assist does not operate, such as a rest area, intersection, junction, etc.
 - The navigation does not operate properly such as when the navigation is updating or restarting.
 - Highway Driving Assist may inadvertently operate or turn off depending on road conditions (navigation information) and surroundings.
 - Lane Following Assist function may be temporarily disabled when the front view camera cannot detect lanes properly or the hands-off warning is on.
 - You may not hear the warning sound of Highway Driving Assist in noisy surroundings.
 - If the vehicle is driven at a speed above a certain speed on a curve, your vehicle may drive to one side or may depart from the driving lane.
 - When you are towing a trailer or another vehicle, turn off Highway Driving Assist for safety reasons.
 - The hands-off warning message may appear early or late depending on how you handle the steering or on road conditions. Always have your hands on the steering wheel while driving.
 - For your safety, please read the owner's manual before using the Highway Driving Assist.

- Highway Driving Assist will not operate when the vehicle is started, or when the detecting sensors or navigation is being initialized.

*** NOTICE**

You can check it in the service message of the utility information view of the instrument cluster display window.

Limitations of Highway Driving Assist

Highway Driving Assist and Highway Lane Change Assist may not operate properly, under the following circumstances:

- The map information and the actual road is different because the navigation is not updated
- The map information and the actual road is different because of real-time GPS data or map information error
- The infotainment system is overloaded by simultaneously performing functions such as route search, video playback, voice recognition, etc.
- GPS signals are blocked in areas such as a tunnel
- You veer off course, reset the navigation route by changing the destination (including route change according to real-time road traffic information) or cancel the route to the destination
- The vehicle enters a service station or rest area
- Android Auto or CarPlay is operating
- The navigation cannot detect the current vehicle position (for example, elevated roads, including overpasses adjacent to general roads or nearby parallel roads)
- If your vehicle fails to recognize white single dashed lane lines and road boundaries
- If some lanes are temporarily restricted
- If there are no physical separation structures, such as a center median, in the middle of the road
- If the lane you intend to change to is a bus lane or a variable lane

- If you have a trailer, carrier, or other equipment attached

* NOTICE

For more details of the front view camera, front radar, front corner radar and rear corner radar sensor, refer to "Forward Collision-Avoidance Assist (FCA) (Sensor Fusion)" on page 6-4.

This device complies with Part 15 of the FCC rules.

Operation is subject to the following three conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.
3. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

Radio frequency radiation exposure information:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 8 in (20 cm) between the radiator (antenna) and your body.

This transmitter must not be colocated or operating in conjunction with any other antenna or transmitter.

Rear View Monitor (RVM) (if equipped)

Rear View Monitor displays the area behind your vehicle to help with safe parking.

Detecting sensor

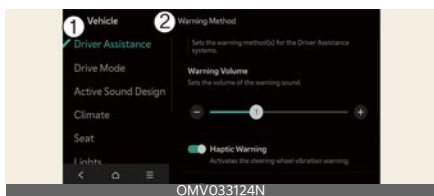
Wide-rear view camera



Refer to the picture above for the detailed location of the detecting sensor.

Rear View Monitor settings

Warning Methods



1 Driver Assistance

2 Parking Safety Priority

The **Warning Methods** can be set with the vehicle on. Select **Setup** → **Vehicle** → **Driver Assistance** → **Warning Methods** from the settings menu in the infotainment system to change the following settings:

- **Parking Safety Priority:** Lowers all other audio volumes when Rear View Monitor is active.

* INFORMATION

- Ensure that **Warning Methods** you have set may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** will maintain its last setting even if the vehicle is restarted.
- The setting menu may not be available for your vehicle depending on the vehicle features and specifications.

Camera Settings



1 Camera Settings

2 Display Contents

3 Display Settings

With the vehicle on, select the setup icon (⚙️) on the screen or **Setup** → **Vehicle** → **Driver Assistance** → **Parking Safety** → **Camera Settings** from the infotainment system screen to change the Rear View Monitor settings.

Extended Rear View Monitor

If Extended Rear View Monitor use is selected, the rear camera is displayed even when shifting from R (Reverse) to N (Neutral) or D (Drive).

Rear-view Parking Guidance

If Rear-view Parking Guidance in the display information is selected, Rear-view Parking Guidance and Top Rear-view Parking Guidance are displayed in the rear monitor.

* NOTICE

- The setting menu may not be available for your vehicle depending on vehicle specifications.
- The horizontal lines of the Rear-view Parking Guidance indicate distances of 20 in (0.5 m), 40 in (1 m) and 91 in (2.3 m) from the vehicle.
- The horizontal scale of the Top View Parking Guidance indicates distances of liftgate opening distance and 60 in (1.5 m) from the vehicle.

Rear View Monitor operation

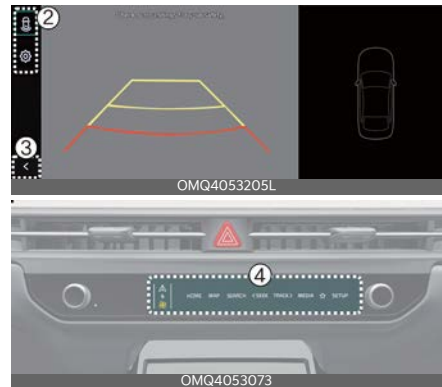
Parking/View button



Press the Parking/View button (1) to turn on Rear View Monitor.

Press the button again to turn off the function.

Rear-view



Operating conditions

The Rear-view function will turn on under the following conditions:

- Shifting the gear to R (Reverse).
- Pressing the Parking/View button (1) while P (Park), or N (Neutral) and the vehicle speed is slower than 6 mph (10 km/h)

Pressing the View switching button (2) with the Rear top view on the screen allows you to select rear top view, rear-view, or rear wide view.

Off conditions

The Rear-view while parking function will turn off under the following conditions while parking:

- Shifting the gear to P (Park)
- Pressing the Parking/View button (1)
- Pressing the back button (3) on the rear monitor screen
- Pressing the infotainment system operation button (4)
- N (Neutral) or D (Drive) and the vehicle speed is faster than 6 mph (10 km/h)

* NOTICE

Rear-view will not turn off when the vehicle is in R (Reverse).

Extended Rear View Monitor

Extended Rear View Monitor function maintains the rear-view of the vehicle when shifting the gear from R (Reverse) to N (Neutral) or D (Drive) to help you park safely.

Operating conditions

Rear View Monitor will maintain when the following conditions are satisfied:

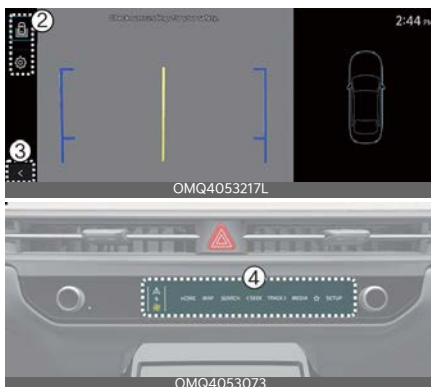
- Shifting the gear from R (Reverse) to N (Neutral) or D (Drive).
- Your driving speed is below approximately 6 mph (10 km/h).

Off conditions

Extended Rear View Monitor function will turn off when one the following conditions are satisfied:

- Shifting the gear to P (Park)
- Pressing the Parking/View button (1)
- Pressing the back button (3) on the rear monitor screen
- Pressing the infotainment system operation button (4)
- The vehicle speed is faster than 6 mph (10 km/h)

Rear top view



The rear top view shows an image of the vehicle looking down from above, allowing you to determine the distance from the rear vehicle or object when parking. Press the Rear Top View button to turn on the Rear Top View.

* NOTICE

- In all views, the video will not turn off when your vehicle is in R (Reverse) mode.
- The rear-view will always be displayed in R (Reverse).
- Rear parking guidelines are displayed in the rear-view and rear top view. Select **Setup** → **Vehicle** → **Driver Assistance** → **Parking Safety** → **Camera Settings** → **Display Information** → **Rear Parking Guidelines** from the settings menu in the infotainment system to display this function. Rear parking guidelines are not displayed in the rear-view while parking.

Rear View Monitor malfunction and limitations

Rear View Monitor malfunction

When Rear View Monitor is not working properly, the screen flickers, or the camera image does not display properly, visit an authorized Kia dealer.

Limitations of Rear View Monitor

When the vehicle is idling for a long time or when the vehicle is parked in an indoor parking lot, exhaust fumes may temporarily blur the image.

⚠ WARNING

- The wide-rear view camera does not cover the complete area behind your vehicle. You should always check the rear area from the inside and outside rear-view mirror before parking or backing up.
- The distance shown on the screen may differ from the actual distance. This is because the image shown on Rear View Monitor is displayed by calibrating the image from the wide-rear view camera. When the vehicle is tilted by cargo loading, rear parking guidelines may not be correct. Make sure to directly check the vehicle's surroundings for safety.
- Always keep the wide-rear view camera lens clean. If the lens is covered with foreign material, it may adversely affect camera performance and Rear View Monitor may not operate properly. Do not use chemical solvents such as strong detergents containing high alkaline or volatile organic solvents (gasoline, acetone etc.). This may damage the camera lens.

Surround View Monitor (SVM) (if equipped)

Surround View Monitor can assist in parking by allowing the driver to see around the vehicle.

Detecting sensor

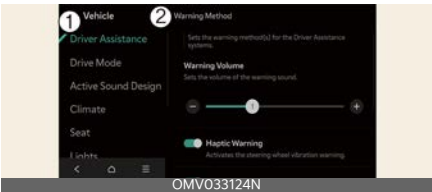


- 1 Wide-front view camera
- 2, 3 Wide-side view camera
- 4 Wide-rear view camera

Refer to the picture above for the detailed location of the detecting sensor.

Surround View Monitor settings

Warning Methods



- 1 Driver Assistance
- 2 Warning Methods

The **Warning Methods** can be set with the vehicle on. Select **Setup** → **Vehicle** → **Driver Assistance** → **Warning Methods** from the settings menu in the info-

tainment system to change the following settings:

- **Parking Safety Priority:** Lowers all other audio volumes when Surround View Monitor is active.

*** INFORMATION**

- Ensure that **Warning Methods** you have set may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** will maintain its last setting even if the vehicle is restarted.
- The setting menu may not be available for your vehicle depending on vehicle features and specifications.

Camera Settings



1 Camera Settings

2 Display Contents

3 Display Settings

With the vehicle on, select the setup icon (⚙️) on the screen or **Setup** → **Vehicle** → **Driver Assistance** → **Parking Safety** → **Camera Settings** from the infotainment system screen to change the Rear View Monitor settings.

- **Display Contents:** Specify information that will be displayed on the parking assistance screen.

Parking Distance Warning

When the Parking Distance Warning is selected, the Parking Distance Warning is displayed on the top view to the right

of the surround view monitor screen when the Parking Distance Warning is activated.

Rear View Parking Guidance

Rear-view Parking Guidance is displayed in the rear-view when **Rear-view Parking Guidance** is selected.

Top View Parking Guidance

When **Top View Parking Guidance** is selected, it is displayed on the top view to the right of the surround view monitor screen when the front or rear top view is activated.

*** NOTICE**

- The setting menu may not be available for your vehicle depending on vehicle features and specifications.
- The parking guide horizontal lines in the rear view indicate distances of 20 in (0.5 m), 40 in (1 m) and 91 in (2.3 m) from the vehicle.
- The horizontal scale of the Top View Parking Lines indicates distances of 79 in (2 m) from the vehicle.

Surround View Monitor Auto On

With the vehicle on, select **Setup** → **Vehicle** → **Driver Assistance** → **Parking Safety** → **Surround View Monitor Auto On** from the infotainment system screen to use the function.

*** NOTICE**

For more details on Surround View Monitor Auto On, refer to "Surround View Monitor Auto On" on page 6-104.

Surround View Monitor operation

Parking/View button



Press the Parking/View button (1) to turn on Rear View Monitor.

Press the button again to turn off the function.

Front-view



The front-view function displays the vehicle's front situation on the navigation system according to the driver's settings, assisting in safe driving.

Parking

While parking, the front-view of the Surround View Monitor is activated under the following conditions:

- P (Park) or N (Neutral) or D (Drive) position with a speed slower than 6 mph (10 km/h), Pressing the Parking/View button (1).
- Shifting from R (Reverse) to N (Neutral) or D (Drive) and the vehicle speed is slower than 6 mph (10 km/h).
- Forward Parking Distance Warning warns the driver when the vehicle is in D (Drive)

*(If **Setup** → **Vehicle** → **Driver Assistance** → **Parking Safety** → **Surround View Monitor Auto On** on the infotainment system selected)

Pressing the view switching button (2) on the Surround View Monitor to select the Top View, Front-view, Side-view, or Wide View.

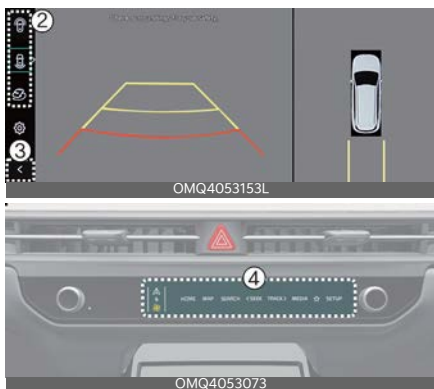
While parking, the front-view of the Surround View Monitor will be turned off under the following conditions:

- Shifting to P (Park) or R (Reverse)
- Pressing the Parking/View button (1)
- Pressing the back button (3) on the Surround View Monitor screen
- Pressing the infotainment system power button (4)
- Driving faster than 6 mph (10 km/h)

*** NOTICE**

When the front-view is activated, the last used view is displayed.

Rear-view



The rear-view function of the Surround View Monitor displays the vehicle's rear situation on the navigation system according to the driver's settings, assisting in safe parking.

Parking

While parking, the rear-view of the Surround View Monitor is activated in the following cases:

- P (Parking) or N (Neutral) or D (Drive) position with a vehicle speed slower than 10 km/h, Pressing the Parking/View button (1) and then pressing the view switching button (2) to select the rear-view
- Shifting to R (Reverse)

Pressing the view switching button (2) on the Surround View Monitor to select the rear-view, rear top view, rear side-view, or rear wide view.

While parking, the rear-view function of the Surround View Monitor is turned off under the following conditions when the vehicle is in P (Park) or N (Neutral) or D (Drive) mode:

- Shifting from N (Neutral) or D (Drive) to P (Parking)

- Pressing the Parking/View button (1)
- Pressing the back button (3) on the Surround View Monitor screen
- Pressing the infotainment system power button (4)
- Driving faster than 10 km/h

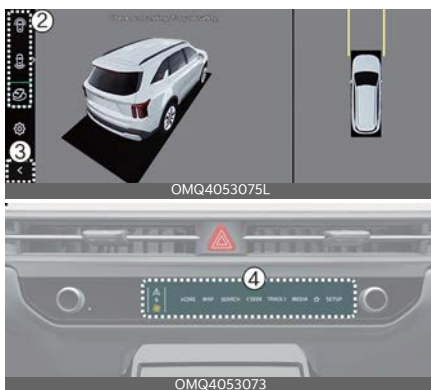
When the vehicle is in R (Reverse), the rear-view function of the Surround View Monitor will turn off under the following conditions:

- Shifting to P (Park)

* NOTICE

- The rear-view will always be displayed in R (Reverse).
- In R (Reverse) position, the video will not be turned off by pressing the infotainment system power button (4).

3D view function



3D view function shows the vehicle in various angles. Press the 3D view icon on the Surround View Monitor screen to choose the angle. Press the 3D view icon again to reset the angle.

The 3D view of the Surround View Monitor is activated under the following conditions:

- P (Park) or N (Neutral) or D (Drive) position with a vehicle speed slower than 6 mph (10 km/h), or when selecting the 3D view button (2) while the Surround View Monitor is activated in R (Reverse) mode.

The 3D view function of the Surround View Monitor while parking will be turned off under the following conditions:

- Shifting from N (Neutral) or D (Drive) to P (Park)
- Pressing the Parking/View button (1)
- Pressing the back button (3) on the Surround View Monitor screen
- Pressing the infotainment system power button (4)
- Driving faster than 6 mph (10 km/h)

When the vehicle is in R (Reverse), the 3D view function of the Surround View Monitor will turn off under the following conditions:

- Shifting to P (Park)

* NOTICE

- The 3D view does not display parking guidelines.
- The top view screen, which is displayed with a Front/Rear-view or 3D view, converts the original images entered from the four wide view cameras to provide a 360-degree image around the vehicle that is viewed down.
- Top view is not displayed with front/rear wide view.
- Zoom in or out on the top view by pinching the top view area.

Surround View Monitor malfunction and limitations

Surround View Monitor malfunction

When Surround View Monitor is not working properly, or the screen flickers, or the camera image does not display normally, have the vehicle inspected by an authorized Kia dealer.

Limitations of Surround View Monitor

- The screen may display abnormally and an icon will appear at the top left side of the screen under the following circumstances:
 - The liftgate is opened.
 - The driver or front passenger door is opened.
 - The outside rear-view mirror is folded.

WARNING

- ALWAYS look around your vehicle to make sure there are no objects or obstacles before moving the vehicle. What you see on the screen may differ from the actual vehicle's location.
- The distance shown on the screen may differ from the actual distance. This is because the image shown on Surround View Monitor is displayed by calibrating the image from the wide-rear view camera. When the vehicle is tilted by cargo loading, rear parking guidelines may not be correct. Make sure to directly check the vehicle's surroundings for safety.
- Surround View Monitor is designed to be used on a flat surface. If used on roads with different heights such as curbs and speed bumps, the image on the screen may not look correct.

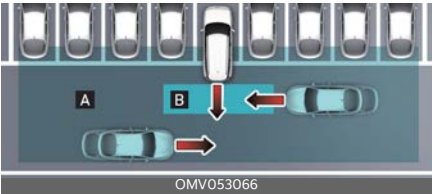
- Always keep the camera lens clean. If the lens is covered with foreign material, it may adversely affect camera performance and Surround View Monitor may not operate normally. Do not use chemical solvents such as strong detergents containing high alkaline or volatile organic solvents (gasoline, acetone etc.). This may damage the camera lens.

*** NOTICE**

The Surround View Monitor shows the surrounding images of the vehicle by cameras mounted on the vehicle. The image shown on the screen may look unnatural depending on the vehicle and the surrounding conditions. The Surround View Monitor can improve its image by calibrating image through daily driving.

Rear Cross-Traffic Collision-Avoidance Assist (RCCA)

Rear Cross-Traffic Collision-Avoidance Assist detects vehicles approaching from the rear left or right while your vehicle is reversing and warns you of a possible collision with a warning message and a warning sound. Also, Rear Cross-Traffic Collision-Avoidance Assist may assist with braking your vehicle to help avoid a collision.



[A] Rear Cross-Traffic Collision Warning operating range

[B] Rear Cross-Traffic Collision-Avoidance Assist operating range

⚠ CAUTION

Warning time may vary depending on the speed of approaching vehicle.

Detecting sensor

Rear corner radar



Refer to the picture above for the detailed location of the detecting sensors.

*** NOTICE**

For more details on the precautions of the rear corner radar, refer to "Blind-Spot Collision-Avoidance Assist (BCA) (if equipped)" on page 6-34.

Rear Cross-Traffic Collision-Avoidance Assist settings

Rear Cross-Traffic Safety



- 1 Driver Assistance
- 2 Parking Safety
- 3 Rear Cross-Traffic Safety

With the vehicle on, select **Setup** → **Vehicle** → **Driver Assistance** → **Parking Safety** → **Rear Cross-Traffic Safety** on the infotainment system screen to turn on Rear Cross-Traffic Collision-Avoidance Assist.

⚠ WARNING

When you restart the vehicle, Rear Cross-Traffic Collision-Avoidance Assist will always turn on. If **Rear Cross-Traffic Safety** is deselected after restart, you should always be aware of the surroundings and drive safely.

⚠ CAUTION

When the trailer's connector is plugged into your vehicle, Rear Cross-Traffic Collision-Avoidance Assist automatically turns off. In this case, you cannot get help Rear Cross-Traffic Collision-Avoidance Assist. Pay extra attention when

you drive when the function is inactive. (If a Kia genuine Trailer Kit that can determine whether a trailer is connected is used)

Warning Methods



- 1 Driver Assistance
- 2 Warning Methods

The **Warning Methods** can be set with the vehicle on. Select **Setup** → **Vehicle** → **Driver Assistance** → **Warning Methods** from the settings menu in the infotainment system to change the following settings

- **Warning Volume:** Adjusts the volume of the warning sound.
- **Haptic Warning:** Activate the steering wheel vibration warning.

*** INFORMATION**

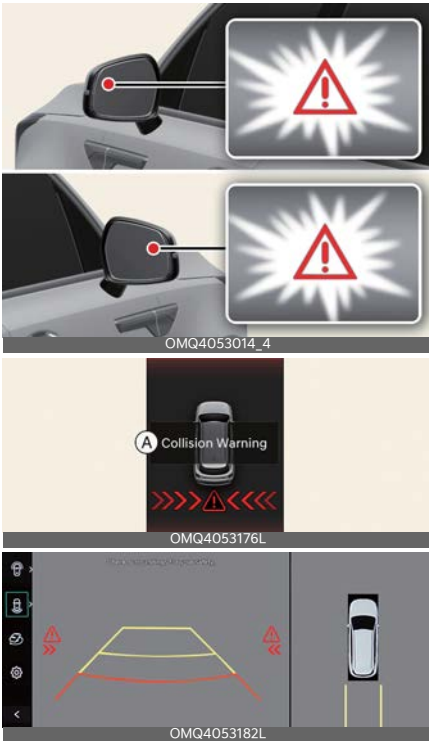
- Ensure that **Warning Methods** you have set may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** will maintain its last setting even if the vehicle is restarted.
- The setting menu may not be available for your vehicle depending on the vehicle features and specifications.
- The **Warning Volume** and **Haptic Warning** cannot be turned off at the same time. When one of the warnings is turned off the other is activated.

Rear Cross-Traffic Collision-Avoidance Assist operation

Rear Cross-Traffic Collision-Avoidance Assist will warn and control your vehicle depending on collision risk level:

- Collision warning
- Emergency braking
- Stopping vehicle and ending brake control

Collision warning



A: Collision Warning

Collision warning will alert you with a warning light on the outside rear-view mirror, a warning message, an audible warning, and steering wheel vibration. Collision warning will also appear on the infotainment system screen.

Collision warning will operate when all the following conditions are satisfied:

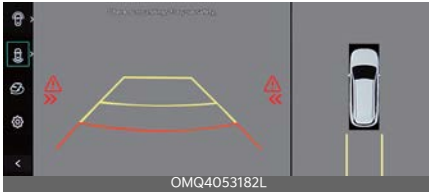
- The gear is shifted to R (Reverse) while your driving speed is below 5 mph (8 km/h)
- The approaching vehicle is within approximately 82 ft (25 m) from the left and right side of your vehicle
- The speed of the vehicle approaching from the left and right is above 3 mph (5 km/h)

* NOTICE

- If the operating conditions are satisfied, there will be a warning whenever the vehicle approaches from the left or right side even though your vehicle speed is 0 mph (0 km/h).
- The images and colors on the instrument cluster may differ depending on the instrument cluster type or theme selected from the instrument cluster.

Emergency braking





A: Emergency Braking

Collision warning will alert the driver with a warning light on the outside rear-view mirror, a warning message, an audible warning, and steering wheel vibration.

Collision warning will also appear on the infotainment system screen.

Emergency braking will be assisted to help prevent collision with approaching vehicles from the left and right.

Emergency braking will operate when all the following conditions are satisfied:

- The gear is shifted to R (Reverse) while your driving speed is below 5 mph (8 km/h)
- The approaching vehicle is within approximately 5 ft (1.5 m) from the left and right side of your vehicle
- The speed of the vehicle approaching from the left and right is above 3 mph (5 km/h)

⚠ WARNING

Brake control ends when the conditions of the approaching vehicle from the rear left or right side are as below:

- The approaching vehicle is out of the detecting range
- The approaching vehicle passes behind your vehicle
- The approaching vehicle does not drive toward your vehicle
- The approaching vehicle speed slows down

- You depress the brake pedal with sufficient power

Stopping vehicle and ending brake control



A: Drive carefully

When your vehicle stops due to emergency braking, a warning message will appear on the instrument cluster.

You should depress the brake pedal immediately and check your surroundings.

- Brake control will end after your vehicle is stopped by emergency braking for approximately 2 seconds.
- During emergency braking, braking control by Rear Cross-Traffic Collision-Avoidance Assist will automatically cancel when the driver excessively depresses the brake pedal.

⚠ WARNING

- For your safety, change the Settings after parking the vehicle at a safe location.
- If any other function's warning message is displayed or audible warning is generated, Rear Cross-Traffic Collision-Avoidance Assist's warning message may not be displayed and audible warning may not be heard.
- You may not hear the warning sound of Rear Cross-Traffic Collision-Avoidance Assist in noisy surroundings.

- Rear Cross-Traffic Collision-Avoidance Assist may not operate if you apply the brake pedal to avoid collision.
- During Rear Cross-Traffic Collision-Avoidance Assist operation, your vehicle may stop suddenly injuring passengers and shifting loose objects. Always have seat belts on and keep loose objects secured.
- Even if there is a problem with Rear Cross-Traffic Collision-Avoidance Assist, your vehicle's basic braking performance will operate properly.

⚠ WARNING

- When Rear Cross-Traffic Collision-Avoidance Assist is operating, its braking control will automatically cancel when you excessively depress the accelerator pedal.
- Rear Cross-Traffic Collision-Avoidance Assist does not operate in all situations and cannot avoid all collisions.
- Rear Cross-Traffic Collision-Avoidance Assist may warn you late or may not warn you depending on the road and driving conditions.
- It is your responsibility to control your vehicle. Do not solely depend on Rear Cross-Traffic Collision-Avoidance Assist. Maintain a safe braking distance, and if necessary, depress the brake pedal to reduce speed or to stop your vehicle.
- Never deliberately operate Rear Cross-Traffic Collision-Avoidance Assist on people, animals, objects, etc. It may cause serious injury or death.

⚠ WARNING

The brake control may not operate properly depending on the status of ESC (Electronic Stability Control).

There will only be a warning when:

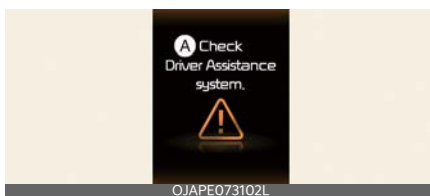
- The ESC (Electronic Stability Control) warning light is on
- ESC (Electronic Stability Control) is engaged with a different function

*** NOTICE**

- If braking is assisted by Rear Cross-Traffic Collision-Avoidance Assist, you must immediately depress the brake pedal and check the surroundings.
- After shifting the gear to R (Reverse), braking control will operate once for left and right vehicle approach.

Rear Cross-Traffic Collision-Avoidance Assist malfunction and limitations

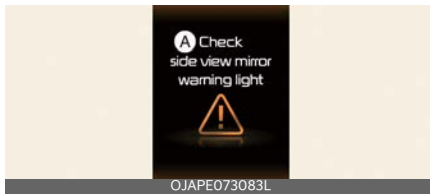
Rear Cross-Traffic Collision-Avoidance Assist malfunction



A: Check Driver Assistance system

If Rear Cross-Traffic Collision-Avoidance Assist is not working properly, a warning message will appear on the instrument cluster for several seconds, and the Master warning light (⚠) will appear on the instrument cluster.

Have the function be inspected by an authorized Kia dealer. Visit an authorized Kia dealer.

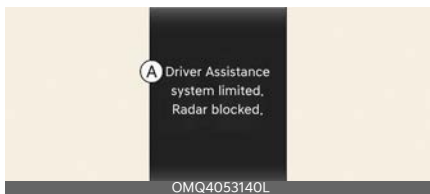


A: Check side-view mirror warning light

When the outside rear-view mirror warning light is not working properly, a warning message will appear on the instrument cluster for several seconds, and the Master warning light (⚠) will appear on the instrument cluster.

Have the function be inspected by an authorized Kia dealer.

Rear Cross-Traffic Collision-Avoidance Assist disabled



A: Driver Assistance system limited. Radar blocked.

When the rear bumper around the rear-side radar or sensor is covered with foreign material, such as snow, rain, trailer or carrier, it can reduce the detecting performance and temporarily limit or disable Rear Cross-Traffic Collision-Avoidance Assist.

If this occurs, a warning message will appear on the instrument cluster.

Rear Cross-Traffic Collision-Avoidance Assist will operate properly when such

foreign material or trailer, etc., is removed.

If Rear Cross-Traffic Collision-Avoidance Assist does not operate properly after it is removed, have the function be inspected by an authorized Kia dealer.

⚠ WARNING

- Even though a warning message does not appear on the cluster, Rear Cross-Traffic Collision-Avoidance Assist may not operate properly.
- Rear Cross-Traffic Collision-Avoidance Assist may not operate properly in an open area where any substances are not detected after turning ON your vehicle.

⚠ CAUTION

Turn off Rear Cross-Traffic Collision-Avoidance Assist to install or remove a trailer, carrier, or another attachment. Turn on Rear Cross-Traffic Collision-Avoidance Assist when finished.

Limitations of Rear Cross-Traffic Collision-Avoidance Assist

Rear Cross-Traffic Collision-Avoidance Assist may not operate properly, or it may operate unexpectedly under the following circumstances:

- Departing from areas with overgrown foliage
- Departing from areas where roads are wet
- Speed of an approaching vehicle is fast or slow

Braking control may not work, and your attention is required in the following circumstances:

- The vehicle vibrates severely while driving over a bumpy, uneven road or pothole
- Driving on a slippery surface such as snow, rain, ice, etc.
- The tire pressure is low or a tire is damaged
- Remote Smart Parking Assist is operating (if equipped)

* NOTICE

For more details on the limitations of the rear corner radar, refer to "Blind-Spot Collision-Avoidance Assist (BCA) (if equipped)" on page 6-34.

⚠ WARNING

- Driving near a vehicle or structure

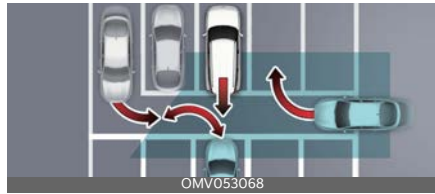


[A]: Structure

Rear Cross-Traffic Collision-Avoidance Assist may be limited when driving near a vehicle or structure, and may not detect a vehicle approaching from the left or right. The function may not warn you or control the brakes when necessary.

Always check your surroundings while backing up.

- When the vehicle is in a complex parking environment



Rear Cross-Traffic Collision-Avoidance Assist may detect vehicles which are parking or pulling out near your vehicle (i.e., example, a vehicle leaving beside your vehicle, a vehicle parking or pulling out in the rear area, a vehicle approaching your vehicle making a turn, etc.).

The function may unnecessarily warn the driver and control the brake.

Always check your surroundings while backing up.

- When the vehicle is parked diagonally



[A]: Vehicle

Rear Cross-Traffic Collision-Avoidance Assist may be limited when backing up diagonally and may not detect the vehicle approaching from the left or right. The function may not warn you or control the brakes when necessary.

Always check your surroundings while backing up.

- When the vehicle is on or near a slope



Rear Cross-Traffic Collision-Avoidance Assist may be limited when your vehicle is on an uphill or downhill slope, or near it, and may not detect a vehicle approaching from the left or right. The function may not warn you or control the brakes when necessary. Always check your surroundings while backing up.

- Pulling into a parking space where there is a structure



[A]: Structure,

[B]: Wall

Rear Cross-Traffic Collision-Avoidance Assist may detect vehicles passing by in front of you when parking in reverse into a parking space with a wall or structure in the rear or side area. The function may unnecessarily warn the driver and control the brake. Always check your surroundings while backing up.

- When the vehicle is parked rearward



Rear Cross-Traffic Collision-Avoidance Assist may detect vehicles passing by behind you when parking in reverse into a parking space. The function may unnecessarily warn the driver and control the brake.

Always check your surroundings while backing up.

⚠ WARNING

- When you are towing a trailer or another vehicle, turn off Rear Cross-Traffic Collision-Avoidance Assist for safety reasons.
- Rear Cross-Traffic Collision-Avoidance Assist may not operate properly if interfered with by strong electromagnetic waves.
- Rear Cross-Traffic Collision-Avoidance Assist may not operate for 3 seconds after your vehicle is started, or the rear corner radars are initialized.
- Even if restarting the vehicle with the sensors blocked or malfunctioning, Rear Cross-Traffic Collision-Avoidance Assist may not properly operate as the function maintains the last setting.

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.

Forward/Reverse Parking Distance Warning (PDW) (if equipped)

Forward/Reverse Parking Distance Warning uses the front and rear ultrasonic sensors to detect and warns you if a person, animal, or object is within a certain distance when your vehicle is stopped or driving at low speed.

Detecting sensor

Front ultrasonic sensors



OMQ4053055

Rear ultrasonic sensors



OMQ4A053035

Refer to the pictures above for the detailed locations of the detecting sensors.

Forward/Reverse Parking Distance Warning settings

Warning Methods



1 Driver Assistance

2 Warning Methods

The **Warning Methods** can be set with the vehicle on. Select **Setup** → **Vehicle** → **Driver Assistance** → **Warning Methods** from the settings menu in the infotainment system to change the following settings:

- **Warning Volume:** Adjusts the volume of the warning sound. If you turn off the **Warning Volume**, for your safety, the function may warn you with a low volume.

* INFORMATION

- Ensure that **Warning Methods** you have set may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** will maintain its last setting even if the vehicle is restarted.
- The setting menu may not be available for your vehicle depending on your vehicle features and specifications.

Parking Distance Warning Auto On

You can set the parking distance warning to be ON at low speeds. To use Parking Distance Warning Auto On function, select **Setup** → **Vehicle** → **Driver Assistance** → **Parking Safety** → **Parking Distance Warning Auto On** on the infotainment system.

CAUTION

When the trailer’s connector is plugged into your vehicle, Reverse Parking Distance Warning automatically turns off. In this case, you cannot get help Reverse Parking Distance Warning. Pay extra attention when you drive when the function is inactive. (If a Kia genuine Trailer Kit that can determine whether a trailer is connected is used)

* NOTICE

When **Parking Distance Warning Auto On** is selected, the Parking Safety button indicator (P) stays on.

Forward/Reverse Parking Distance Warning operation

Parking Safety button



Press the Parking Safety (P) button to turn on Forward/Reverse Parking Distance Warning. Press the button again to turn it off.

- When the gear is shift to R (Reverse), Parking Distance Warning will auto-

atically turn on (Parking Safety button indicator on).

Forward Parking Distance Warning

Forward Parking Distance Warning will operate when one of these conditions is satisfied:

- The gear is shifted from R (Reverse) to D (Drive) with Reverse Parking Distance Warning on
- The gear is in D (Drive) and the Parking Safety (P) button indicator light is on
- Forward Parking Distance Warning warns the driver when the vehicle is in D (Drive)
(If Setup → Vehicle → Driver Assistance → Parking Safety → Parking Distance Warning Auto On on the infotainment system selected)

* NOTICE

- Forward Parking Distance Warning operate when the vehicle's speed is below 6 mph (10 km/h).
- When in R (Reverse), no warning is issued for objects inside the front. Only objects within 24 in (60 cm) outside the front will be alerted.
- If you do not select Parking Distance Warning Auto On, the Forward Parking Distance Warning function will turn off (the indicator light in the button will turn off) when the vehicle speed exceeds 18 mph (30 km/h). Even if you drive below 6 mph (10 km/h) again, the function will not turn on automatically.

Warning indication and warning sound

Distance from object	Warning indicator		Warning sound
	Cluster	Infotainment	
24~48 in (60~120 cm)			Buzzer beeps intermittently (Front inner side)
12~24 in (30~60 cm)			Beeps more frequently
within 12 in (30 cm)			Beeps continuously

- The corresponding indicator will appear whenever each ultrasonic sensor detects a person, animal or object in its sensing range. An audible warning will sound.
- When more than two objects are detected at the same time, the closest one will be warned with an audible warning.
- When the distance from the object is more than 24 in (60 cm), it is not displayed on the instrument cluster.
- The shape of the indicator in the illustration may differ from the actual vehicle.

Reverse Parking Distance Warning

Reverse Parking Distance Warning will operate under the following conditions.

- The gear is shifted to R (Reverse).

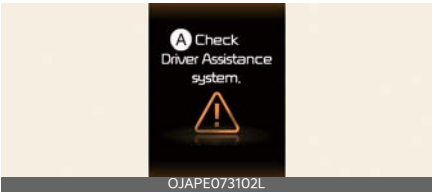
Warning indication and warning sound

Distance from object	Warning indicator		Warning sound
	Cluster	Infotainment	
24~48 in (60~120 cm)	 OKA4H054		Buzzer beeps intermittently
12~24 in (30~60 cm)	 OKA4H054		Beeps more frequently
within 12 in (30 cm)	 OKA4H054		Beeps continuously

- The corresponding indicator will appear whenever each ultrasonic sensor detects a person, animal or object in its sensing range. An audible warning will sound.
- When more than two objects are detected at the same time, the closest one will be warned with an audible warning.
- The shape of the indicator in the illustration may differ from the actual vehicle.

Forward/Reverse Parking Distance Warning malfunction and precautions

Forward/Reverse Parking Distance Warning malfunction

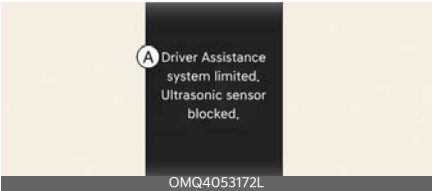


A: Check Driver Assistance system

If there is a problem with Forward/Reverse Parking Distance Warning or related functions and parts, a warning message is displayed on the instrument cluster.

The contents of the warning can be checked in the service message of the utility information view of the instrument cluster display window. If it still does not work properly, have the vehicle inspected by an authorized Kia dealer.

Parking Distance Warning disabled



A: Driver Assistance system limited. Ultrasonic sensor blocked.

The ultrasonic sensor can detect objects around the vehicle. The Parking Distance Warning may be temporarily limited or may not operate if snow, rain, foreign substances, etc. get on the sensor. You can check the detection sensor

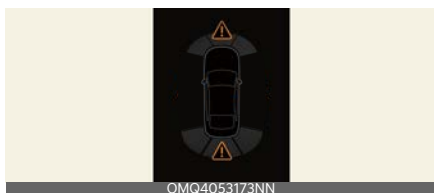
blind warning target (ultrasonic sensor) in the service message of the utility information view in the instrument cluster display window.

Parking Distance Warning will work normally if you remove the contamination from the recognition sensor. Always keep it clean.

If it still does not work properly even after you have removed the contamination, have the vehicle inspected by an authorized Kia dealer.

* NOTICE

- The Master warning light (⚠) is displayed in the target direction if a malfunction or ultrasonic sensor is blocked while Parking Distance Warning is operating.



- You can check it in the service message of the utility information view of the instrument cluster display window.

Limitations of Forward/Reverse Parking Distance Warning

Parking Distance Warning may not operate properly when:

- Ice is on the sensor
- Sensor is covered with foreign material, such as snow or water (Parking Distance Warning will operate properly when such substance is removed.)
- The weather is extremely hot or cold
- The sensor or sensor assembly is disassembled
- The surface of the sensor is pressed hard or hit with a hard object
- The surface of the sensor is scratched with a sharp object
- The sensors or its surrounding area is directly sprayed with a high pressure washer
- When objects emitting ultrasonic waves, such as a vehicle's horn, motorcycle engine, or large vehicle air brakes are nearby.

Parking Distance Warning may malfunction when:

- Heavy rain or water spray is present
- Water flows on the surface of the sensor
- Affected by another vehicle's sensors
- The sensor is covered with snow or ice
- Driving on uneven road, gravel roads or bushes
- Objects that generate ultrasonic waves are near the sensor
- License plate is installed in a different spot from the original location
- The vehicle bumper height or ultrasonic sensor installation has been modified

- Attaching equipment or accessories next to the ultrasonic sensors

The following objects may not be detected:

- Sharp or slim objects, such as ropes, chains or small poles.
- Narrow objects, such as corners of a square column
- Objects, which tend to absorb sensor frequency, such as clothes, spongy material or snow.
- Objects smaller than 40 in (100 cm) in length and narrower than 6 in (14 cm) in diameter.
- Pedestrians, animals, or objects that are very close to the ultrasonic sensors

- If the Parking Distance Warning does not operate properly, have the vehicle inspected by an authorized Kia dealer.

WARNING

- Parking Distance Warning is a supplemental function. The operation of Parking Distance Warning can be affected by several factors including environmental conditions. It is your responsibility to always check the front and rear-view before and while parking.
- Your new vehicle warranty does not cover any accidents or damage to your vehicle due to the malfunction of Parking Distance Warning.
- Pay close attention when driving near objects, pedestrians and especially children. Some objects may not be detected by the ultrasonic sensors due to the objects distance, size or material, all of which can limit the effectiveness of the sensor.
- Parking Distance Warning does not warn you in the order of detection. It varies depending on the speed of your vehicle or the shape of a person, animal or object.

Forward/Side/Reverse Parking Distance Warning (PDW) (if equipped)

Forward/Side/Reverse Parking Distance Warning uses the front, side and rear ultrasonic sensors to detect and warns you if a person, animal, or object is within a certain distance when your vehicle is stopped or driving at low speed.

Detecting sensor

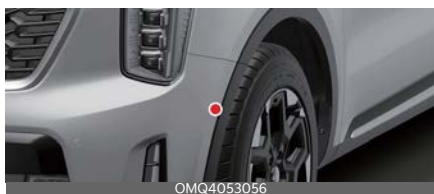
Front ultrasonic sensors



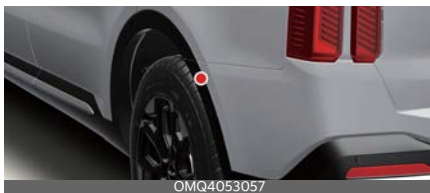
Rear ultrasonic sensors



Front side ultrasonic sensors

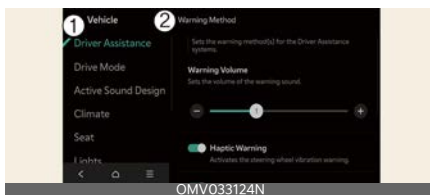


Rear side ultrasonic sensors



Forward/Side/Reverse Parking Distance Warning settings

Warning Methods



1 Driver Assistance

2 Warning Methods

The **Warning Methods** can be set with the vehicle on. Select **Setup** → **Vehicle** → **Driver Assistance** → **Warning Methods** from the settings menu in the infotainment system to change the following settings:

- **Warning Volume:** Adjusts the volume of the warning sound. If you turn off the **Warning Volume**, for your safety, the function may warn you with a low volume.

* INFORMATION

- Ensure that **Warning Methods** you have set may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** will maintain its last setting even if the vehicle is restarted.
- The setting menu may not be available for your vehicle depending on

your vehicle features and specifications.

Parking Distance Warning Auto On

You can set the parking distance warning to be ON at low speeds. To use Parking Distance Warning Auto On function, select **Setup → Vehicle → Driver Assistance → Parking Safety → Parking Distance Warning Auto On** on the infotainment system.

⚠ CAUTION

When the trailer’s connector is plugged into your vehicle, Reverse Parking Distance Warning automatically turns off. In this case, you cannot get help Reverse Parking Distance Warning. Pay extra attention when you drive when the function is inactive. (If a Kia genuine Trailer Kit that can determine whether a trailer is connected is used)

*** NOTICE**

When **Parking Distance Warning Auto On** is selected, the Parking Safety button indicator (P+⚠) stays on.

Forward/Side/Reverse Parking Distance Warning operation

Parking Safety button



Press the Parking Safety (P+⚠) button to turn on Forward/Side/Reverse Parking Distance Warning. Press the button again to turn off the function.

- When the gear is shift to R (Reverse), Parking Distance Warning will automatically turn on (Parking Safety button indicator on).

Forward Parking Distance Warning

Forward Parking Distance Warning will operate when one of these conditions is satisfied:

- The gear is shifted from R (Reverse) to D (Drive) with Reverse Parking Distance Warning on
- The gear is in D (Drive) and the Parking safety (P+⚠) button indicator light is on
- Forward Parking Distance Warning warns the driver when the vehicle is in D (Drive)

(If **Setup → Vehicle → Driver Assistance → Parking Safety → Parking Distance Warning Auto On** on the infotainment system selected)

* NOTICE

- Forward Parking Distance Warning operate when the vehicle's speed is below 6 mph (10 km/h).
- When in R (Reverse), no warning is issued for objects inside the front. Only objects within 24 in (60 cm) outside the front will be alerted.
- If you do not select Parking Distance Warning Auto On, the Forward Parking Distance Warning function will turn off (the indicator light in the button will turn off) when the vehicle speed exceeds 18 mph (30 km/h). Even if you drive below 6 mph (10 km/h) again, the function will not turn on automatically.

Warning indication and warning sound

Distance from object	Warning indicator		Warning sound
	Cluster	Infotainment	
24~48 in (60~120 cm)			Buzzer beeps intermittently (Front inner side)
12~24 in (30~60 cm)			Beeps more frequently
within 12 in (30 cm)			Beeps continuously

- The corresponding indicator will appear whenever each ultrasonic sensor detects a person, animal or object in its sensing range. An audible warning will sound.

- When more than two objects are detected at the same time, the closest one will be warned with an audible warning.
- When the distance from the object is more than 24 in (60 cm), it is not displayed on the instrument cluster.
- The shape of the indicator in the illustration may differ from the actual vehicle.

Side Parking Distance Warning

Side Parking Distance Warning will operate when one of these conditions is satisfied:

- Shifting the gear to R (Reverse)
- The gear is in D (Drive) and the Parking Safety (P) button indicator light is on
- Forward Parking Distance Warning warns the driver when the vehicle is in D (Drive)

(If Setup → Vehicle → Driver Assistance → Parking Safety → Parking Distance Warning Auto On on the infotainment system selected)

- Your driving speed is below 6 mph (10 km/h).

* NOTICE

- Side Parking Distance Warning only works when the vehicle speed is below 6 mph (10 km/h).
- Side Parking Distance Warning function works only when the Forward/Reverse Parking Distance Warning function is turned on.

Warning indication and warning sound

Distance from object	Warning indicator		Warning sound
	Cluster	Infotainment	
24~48 in (60~120 cm)			-
12~24 in (30~60 cm)			-
within 12 in (30 cm)			Beeps continuously

- When the side ultrasonic sensor detects a person or object, it displays indicator lights for each distance on the instrument cluster or infotainment system screen.
- A warning sounds when an object within 12 in (30 cm) of the side is detected in the vehicle's exit path.
- If it detects an object to the side outside the vehicle's exit path, it only displays the indicator light.
- In D (driving), when the distance from the object is 12 in (30 cm) or more, the side-way warning is not displayed on the instrument cluster.
- The shape of the indicator may differ from the actual vehicle.

Reverse Parking Distance Warning

Reverse Parking Distance Warning will operate under the following conditions.

- The gear is shifted to R (Reverse).

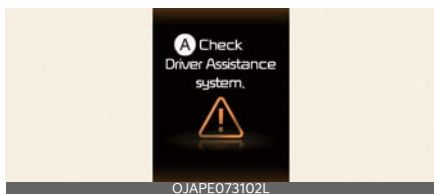
Warning indicator and warning sound

Distance from object	Warning indicator		Warning sound
	Cluster	Infotainment	
24~48 in (60~120 cm)			Buzzer beeps intermittently
12~24 in (30~60 cm)			Beeps more frequently
within 12 in (30 cm)			Beeps continuously

- The corresponding indicator will appear whenever each ultrasonic sensor detects a person, animal or object in its sensing range. An audible warning will sound.
- When more than two objects are detected at the same time, the closest one will be warned with an audible warning.
- The shape of the indicator in the illustration may differ from the actual vehicle.

Forward/Side/Reverse Parking Distance Warning malfunction and precautions

Forward/Side/Reverse Parking Distance Warning malfunction

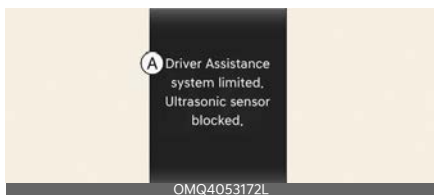


A: Check Driver Assistance system

If there is a problem with the Parking Distance Warning or related functions and parts, a warning message is displayed on the instrument cluster.

The contents of the warning can be checked in the service message of the utility information view of the instrument cluster display window. If it still does not work properly, have the vehicle inspected by an authorized Kia dealer.

Parking Distance Warning disabled



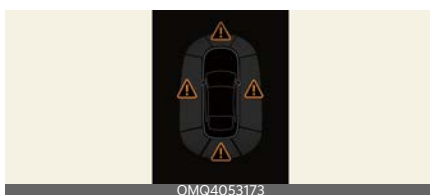
A: Driver Assistance system limited. Ultrasonic sensor blocked.

The ultrasonic sensor can detect objects around the vehicle. The Parking Distance Warning may be temporarily limited or may not operate if snow, rain, foreign substances, etc. get on the sensor. You can check the detection sensor blind warning target (ultrasonic sensor)

in the service message of the utility information view in the instrument cluster display window. The Parking Distance Warning will work normally if you remove the contamination from the recognition sensor. Always keep it clean. If it still does not work properly even after you have removed the contamination, have the vehicle inspected by an authorized Kia dealer.

* NOTICE

- The Master warning light (⚠) is displayed in the target direction if a malfunction or ultrasonic sensor is blocked while the Parking Distance Warning is operating. You can check it in the service message of the utility information view of the instrument cluster display window.



Limitations of Forward/Side/Reverse Parking Distance Warning

Parking Distance Warning may not operate properly when:

- Ice is on the sensor
- Sensor is covered with foreign material, such as snow or water (Parking Distance Warning will operate properly when such substance is removed.)
- The weather is extremely hot or cold
- The sensor or sensor assembly is disassembled

- The surface of the sensor is pressed hard or hit with a hard object
- The surface of the sensor is scratched with a sharp object
- The sensors or its surrounding area is directly sprayed with a high pressure washer
- When objects emitting ultrasonic waves, such as a vehicle's horn, motorcycle engine, or large vehicle air brakes are nearby.

Parking Distance Warning may malfunction when:

- Heavy rain or water spray is present
- Water flows on the surface of the sensor
- Affected by another vehicle's sensors
- The sensor is covered with snow or ice
- Driving on uneven road, gravel roads or bushes
- Objects that generate ultrasonic waves are near the sensor
- License plate is installed in a different spot from the original location
- The vehicle bumper height or ultrasonic sensor installation has been modified
- Attaching equipment or accessories next to the ultrasonic sensors

The following objects may not be detected:

- Sharp or slim objects, such as ropes, chains or small poles.
- Narrow objects, such as corners of a square column
- Objects, which tend to absorb sensor frequency, such as clothes, spongy material or snow.
- Objects smaller than 40 in (100 cm) in length and narrower than 6 in (14 cm) in diameter.

- Pedestrians, animals, or objects that are very close to the ultrasonic sensors
- Objects in the side space between the front side ultrasonic sensor and the rear side ultrasonic sensor or approaching the side space.

WARNING

- Parking Distance Warning is a supplemental function. The operation of Parking Distance Warning can be affected by several factors, including environmental conditions. It is your responsibility to always check the front and rear views before and while parking.
- Your new vehicle warranty does not cover any accidents or damage to the vehicle due to the malfunction of Parking Distance Warning.
- Pay close attention when driving near objects, pedestrians and especially children. Some objects may not be detected by the ultrasonic sensor, due to the objects distance, size or material, all of which can limit the effectiveness of the sensor.
- Parking Distance Warning does not warn you in the order of detection. It varies depending on the speed of the vehicle or the shape of a person, animal, or object.
- If the Parking Distance Warning does not operate properly, have the vehicle inspected by an authorized Kia dealer.

Reverse Parking Collision-Avoidance Assist (PCA) (if equipped)

Reverse Parking Collision-Avoidance Assist can detect pedestrians or objects behind your vehicle and may warn you or assist you with braking to help avoid a collision while your vehicle is reversing.

Detecting sensor

wide-rear view camera



Rear ultrasonic sensors



Reverse Parking Collision- Avoidance Assist settings

Parking Safety



- 1 Driver Assistance
- 2 Parking Safety
- 3 Backward Safety

With the vehicle on, touch **Setup** → **Vehicle** → **Driver Assistance** → **Parking Safety** on the infotainment system.

- **Backward Safety:** It warns or assists in braking when there is a high risk of collision with pedestrians or objects in the rear direction.

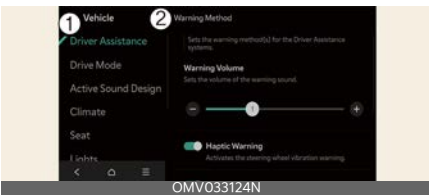
⚠ CAUTION

When the trailer's connector is plugged into your vehicle, Parking Collision-Avoidance Assist automatically turns off. In this case, you cannot get help Parking Collision-Avoidance Assist. Pay extra attention when you drive when the function is inactive. (If a Kia genuine Trailer Kit that can determine whether a trailer is connected is used)

* NOTICE

Backward safety will be selected and Parking Collision-Avoidance Assist settings will be retained whenever your vehicle is restarted.

Warning Methods



- 1 Driver Assistance
- 2 Warning Methods

The **Warning Methods** can be set with the vehicle on. Select **Setup** → **Vehicle** → **Driver Assistance** → **Warning Methods** from the settings menu in the infotainment system to change the following settings:

- **Warning Volume:** Adjusts the volume of the warning sound. If you turn off the **Warning Volume**, for your safety, the function may warn you with a low volume.
- **Haptic Warning:** Activate the steering wheel vibration warning

* INFORMATION

- Ensure that **Warning Methods** you have set may apply to the **Warning Methods** of other driver assistance systems.
- **Warning Methods** will maintain its last setting even if the vehicle is restarted.
- The setting menu may not be available for your vehicle depending on the vehicle features and specifications.
- The **Warning Volume** and **Haptic Warning** cannot be turned off at the same time. When one of the warnings is turned off, the other is activated.

Reverse Parking Collision- Avoidance Assist operation

Turning On/Off



Press and hold the Parking Safety (P) button more than 2 seconds to turn the Parking Collision-Avoidance Assist on or off.

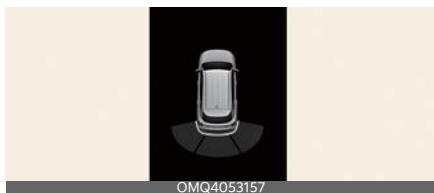
Operating conditions

When detecting a risk of collision with pedestrians or objects behind the vehicle, the warning sound and steering wheel will vibrate and the warning appears in the cluster. If the Surround View Monitor is active, the Infotainment system screen also displays a warning. If a collision is urgent, the Reverse Parking Collision-Avoidance Assist controls the braking of the vehicle.

Select **Backward safety** from the **Parking safety** menu of the infotainment system. Parking Collision-Avoidance Assist is enabled when the following conditions are satisfied:

- The liftgate and doors are closed
- The Electronic Parking Brake (EPB) is released
- The gear is shifted to R (Reverse)
- Your driving speed is below 6 mph (10 km/h) (detecting pedestrians)
- Your driving speed is below 1 mph (4 km/h) (detecting objects)
- Parking Collision-Avoidance Assist components such as the wide-rear

view camera and the rear ultrasonic sensors are in normal conditions



When Parking Collision-Avoidance Assist activates, a line appears at the bottom of the vehicle image in the instrument cluster.

* NOTICE

Parking Collision-Avoidance Assist operates only once after shifting the gear to R (Reverse). To reactivate Parking Collision-Avoidance Assist, shift the gear from another gear to R (Reverse).

Off conditions

If Parking Collision-Avoidance Assist detects a risk of collision around your vehicle with a pedestrian or an object, Parking Collision-Avoidance Assist will warn the driver with an audible warning and warning message on the instrument cluster. If the infotainment screen is on, a warning will appear on the screen.

If a collision is imminent, Parking Collision-Avoidance Assist can assist you with braking.

Braking assist is released after 5 minutes. Immediately depress the brake pedal and check your surroundings. Braking assist is also released under the following conditions when:

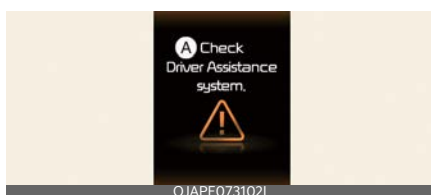
- The gear is shifted to P (Park) or D (Drive)
- The brake pedal is depressed with sufficient power
- The warning is released when shifting to 'P' (Park), 'N' (Neutral), or 'D' (Drive).

* NOTICE

When Parking Collision-Avoidance Assist is activated while reversing, braking control will be released after 5 minutes and the Electronic Parking Brake (EPB) will be engaged.

Reverse Parking Collision- Avoidance Assist malfunction and limitations

Reverse Parking Collision- Avoidance Assist malfunction

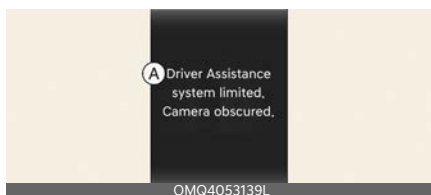


A: Check Driver Assistance system

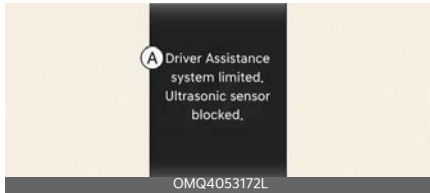
If there is a problem with Parking Collision-Avoidance Assist or related functions and parts, a warning message is displayed on the instrument cluster.

If it still does not work properly, have the vehicle inspected by an authorized Kia dealer.

Reverse Parking Collision-Avoidance Assist disabled



A: Driver Assistance system limited. Camera obscured.



A: Driver Assistance system limited. Ultrasonic sensor blocked.

The wide-rear view camera and rear ultrasonic sensors detect objects around your vehicle. Parking Collision-Avoidance Assist may be temporarily limited or may not operate if snow, rain, foreign substances, etc. get on the sensor. You can check the detection sensor blind warning target (wide-rear view camera, rear ultrasonic sensor) in the service message of the utility information view in the instrument cluster display window. Parking Collision-Avoidance Assist works normally if you remove the contamination from the recognition sensor. Always keep it clean. If it still does not work properly even after decontamination is removed, have the vehicle inspected by an authorized Kia dealer.

* NOTICE

You can check it in the service message of the utility information view of the cluster display window.

Limitations of Reverse Parking Collision-Avoidance Assist

Parking Collision-Avoidance Assist may not assist braking or warn the driver even if there are pedestrians or objects under the following circumstances:

- There is a problem with the vehicle
 - Any non-factory equipment or accessory is installed
- Braking system components, such as brake discs and calipers, are modified
- Wheels are misaligned or suspension components are modified
- Accessories are attached to the steering wheel or steering components are modified
- Your vehicle is unstable due to an accident or other causes
- Bumper height or ultrasonic sensor installation has been modified
- If there is severe tilting of the overall height due to abnormal tire pressure or excessive loading in the cargo area
- Wide view camera(s) or ultrasonic sensor(s) are damaged
- Wide view camera(s) or the ultrasonic sensor(s) is covered with foreign material, such as snow, dirt, etc.
- A snow chain, spare tire, or wheel of a different size is installed
- There is a problem with the surroundings
 - If there is a pattern on the road
 - When the shadow on the ground or reflected light
 - Pedestrians or objects are nearby the vehicle's path
 - Driving through a narrow track or a parking space
 - Driving on uneven roads such as unpaved roads, gravel roads, speed bumps or inclined roads, etc.
 - A trailer or carrier is installed around the rear corner radar
 - Wide view camera(s) is obscured by a light source or by inclement weather, such as heavy rain, fog, snow, etc.

- The surroundings are very bright or very dark
- Outside temperature is very high or very low
- The wind is either strong (above 12 mph (20 km/h)) or blowing perpendicular to the rear bumper
- Objects generating excessive noise, such as vehicle horns, loud motorcycles or truck air brakes, are near your vehicle
- An object that generates ultrasonic waves is nearby
- A wireless device with a transmission function operates near the rear ultrasonic sensor
- It is affected by another vehicle's parking distance warning function
- The road is slippery or inclined
- There is a situation with pedestrians or objects
 - The pedestrians are difficult to detect
 - There is ground height difference between your vehicle and the pedestrian
 - The image of a pedestrian in the wide-rear view camera is indistinguishable from the background
 - The pedestrian is near the rear edge of the vehicle
 - The pedestrian is not standing upright
 - The pedestrian is either too short or tall to detect
 - The pedestrian or cyclist is wearing clothing that easily blends into the background, making it difficult to detect
 - The pedestrian is wearing clothing that does not reflect ultrasonic waves
- Size, thickness, height, or shape of the object does not reflect ultrasonic waves (for example, a pole, bush, curbs, carts, edge of a wall, etc.)
- The pedestrian or the object is moving
- The pedestrian or object is very close to the rear of your vehicle
- There is a large object such as a wall behind a pedestrian or the object
- The object is not located at the front or rear center of your vehicle
- The object is not parallel to the rear bumper
- The face of the object is not parallel to the bumper
- There is a situation with the driving conditions
 - You drive the vehicle immediately after shifting to R (Reverse) or D (Drive)
 - You accelerate or circle the vehicle
 - You drive immediately after starting the vehicle

WARNING

- Always use extreme caution while driving. You are responsible for controlling the brake for safe driving.
- Always look around your vehicle to make sure there are no pedestrians or objects before moving your vehicle.
- The performance of Parking Collision-Avoidance Assist may vary under certain conditions. If vehicle speed is above 2 mph (4 km/h), Parking Collision-Avoidance Assist will provide collision avoidance assistance only when pedestrians are detected. Always look

around and pay attention when driving your vehicle.

- Some objects may not be detected by the rear ultrasonic sensors due to the objects distance, size or material, all of which can limit the effectiveness of the sensors.
- Parking Collision-Avoidance Assist may not operate properly or may operate unnecessarily depending on the road conditions and the surroundings.
- Do not solely rely on Parking Collision-Avoidance Assist. Doing so may lead to vehicle damage or injuries.
- Always keep the wide-rear view camera and ultrasonic sensors clean.
- Do not use any cleaner containing acid or alkaline detergents when cleaning the camera lens. Use only a mild soap or neutral detergent and rinse thoroughly with water.
- Do not spray the wide-rear view camera or the rear ultrasonic sensors or their surrounding area directly with a high pressure washer. It may cause the wide-rear view camera or the ultrasonic sensors to malfunction.
- Do not apply objects, such as a bumper sticker or a bumper guard, near the wide-rear view camera or ultrasonic sensors or apply paint to the bumper. Doing so may adversely affect the performance of Parking Collision-Avoidance Assist.
- Never disassemble or impact the wide-rear view camera or the components of the ultrasonic sensor.
- Do not apply unnecessary force on the wide-rear view camera or the ultrasonic sensors. Parking Collision-Avoidance Assist may not operate properly if the wide-rear view camera or the ultrasonic sensor(s) are forcibly moved out of proper alignment. Visit an authorized Kia dealer.
- Noise may be heard when sudden braking occurs to avoid a collision.
- If any other warning sound such as the seat belt warning chime is already generated, Parking Collision-Avoidance Assist warning may not sound.
- Parking Collision-Avoidance Assist may not work properly if the bumper has been damaged, replaced or repaired.
- Parking Collision-Avoidance Assist may not operate properly if interfered with by strong electromagnetic waves.
- Playing the vehicle audio system at high volume may prevent passengers from hearing Parking Collision-Avoidance Assist warning sounds.
- The brake control may not operate properly depending on the status of ESC (Electronic Stability Control). There will only be a warning when:
 - The ESC (Electronic Stability Control) warning light is on
 - ESC (Electronic Stability Control) is engaged in a different function
- Check your brake fluid and brake pad conditions regularly. The brake performance may decrease depending on brake condition.
- Turn off Parking Collision-Avoidance Assist when towing a trailer. If towing and moving in reverse, Parking Collision-Avoidance Assist will activate as it detects the trailer.

* NOTICE

Parking Collision-Avoidance Assist can detect a pedestrian or an object when:

- A pedestrian is standing behind the vehicle
- A large obstacle, such as a vehicle, is parked in the rear center of your vehicle

Declaration of conformity

The radio frequency components (Front Radar) complies:

For United States and United States territories



FCC ID

: 2A302-MRR-35

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.

CAUTION TO USERS

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

OSG2H053295L

For Canada

Model: MRR-35

IC: 27992-MRR35

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

OSG2H053296L

The radio frequency components
(Front Corner Radar/Rear Corner
Radar) complies: (if equipped)

For United States and United
States territories



OCV051263N

FCC ID : LTQ2H5TR

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.

CAUTION TO USERS

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

ONQ5P052042N

For Canada

Model: 2H5TR

IC: 3659A-2H5TR

This device complies with Industry Canada licence-
exempt RSS standard(s). Operation is
subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference,
including interference that may cause undesired
operation of the device.

Le présent appareil est conforme aux CNR
d'Industrie Canada applicables aux appareils
radio exempts de licence. L'exploitation est autorisée
aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage,
et
- (2) l'utilisateur de l'appareil doit accepter tout
brouillage radioélectrique subi, même si le
brouillage est susceptible d'en compromettre
le fonctionnement.

OON052198

What to do in an emergency

7

Road warning	7-2
• Hazard warning flasher	7-2
In case of an emergency while driving	7-2
• If the vehicle stalls while driving	7-2
• If the engine stalls at a crossroad or crossing	7-2
• If you have a flat tire while driving	7-2
If the engine will not start	7-3
• If engine doesn't turn over or turns over slowly	7-3
• If engine turns over normally but does not start	7-3
Emergency starting	7-4
• Jump-starting	7-4
• Push-starting	7-6
If the engine overheats	7-6
Tire Pressure Monitoring System (TPMS)	7-7
• Effective use of TPMS	7-8
• Low tire pressure telltale	7-9
• TPMS malfunction indicator	7-10
• Tire replacement with TPMS	7-10
• This device complies with Part 15 of the FCC rules	7-11
If you have a flat tire (with spare tire)	7-12
• Jack and tools	7-12
• Removing and storing the spare tire	7-13
• Changing tires	7-14
• Important - use of compact spare tire	7-17
• Jack label	7-19
Towing	7-20
• Towing without wheel dollies when using a towing service	7-20

What to do in an emergency

Road warning

When an emergency situation occurs while driving or when you park by the edge of the roadway, you must alert approaching or passing vehicles to be careful as they pass. For this, you should use the hazard warning flasher.

Hazard warning flasher

The hazard warning flasher serves as a warning to other drivers to exercise extreme caution when approaching, overtaking, or passing your vehicle.



It should be used whenever emergency repairs are being made or when the vehicle is stopped near the edge of a roadway.

Depress the flasher switch with the ENGINE START/STOP button in any position. The flasher switch is located in the center fascia panel. All turn signal lights will flash simultaneously.

- The hazard warning flasher operates whether your vehicle is running or not.
- The turn signals do not work when the hazard flasher is on.
- Care must be taken when using the hazard warning flasher while the vehicle is being towed.

In case of an emergency while driving

In an emergency, stay calm and take the following steps.

If the vehicle stalls while driving

1. Reduce your speed gradually, keeping a straight line.
2. Move cautiously off the road to a safe place.
3. Turn on your hazard warning flasher.
4. Try to start the vehicle again. If your vehicle will not start, contact an authorized Kia dealer.

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

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.
2. When the vehicle has slowed to such a speed that it is safe to do so, brake carefully and pull off the road.
3. Drive off the road as far as possible and park on firm level ground.
If you are on a divided highway, do not park in the median area between the two traffic lanes.
4. When the vehicle is stopped, turn on your emergency hazard flashers, set the parking brake and put the transmission in P.

5. Have all passengers get exit the vehicle. Be sure they all get out on the side of the vehicle that is away from traffic.
6. When changing a flat tire, follow the instruction provided later in this section.

If the engine will not start

When the engine doesn't start, first check to see how much fuel there is and whether the battery is discharged.

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.

WARNING

Do not push or pull the vehicle to start it. This could cause damage to your vehicle. Refer to "Jump-starting" on page 7-4.

If engine turns over normally but does not start

1. Check the fuel level and add fuel if necessary.
2. With the ENGINE START/STOP button in the OFF position, check all connectors at the ignition coils and spark plugs. Reconnect any that may be disconnected or loose.
3. Check the fuel line in the engine compartment.
4. If the engine still does not start, call an authorized Kia dealer or seek other qualified assistance.

Emergency starting

When the vehicle will not start because of low battery power, you may need to jump start the vehicle.

Jump-starting

Connect cables in numerical order and disconnect in reverse order.



Jump-starting can be dangerous if done incorrectly. To avoid harm to yourself or damage to your vehicle or battery, follow these jump-starting procedures. If in doubt, have a competent technician or towing service jump-start your vehicle.

⚠ CAUTION

Use only a 12-volt jumper system. You can damage a 12-volt starting motor, ignition system, and other electrical parts beyond repair by use of a 24-volt power supply (either two 12-volt batteries in series or a 24-volt motor generator set).

⚠ WARNING

Frozen batteries

Do not attempt to jump start the vehicle if the discharged battery is frozen, as the battery may rupture or explode.

⚠ WARNING

Battery

- Never attempt to check the electrolyte level of the battery, as this may cause the battery to rupture or explode.
- Keep all flames or sparks away from the battery. The battery produces hydrogen gas which may explode if exposed to flame or sparks.

If these instructions are not followed exactly, serious personal injury and damage to the vehicle may occur! If you are not sure how to follow this procedure, seek qualified assistance. Automobile batteries contain sulfuric acid. This is poisonous and highly corrosive. When jump starting, wear protective glasses and be careful not to get acid on yourself, your clothing or on the vehicle.

- Do not attempt to jump start the vehicle if the discharged battery is frozen or if the electrolyte level is low; the battery may rupture or explode.
- Do not allow the (+) and (-) jumper cables to touch. It may cause sparks.
- The battery may rupture or explode when you jump start with a low or frozen battery.

⚠ 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 or degrade. Make sure to connect one end of the jumper cable to the negative terminal of the booster battery, and the other end to a metallic point, far away from the battery.

⚠ WARNING**Sulfuric acid risk**

Automobile batteries contain sulfuric acid. When jump starting your vehicle, be careful not to get sulfuric acid on yourself, your clothing, or on the vehicle. This acid is poisonous and highly corrosive.

Jump-starting

1. Make sure the booster battery is 12-volt and that its negative terminal is grounded.
If the booster battery is in another vehicle, do not allow the vehicles to come in contact.
2. Turn off all unnecessary electrical loads.
3. Connect the jumper cables in the exact sequence shown in the illustration.
 - 1) Connect one end of a jumper cable to the positive terminal of the discharged battery (1).
 - 2) Connect the other end to the positive terminal of the booster battery (2).

- 3) 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 ground - a solid, stationary, metallic point (for example, the engine lifting bracket) away from the battery (4).

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.

4. If connected with the other vehicle, start the vehicle with the booster battery first and let it run at 2,000 rpm for several minutes.
5. Start the vehicle with the discharged battery.
6. If the engine starts, disconnect one end of the negative terminal of the booster battery (3), then other end of the positive terminal of the booster battery (2) and the discharged battery (1).

If the cause of your battery discharging is not apparent, have your vehicle checked by an authorized Kia dealer.

*** NOTICE****Battery cables**

Do not connect the jumper cable from the negative terminal of the booster battery to the negative terminal of the discharged battery. This can cause the discharged battery to overheat and crack, releasing battery acid.

Make sure to connect one end of the jumper cable to the negative terminal of the booster battery, and the other end to a metallic point, far away from the battery.

Push-starting

Vehicles equipped with automatic transmission or Dual Clutch Transmission (DCT) cannot be push-started. It can only be jump-started. Follow the directions in this section for "Jump-starting" on page 7-4.

WARNING

Tow starting vehicle

Never tow the vehicle to start it.

When the engine starts, the vehicle can suddenly surge forward and could cause a collision with the tow vehicle.

If the engine overheats

If your temperature gauge indicates overheating, you experience a loss of power, or hear a 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. Shift the gear to P (Park) and set the parking brake.
3. If the air conditioning is on, turn it off.
4. If engine coolant is leaking under the vehicle or steam is coming from underneath the hood, stop the engine. Do not open the hood until the coolant has stopped leaking or the steam has stopped.
5. 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.
 - 1) If the fan is not operating, turn the engine off.
6. Check to see if the water pump drive belt is missing.
 - 1) If it is not missing, check to see that it is tight.
 - 2) 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.

7. If the water pump drive belt is broken or engine coolant is leaking out, stop the engine immediately and call the nearest an authorized Kia dealer for assistance.
8. If you cannot find the cause of the overheating, wait until the engine temperature has returned to normal. If coolant has been lost, carefully add coolant to the reservoir to bring the fluid level in the reservoir up to the halfway mark.
9. Proceed with caution, keeping alert for further signs of overheating. If overheating recurs, call an authorized Kia dealer for assistance.

WARNING

Coolant reservoir cap



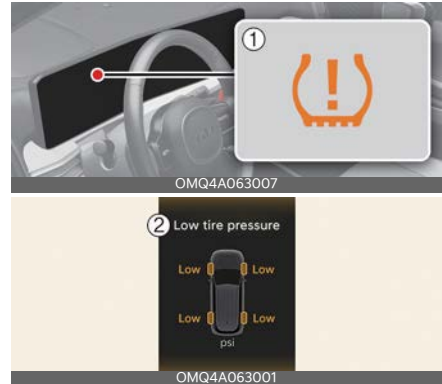
Do not remove the engine coolant reservoir cap when the engine is hot. This may result in coolant blowing out of the opening and cause serious burns.

CAUTION

- Serious loss of coolant indicates there is a leak in the cooling system and this should be checked as soon as possible. Have your vehicle checked by an authorized Kia dealer.
- When the engine overheats from low engine coolant, suddenly adding engine coolant may cause cracks in the engine. To prevent damage, add engine coolant slowly in small quantities.

Tire Pressure Monitoring System (TPMS)

The Tire Pressure Monitoring System (TPMS) detects the pressure of vehicle's tires and displays it on the LCD display.



1. Low tire pressure telltale/TPMS malfunction indicator
2. Low tire pressure position telltale (Shown on the LCD display)

Tire Pressure Indicator

- You can check the tire pressure in the assist mode on the cluster.
 - Refer to "LCD display modes" on page 4-88.
- 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 "LCD display modes" on page 4-88).

*** NOTICE**

- The tire pressure may change due to factors such as parking condition, driving style, and altitude above sea level.
- The tire pressure shown on the dashboard may differ from the tire pressure measured by tire pressure gauge.
- Low tire pressure warning may sound when a tire's pressure unit is equal or lower than nearby tires. This is a normal occurrence, which is due to the change in tire pressure along with tire temperature.

Effective use of TPMS**⚠ WARNING**

Over-inflation or under-inflation can reduce tire life, adversely affect vehicle handling, and lead to sudden tire failure that may cause loss of vehicle control resulting in an accident

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

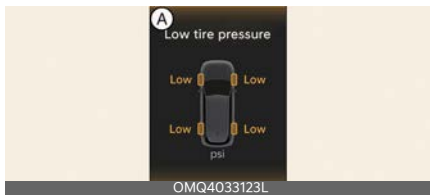
If any of the below happens, have the system checked by an authorized Kia dealer.

1. The low tire pressure telltale/TPMS malfunction indicator does not appear for 3 seconds when the ENGINE START/STOP button is turned to the ON position or engine is running.
2. The TPMS malfunction indicator remains illuminated after blinking for approximately 1 minute.
3. The Low tire pressure position telltale remains illuminated.

Low tire pressure telltale (!)

Low tire pressure position telltale

When the TPMS warning indicators are illuminated, one or more of your tires is significantly under-inflated.



A: Low tire pressure

If the telltale illuminates, immediately reduce your speed, avoid hard cornering and anticipate increased stopping distances. 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.

The TPMS malfunction indicator and the Low Tire Pressure telltale may turn on and appear 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 appeared 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.

You should check the tire inflation pressure and adjust the tires to the recommended tire inflation pressure when driving your vehicle under the following conditions.

- from a warm area to a cold area
- from a cold area to a warm area
- the outside temperature is extremely high or low

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 and result in increased braking distances and a loss of vehicle control.

TPMS malfunction indicator (!)

The low tire pressure telltale will appear after it blinks for approximately one minute when there is a problem with the TPMS.

If the system correctly detects an under-inflation warning at the same time as a system failure, it will appear both the TPMS malfunction and the low tire pressure position telltales (e.g., if the Front Left sensor fails, the TPMS malfunction indicator appears, but if the Front Right, Rear Left, or Rear Right tire is underinflated, the low tire pressure position telltales may appear 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 illuminate 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 TPMS.
- The TPMS malfunction indicator may illuminate if the vehicle is equipped with snow chains or a personal electronic devices (such as a laptop computer, mobile charger, remote starter or navigation) is used in the vehicle. This can interfere with normal operation of the TPMS.

Tire replacement 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. A sealant that is 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. 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 appear after a few minutes. This is because the TPMS sensor mounted on the spare wheel is not activated.

Once the low pressure tire is inflated to the recommended pressure and installed on the vehicle or the TPMS sensor mounted on the replaced spare wheel is activated 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 has not disappeared 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 activated 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 pressure 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 (sitting stationary for at least 3 hours or 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 or driven for less than 1 mile (1.6 km) in that 3 hour period.

Never use tire sealant if your vehicle is equipped with a TPMS. A 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 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 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 three conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.
3. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

If you have a flat tire (with spare tire) (if equipped)

If you have a flat tire, you can change the flat tire to a spare tire using tools.

⚠ WARNING

Driving on a flat tire will cause permanent damage to the tire. Re-inflating a tire after it has been driven on while being severely underinflated or flat may cause a blowout and a serious crash. Never attempt to re-inflate a tire that has been driven on while severely underinflated or flat. In this case, repair or replace the flat tire as soon as possible.

⚠ WARNING

Changing a tire can be dangerous. Follow the instructions in this section when changing a tire to reduce the risk of serious injury or death.

⚠ CAUTION

Be careful as you use the jack handle to stay clear of the flat end. The flat end has sharp edges that could cause cuts.

Jack and tools



The jack, jack handle and wheel lug nut wrench are stored in the luggage compartment.

Pull up the luggage compartment cover to reach this equipment.

1. Jack

2. Wheel lug nut wrench

Jacking instructions

The jack is provided for emergency tire changing only.

- To prevent the jack from "rattling" while the vehicle is in motion, store it properly.
- Follow jacking instructions to reduce the possibility of personal injury.

⚠ WARNING

Changing tires

- Never attempt vehicle repairs in the traffic lanes of a public road or highway.
- Always move the vehicle completely off the road and onto the shoulder before changeinge a tire. Use the jack on firm level ground. If you cannot find a firm level place off the road, call a towing service company for assistance.
- Be sure to use the correct front and rear jacking positions on the vehicle; never use the bumpers or any other part of the vehicle for jacking support.
- The vehicle can roll off the jack causing serious injury or death.
- Do not go under a vehicle that is supported by a jack.
- Do not start or run the engine while the vehicle is on the jack.
- Do not allow anyone 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**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.

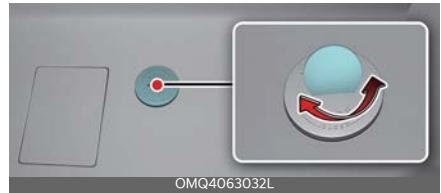
⚠ WARNING**Running engine on jack**

Do not start or run the engine of the vehicle while it is on the jack. This may cause the vehicle to fall off the jack.

To prevent the jack from "rattling" while the vehicle IS in motion, store it properly.

*** NOTICE****Retreaded tires**

Substantial design variations and the age of the retreaded tire casing structure can limit service life and have negative impact on road safety.

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.
If necessary, separate the tool case only after removing the clamp.
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 reaches the ground.



5. After the spare tire reaches the ground, continue to turn the wrench counterclockwise, and draw the spare

tire outside. Never rotate the wrench excessively. The spare tire carrier may be damaged.

6. Remove the retainer (1) from the center of the spare tire. During tire removal & installation, try and keep the retainer cable tight, to prevent backlashing/binding.



To store the spare tire:

1. Lay the tire on the ground with the valve stem facing up.
2. Place the wheel under the vehicle and install the retainer (1) through the wheel center.
3. Turn the wrench clockwise until it clicks.

⚠ WARNING

Touching surface of the luggage compartment floor

Do not touch the metal surface of the luggage compartment floor while the engine is operating or hot. It could result in serious bodily injury.

Turn the engine off and wait until it cools down or wear gloves to remove the spare tire from the luggage compartment.

Changing tires

⚠ WARNING

A vehicle can slip or roll off a jack causing serious injury or death to you or those nearby. Take the following safety precautions:

- Never place any portion of your body under a vehicle that is supported by a jack.
- NEVER attempt to change a tire in the lane of traffic. ALWAYS move the vehicle completely off the road on level, firm ground away from traffic before trying to change a tire. If you cannot find a level, firm place off the road, call a towing service for assistance.
- Be sure to use the jack provided with the vehicle.
- ALWAYS place the jack on the designated jacking positions on the vehicle and NEVER on the bumpers or any other part of the vehicle for jacking support.
- Do not start or run the engine while the vehicle is on the jack.
- Do not allow anyone to remain in the vehicle while it is on the jack.
- Keep children away from the road and the vehicle.

1. Park on a level surface and apply the parking brake firmly.



2. Shift the gear to P (Park), apply the parking brake, and turn the engine OFF.
3. Activate the hazard warning flasher.

4. Remove the wheel lug nut wrench, jack, jack handle, and spare tire from the vehicle.
5. Block both the front and rear of wheel that is diagonally opposite the jack position.



⚠ WARNING

Jack location

To reduce the possibility of injury, be sure to only use the jack provided with your vehicle in the correct jack position. Never use any other part of the vehicle for jack support.

⚠ WARNING

Changing a tire

- To prevent vehicle movement while changing a tire, always set the parking brake fully, and always block the wheel diagonally, opposite the wheel being changed.
- All the wheels of the vehicle should be blocked, and no person should remain in a vehicle that is being jacked.

6. Loosen the wheel lug nuts counter-clockwise one turn each, but do not remove any nut until the tire has been raised off the ground.



7. Place the jack at the front (1) or rear (2) jacking position closest to the tire you are changing. Place the jack at the designated locations under the frame. The jacking positions are plates welded to the frame with two tabs and a raised dot.



8. Insert the jack handle into the jack and turn it clockwise, raising the vehicle until the tire just clears the ground. This measurement is approximately 1.2 inches (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 line up the top hole in the wheel lined up with the top stud. Jiggle the wheel back and forth until the wheel can be slid over the other studs.

10. To reinstall the wheel, hold it on the studs, put the wheel nuts on the studs and finger tighten them. Jiggle the tire to be sure it is completely seated, then finger tighten the nuts as much as possible.
11. Lower the vehicle to the ground by turning the wheel nut wrench counterclockwise.



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 exten-

sion pipe over the wrench handle. Go around the wheel tightening every other nut until they are all tight. 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.

⚠ WARNING

Installing a wheel

- Whenever you install a wheel, remove any corrosion, dirt or foreign materials present on the mounting surfaces of the wheel or the surface of the wheel hub, brake drum or brake disc that contacts the wheel. Make sure to secure any fasteners that attach the rotor to the hub so they do not interfere with the mounting surfaces of the wheel. Installing wheels without correct metal-to-metal contact at the wheel mounting surfaces can cause the wheel nuts to loosen and the wheel to come off while your vehicle is in motion, resulting in loss of vehicle control, personal injury or death.
- 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 secure, 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.

Wheel nut tightening torque:

Steel wheel & aluminum alloy wheel:
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 tire pressure. If the cap is not replaced, air may leak from the tire. If you lose a valve cap, buy another and install it as soon as possible. After you have changed wheels, always secure the flat tire in its place and return the jack and tools to their proper storage locations.

CAUTION

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.

WARNING

Never use oil or grease on bolts or nuts because the nuts might come loose. The vehicle's wheel could fall off, causing a crash.

Important - use of compact spare tire (if equipped)

Your vehicle is equipped with a compact spare tire. This compact spare tire takes up less space than a regular-size tire. This tire is smaller than a conventional tire and is designed for temporary use only.

- You should drive carefully when the compact spare is in use. The compact spare should be replaced by the proper conventional tire and rim at the first opportunity.
- The operation of this vehicle is not recommended with more than one compact spare tire in use at the same time.

WARNING

Spare tire

The compact spare tire is for emergency use only. Do not operate your vehicle on this compact spare at speeds over 50 mph (80 km/h). The original tire should be repaired or replaced as soon as possible to avoid failure of the spare, possibly leading to bodily injury or death.

The compact spare tire should be inflated to 60 psi (420 kPa).

NOTICE

Check the inflation pressure after installing the spare tire. Adjust it to the specified pressure, as necessary.

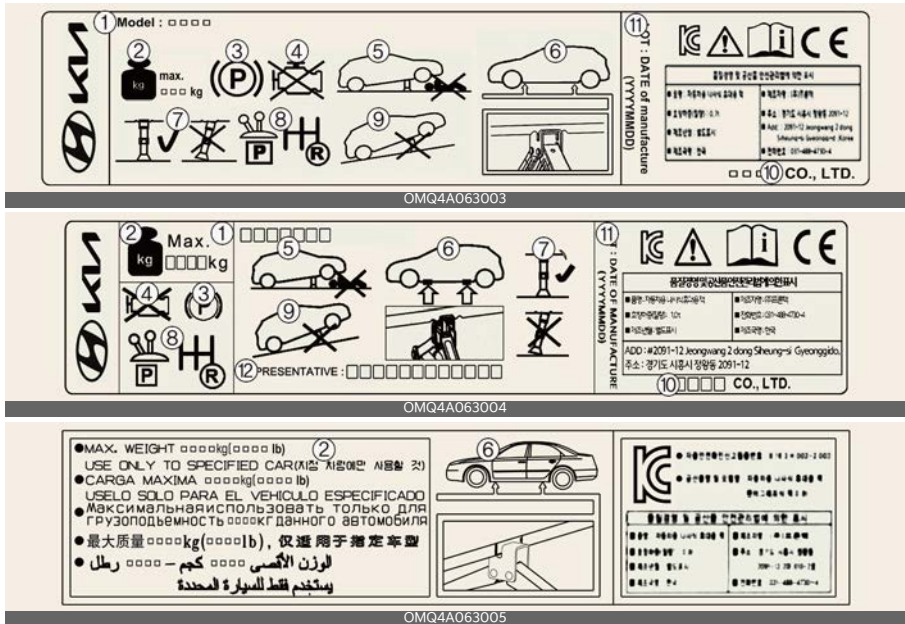
When using a compact spare tire, observe the following precautions:

- Under no circumstances should you exceed 50 mph (80 km/h). A higher speed could damage the tire.
- Ensure that you drive slowly enough for the road conditions to avoid all

hazards. Any road hazard, such as a pothole or debris, could seriously damage the compact spare.

- Continuous use of this tire could result in tire failure, loss of vehicle control, and possible personal injury.
- Do not exceed the vehicle's maximum load rating or the load-carrying capacity shown on the sidewall of the compact spare tire.
- Avoid driving over obstacles. The compact spare tire diameter is smaller than the diameter of a conventional tire and reduces the ground clearance approximately 1 inch (25 mm), which could result in damage to the vehicle.
- Do not take this vehicle through an automatic vehicle wash while the compact spare tire is installed.
- Do not use 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 neither 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



* The actual Jack label in the vehicle may differ from the illustration. For more detailed specifications, refer to the label attached to the jack:

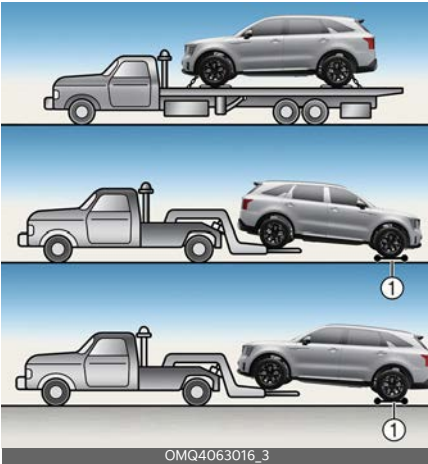
1. Model Name
2. Maximum allowable load
3. When using the jack, set your parking brake.
4. When using the jack, stop the engine.
5. Do not get under a vehicle that is supported by a jack.
6. Use the designated jack locations under the frame
7. When supporting the vehicle, the base plate of the jack must be vertical under the lifting point.
8. Move the shift position to the P (Park) position.
9. The jack should be used on firm level ground.
10. Jack manufacturer
11. Production date
12. Representative company and address

Towing

Towing service

If emergency towing is necessary, have it done by an authorized Kia dealer or a commercial tow-truck service.

Proper lifting and towing procedures are necessary to prevent damage to the vehicle. The use of wheel dollies (1) or flatbed is recommended.



* 1: dollies

⚠ CAUTION

Your AWD vehicle should never be towed with the wheels on the ground. This can cause serious damage to the transmission or the AWD system.

⚠ WARNING

Side and curtain air bag

If your vehicle is equipped with side and curtain air bag, set the ENGINE START/STOP button to ACC position when the vehicle is being towed.

The side and curtain air bag may deploy when the ENGINE START/STOP button

is turned to the ON position and the roll-over sensor detects the situation as a rollover.

* NOTICE

If the EPB does not release normally, take your vehicle to an authorized Kia dealer by loading the vehicle on a flat-bed tow truck and have the system checked.

Towing without wheel dollies when using a towing service

When towing your vehicle in an emergency without wheel dollies:

1. Set the ENGINE START/STOP button to ACC position.
2. Place the shift lever in N (Neutral).
3. Release the parking brake.

2WD vehicle (front wheel drive)



⚠ CAUTION

Towing gear position

Failure to shift to N (Neutral) may cause internal damage to the vehicle.

⚠ CAUTION

- If any of the loaded wheels or suspension components are damaged or the vehicle is being towed with the driven wheels on the ground, use a towing dolly under the driven wheels.



- Do not tow the vehicle backwards with the driven wheels on the ground, as this may cause damage to the transmission.

2WD vehicle (front wheel drive)



- Attaching straps to the chassis, suspension or other parts of the body can cause damage.
- Do not tow with sling-type equipment. Use wheel lift or flatbed equipment.
- Do not tow the vehicle with four wheels in contact with the ground if it is a vehicle equipped with AT or DCT. The transmission will be seriously damaged. Make sure not to tow the vehicle connecting it with other vehicles including camper vans.

WARNING

- If you tow the vehicle while the driven wheels are touching the ground, the vehicle motor may generate electricity and the motor components may be damaged or a fire may occur.
- When a vehicle fire occurs due to the battery, there is a risk of a second fire. Contact the fire department when towing the vehicle.

Engine compartment.....	8-5
Maintenance services.....	8-6
Owner maintenance	8-7
• Owner maintenance schedule	8-7
Scheduled maintenance service	8-9
• Scheduled maintenance service precaution	8-9
Explanation of scheduled maintenance items.....	8-14
• Engine oil and filter	8-14
• Drive belts.....	8-14
• Fuel filter	8-14
• Fuel lines, fuel hoses and connections.....	8-14
• Fuel tank and fuel cap.....	8-14
• Vacuum crankcase ventilation hoses.....	8-14
• Air cleaner filter.....	8-14
• Spark plugs.....	8-14
• Cooling system.....	8-15
• Coolant.....	8-15
• Dual clutch transmission (DCT) fluid.....	8-15
• Automatic transmission (AT) fluid	8-15
• Brake hoses and lines	8-15
• Parking brake	8-15
• Brake fluid.....	8-15
• Exhaust pipe and muffler.....	8-15
• Brake discs, pads and calipers.....	8-15
• Suspension mounting bolts.....	8-15
• Steering gear box, linkage & boots/lower arm ball joint.....	8-16
• Drive shafts and boots.....	8-16
• Air conditioning refrigerant	8-16
• Propeller shaft	8-16
• Checking fluid levels.....	8-16

8 Maintenance

Engine oil	8-16
• Checking the engine oil level.....	8-16
• Changing the engine oil and filter.....	8-17
Engine coolant	8-18
• Checking the coolant level.....	8-18
• Changing the coolant.....	8-20
Brake fluid	8-21
• Checking the brake fluid level.....	8-21
Washer fluid	8-22
• Checking the washer fluid level	8-22
Parking brake.....	8-22
• Checking the parking brake.....	8-22
Air cleaner.....	8-23
• Filter replacement.....	8-23
Climate control air filter.....	8-24
• Filter inspection	8-24
Wiper blades.....	8-25
• Blade inspection.....	8-25
• Blade replacement	8-25
Battery.....	8-27
• For best battery service	8-27
• Battery recharging	8-29
• Reset items	8-30
12V Parking lithium battery	8-30
Tires and wheels	8-31
• Checking tire inflation pressure	8-32
• Tire rotation.....	8-33
• Wheel alignment and tire balance	8-34
• Tire replacement.....	8-34
• Wheel replacement.....	8-34

• Tire traction	8-35
• Tire maintenance	8-35
• Tire sidewall labeling	8-35
• Tire terminology and definitions	8-39
• All season tires:	8-41
• Summer tires:	8-41
• Snow tires:	8-42
• Tire chains	8-42
• Radial-ply tires	8-43
• Low aspect ratio tires	8-43
Fuses	8-44
• Inner panel fuse replacement	8-46
• Engine compartment fuse replacement	8-47
• Fuse/relay panel description	8-47
Light bulbs	8-55
• Bulb replacement precaution	8-55
• Light bulb position (Front)	8-56
• Light bulb position (Rear)	8-56
• Light bulb position (Side)	8-57
• Replacing headlight (Low beam / High beam), position lamp / daytime running light, turn signal light, front side marker lamp (LED type)	8-57
• Replacing front fog light (LED type)	8-58
• Replacing side repeater light (LED type)	8-58
• Replacing stop and taillight (Bulb type)	8-58
• Replacing rear turn signal light (Bulb type)	8-59
• Replacing rear turn signal light, stop and taillight, side marker lamp (LED type)	8-59
• Replacing reversing light (bulb type)	8-60
• Replacing high mounted stop light (LED type)	8-60
• Replacing license plate light (LED type)	8-60
• Replacing map light (Bulb type)	8-60

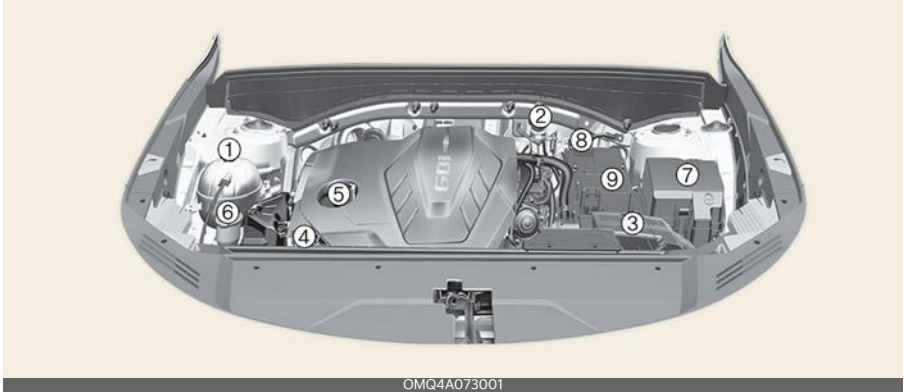
8 Maintenance

• Replacing map light (LED type).....	8-61
• Replacing cabin light (Bulb type).....	8-61
• Replacing room lamp (LED type).....	8-61
• Replacing personal light (LED type).....	8-62
• Replacing glove box light.....	8-62
• Replacing luggage light (Bulb type).....	8-62
• Replacing luggage light (LED type).....	8-63
Appearance care.....	8-63
• Exterior care.....	8-63
• Interior care.....	8-68
Emission control system	8-70
California perchlorate notice	8-72

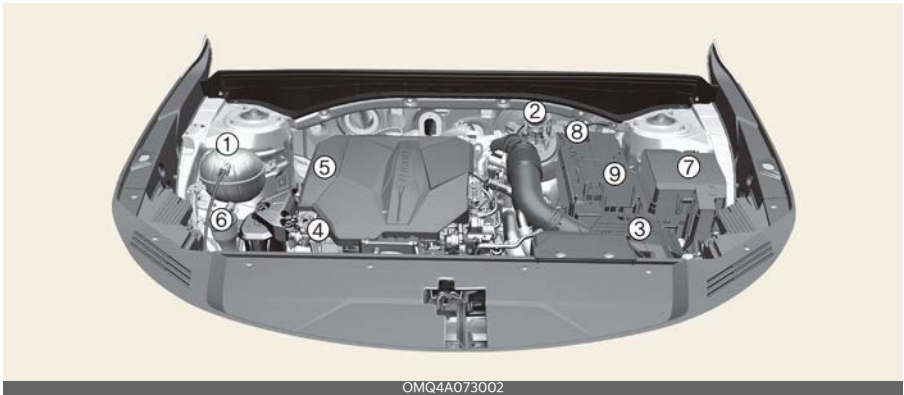
Maintenance

Engine compartment

Smartstream G2.5 GDi (Gasoline)



Smartstream G2.5 T-GDi (Gasoline)



* The actual engine compartment in your Kia may differ from the illustration.

1. Engine coolant reservoir
2. Brake fluid reservoir
3. Air cleaner
4. Engine oil dipstick
5. Engine oil filler cap
6. Windshield washer fluid reservoir
7. Fuse box
8. Negative battery terminal
9. Positive battery terminal

Maintenance services

Exercise utmost care to prevent damage to your vehicle and injury whenever performing any maintenance or inspection procedures.

Should you have any doubts concerning the inspection or servicing of your vehicle, 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 are required as a result of improper maintenance or a lack of required maintenance are not covered.

Have your vehicle maintained and repaired by an authorized Kia dealer. Authorized Kia dealers meet Kia's high service quality standards and receive technical support from Kia 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 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 spongy brakes, fluids leaking, impairment of directional control, suspension noises or rattling metal straps.
- NHTSA further advises that after a vehicle is 7 years old, it is essential that you take these indicated maintenance steps to ensure that you protect yourself from unsafe corrosion conditions.

Owner maintenance precautions

Improper or incomplete service may result in problems. This section gives instructions only for maintenance items that are easy to perform.

Several procedures can only be done 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 items 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 cooling fans.

⚠ WARNING

Touching metal parts

Do not touch metal parts (including strut bars) while the vehicle is operating or hot. Doing so could result in serious bodily injury. Turn the vehicle off and wait until the metal parts cool down to perform maintenance work on the vehicle.

Owner maintenance

The following lists are vehicle checks and inspections that should be performed by the owner or an authorized Kia dealer indicated at the frequencies 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 your warranty and you may be charged for labor, parts and lubricants used.

Owner maintenance schedule

When you stop for fuel:

- Check the coolant level in coolant reservoir.
- Check the windshield washer fluid level.
- Look for low or under inflated tires.
- Check if the front of the radiator and condenser are clean and not blocked with leaves, dirt or insects etc. If any of the above parts are extremely dirty or you are not sure of their condition, take your vehicle to an authorized Kia dealer.

⚠ WARNING

Hot coolant



Be careful when checking your engine coolant level when the engine is hot. Scalding hot coolant and steam may blow out under pressure.

While operating your vehicle:

- Note any changes in the sound of the exhaust or any smell of exhaust fumes in the vehicle.
- Check for vibrations in the steering wheel. Notice any increased steering effort or looseness in the steering wheel or change in its straight-ahead position.
- Notice if your vehicle constantly turns slightly or "pulls" to one side when traveling on smooth, level road.
- When stopping, listen and check for unusual sounds, pulling to one side, increased brake pedal travel or "hard-to-push" brake pedal.
- If any slipping or changes in the operation of your transmission occurs, take your vehicle to an authorized Kia dealer.
- Check the 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 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, for worn tires, uneven wear, or damage.
- Check for loose wheel lug nuts.

At least once every 6 months:

- 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 headlamp alignment.
- Check the muffler, exhaust pipes, shields and clamps.
- Check the lap/shoulder belts for wear and function.

At least once a year:

- Clean the body and door drain holes.
- Lubricate the door hinges and check the hood hinges.
- Lubricate the door, hood locks and latches.
- Lubricate the door rubber weatherstrips.
- Check the air conditioning system.
- Inspect and lubricate transmission linkage and controls.
- Clean the battery and terminals.
- Check the brake fluid level.
- Visually inspect steering, suspension, and chassis components for damaged, loose, or missing parts or signs of wear.

Scheduled maintenance service

Scheduled maintenance service precaution

Follow the Normal Maintenance Schedule if the vehicle is usually operated under 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
- Using for towing or camping and driving with loading on the roof
- Driving as a patrol car, taxi, other commercial use of vehicle towing
- Frequently driving under high speed or rapid acceleration/deceleration.
- Frequently driving in stop-and-go traffic.

If your vehicle operates under the following conditions, you should inspect, replace or refill more frequently or follow the 'Severe' Maintenance schedule. After the periods or distance shown in the chart, continue to follow the prescribed maintenance intervals.

* NOTICE

The vehicle may be equipped with the Oil Life Management System that predicts engine oil life based on the driver's driving history and alerts the driver to change engine oil.

- If the deterioration of the engine oil increases depending on the driver's driving severity, the remaining oil life alert appears on the instrument cluster before the normal engine oil replacement interval. Have the engine oil and filter be changed by an authorized Kia dealer.
- Oil Life Management System works when the recommended engine oil is used. So, if recommended engine oil is not used, replace the engine oil according to the maintenance schedule under severe usage condition. Also, check the amount of engine oil regularly as this system assumes that the engine oil is being filled normally.
- Always reset the remaining engine oil life whenever the engine oil is changed. Otherwise, the Oil Life Management System will not be correct.
- If there is no alert until the maximum maintenance interval, have vehicle be checked by an authorized Kia dealer.

* NOTICE

After 10 years or 100,000 miles (150,000 km), we recommend using severe maintenance schedule.

Normal maintenance schedule

The following maintenance services must be performed to ensure good emission control and performance. Keep receipts for all vehicle services to protect your warranty. Where both mileage and date are shown, the frequency of service is determined by whichever occurs first.

I: Inspect and if necessary, adjust, correct, clean or replace.

R: Replace or change.

Number of months or driving distance, whichever comes first													
Months		12	24	36	48	60	72	84	96	108	120	132	144
Miles×1,000		8	16	24	32	40	48	56	64	72	80	88	96
Km×1,000		13	26	39	52	65	78	91	104	117	130	143	156
Tire rotation		Rotate every 8,000 miles (13,000 km) or 12 months											
Fuel additives ^{*1}		Add every 8,000 miles (13,000 km) or 12 months											
Engine oil and engine oil filter ^{*2}	Smartstream G2.5 GDi	R	R	R	R	R	R	R	R	R	R	R	R
	Smartstream G2.5 T-GDi												
Climate control air filter		I	R	I	R	I	R	I	R	I	R	I	R
Air cleaner filter (Engine)		I	I	R	I	I	R	I	I	R	I	I	R
Brake fluid		Inspect every 8,000 miles (13,000 km) or 12 months Replace every 48,000 miles (78,000 km) or 48 months											
Spark plugs	Smartstream G2.5 GDi	Replace every 96,000 miles (156,000 km)											
	Smartstream G2.5 T-GDi	Replace every 48,000 miles (78,000 km)											
Coolant (Engine) ^{*3}		At first, replace at 120,000 miles (195,000 km) or 120 months After that, replace every 24,000 miles (39,000 km) or 24 months											
Air conditioner refrigerant		I	I	I	I	I	I	I	I	I	I	I	I
Air conditioner compressor													
12V Battery condition													
Vacuum hoses													
Brake discs and pads													
Brake lines, hoses and connections													
Suspension ball joints													
Steering gear rack, linkage and boots													
Exhaust system													
Cooling system													
Intercooler in/out hose, air intake hose	Smartstream G2.5 T-GDi	I	-	I	-	I	-	I	-	I	-	I	-
Drive shaft and boots		-	I	-	I	-	I	-	I	-	I	-	I
Propeller shaft (AWD)													
Fuel tank and fuel cap													
Fuel tank air filter													
Fuel lines, hoses and connections													
Drive belts (Engine) ^{*5}		-	-	-	-	-	I	I	I	I	I	I	I

Number of months or driving distance, whichever comes first													
Months	12	24	36	48	60	72	84	96	108	120	132	144	
Miles×1,000	8	16	24	32	40	48	56	64	72	80	88	96	
Km×1,000	13	26	39	52	65	78	91	104	117	130	143	156	
Differential oil (rear) (AWD) *6	Inspect every 40,000 miles (65,000 km) or 48 months												
Transfer case oil (AWD) *7													
Automatic transmission (AT) fluid*	Smartstream G2.5 GDi	No service required											
Dual clutch transmission (DCT) fluid*	Smartstream G2.5 T-GDi	-	-	-		-	-	-		-	-	-	

*1. Fuel additives

If TOP TIER Detergent Gasoline is not available, one bottle of additive is recommended. Additives are available from your authorized Kia dealer along with information on how to use them. Do not mix other additives.

*2. Engine oil and engine oil filter

As it is normal for engine oil to be consumed during driving, the engine oil level should be checked on regular basis.

The engine oil change interval for normal operating conditions is based on the use of the recommended engine specification. If the recommended engine oil specification is not used, then replace the engine oil according to the maintenance schedule under severe operating conditions.

Never add any additives to the engine oil. Engine oil additives can change its properties of engine oil and may cause serious engine failure.

*3. Coolant (Engine)

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.

*4. Drive belts (Engine)

Inspect the alternator, water pump and air conditioner drive belt and if necessary, repair or replace. Inspect drive belt tensioner, idler and alternator pulley and if necessary repair or replace.

*5. Differential oil (rear) (AWD)

If your vehicle has been submerged in water or in a flooded area, the fluids should be changed as a precaution.

***6. Transfer case oil (AWD)**

If your vehicle has been submerged in water or in a flooded area, the fluids should be changed as a precaution.

*** Transmission fluid**

If the vehicle has been submerged in water or in a flooded area, the fluids should be changed as a precaution.

Fuel filter (Gasoline engine)

The fuel filter is normally maintenance free but periodic inspection is recommended during scheduled maintenance to look for conditions caused by poor fuel quality.

- If there are safety risks such as fuel flow restriction, surging, loss of power, hard starting problem etc, replace the fuel filter immediately regardless of maintenance schedule and consult an authorized Kia dealer for details.

Maintenance under severe usage conditions

I: Inspect and if necessary, adjust, correct, clean or replace.
R: Replace or change.

Maintenance item		Maintenance operation	Maintenance intervals	Driving condition
Engine oil and engine oil filter	Smartstream G2.5 GDi	R	Every 5,000 miles (8,000 km) or 6 months	D, H, I
	Smartstream G2.5 T-GDi			
Spark plugs	Smartstream G2.5 GDi	R	More frequently	A, B, F, G, H, I, K
	Smartstream G2.5 T-GDi			
Air cleaner filter		R	More frequently	C, E
Climate control air filter		R	More frequently	C, E, G
Automatic transmission (AT) fluid	Smartstream G2.5 GDi	R	Every 56,000 miles (91,000 km)	A, C, F, G, H, I, J, K
Dual clutch transmission (DCT) fluid	Smartstream G2.5 T-GDi	R		A, C, D, E, F, G, H, I, J, K
Differential oil (rear) (AWD)		R	Every 72,000 miles (117,000 km)	C, E, G, H, I, J
Transfer case oil (AWD)		R	Every 72,000 miles (117,000 km)	C, E, G, H, I, J
Steering gear rack, linkage and boots		I	More frequently	C, D, E, F, G, H, I
Suspension ball joints		I	More frequently	C, D, E, G, H, I
Brake discs, pads and calipers		I	More frequently	C, D, E, G, H, I, J, K
Drive shaft and boots		I	More frequently	C, D, E, F, G, H, I, J
Propeller shaft (AWD)		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 roads repeatedly.
- H: Using for towing or camping and driving with loading on the roof
- I: Driving for patrol car, taxi, other commercial use of vehicle towing.
- J: Frequently driving under high speed or rapid acceleration/deceleration
- 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.

CAUTION

When you are inspecting the belt, place the ENGINE START/STOP button in the LOCK/OFF or ACC position.

Fuel filter

The fuel filter is considered to be maintenance free, but periodic inspection is recommended to be scheduled depending on the quality of fuel used.

If there are safety risks such as fuel flow restriction, surging, loss of power, hard starting problem etc., replace the fuel filter immediately regardless of maintenance schedule and consult an authorized Kia dealer for details.

Fuel lines, fuel hoses and connections

Check the fuel lines, fuel hoses and connections for leakage and damage. Have the fuel lines, fuel hoses and connections replaced by an authorized Kia dealer.

Fuel tank and fuel cap

The fuel tank and fuel cap should be inspected at those intervals specified in the maintenance schedule. Make sure that a new fuel tank or fuel cap is correctly replaced.

Vacuum crankcase ventilation hoses

Inspect the surface of hoses for evidence of heat and/or mechanical damage. Hard and brittle rubber, cracking, tears, cuts, abrasions, and excessive swelling indicate deterioration. Particular attention should be paid to examine those hose surfaces nearest to high heat sources, such as the exhaust manifold.

Inspect the hose routing to ensure that the hoses do not contact with any heat source, sharp edges or moving component which might cause heat damage or mechanical wear. Inspect all hose connections, such as clamps and couplings, to make sure they are secure, and that no leaks are present. Hoses should be replaced immediately if there is any evidence of deterioration or damage.

Air cleaner filter

Have the Genuine Kia air cleaner filter replaced by an authorized Kia dealer.

Spark plugs

Make sure to install new spark plugs of the correct heat range.

When assembling parts, be sure to wipe the inside and outside of the boot bottom of the ignition coil and the insulator of the spark plug with a soft cloth to prevent contamination of the spark plug insulator.

⚠ WARNING

Do not disconnect and inspect spark plugs when the engine is hot. You may burn yourself.

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.

Dual clutch transmission (DCT) fluid (if equipped)

Inspect the dual clutch transmission fluid according to the maintenance schedule.

Automatic transmission (AT) fluid (if equipped)

Automatic transmission fluid should not be checked under normal usage conditions. Have the automatic transmission fluid changed by an authorized Kia dealer.

*** NOTICE**

Automatic transmission fluid color is basically red.

As the vehicle is driven, the automatic transmission fluid will begin to look darker. It is normal condition and does not mean that you should replace the fluid based only on the color change.

⚠ CAUTION

The use of a non-specified fluid could result in transmission malfunction and failure.

Use only specified automatic transmission fluid. (Refer to "Recommended lubricants and capacities" on page 9-9.)

Brake hoses and lines

Visually check for proper installation, chafing, cracks, deterioration and any leakage. Replace any deteriorated or damaged parts immediately.

Parking brake

Inspect the parking brake system including the parking brake lever (or pedal) and cables.

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 4 specification.

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.

Brake discs, pads and calipers

Check the pads for excessive wear, discs for run out and wear, and calipers for fluid leakage.

Suspension mounting bolts

Check the suspension connections for looseness or damage. Retighten to the specified torque.

Steering gear box, linkage & boots/lower arm ball joint

With the vehicle stopped and engine off, check for excessive free-play in the steering wheel.

Check the linkage for bends or damage. Check the dust boots and ball joints for deterioration, cracks, or damage. Replace any damaged parts.

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.

Propeller shaft

Check the propeller shaft, boots, clamps, rubber coupling and center bearing rubber for cracks, deterioration, or damage. Replace any damaged parts and if necessary, repack the grease.

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

Engine oil is used for lubricating, cooling, and operating various hydraulic components in the engine. Engine oil consumption while driving is normal, and it is necessary to check and refill the engine oil regularly. Also, check and refill the oil level within the recommended maintenance schedule to prevent deterioration of oil performance.

Check the engine oil following the below procedure:

Smartstream G2.5 GDi



Smartstream G2.5 T-GDi



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, remove the oil filler cap and pull the dipstick out. Wait for 15 minutes for the oil to return to the oil pan.
4. Pull the dipstick out again and check the level. Check if the oil level is between the F-L line, and if it is below the L line, add enough oil to bring the level to F line.

- Wipe the dipstick clean and re-insert it fully.

⚠ WARNING

Radiator hose

Be very careful not to touch the radiator hose when checking or adding engine oil as it may be hot enough to burn you.

⚠ CAUTION

When you wipe the oil level gauge, you should wipe it with a clean cloth. When mixed with debris, it can cause engine damage.

Smartstream G2.5 GDi



Smartstream G2.5 T-GDi



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" on page 9-9.)

- Do not spill engine oil when adding or changing engine oil. Wipe off spilled oil immediately.
- The engine oil consumption may increase while you break in your new vehicle. It will stabilize after driving 4,000 miles (6,000 km).

- The engine oil consumption can be affected by driving habits, climate conditions, traffic conditions, oil quality, etc. Therefore, it is recommended that you inspect the engine oil level regularly and refill it if necessary.

Changing the engine oil and filter

The lubrication, rust prevention, cooling, and cleaning effect of the engine oil will gradually degrade during its use. Have the engine oil and filter changed by an authorized Kia dealer according to the Engine Oil Life Management System instructions or the maintenance schedule.

- If the maintenance schedule to replace engine oil is exceeded, the engine oil performance may deteriorate, and the engine condition may be affected. Therefore, replace the engine oil according to the maintenance schedule.
- To keep the engine in optimal condition, use the recommended engine oil and filter. If the recommended engine oil and filter are not used replace it according to the maintenance schedule under severe usage conditions.
- The purpose of the maintenance schedule for engine oil replacement is to prevent oil deterioration and it is irrelevant to oil consumption. Check and refill engine oil regularly.

⚠ WARNING

Used engine oil

Used engine oil may cause irritation or cancer of the skin if left in contact with the skin for prolonged periods of time. Used engine oil contains chemicals that have caused cancer in laboratory animals. Always protect your skin by washing your hands thoroughly with soap

and warm water as soon as possible after handling used oil. Do not leave used engine oil within the reach of children.

* NOTICE

- When the oil pressure is low due to insufficient engine oil, the Engine Oil Pressure (🛢️) warning light will appear.

In addition, the enhanced engine protection system, which limits the engine's power is activated and the Malfunction Indicator Lamp (🛢️) will appear when the vehicle is driven in this state continuously.

- When the engine oil pressure is restored, the warning light and the enhanced engine protection system will turn off after the engine is restarted.

⚠ CAUTION

The engine oil is very hot immediately after the vehicle has been driven and can cause burns during replacement. Replace the engine oil after the engine oil has cooled down.

* NOTICE

Never add any additives to the engine oil. Engine oil additives can change its properties and may cause engine failure.

Engine coolant

The high-pressure cooling system has a reservoir filled with year round anti-freeze coolant. The reservoir is filled at the factory.

Check the antifreeze protection and coolant level at least once a year, at the beginning of the winter season, and before traveling to a colder climate.

⚠ CAUTION

- When the engine overheats from low engine coolant, suddenly adding engine coolant may cause cracks in the engine. To prevent damage, add engine coolant slowly in small quantities.
- Do not drive with no engine coolant. It may cause water pump failure and engine seizure, etc.

Checking the coolant level

⚠ CAUTION

Removing engine coolant reservoir cap



Never attempt to remove the engine coolant reservoir cap while the engine is operating or hot. Doing so might lead to cooling system and engine damage. Also, hot coolant or steam could cause serious personal injury.

Turn the engine off and wait until it cools down. Use extreme care when removing the engine coolant reservoir cap. Wrap a thick towel around it and turn it counter-

clockwise 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 engine coolant reservoir 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



OMQ4A074034

The electric motor (cooling fan) is controlled by engine coolant temperature, refrigerant pressure and vehicle speed. It may sometimes operate even when the engine is not running. Use extreme caution when working near the blades of the cooling fan so that you are not injured by a rotating fan blades. As the engine coolant temperature decreases, the electric motor will automatically shut off. This is a normal condition.

The electric motor (cooling fan) may operate until you disconnect the negative battery cable.

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 MAX and MIN (F and L) marks on the side of the coolant reservoir when the engine is cool.

If the coolant level is low, add enough distilled (deionized) or soft water. Bring the level to MAX (F), but do not overfill. If frequent additions are required, have the system inspected by an authorized Kia dealer.

* NOTICE

Make sure the coolant cap is properly closed after refill of coolant. The engine could be overheated while driving.

1. Check if the engine coolant reservoir cap label is on straight.



OMQ4A073008_2

2. Make sure that the tiny protrusions inside the coolant cap are securely interlocked.



OMQ4A073007

Recommended engine coolant

- When adding coolant, use only deionized water or soft water for your vehicle and never mix hard water in the coolant filled at the factory. An improper coolant mixture can result in serious malfunction or engine damage.

- The engine in your vehicle has aluminum engine parts and must be protected by an ethylene-glycol with phosphate-based coolant to prevent corrosion and freezing.
- DO NOT USE alcohol or methanol coolant or mix them with the specified coolant.
- Do not use a solution that contains more than 60% antifreeze or less than 35% antifreeze, which would reduce the effectiveness of the solution.

For mixture percentage, refer to the following table.

Ambient Temperature	Mixture Percentage (volume)	
	Antifreeze	Water
5°F (-15°C)	35	65
-13°F (-25°C)	40	60
-31°F (-35°C)	50	50
-49°F (-45°C)	60	40

⚠ WARNING

Engine coolant reservoir cap



Do not remove the engine coolant reservoir cap when the engine and radiator are hot. Scalding hot coolant and steam may blow out under pressure causing serious injury.

Changing the coolant

Have the coolant replaced by an authorized Kia dealer.

⚠ CAUTION

Put a thick cloth around the radiator cap before refilling the coolant to prevent the coolant from overflowing into engine parts such as the alternator.

⚠ WARNING

Coolant

- Do not use engine coolant or antifreeze in the washer fluid reservoir.
- Radiator coolant can severely obscure visibility when sprayed on the windshield and may cause loss of vehicle control or damage the paint and body trim.

Brake fluid

Checking the brake fluid level

Check the fluid level in the reservoir periodically. The fluid level should be between MAX and MIN marks on the side of the reservoir.



1. Before removing the reservoir cap and adding brake fluid, clean the area around the reservoir cap thoroughly to prevent brake fluid contamination.
2. Periodically check that the fluid level in the brake fluid reservoir is between MIN and MAX. The level will fall with accumulated mileage. This is a normal condition associated with the wear of the brake linings.

If the fluid level is excessively low, have the system checked by an authorized Kia dealer.

Use only hydraulic brake fluid that conforms to DOT 4 specifications. (Refer to "Recommended lubricants and capacities" on page 9-9.)

Never mix different types of fluid.

⚠ WARNING

Loss of brake fluid

In the event the brake system requires frequent additions of fluid, have the system inspected by an authorized Kia dealer.

⚠ WARNING

Brake fluid

When changing and adding brake fluid, handle it carefully. Do not let contact your eyes. If brake fluid should contact your eyes, immediately flush them with a large quantity of fresh tap water. Have your eyes examined by a doctor as soon as possible.

⚠ CAUTION

Do not allow brake fluid to contact the vehicle's body paint, as paint damage will result. Brake fluid, which has been exposed to open air for an extended time should never be used as its quality cannot be guaranteed. It should be properly disposed. Don't put in the wrong kind of fluid. A few drops of mineral-based oil, such as engine oil, in your brake system can damage brake system parts.

Washer fluid

Checking the washer fluid level

The reservoir is translucent so that you can check the level with a quick visual inspection.



OMQ4A073010

- 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

Washer fluid

- Do not use radiator coolant or anti-freeze in the washer fluid reservoir.
- Radiator coolant can severely obscure visibility when sprayed on the windshield and may cause loss of vehicle control or damage to paint and body trim.
- Windshield Washer fluid agents contain some amounts of alcohol and can be flammable under certain circumstances. Do not allow sparks or flame to contact the washer fluid or the washer fluid reservoir. Damage to your vehicle or occupants could occur.
- Windshield washer fluid is poisonous to humans and animals. Do not drink and avoid contacting windshield washer fluid. Serious injury or death could occur.

Parking brake

Checking the parking brake



OMQ4A073011

- Check whether the stroke is within specification when the parking brake pedal is depressed with 66 lbs. (30 kg, 294 N) of force. The parking brake alone should securely hold the vehicle on a steep grade. If the stroke is more or less than specified, have the system serviced by an authorized Kia dealer.

Stroke: 8 ~ 9 notch

Air cleaner

Filter replacement

Air cleaner filter must be replaced when necessary and should not be washed.



You can clean the filter when inspecting the air cleaner compartment. Clean the filter by using compressed air.

1. Pull up the lever (1) on the air cleaner cover and release the lock.



2. Pull up the air cleaner cover (2) and open.



3. Rotate the fixed lever on the filter and loosen the lock.



4. Replace the air cleaner filter.
5. Assemble in 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" on page 8-13)

CAUTION

- Do not drive with the air cleaner removed; this will result in excessive engine wear.
- When removing the air cleaner filter, be careful that dust or dirt does not enter the air intake, or damage may result.
- Use genuine replacement parts from an authorized Kia dealer.

Climate control air filter

Filter inspection

The climate control air filter should be replaced according to the maintenance schedule. If the vehicle is operated in severely air-polluted cities or on dusty rough roads for a long period, it should be inspected more frequently and replaced earlier. When you replace the climate control air filter, replace it by performing the following procedure, and be careful to avoid damaging other components.

1. Open the glove box and remove the stoppers on both sides.



2. With the glove box open, pull the support strap (1).



3. Remove the climate control air filter cover by pulling out both sides of the cover.



4. Replace the climate control air filter.



5. Reassemble in the reverse order of disassembly.

* NOTICE

When replacing the climate control air filter install it properly. Otherwise, the system may produce noise and the effectiveness of the filter may be reduced.

Wiper blades

When the wipers no longer clean adequately, the blades may be worn or cracked, and require replacement.

To prevent damage to the wiper arms or other components, do not attempt to move the wipers manually.

The use of a non-specified wiper blade could result in wiper malfunction and failure.

Blade inspection



OMQ4073028

* NOTICE

Commercial hot waxes applied by automatic car washes have been known to make the windshield difficult to clean.

Contamination of either the windshield or the wiper blades with foreign matter can reduce the effectiveness of the windshield wipers. Common sources of contamination are insects, tree sap, and hot wax treatments used by some commercial car washes. If the blades are not wiping properly, clean both the window and the blades with a good cleaner or mild detergent, and rinse thoroughly with clean water.

⚠ CAUTION

To prevent damage to the wiper blades, do not use gasoline, kerosene, paint thinner, or other solvents on or near them.

Blade replacement

When the wipers no longer clean adequately, the blades may be worn or cracked, and require replacement.

⚠ CAUTION

To prevent damage to the wiper arms or other components, do not attempt to move the wipers manually.

⚠ CAUTION

The use of a non-specified wiper blade could result in wiper malfunction and failure.

Front wiper blade replacement



OMQ4073029

For your convenience and to prevent hood paint damage, you must move the windshield wiper blades to the service position as follows:

After turning off the engine, move the wiper switch to the single wiping (MIST) position within 20 seconds and hold the switch more than 2 seconds until the wiper blade is in the fully up position.

⚠ CAUTION

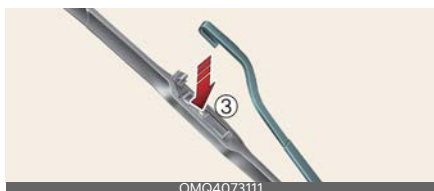
Wiper arms

- Do not allow the wiper arm to fall against the windshield, since it may chip or crack the windshield.
- Do not pull the wiper arm forward, since arm could chip hood paint.

1. Raise the wiper arm.
2. Lift up the wiper blade clip. Then pull down the blade assembly and remove it.



3. Install the new blade assembly.



4. Make sure that both blade assemblies are installed firmly by trying to pull it slightly.
5. Return the wiper arm onto the windshield.
6. Turn ignition to the ON position and wiper arms will return to the normal operating position.

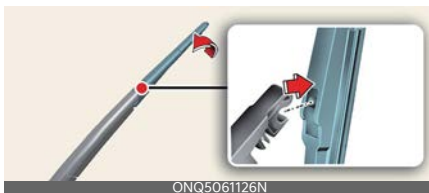
Rear wiper blade replacement



1. Within 20 seconds after the vehicle ignition is OFF, move the wiper lever to MIST position for over 2 seconds until the wiper moves down to the bottom-middle part.
2. Raise the wiper arm and pull out the wiper blade assembly.



3. Lift up the wiper blade and pull the blade to remove it.



4. Install the new blade assembly by inserting the center part into the slot in the wiper arm until it clicks into place.



5. Make sure the blade assembly is installed firmly by trying to pull it slightly.

If the replacement is correct place the wiper arm on the rear windshield, and turn the vehicle ignition to ON and operate the wipers to check the blade is installed correctly.

To prevent damage to the wiper arms or other components, have the wiper blade replaced by an authorized Kia dealer.

⚠ CAUTION

If too much force is applied to the wiper arm while pulling the blade, the center part may be damaged.

⚠ CAUTION

- The wiper may not operate for approx. 10 seconds when the wiper is operated without washer fluid or the blades are frozen. This is not a malfunction. It is a wiper protection system activated by the motor overload circuit within the wiper motor.
- The front windshield should be cleaned with a hose and wiped with a clean towel with the wiper blades raised up. The wiper blades should be wiped clean when grease or wax is applied to the blades.

Battery**For best battery service**

- Keep the battery securely mounted.
- Keep the battery top clean and dry.
- Keep the terminals and connections clean, tight, and coated with petroleum jelly or terminal grease.
- Rinse any spilled electrolyte from the battery immediately with a solution of water and baking soda.
- If the vehicle is not going to be used for an extended time, disconnect the battery cables.

*** NOTICE**

Your vehicle is equipped with maintenance free battery. If your vehicle is equipped with the battery marked with LOWER and UPPER on the side, you can check the electrolyte level. The electrolyte level should be between LOWER and UPPER. If the electrolyte level is low, it should be added distilled (demineralized) water (Never add sulfuric acid or other electrolytes). When refill, be careful not to splash the battery and adjacent components. And do not overfill the battery cells. It can cause corrosion on other parts. Make sure that the cell caps are tightened.

Contact an authorized Kia dealer.

⚠ 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 contacts 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 of the battery

according to your local law(s) or regulation.



The battery contains lead. Do not dispose of it after use. Please return the battery to an authorized Kia dealer to be

recycled.

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 "zap" you.

*** NOTICE**

If you connect unauthorized electronic devices to the battery, the battery may be discharged. Never use unauthorized devices.

⚠ WARNING**Recharging battery**

Never attempt to recharge the battery when the battery cables are connected.

⚠ WARNING**Battery lead compound**

Battery posts, terminals, and related accessories contain lead and lead compounds. Wash hands after handling.

⚠ WARNING**California Proposition 65**

Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer, birth defects and reproductive harm. Batteries also contain other chemicals known to the State of California to cause cancer. Wash hands after handling.

Battery recharging

If the becomes discharged, either run the engine for at least 60 minutes driving or at idle. Alternatively, you may connect a fully automatic regulated charger to the engine compartment front jumper posts or at the battery in the liftgate.

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 in following cases:
 1. the battery cells begin gassing (boiling) violently.
 2. the electrolyte temperature of any cell exceeds 120 °F (49 °C).

- Wear eye protection when checking the battery during charging.
- Before performing maintenance or recharging the battery, turn off all accessories and stop the vehicle.
- 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.
- The negative battery cable must be removed first and installed last when the battery is disconnected.

⚠ CAUTION**AGM battery**

- Absorbent Glass Mat (AGM) batteries are maintenance free and have the AGM battery serviced by an authorized Kia dealer.

For charging your AGM battery, use only fully automatic battery chargers that are specially developed for AGM batteries.

- When replacing the AGM battery, use parts for replacement from an authorized Kia dealer.
- Do not open or remove the cap on top of the battery. This may cause leaks of internal electrolytes that could result in severe injury.

Reset items

The following items should be reset after the battery has been discharged or the battery has been disconnected.

- Auto up/down window (Refer to "Window opening and closing" on page 4-50)
- Trip computer (Refer to "Trip information (trip computer)" on page 4-90)
- Climate control system (Refer to "Automatic climate control system (if equipped)" on page 4-130)
- Sunroof (Refer to "Panoramic sunroof (if equipped)" on page 4-59)
- Driver's seat position (Refer to "Integrated Memory System (if equipped)" on page 4-36)
- Trip computer information settings (Refer to "LCD displays" on page 4-90)
- Radio presets
- Clock

12V Parking lithium battery

12V Parking lithium battery is added to secure stable operation power supply when functions such as OTA update, after-blow, and CCS are operated while parking.

12V Lithium Auxiliary Battery care

If the 12V lithium auxiliary battery detects an abnormality, such as high temperature or overcharging, a warning message is displayed in the cluster or a malfunction alert text is sent to the registered mobile phone number.

However, malfunction alert text is sent only to customers who subscribe to the Kia Connect service.

WARNING

If you receive a warning message in the cluster or a malfunction notification on your phone, In this case, have the system inspected by an authorized Kia dealer.

Tires and wheels

For proper maintenance, safety, and maximum fuel economy, you must always maintain the recommended tire pressures and stay within the load limits and weight distribution recommended for your vehicle.

Recommended cold tire inflation pressures

All tire pressures should be checked when the tires are cold. "Cold Tires" means the vehicle has not been driven for at least three hours or driven less than 1 mile (1.6 km).

Recommended pressures must be maintained for the best ride, vehicle handling, and minimum tire wear.

For recommended pressure, refer to "Tires and wheels" on page 8-31.

All specifications (sizes and pressures) can be found on a label attached to the driver's side center pillar.



⚠ WARNING

Tire underinflation

Inflate your tires consistent with the instructions provided in this manual. Regularly check the tire inflation pressure, and correct it as needed, at least twice a month and before any long trips. If you fail to observe this precaution, you may be driving on underinflated tires, which may not only compromise your vehicle's driving stability, but may also lead to tire damage and the risk of an accident. This risk is much higher on hot days and when driving for long periods at high speeds.

Failure to maintain specified pressure may result in excessive wear, poor handling, reduced fuel economy, deformation of tire and/or wheel, harsh ride conditions, possibility for additional damage from road hazards, or result in tire failure.

Tire pressure

Always observe the following:

- Check tire pressure when the tires are cold. (After vehicle has been parked for at least three hours or hasn't been driven more than 1 mile (1.6 km) since startup.)
- Check the pressure of your spare tire each time you check

the pressure of other tires. (if equipped)

- Never overload your vehicle. Be careful not to overload a vehicle luggage rack if your vehicle is equipped with one.
- Warm tires normally exceed recommended cold tire pressures by 4 ~ 6 psi (28 ~ 41 kPa). Do not release air from warm tires to adjust the pressure or the tires will be underinflated.

WARNING

Tire Inflation

Overinflation or underinflation can reduce tire life, adversely affect vehicle handling, and lead to sudden tire failure. This could result in loss of vehicle control and potential injury.

Checking tire inflation pressure

Check your tires once a month or more.

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 inflation pressure when the tires are cold. "Cold" means your vehicle has been sitting or at least three hours or

driven no more than 1 mile (1.6 km).

1. Remove the valve cap from the tire valve stem.
2. 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.
3. If the pressure is low, add air until you reach the recommended amount.
4. If you overfill the tire, release air by pushing on the metal stem in the center of the tire valve.
5. Recheck the tire pressure with the tire gauge.
6. 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. This could result in poor handling, loss of vehicle control, and sudden tire failure leading to accidents, injuries, and even death. The recommended cold tire pres-

sure for your vehicle can be found in this manual and on the tire label located on the driver's side center pillar.

Tire rotation

To equalize tread wear, it is recommended that the tires be rotated every 8,000 miles (13,000 km) or sooner if irregular wear develops.

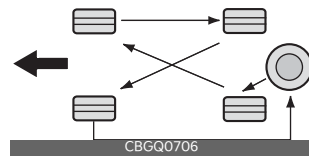
During rotation, check the tires for correct balance.

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. (proper torque is 79 ~ 94 lb-ft [11 ~ 13 kgf·m])

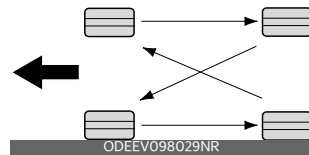
Refer to "Tires and wheels" on page 8-31.

Disc brake pads should be inspected for wear whenever tires are rotated.

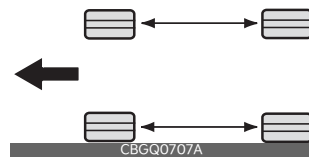
With a full-size spare tire (if equipped)



Without a spare tire



Directional tires (if equipped)



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 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.

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.

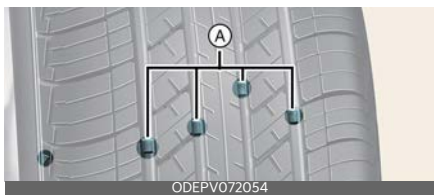
⚠ CAUTION

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.



[A] : Tread wear indicator

This shows there is less than 1/16 in (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 Anti-lock Brake System (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 and ESC to work irregularly. It is best to replace all four tires at the same time. If that is not possible, or necessary, then replace the two front or two rear tires as a pair. Replacing just one tire can seriously affect your vehicle's handling.

* NOTICE

When replacing tires, use the same type of tires originally supplied with the vehicles to avoid impacting driving performance.

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 with an incorrect size may adversely affect many things: wheel and bearing life,

braking and stopping abilities, handling characteristics, ground clearance, body-to-tire clearance, snow chain clearance, speedometer and odometer calibration, headlamp aiming and bumper height.

⚠ 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.

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.

Make sure the newly installed tires are balanced correctly to increase vehicle ride comfort and

tire life. In addition, always rebalance the tire when the tire is removed from the wheel.

Tire sidewall labeling

This information identifies and describes the fundamental characteristics of the tire and 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.)

P255/45R20 105V

- 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).
- 255: Tire width in millimeters.
- 45: Aspect ratio. The tire's section height as a percentage of its width.
- R: Tire construction code (Radial).
- 20: Rim diameter in inches.
- 105: Load Index, a numerical code associated with the maximum load the tire can carry.
- V: Speed Rating Symbol. See the speed rating chart in this section for additional information.

Wheel size designation

Wheels are also marked with important information that you need if you ever have to replace one. The following explains what the letters and numbers in the wheel size designation mean. Example wheel size designation:

8.5JX20

- 8.5: Rim width in inches.

- J: Rim contour designation.
- 20: 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)
W	168 mph (270 km/h)
Y	186 mph (300 km/h)

3. Checking tire life

Any tires that are over 6 years old, based on the manufacturing date, 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 num-

bers and English letters. The manufacturing date is designated by the last four digits (characters) of the DOT code.

DOT: XXXX XXXX 0000

The front part of the DOT means a plant code number, tire size and tread pattern and the last four numbers indicate week and year manufactured.

For example:

DOT XXXX XXXX 1624 represents that the tire was produced in the 16th week of 2024.

⚠ 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 let-

ter "B" means belted-bias ply construction.

5. Maximum Inflation Pressure

This number is the greatest amount of air pressure that should be put in the tire. Do not exceed the maximum inflation pressure. Refer to "Certification label" on page 5-79 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 climate 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 ($1\frac{1}{2}$) as well on the government course as a tire graded 100.

The relative performance of tires depends upon the actual conditions of their use. Performance 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 sidewalls 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

Refer to the following for detailed definitions of the terms that are found in the tire description:

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: 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: 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 complies 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 inflation pressure for that tire.

Maximum Loaded Vehicle

Weight: The sum of curb weight; accessory weight; vehicle capacity weight; and production options weight.

Normal Occupant Weight: The number of occupants a vehicle is designed to seat multiplied by 150 lbs. (68 kg).

Occupant Distribution: Designated seating positions.

Outward Facing Sidewall: The side of an 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 lbs. (2.3 kg) more than the standard items which they replace, not previously considered in curb weight or accessory weight. Examples include 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 contacts the road.

Treadwear Indicators: Narrow bands, sometimes called "wear bars," that show across the tread of a tire when only 2/32 inch (1.6 mm) 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 weight 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.

WARNING

Do not use summer tires at temperatures below 45 °F (7 °C) or when driving on snow or ice. At temperatures below 45 °F (7 °C), summer tires can lose elasticity, and therefore traction and braking power as well. Change the tires on your vehicle to winter or

all-weather tires of the same size as the standard tires of the vehicle. Both types of tires are identified by the M+S (Mud and Snow) marking. Using summer tires at very cold temperatures could cause cracks to form, thereby damaging the tires permanently.

Tire chains

Tire chains, if necessary, should be installed on the front wheels. Be sure that the chains are installed in accordance with the manufacturer's instructions.

To minimize tire and chain wear, do not continue to use tire chains when they are no longer needed.

- When driving on roads covered with snow or ice, drive at speeds 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 0.47 inches (12 mm) to prevent damage to the chain's connection.

Radial-ply tires

Radial-ply tires provide improved tread life, road hazard resistance and smoother high-speed ride.

The radial-ply tires used on this vehicle are of belted construction and are selected to complement the ride and handling characteristics of your vehicle. Radial-ply tires have the same load carrying capacity as bias-ply or bias belted tires of the same size, and use the same recommended inflation pressure.

Do not mix radial-ply tires with bias-ply or bias belted tires. Any combinations of radial-ply and bias-ply or bias belted tires when used on the same vehicle will seriously deteriorate vehicle handling. Identical radial-ply tires should always be used as a set of four.

Longer wearing tires can be more susceptible to irregular tread wear. Follow the tire rotation interval shown in this section to achieve the tread life potential of these tires. Cuts and punctures in radial-ply tires are repairable only in the tread area, because of sidewall flexing. Con-

sult your tire dealer for radial-ply tire repairs.

Low aspect ratio tires (if equipped)

Low aspect ratio tires, whose aspect ratio is lower than 50, are provided for sporty looks.

Because the low aspect ratio tires are optimized for handling and braking, it may be more uncomfortable to ride in and there is more noise compared to normal tires.

CAUTION

Because the sidewall of the low aspect ratio tire is shorter than normal, the wheel and tire of the low aspect ratio tire is more easily damaged. Follow the instructions below:

- When driving on a rough road or off road, drive cautiously because tires and wheels may be damaged. After driving, inspect the tires and wheels.
- When passing over a pothole, speed bump, manhole, or curb stone, drive slowly so that the tires and wheels are not damaged.
- If the tire is impacted, inspect the tire condition or contact an authorized Kia dealer.
- To prevent damage to the tire, inspect the tire condition and

pressure every 1,900 miles (3,000 km).

- It is not easy to visually recognize tire damage. If there is a hint of tire damage even though you cannot see the damage, 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 your warranty.
 - You can locate the tire information on the tire sidewall.
-

Fuses

Blade type



Cartridge type



Multi fuse



High voltage fuse



* Left side: Normal, Right side: Blown

* The actual fuse/relay panel label may differ from equipped items.

A vehicle's electrical system is protected from electrical overload damage by fuses.

This vehicle has 2 (or 3) fuse panels, one located in the driver's side panel bolster, the other in the engine compartment near the battery.

If any of your vehicle's lights, accessories, or controls do not work, check the appropriate circuit fuse. If a fuse has blown, the element inside the fuse will melt.

If the electrical system does not work, first check the driver's side fuse panel. If the replacement fuse blows, this indicates an electrical problem. Avoid using the system involved and immediately consult an authorized Kia dealer.

Three kinds of fuses are used: blade type for lower amperage rating, car-tridge 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 electric wiring to the vehicle.

CAUTION

Do not use a screwdriver or any other metal object to remove fuses because they 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.

Do not remove fuses, relays and terminals fastened with bolts or nuts. The fuses, relays and terminals may be fastened incompletely, and it may cause a possible fire. If fuses, relays and terminals fastened with bolts or nuts are blown, consult with an authorized Kia dealer.

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.

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 after-market 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 taillamp or replace the bulb which is over the regulated capacity to install

trailers etc., the inner junction block can get burned.

⚠ 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 multimedia or a theft alarm system, phone or radio may cause vehicle damage and increase the risk of a vehicle fire.

* NOTICE

Rewiring 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 you may be responsible for any subsequent vehicle damage.

Inner panel fuse replacement

1. Turn the ENGINE START/STOP button and all other switches off.
2. Open the fuse panel cover.



3. Pull the suspected fuse straight out. Use the removal tool provided in the main fuse box in the engine compartment.



4. Check the removed fuse; replace it if it is blown.

Spare fuses are provided in the instrument panel fuse panel (or in the engine compartment fuse panel).

5. Push in a new fuse of the same rating, and make sure it fits tightly in the clips.

If it fits loosely, consult an authorized Kia dealer.

If you do not have a spare, use a fuse of the same rating from a circuit you may not need for operating the vehicle, such as the cigarette lighter fuse.

If the headlamps or taillamps, stoplights, courtesy lamp, day time running lights (DRL) do not work and the fuses are OK, consult an authorized Kia dealer.

Engine compartment fuse replacement

1. Turn the ignition and all other switches off.
2. Remove the fuse panel cover by pressing the tab and pulling the cover up.



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

After checking the fuse panel in the engine compartment, securely install the fuse panel cover through the audible clicking sound.

If not, electrical failures may occur from water contact.

* NOTICE

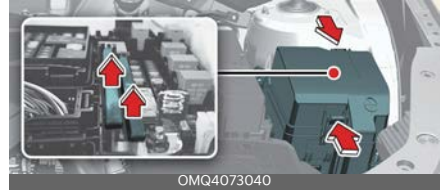
If the multi-fuse is blown, consult an authorized Kia dealer.

* 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, visit the nearest authorized Kia dealer.

Main fuse (Multi-fuse)



If the main fuse is blown, it must be removed as follows:

1. Turn off the engine.
2. Disconnect the negative battery cable.
3. Remove the nuts shown in the picture above.
4. Replace the fuse with a new one of the same rating.
5. Reinstall in the reverse order of removal.

⚠ CAUTION

Visually inspect the battery cap for secure closing. If the battery cap is not securely latched, the electrical system may be damaged due to influx of moisture into the system.

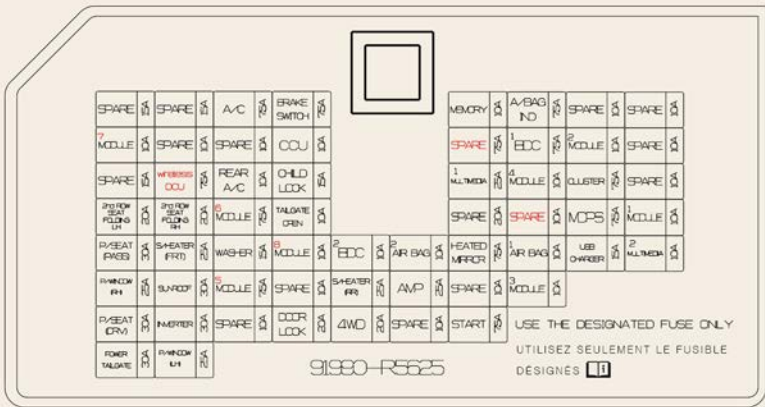
Fuse/relay panel description

Inside the fuse/relay panel covers, you can find the fuse/relay label describing fuse/relay name and capacity.

* NOTICE

While the fuse panel descriptions in this manual are accurate at the time of printing, not all fuse panel description may be applicable to your vehicle.

Driver's side fuse panel



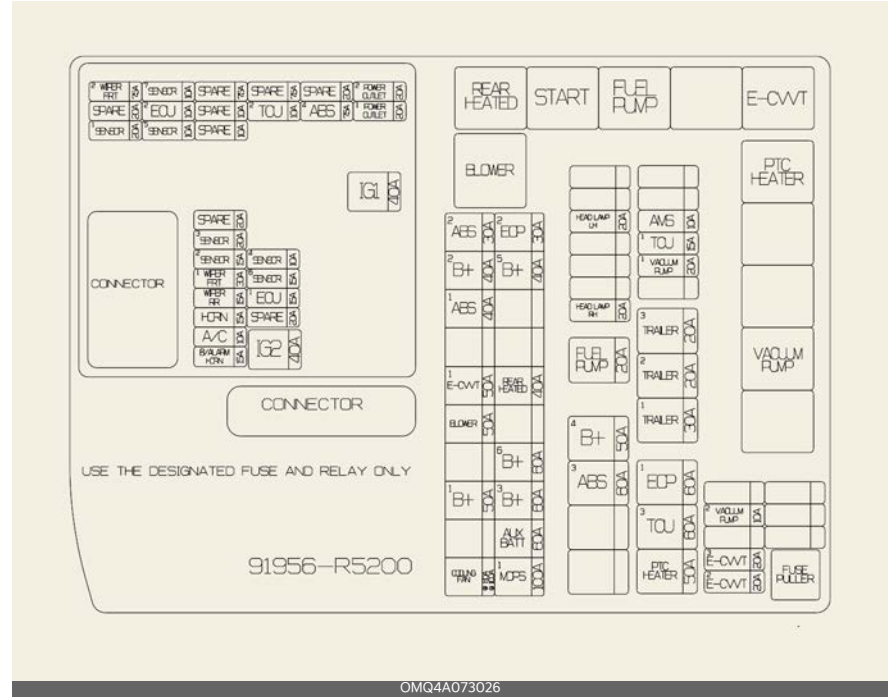
OMQ4A073027

PDC

Fuse Name	Fuse rating	Circuit Protected
A/C	7.5A	MTC/DATC, ERJB(PTC HEATER2 RELAY)
BRAKE SWITCH	7.5A	BDC (Body Domain Controller), Stop Lamp Switch
MEMORY	10A	Cluster, ISG LDC 450W, Mood Lamp Unit, Mood Lamp LH/RH, BDC, Built-in Camera Unit, MTC/DATC, ADAS PRK ECU, Rear Aircon Switch
A/BAG IND	7.5A	Overhead Console
CCU	10A	CCU (Central Communication Unit)
BDC1	7.5A	BDC (Body Domain Controller)
MODULE3	10A	CCU (Central Communication Unit), DCU (Data Connectivity Unit), Stop Lamp Switch

Fuse Name	Fuse rating	Circuit Protected
wireless DCU	7.5A	DCU(Data Connectivity Unit)
RR A/CON	10A	Rear Aircon Switch, Rear Aircon Blower Motor
CHILD LOCK	15 A	Rear Door Child Lock LH/RH
MULTI MEDIA1	25A	ISG LDC 200W, CCNC (Connected Car Navigation Cockpit)
MODULE5	7.5A	Wireless Charger, OBD, MTC/DATC, ECM/DCM Mirror, Built-in Camera Unit, CCNC (Connected Car Navigation Cockpit), ISG LDC 200W/450W, 1st Seat Power Seat Unit, Amplifier, HLLD (Head Lamp Leveling Device)
CLUSTER	7.5A	Cluster
2nd ROW SEAT FOLD- ING LH	20A	2nd Seat Folding Actuator LH
2nd ROW SEAT FOLD- ING RH	20A	2nd Seat Folding Actuator RH
MODULE8	10A	P_LBM (Parking-Lithium Battery Module)
T/GATE OPEN	10A	Tail Gate Latch
MODULE6	7.5A	Multi Function Switch, Power Window Main Switch
MDPS	7.5A	MDPS (Motor Driven Power Steering) Unit * MDPS (Motor Driven Power Steering) is same as EPS (Electric Power Steering).
MODULE2	10A	CCNC (Connected Car Navigation Cockpit) Keyboard, BDC (Body Domain Controller), CCU (Central Communication Unit), USB Charger, Built-in Camera Unit, CCNC (Connected Car Navigation Cockpit), MTC, DCU (Data Connectivity Unit), Overhead Console, Amplifier, ADAS Parking Unit
P/SEAT PASS	30A	Passenger Power Seat Motor
S/HEATER FRT	25A	1st Seat Warmer/Ventilation LH/RH
WASHER	15A	Multi Function Switch
BDC2	10A	BDC (Body Domain Controller), Driver Outside Handle Switch, Passenger Outside Handle Switch, ATM Lever, Digitalkey 2.0 Unit/Sensor
A/BAG2	10A	Airbag Control Unit
HEATED MIRROR	7.5A	Outside Mirror Heated LH/RH
A/BAG1	10A	Airbag Control Unit
USB CHARGER	15A	Luggage USB Charger LH/RH, 1ST Seat USB Charger LH/RH
MULTI MEDIA2	10A	Cluster, MTC, Wireless Charger, ADAS Parking Unit, Rear Corner Radar LH/RH
P/WINDOW RH	25A	Power Window Motor RH
SUNROOF	30A	Panoramic Sunroof Motor
S/HEATER RR	15A	2nd Seat Warmer LH/RH
AMP	25A	Amplifier, ISG LDC 450W
MODULE4	10A	Front View Camera, Tilt-Tele Unit, C/PAD Switch, ADAS Drive Unit, Rear Corner Radar LH/RH, 4WD ECU, DCU(Dosing Control Unit), Console Switch, ADAS Parking Unit, Front Radar, Front Corner Radar LH/RH
P/SEAT DRV	30A	Driver Power Seat Motor
DR LOCK	20A	All Door Lock/Unlock
4WD	20A	4WD ECU
START	7.5A	Ignition Switch
POWER TAILGATE	30A	Power Tailgate Unit
P/WINDOW LH	25A	Power Window Motor LH

Engine compartment fuse panel



Engine Compartment Junction Block

Fuse Name	Fuse rating	Circuit Protected
COOLING FAN	80 A 100 A	Cooling Fan Motor
B+2	40 A	PDC (Power Domain Controller)
BLOWER	50 A	Blower Relay
ABS1	40 A	ABS/ESC
ABS2	30 A	ABS/ESC
TRAILER1	50 A	Trailer Module

Fuse Name	Fuse rating	Circuit Protected
MDPS1	100 A	MDPS (Motor Driven Power Steering) Unit * MDPS (Motor Driven Power Steering) is same as EPS (Electric Power Steering).
AUX BATT	60 A	Parking Lithium Battery Module
B+3	60 A	PDC (Power Domain Controller)
B+6	60 A	PCB Block
REAR HEATED	40 A	Rear Glass Heated Relay
B+1	50 A	PDC (Power Domain Controller)
ABS3	60 A	ABS/ESC
B+4	50 A	PDC (Power Domain Controller)
FUEL PUMP	20 A	Fuel Pump Relay
HEAD LAMP RH	20 A	HEAD LAMP RH
HEAD LAMP LH	20 A	HEAD LAMP LH
PTC HEATER	50A	PTC Heater Relay1
TCU3	60 A	DCT TCU
EOP1	60 A	EOP (Electric Oil Pump)
B+5	40 A	PDC (Power Domain Controller)
TRAILER2	20 A	Trailer Module
TRAILER3	20 A	Trailer Module
TCU1	15 A	TCU
AMS	10 A	Battery Sensor
E-CVVT1	50 A	E-CVVT Relay
EOP2	30 A	Electric Oil Pump
VACUUM PUMP1	20 A	Vacuum Pump Relay
E-CVVT2	20A	[Smartstream G2.5 T-GDI] ECU(Engine Control Unit)
E-CVVT3	20A	[Smartstream G2.5 T-GDI] ECU(Engine Control Unit)
VACUUM PUMP2	20A	ABS/ESC

Process Control Block (PCB)

Fuse Name	Fuse rating	Circuit Protected
IG1	40 A	PCB Block (IG1 Relay, ACC relay)
IG2	40 A	PCB Block (IG2 Relay), Start Relay
FRT WIPER2	7.5 A	BDC(Body Domain Controller), ECU (Engine Control Unit)
SENSOR6	15 A	Injector #1/#2/#3/#4
SENSOR1	20 A	Ignition Coil #1/#2/#3/#4
ECU2	10 A	ECU (Engine Control Unit)
SENSOR5	10 A	Fuel Pump Relay, ECU (Engine Control Unit)
SENSOR3	20 A	ECU (Engine Control Unit)
SENSOR2	15 A	Oxygen Sensor (Up 1/Down 1) Oxygen Sensor (Up/Down)
FRT WIPER1	30 A	Front Wiper Motor, PCB Block (Front Wiper Relay High, Low)
RR WIPER	15 A	Rear Wiper Motor, PCB Block (Rear Wiper Relay High, Low)
HORN	15 A	PCB Block (Horn Relay)
A/C	10 A	PCB Block (Air-con Compressor Relay)
B/ALARM HORN	15 A	PCB Block (Burglar Alarm Horn Relay)
SENSOR4	10 A	Cooling Fan, Variable Intake Solenoid, Recirculation Control Valve, Oil Control Valve, Canister Control Valve, Variable Oil, Pump Solenoid Valve, Oil Level Sensor, Purge. Control Solenoid Valve
SENSOR7	10 A	Electric Oil Pump
ECU1	15 A	ECU (Engine Control Unit)
ABS4	7.5 A	ABS/ESC
POWER OUTLET2	20 A	Rear Console Power Outlet
POWER OUTLET1	20 A	Luggage Power Outlet
TCU2	10 A	TCU (Transmission Control Unit), DCT Lever

Relay

Refer to the following table for the relay type.

Relay Name	TYPE
Start Relay	MICRO
Fuel Pump Relay	MICRO
PTC Heater Relay	MICRO
Blower Relay	MINI
Rear Heated Relay	MICRO
E-CVVT Relay	MICRO
Vacuum Pump Relay	MICRO

Engine compartment fuse panel (Battery terminal cover)



OMQ4070081L

Light bulbs

Light bulbs are installed in various parts of the vehicle to provide lighting inside and outside the vehicle as well as to alert other vehicles.

Bulb replacement precaution

Please prepare bulbs with appropriate standards in case of emergencies. Refer to "Bulb wattage" on page 9-7.

When changing lights, turn off the engine at a safe place, firmly apply the side brake and take out the battery's negative (-) terminal.

⚠ WARNING

Working on the lights

Prior to working on the lights, 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, burning your fingers or receiving an electric shock.

Use only the bulbs of the specified wattage.

⚠ CAUTION

Light replacement

Be sure to replace the burned-out bulb with one of the same wattage rating. Otherwise, it may cause damage to the fuse or electric wiring system.

Fully install light bulbs and any parts used to secure them. Failure to do so may result in heat damage, fire, or water entering the headlamp unit. This may damage the headlamps or cause condensation to build up on the lens. To prevent damage or fire, make sure bulbs are fully seated and locked.

⚠ CAUTION

Headlamp lens

To prevent damage, do not clean the headlamp lens with chemical solvents or strong detergents.

* 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

Have the headlamp aiming adjusted by an authorized Kia dealer after an accident or after the headlamp assembly is reinstalled.

* NOTICE

You can find moisture inside the lens of lamps after a car wash or driving in the rain. It is a natural event caused by the temperature difference between the inside and the outside of the lamp and does not mean there is a problem with

its functions. The moisture inside the lamp would disappear if you drive the vehicle with the headlamp turned on. However, the level at which the moisture is removed may differ depending on the size/location/condition of the lamp. If the moisture continues to stay inside the lamp, 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 standard bulbs are used, it may lead to blowing a fuse or other wiring damages. Kia Genuine Parts we guarantee for quality and performance.

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 wiring may be damaged.

Light bulb position (Front)

Head lamp - Type A



Head lamp - Type B



Fog lamp



1. Headlamp (Low) (LED type)
2. Headlamp (High) (LED type)
3. Front turn signal lamp (LED type)
4. Day time running lamp / Position lamp (LED type)
5. Front fog lamp (LED type)
6. Front side marker lamp (LED type)

Light bulb position (Rear)

Rear combination lamp - Type A



Rear combination lamp - Type B



Rear Reflex Reflector



Reversing lamp



License plate lamp



High mounted stop lamp



1. Stop and tail lamp (Bulb type)
2. Rear turn signal lamp (Bulb type)
3. Tail lamp (LED type)
4. Stop lamp (LED type)
5. Rear turn signal lamp (LED type)
6. License plate lamp (LED type)
7. High mounted stop lamp (LED type)
8. Rear Reflex Reflector (LED type)
9. Reversing lamp (Bulb type)
10. Front side marker lamp (LED type)

Light bulb position (Side)



1. Side repeater light (LED type)

Replacing headlight (Low beam / High beam), position lamp / day-time running light, turn signal light, front side marker lamp (LED type)

Type A



Type B



If the headlight LED (1,2), daytime running light LED (3) and turn signal light LED (4,5), front side marker lamp (6) do not operate, have your vehicle checked at an authorized Kia dealer.

Replacing front fog light (LED type)



If the front fog light (6) does not operate, have your vehicle checked by an authorized Kia dealer.

Replacing side repeater light (LED type)



If the Side repeater light (LED) (1) does not operate, have your vehicle checked by an authorized Kia dealer.

The LED light cannot be replaced as a single unit because it is an integrated unit. The LED light has to be replaced with the unit.

A skilled technician should check or repair the Side repeater light (LED), for it may damage related parts of the vehicle.

Replacing stop and taillight (Bulb type)



1. Turn off vehicle and disconnect the negative terminal from the battery.

2. Open the liftgate.
3. Open the service cover.
4. Loosen the light assembly retaining screws with a cross-tip (Phillips) screwdriver.



5. Remove the rear combination lamp assembly from the body of the vehicle.
6. Disconnect the rear combination lamp connector.
7. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.



8. 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.
9. Insert a new bulb into the socket and rotating it until it locks into place.
10. 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.
11. Install the rear combination light assembly to the body of the vehicle.
12. Install the service cover.

Replacing rear turn signal light (Bulb type)



1. Turn off vehicle and disconnect the negative terminal from the battery.
2. Open the liftgate.
3. Open the service cover.
4. Loosen the light assembly retaining screws with a cross-tip (Phillips) screwdriver.



5. Remove the rear combination lamp assembly from the body of the vehicle.
6. Disconnect the rear combination lamp connector.
7. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.



8. 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.

9. Insert a new bulb into the socket and rotating it until it locks into place.
10. 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.
11. Install the rear combination light assembly to the body of the vehicle.
12. Install the service cover.

Replacing rear turn signal light, stop and taillight, side marker lamp (LED type)



If the rear turn signal lamp (2), stop and tail lamp (1), and tail lamp (3) and side marker lamp (4) do not operate, have your vehicle checked by an authorized Kia dealer.

The LED light cannot be replaced as a single unit because it is an integrated unit. The LED light has to be replaced with the unit.

A skilled Kia technician should check or repair the stop and taillight (LED), as it may damage related parts.

Replacing reversing light (bulb type)



1. Turn off vehicle and disconnect the negative terminal from the battery.
2. Remove the plastic tabs with a flat-tip (slotted) screwdriver.
3. Loosen the plastic retaining screws and remove the under-panel cover.
4. Disconnect the rear back up lamp connector (A).
5. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
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. Connect the rear back up lamp connector.
8. Tighten the plastic retaining screws.
9. Install the plastic tabs and the under-panel cover.

Replacing high mounted stop light (LED type)



If the lamp (LED) (1) is not functioning high-mounted stop, please have your

vehicle inspected by an authorized Kia dealer.

The LED lamp cannot be replaced as a single unit because it is an integrated component. Instead, the entire LED lamp unit must be replaced.

It's essential to have a skilled technician check or repair the high-mounted stop lamp (LED) to prevent any damage to related vehicle parts.

Replacing license plate light (LED type)



If the license plate light does not operate, have your vehicle checked by an authorized Kia dealer. LED light cannot be replaced as a single unit because it is an integrated unit. The LED light has to be replaced with the unit. A skilled Kia technician should check or repair the map light (LED), as it may damage related parts.

Replacing map light (Bulb type)



⚠ WARNING

Prior to working on the Interior lights, ensure that the "OFF" button is depressed to avoid burning your fingers or receiving an electric shock.

1. Turn off vehicle and disconnect the negative terminal from the battery.
2. Using a flat-tip screwdriver, gently pry the lens cover from lamp housing.
3. Remove the bulb by pulling it straight out.
4. Install a new bulb in the socket.
5. 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.

Replacing map light (LED type)

If the map light (LED) (1) is not functioning, please have your vehicle inspected by an authorized Kia dealer.

The LED light cannot be replaced as a single unit because it is an integrated unit. The LED light has to be replaced with the unit.

A skilled Kia technician should check or repair the map light (LED), as it may damage related parts.

Replacing cabin light (Bulb type)

1. Turn off vehicle and disconnect the negative terminal from the battery.
2. Using a flat-tip screwdriver, gently pry the lens cover from lamp housing.
3. Remove the bulb by pulling it straight out.
4. Install a new bulb in the socket.
5. 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.

Replacing room lamp (LED type)

If the room lamp (LED) (1) is not functioning, please have your vehicle inspected by an authorized Kia dealer.

The LED lamp cannot be replaced as a single unit because it is an integrated unit. The LED lamp 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.

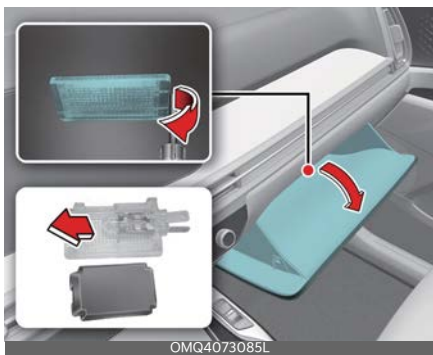
Replacing personal light (LED type) (if equipped)



If the personal light (LED) (1) is not functioning, please have your vehicle inspected by an authorized Kia dealer. The LED light cannot be replaced as a single unit because it is an integrated unit. The LED light has to be replaced with the unit.

A skilled Kia technician should check or repair the personal light (LED), as it may damage related parts.

Replacing glove box light



1. Turn off vehicle and disconnect the negative terminal from the battery.
2. Using a flat-tip screwdriver, gently pry the lamp assembly from interior.
3. Remove the cover from the lamp assembly.
4. Remove the bulb by pulling it straight out.
5. Install a new bulb in the socket.
6. Install the cover to the light assembly.

7. Install the light assembly to interior.

⚠ CAUTION

Be careful not to dirty or damage the lens, lens tab, and plastic housings.

Replacing luggage light (Bulb type)



⚠ WARNING

Prior to working on the Interior lights, ensure that the "OFF" button is depressed to avoid burning your fingers or receiving an electric shock.

1. Turn off vehicle and disconnect the negative terminal from the battery.
2. Using a flat-tip screwdriver, gently pry the light assembly from interior.
3. Remove the cover from the light assembly.
4. Remove the bulb by pulling it straight out.
5. Install a new bulb in the socket.
6. Install the cover to the light assembly.
7. Install the light assembly to interior.

⚠ CAUTION

Be careful not to dirty or damage the lens, lens tab, and plastic housings.

Replacing luggage light (LED type)



If the luggage light LED does not operate, have the system checked by an authorized Kia dealer.

Appearance care

Use the information in the following sections to keep the exterior and interior of your vehicle clean.

Exterior care

Use the information in the following sections to maintain the exterior of your vehicle. Keeping the exterior clean is not only aesthetically pleasing, but it also helps to prolong the life of the vehicle.

* NOTICE

If you park the vehicle around a stainless signboard or reflective building etc., the plastic exterior trim (bumper, spoiler, trim, lights, outside mirror etc.) may be damaged by reflected sunlight from the external structure. To avoid damaging the plastic exterior trim, park the vehicle away from areas where there's reflected light may or use a vehicle cover. (Depending on the vehicle, the type of exterior trim may differ.)

Exterior general caution

It is very important to follow the label directions when using any chemical cleaner or polish. Read all warning and caution statements that appear on the label.

Finish maintenance

Washing

To help protect your vehicle's finish from rust and deterioration, wash it thoroughly and frequently at least once a month with lukewarm or cold water.

If you use your vehicle for off-road driving, you should wash it after each off-road trip. Pay special attention to the removal of any accumulation of salt, dirt, mud, and other foreign materials. Make sure the drain holes in the lower edges of the doors and rocker panels are kept clear and clean.

Insects, tar, tree sap, bird droppings, industrial pollution and similar deposits can damage your vehicle's finish if not removed immediately.

Even prompt washing with plain water may not completely remove all these deposits. A mild soap, safe for use on painted surfaces, may be used.

After washing, rinse the vehicle thoroughly with lukewarm or cold water. Do not allow soap to dry on the finish.

After washing the vehicle, test the brakes while driving slowly to see if they have been affected by water. If braking performance is impaired, dry the brakes by applying them lightly while maintaining a slow forward speed.

CAUTION

- Do not use strong soap, chemical detergents or hot water, and do not wash the vehicle in direct sunlight or when the body of the vehicle is warm.
- Be careful when washing the side windows of your vehicle, especially with high-pressure water. Water may leak through the windows and wet the interior.

- To prevent damage to the plastic parts and lights, do not clean with chemical solvents or strong detergents.

WARNING

After washing the vehicle, test the brakes while driving slowly to see if they have been affected by water. If braking performance is impaired, dry the brakes by applying them lightly while maintaining a slow forward speed.

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 contact high pressure water.

WARNING

After washing the vehicle, test the brakes while driving slowly to see if they have been affected by water. If braking performance is impaired, dry the brakes by applying them lightly while maintaining a slow forward speed.

⚠ CAUTION**Wetting engine compartment**

- Water washing in the engine compartment including high-pressure washing may cause failure of electrical circuits located in the engine compartment.
- Never allow water or other liquids to contact electrical/electronic components and air ducts as this may damage them.
- After the vehicle has been washed, brake carefully while paying attention to the traffic conditions until the braking effect has been fully restored.

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.

Be careful not to touch the lens when waxing the lights.

⚠ CAUTION**Drying vehicle**

- Wiping dust or dirt off the body with a dry cloth will scratch the finish.
- Do not use steel wool, abrasive cleaners, acid detergents or strong detergents containing high alkaline or caustic agents on chrome-plated or anodized aluminum parts. This may result in damage to the protective coating and cause discoloration or paint deterioration.

Finish damage repair

Deep scratches or stone chips in the painted surface must be repaired promptly. Exposed metal will quickly rust and may develop into a major repair expense.

*** NOTICE**

If your vehicle is damaged and requires any metal repair or replacement, be sure the body shop applies anti-corrosion materials to the parts repaired or replaced.

Bright-metal maintenance

To remove road tar and insects, use a tar remover, not a scraper or other sharp object.

To protect the surfaces of bright metal parts from corrosion, apply a coating of wax or chrome preservative and rub to a high luster.

During winter weather or in coastal areas, cover the bright metal parts with a heavier coating of wax or preservative. If necessary, coat the parts with non-cor-

rosive 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 many parts: the fuel lines, the fuel tank retention system, the suspension, the exhaust system, and even the body frame.

The National Highway Traffic Safety Administration (NHTSA) 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 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 spongy 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 or damage the finish.

- Clean the wheel when it has cooled.
- Use only a mild soap or neutral detergent, and rinse thoroughly with water. Also, be sure to clean the wheels after driving on salted roads. This helps prevent corrosion.
- Avoid washing the wheels with high-speed 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. This is only part of the job. To achieve the long-term corrosion resistance your vehicle can deliver, your cooperation and assistance is 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 materi-

als, 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. Corrosion is accelerated by high humidity, particularly when temperatures are just above freezing. 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 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 starting 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 pre-

vent 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

Use the information in the following sections to maintain the interior of your vehicle.

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 mixture of warm water and mild non-detergent cleaner (test all cleaners on a concealed area before use).

⚠ CAUTION

Electrical components

Never allow water or other liquids to contact 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.

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 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 a wet cloth. It may cause the surface to crack.

Cleaning the leather seats

Remove all contaminants instantly. Refer to instructions below for removal of each contaminant.

- Cosmetic products (sunscreen, foundation, etc.)
 - Apply cleaning cream on a cloth and wipe the contaminated area. 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 contaminants do not smear.
- Oil, blue jeans/clothes (Color transfer)
 - Remove oil/stain instantly with absorbable cloth and wipe with stain remover for leather only.
- Chewing gum
 - Harden the gum with ice and remove gradually.

Fabric seat cover (if equipped)

Clean the fabric seats regularly with a vacuum cleaner considering the fabric material. 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.

Do not rub such objects against the surface.

Cleaning the upholstery and interior trim

Car interior surfaces

Remove dust and loose dirt from interior surfaces with a whisk broom or a vacuum cleaner. If necessary, clean interior surfaces with a mixture of warm water and mild non-detergent cleaner (test all cleaners on a concealed area before use).

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 stain and its color can be affected. 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 fog up (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. See the warranty information contained in the Warranty & Consumer Information manual in your vehicle.

Your vehicle is equipped with an emission control system to meet all applicable emission regulations. There are three emission control systems, as follows:

1. Crankcase emission control system
2. Evaporative emission control system
3. Exhaust emission control system

To ensure proper function of the emission control systems, 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 ESC off by pressing the ESC switch.**
- **After dynamometer testing is completed, turn the ESC back on by pressing the ESC switch again.**

1. Crankcase emission control system

The Positive Crankcase Ventilation (PCV) system is 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 Onboard Refueling Vapor Recovery (ORVR)) system

The ORVR 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 (PCSV)

PCSV

The PCSV 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 drawn 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. Damage or performance problems resulting from any modification may not be covered under your 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 (CO) can be present with other exhaust fumes. If you smell exhaust fumes inside your vehicle, have it inspected and repaired immediately. If you suspect exhaust fumes are entering your vehicle, drive it only with all the windows fully open. Have your vehicle checked and repaired immediately by an authorized kia dealer.

WARNING

Exhaust

Engine exhaust gases contain 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) more than necessary to move your vehicle in or out of the area.
- When your 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 in outside air.
- 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

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.
- Do not remove the heat sink around the exhaust system, do not seal the bottom of the vehicle and do not coat the vehicle for corrosion control. They

may present a fire risk under certain conditions.

Your vehicle is equipped with a catalytic converter emission control device.

The following precautions must be observed:

- Use only UNLEADED FUEL for gasoline engines.
- Do not operate your 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. This could void your warranty.

California perchlorate notice

Perchlorate Material-special handling may apply, See <https://dtsc.ca.gov/perchlorate>.

Notice to California Vehicle Dismantlers: Perchlorate containing materials, such as air bag inflators, seatbelt pre-tensioners and keyless remote entry batteries, must be disposed of according to Title 22 California Code of Regulations Section 67384.10 (a).

Specifications, Consumer information and Reporting safety

9

Dimensions	9-2
Engine	9-3
Gross vehicle weight	9-4
Luggage volume	9-5
Air conditioning system.....	9-6
Bulb wattage	9-7
Tires and wheels	9-8
Recommended lubricants and capacities	9-9
• Recommended SAE viscosity (thickness) number.....	9-10
Vehicle Identification Number (VIN).....	9-11
Vehicle certification label.....	9-11
Tire specification and pressure label.....	9-12
Engine number.....	9-12
Air conditioner compressor label	9-13
Refrigerant label.....	9-13
Consumer Assistance (U.S. only).....	9-14
Electrical Equipment (U.S. only)	9-16
Reporting Safety Defects (U.S. only)	9-17
Online factory authorized manuals (U.S. only)	9-17

Specifications, Consumer information and Reporting safety defects

Dimensions

Item			6, 7 Seats in (mm)	
			Base	X Line
Overall length			189.6 (4,815)	189.8 (4,820)
Overall width			74.8 (1,900)	74.8 (1,900)
Overall height	Without Roof rack		66.7 (1,695)	-
	With Roof rack		66.9 (1,700)	70.3 (1,785)
Tread	Front	235/65 R17	65.0 (1,651)	
		235/60 R18	64.8 (1,646)	
		255/45 R20	64.4 (1,637)	
	Rear	235/65 R17	65.4 (1,661)	
		235/60 R18	65.2 (1,656)	
		255/45 R20	64.8 (1,647)	
Wheelbase			110.8 (2,815)	

Engine

Item	Smart stream G2.5 GDi	Smart stream G2.5 T-GDi
Displacement [cu in (cc)]	152.3 (2,497)	152.3 (2,497)
Bore x Stroke [in (mm)]	3.5 x 4 (88.5 x 101.5)	3.5 x 4 (88.5 x 101.5)
Firing order	1-3-4-2	1-3-4-2
No. of cylinders	4 (inline)	4 (inline)

Gross vehicle weight

Item	Engine		Wheel size	FWD		AWD	
				6 seats	7 seats	6 seats	7 seats
USA [lbs. (kg)]	Smartstream G2.5 GDi			-	5401.3 (2,450)	-	5511.6 (2,500)
	Smartstream G2.5 T-GDi	17"		-	-	5401.3 (2,450)	-
		20"		5401.3 (2,450)	-	5511.6 (2,500)	-
CANADA [kg (lbs.)]	Smartstream G2.5 GDi			-	2,450 (5401.3)	-	-
	Smartstream G2.5 T-GDi			-	-	-	2,500 (5511.6)

Luggage volume

Item		6 seats	7 seats
Luggage volume (SAE) [cu ft (L)]	MIN.	38.5 (1090)	38.5 (1090)
	MAX.	45.0 (1274)	45.0 (1274)

- Min: Behind rear seat (seatback upright 23 degrees, cushion backwards)
- Max: Behind rear seat (seatback upright 15degrees, cushion forwards)

Air conditioning system

Item		Weight of volume	Classification
Refrigerant	FRONT A/CON	575 ± 25	R-1234yf
	FRONT + REAR A/CON	800 ± 25	
Compressor lubricant	FRONT A/CON	100 ± 10	PAG
	FRONT + REAR A/CON	190 ± 10	

Contact an authorized Kia dealer for more details.

Bulb wattage

Light bulb			Bulb type	Wattage (Watt)
Front	Type A	High beam	LED	LED
		Low beam	LED	LED
		Position and daytime running lamps*	LED	LED
		Front fog lamps*	LED	LED
		Front side marker lamps	LED	LED
	Type B	High beam	LED	LED
		Low beam	LED	LED
		Auxiliary low beam	LED	LED
		Position and daytime running lamps*	LED	LED
		Turn signal lamps	LED	LED
		Front fog lamps*	LED	LED
		Front side marker lamps	LED	LED
Rear	Type A	Stop and tail lamps	21/5W	21/5
		Turn signal lamps	P21W	21
		Side marker lamps (Bulb Type)	W5W	W5W
	Type B	Stop and tail lamps	LED	LED
		Turn signal lamps	LED	LED
		Side marker lamps (LED Type)	LED	LED
	Back up lamps		W16W	16
	High mounted stop lamps		LED	LED
Interior	License plate lamps		W5W	5
	Map lamps (Bulb Type)		WEDGE(W10W)	10
	Map lamps (LED Type)*		LED	LED
	Room lamps		FESTOON	10
	Personal lamps*		LED	LED
	Vanity mirror lamps		FESTOON	5
	Glove box lamp		W5W	5
	Vanity mirror lamps*		BULB	5
	Luggage lamp (Bulb Type)		FESTOON	8
	Luggage lamp (LED Type)*		LED	LED

* : if equipped

Tires and wheels

Item	Tire size	Wheel size	Load capacity		Speed capacity		Inflation pressure [bar (psi, kPa)]				Wheel lug nut torque kgf·m (lbf·ft, N·m)
			L ¹	kg	SS ²	km/h	Normal load		Maximum load		
							Front	Rear	Front	Rear	
Full size tire	235/65R17	7.0J X 17"	104	900	H	210	2.4 (35, 240)	2.4 (35, 240)	2.4 (35, 240)	2.4 (35, 240)	11 ~ 13 (79 ~ 94, 107 ~ 127)
	235/60R18	7.5J X 18"	103	875	H	210	2.4 (35, 240)	2.4 (35, 240)	2.4 (35, 240)	2.4 (35, 240)	
	255/45R20	8.5J X 20"	105	925	V	240	2.4 (35, 240)	2.4 (35, 240)	2.4 (35, 240)	2.4 (35, 240)	
Compact spare tire (steel wheel) ²	T135/90D17	4B X 17"	104	900	M	130	4.2 (60, 420)	4.2 (60, 420)	4.2 (60, 420)	4.2 (60, 420)	

*1. Load Index

*2. If equipped

* NOTICE

- When replacing tires, use the same originally supplied with the vehicles. If not, that affects driving performance.
- When driving in high altitude grades, the atmospheric pressure decreases. Therefore, please check the tire pressure and add more air when necessary.

Additionally required tire air pressure per mile (km) above sea level: 3.3psi/ mile (1.5 psi/km)

Recommended lubricants and capacities

To help achieve proper engine and powertrain performance and durability, use only correct lubricants.

Correct lubricants also help promote engine efficiency that results in improved fuel economy.

These lubricants and fluids are for use in your vehicle.

Lubricant		Volume	Classification
Engine oil (drain and refill) Recommends  TotalEnergies	Smartstream G2.5 GDi	6.13 US qt. (5.8 L)	Full synthetic SAE 0W-20, API SN PLUS/ SP or ILSAC GF-6
	Smartstream G2.5 T-GDi	6.13 US qt. (5.8 L)	Full synthetic SAE 0W-30, API SN PLUS/ SP or ILSAC GF-6
Double clutch transmis- sion (DCT) fluid	Gear oil	3.49 ~ 3.59 US qt. (3.3 ~ 3.4 L)	Kia Genuine oil (WET DCTF 75W or WET DCT FLUID)
	Control oil	2.59 ~ 2.64 US qt. (2.45 ~ 2.5 L)	Kia Genuine oil (WET DCT HYDRAULIC OIL or WET DCT HYDRAULIC CONTROL OIL)
Automatic transmission (AT) fluid ^{*1}		6.87 US qt. (6.5 L)	SK ATF SP4M-1, MICHANG ATF SP4M-1, S-OIL ATF SP4M-1, Kia Genuine ATF SP4M-1
Coolant ^{*2}	Smartstream G2.5 GDi	9.72 US qt. (9.2 L)	An Phosphate based ethylene glycol based coolant
	Smartstream G2.5 T-GDi	8.88 US qt. (8.4 L)	
Brake fluid		As required	DOT 4
Rear differential oil (AWD)		0.56 ~ 0.66 US qt. (0.53 ~ 0.63 L)	HYPoid GEAR OIL API GL-5, SAE 75W/85 (Recommended: SK HCT-5 GEAR OIL 75W/85 or equivalent)
Transfer case oil (AWD)	Smartstream G2.5 GDi	0.65 ~ 0.72 US qt. (0.62 ~ 0.68 L)	HYPoid GEAR OIL API GL-5, SAE 75W/85 (Recommended: SK HCT-5 GEAR OIL 75W/85 or equivalent)
	Smartstream G2.5 T-GDi	0.51 ~ 0.55 US qt. (0.48 ~ 0.52 L)	
Fuel		17 US gal. (67 L)	Gasoline

^{*1}. Use only specified genuine automatic transmission fluid. The use of non-specified (even marked as compatible with genuine) could result in shift quality deterioration, vibrations and transmission failure. (Refer to "Explanation of scheduled maintenance items" on page 8-14")

^{*2}. Different type of coolant or water may damage the electrical component.

Recommended SAE viscosity (thickness) number

⚠ CAUTION

Always clean the area around any filler plug, drain plug, or dipstick before checking or draining any lubricant. This is especially important in dusty or sandy areas and when the vehicle is used on unpaved roads. Cleaning the plug and dipstick areas will prevent dirt and grit from entering the engine and other mechanisms that could be damaged.

* NOTICE

Never add any additives to the engine oil. Engine oil additives can change the properties of engine oil and may cause serious engine failure.

Engine oil viscosity (thickness) affects fuel economy and cold weather operation (engine start and engine oil flow ability). Lower viscosity engine oils can provide better fuel economy and cold weather performance. 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. Select the recommended oil viscosity from the chart.

Temperature Range for SAE Viscosity Numbers

- A: Smartstream G2.5 GDi
- B: Smartstream G2.5 T-GDi

TEMP.	°C	-30	-20	-10	0	10	20	30	40	50
	°F	-10	0	20	40	60	80	100	120	
A						0W-20				
B						0W-30				



An engine oil displaying this American Petroleum Institute (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)

The VIN is the number used in registering your vehicle and in all legal matters pertaining to its ownership, etc.

VIN cover (if equipped)



The number is punched on the floor under the front passenger's seat. To check the number, open the cover.

VIN label



The VIN is also on a plate attached to the top of the dashboard. The number on the plate can easily be seen through the windshield from outside.

Vehicle certification label



The vehicle certification label attached on the driver's side center pillar gives the vehicle identification number (VIN).

Tire specification and pressure label



The tires supplied on your new vehicle are chosen to provide the best performance for normal driving.

The tire label located on the driver's side center pillar gives the tire pressures recommended for your vehicle.

Engine number

The engine number is stamped on the engine block as shown in the drawing.



Air conditioner compressor
label



A compressor label informs you the type of compressor your vehicle is equipped with such as model, supplier part number, production number, refrigerant (1) and refrigerant oil (2).

Refrigerant label



The refrigerant label is located under the hood.

The label contains the following information:

- Type of refrigerant
- Amount of refrigerant

* For more details, refer to "A/C refrigerant label (if equipped)" on page 4-122.

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 (inservice 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.

Kia America, Inc. reserves the right to limit or deny services or other benefits to any owner or driver when, in Kia America, Inc.'s judgment, the claims and/or service requests are excessive in frequency or type of occurrence.

Toll free consumer assistance

Available from 5:00 AM to 6:00 PM PST, Monday through Friday and is accessible by dialing 1-800-333-4542.

For more information regarding available assistance, please refer to your Kia Warranty & Consumer Information Manual.

Emergency roadside assistance

Available 24 hours a day, 365 days a year and is accessible by dialing 1-800-333-4542 or by pressing the RSA button (when enrolled into Kia Connect).

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 dashboard at the driver's side, on the door jamb, 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 should you become locked out of your Kia.

If 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 have been 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 if 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, fuel injection system, and other fuel-related parts which may not be covered under your New Vehicle Emissions Limited Warranty.
2. 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 registra-

tion, 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 foreign 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. This can cause trouble in obtaining services in a foreign country for any number of reasons.

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.

Before any additional electrical equipment is installed in your vehicle, consult an Authorized Kia Dealer, 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, audio system and electrical charging system and 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 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 vehicles are designed and manufactured to meet or exceed all applicable Motor Vehicle Safety Standards (FMVSS).

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 America, Inc.

P.O. Box 52410

Irvine, CA 92619-2410

1-800-333-4542

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 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 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., West Building, Washington, DC 20590.

You can also obtain other information about motor vehicle safety from <http://www.safercar.gov>.

Online factory authorized manuals (U.S. only)

The following publications are available on www.KiaTechinfo.com.

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 in-depth troubleshooting information for each electrical circuit in your vehicle.

Owner's manual

This manual describes the safety features, overall features and operating procedures for the vehicle.

Abbreviation A

Abbreviation

ABS

Anti-lock Brake System

BAS

Brake Assistant System

BCA

Blind-Spot Collision-Avoidance Assist

BCW

Blind-Spot Collision Warning

BVM

Blind-Spot View Monitor

CC

Cruise Control

CRS

Child Restraint System

DAW

Driver Attention Warning

DBC

Downhill Brake Control

DRL

Daytime Running Light

EBD

Electronic Brake force Distribution

ECM

Electric Chromic Mirror

EPS

Electric Power Steering

ESC

Electronic Stability Control

ESS

Emergency Stop Signal

FCA

Forward Collision-Avoidance Assist

HAC

Hill-start Assist Control

HBA

High Beam Assist

HDA

Highway Driving Assist

HMSL

High Mounted Stop Lamp

ISLA

Intelligent Speed Limit Assist

LATCH

Lower Anchors and Tether for Children

LFA

Lane Following Assist

LKA

Lane Keeping Assist

MCB

Multi-Collision Brake

MDPS

Motor Driven Power Steering

MIL

Malfunction Indicator Lamp

MSLA

Manual Speed Limit Assist

Abbreviation

NSCC

Navigation-based Smart Cruise Control

ODS

Occupant Detection System

PCA

Reverse Parking Collision-Avoidance Assist

PDW

Reverse Parking Distance Warning

RCCA

Rear Cross-Traffic Collision-Avoidance Assist

RCCW

Rear Cross-Traffic Collision Warning

RVM

Rear View Monitor

SBW

Shift-By-Wire

SCC

Smart Cruise Control

SEA

Safe Exit Assist

SEW

Safe Exit Warning

SRS

Supplemental Restraint System

SRSCM

SRS Control Module

SVM

Surround View Monitor

TBT

Turn By Turn

TCS

Traction Control System

TIN

Tire Identification Number

TPMS

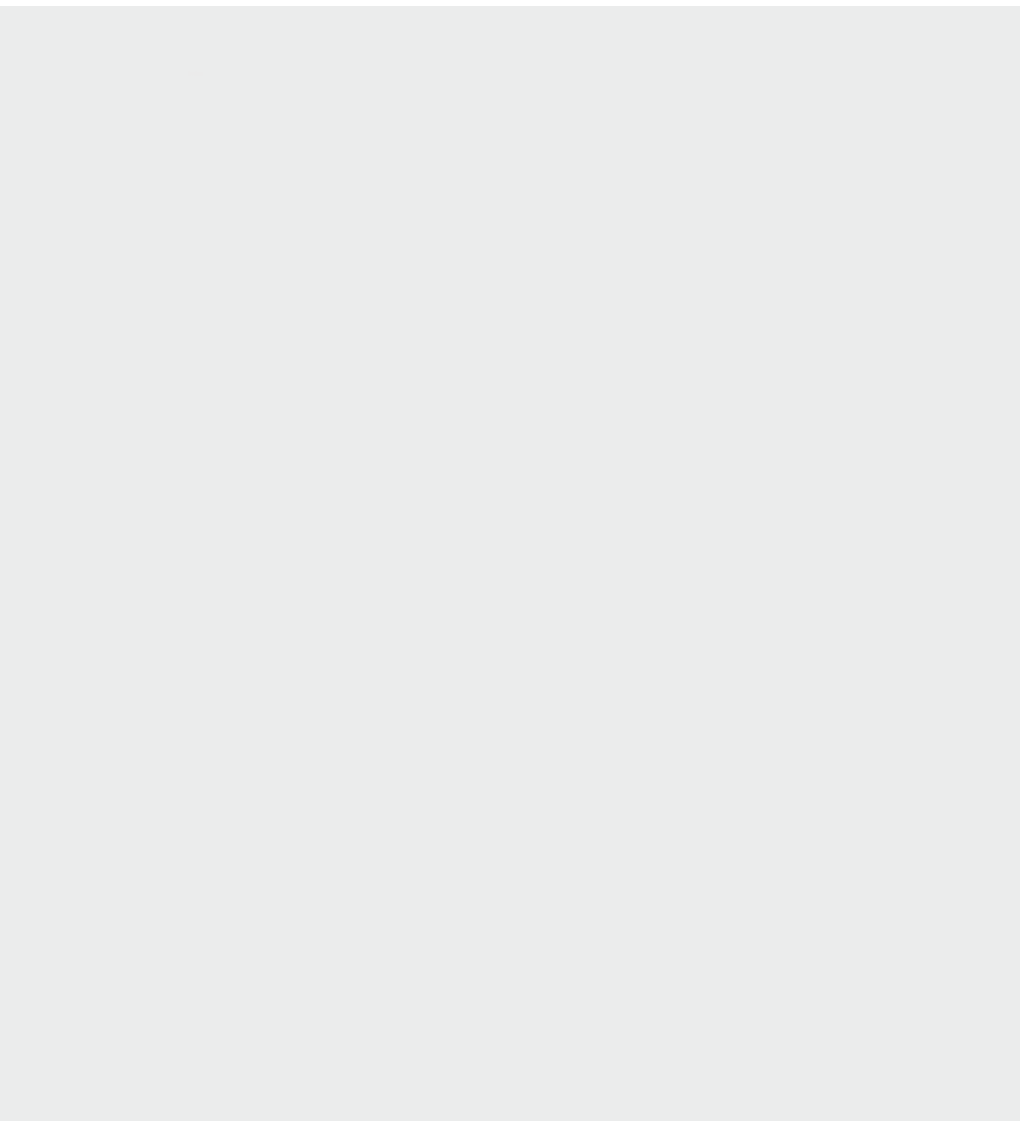
Tire Pressure Monitoring System

VIN

Vehicle Identification Number

VSM

Vehicle Stability Management



Index

A

A/C automatic drying	4-137
AC inverter	4-149
air bag	3-38
adding equipment to or modifying your air bag-equipped vehicle	3-58
additional safety precautions	3-57
air bag collision sensors	3-53
air bag warning labels	3-58
curtain air bag	3-51
front air bag	3-48
inflation conditions	3-54
non-inflation conditions	3-55
occupant detection system (ODS)	3-43
side air bag	3-50
SRS components and functions	3-41
supplemental restraint system (SRS)	3-56
system operate	3-39
warning and indicator	3-40
air cleaner	8-23
air ventilation seat	4-146
all wheel drive (AWD) system	5-24
appearance care	8-63
exterior care	8-63
interior care	8-68
audio system	4-163
shark-fin antenna	4-163
USB port	4-163
automatic	
climate control system	4-130
air conditioning	4-136
controlling air intake	4-135
controlling fan speed	4-136
heating and	
air conditioning automatically	4-132
heating and	
air conditioning manually	4-133
mode selection	4-134
temperature control	4-135
turning off the front	
air climate control	4-136
using the infotainment/climate switchable controller	4-125, 4-131, 4-160
automatic transmission	
LCD display for warning message	5-11

operation	5-10
shift lock system	5-14
automatic transmission shift indicator	4-87
automatic transmission (shift lever)	5-10
AWD	
AWD mode	5-25
safe operation	5-28

B

battery	8-27
battery saver function	4-108
Before Driving	5-4
blind-spot collision-avoidance assist (BCA)	6-34
malfunction and limitations	6-39
operation	6-37
settings	6-35
blind-spot view monitor (BVM)	6-65
malfunction	6-66
operation	6-65
settings	6-65
brake fluid	8-21
brake system	5-33
anti-lock brake system (ABS)	5-42
auto hold	5-40
brake assistant system (BAS)	5-49
downhill brake control (DBC)	5-46
electronic parking brake (EPB)	5-36
electronic stability control (ESC)	
system	5-43
foot brake	5-34
good braking practices	5-50
hill-start assist control (HAC)	5-48
power brakes	5-33
trailer stability assist (TSA)	5-49
vehicle stability management (VSM)	
system	5-48
bulb replacement	8-57
bulb replacement precaution	8-55

C

california perchlorate notice	8-72
care of seat belts	3-29

cargo security screen	4-154	in case of an emergency	4-20
child restraint system (CRS)	3-30	rear occupant alert (ROA) system	4-20
children always in the rear	3-30	with the mechanical key	4-15
installing a CRS	3-32	with the smart key	4-15
selecting a CRS	3-31	drive mode	5-57
types	3-31	drive mode integrated control system	5-57
climate control air filter	8-24	drive mode	5-57
climate control system	4-120	driver attention warning (DAW)	6-60
air conditioning refrigerant label	4-122	malfunction and limitations	6-62
checking the amount		operation	6-61
of air conditioner refrigerant	4-123	settings	6-61
checking the amount		driver position memory system	4-36
of compressor lubricant	4-123	dual clutch transmission (DCT)	5-17
climate control air filter	4-122	operation	5-17
heating	4-120	shift lock system	5-22
system operation	4-120		
ventilation	4-120		
closing the hood	4-54		
coat hook	4-152		
consumer assistance	9-14		
cup holder	4-144		
D		E	
day/night rear view mirror	4-66	economical operation	5-60
daytime running light (DRL)	4-108	electric chromic mirror (ECM)	4-66
declaration		electrical equipment	9-16
of conformity	4-166, 6-134	electronic stability control (ESC)	
defogging (windshield)	4-139	system	5-43
automatic climate control	4-140	emergency	7-2
manual climate control system	4-139	emergency starting	7-4
defrosting (windshield)	4-139	emergency while driving	7-2
automatic climate control	4-140	engine doesn't turn over	7-3
manual climate control system	4-140	engine stalls at	
digital key 2 touch	4-23	a crossroad or crossing	7-2
card key	4-27	engine will not start	7-3
personalized profile		flat tire while driving	7-2
and vehicle settings	4-30	flat tire (with spare tire)	7-12
smart phone	4-23	hazard warning flasher	7-2
used vehicle/digital key 2 touch		not start	7-3
maintenance	4-33	road warning	7-2
door locks	4-15	turns over slowly	7-3
child-protector rear door lock	4-19	vehicle stalls while driving	7-2
door lock/unlock features	4-18	emergency starting	
electronic child safety lock system	4-19	jump-starting	7-4
from inside the vehicle	4-17	push-starting	7-6
impact sensing door unlock system	4-18	emission control system	8-70
		engine compartment	2-8, 8-5
		engine coolant	8-18
		engine overheats	7-6
		engine start/stop button	5-6

ENGINE START/STOP button position	5-6
Illuminated	
ENGINE START/STOP button	5-6
starting the engine	5-8
exterior features	4-157
roof rack	4-157

F

fingerprint	
authentication system	4-34
limitations of the system	4-35
operation	4-35
settings	4-34
used vehicle	4-36
flat tire	
using of compact spare tire	7-17
flat tire (with spare tire)	7-12
floor mat anchor(s)	4-153
forward collision-avoidance	
assist (FCA)	6-4
malfunction and limitations	6-21
operation	6-10
settings	6-7
forward/reverse parking distance	
warning (PDW)	6-116
malfunction and precautions	6-119
operation	6-117
settings	6-117
forward/side/reverse parking	
distance warning (PDW)	6-122
settings	6-122
fuel filler door	4-55
closing the fuel filler door	4-56
opening the fuel filler door	4-55
fuel requirements	1-2
fuses	8-44
driver's side fuse panel	8-48
engine	
compartment fuse panel	8-50, 8-54
engine compartment	
fuse replacement	8-47
inner panel fuse replacement	8-46

G

gauges	4-84
distance to empty	4-86

engine coolant temperature gauge	4-84
fuel gauge	4-85
odometer	4-85
outside temperature gauge	4-86
speedometer	4-84
tachometer	4-84
glove box	4-144

H

headrest	
front seat headrest	3-17
rear seat headrest	3-19
heated steering wheel	4-65
highway driving assist (HDA)	6-89
malfunction and limitations	6-97
operation	6-91
settings	6-90
HomeLink® system	4-67
hood	4-53
closing the hood	4-54
hood open warning	4-54
opening the hood	4-53
hood open warning	4-54

I

idle stop and go (ISG)	5-52
deactivating	5-53
immobilizer system	4-12
indicator lights	4-103
infotainment system	4-160
audio system	4-163
inside rear view mirror	4-66
day/night rear view mirror	4-66
electronic chromic mirror (ECM)	4-66
HomeLink® system	4-67
instrument cluster	4-82
adjusting	
instrument cluster illumination	4-83
gauges	4-84
transmission shift indicator	4-87
intelligent speed limit assist (ISLA)	
malfunction and limitations	6-58
operation	6-56
settings	6-56
interior features	4-144
AC inverter	4-149

air ventilation seat	4-146	liftgate	4-38
cargo security screen	4-154	closing the liftgate	4-39
coat hook	4-152	emergency liftgate safety release	4-39
cup holder	4-144	opening the liftgate	4-38
floor mat anchor(s)	4-153	light bulbs	8-55
power outlet	4-148	bulb replacement	8-57
seat warmer	4-145	bulb replacement precaution	8-55
side curtain	4-153	light bulb position (front)	8-56
sun visor	4-147	light bulb position (rear)	8-56
USB charger	4-147	light bulb position (side)	8-57
wireless		lighting	
smart phone charging system	4-150	battery saver function	4-108
interior light	4-118	daytime running light (DRL)	4-108
automatic turn off function	4-118	front fog light	4-111
glove box lamp	4-120	headlamp delay function	4-108
luggage room lamp	4-119	high beam assist (HBA)	4-111
map lamp	4-118	lighting control	4-108
room lamp	4-119	one-touch lane change	4-110
vanity mirror lamp	4-119	operating high beam	4-110
		operating turn signals	4-110
		lighting control	4-108
J		auto light	4-109
jump-starting	7-4	head light (low beam)	4-109
		position and tail lamp	4-109
		luggage board	4-156
K		luggage net holder	4-154
keys	4-7	Luggage side tray	4-157
battery replacement	4-7	luggage tray	4-157
smart key	4-8		
		M	
L		maintenance	
lane following assist (LFA)	6-85	air cleaner	8-23
malfunction and limitations	6-88	battery	8-27
operation	6-86	climate control air filter	8-24
settings	6-85	engine coolant	8-18
lane keeping assist (LKA)	6-28	fuses	8-44
malfunction and limitations	6-31	lights bulbs	8-55
operation	6-29	maintenance services	8-6
settings	6-28	owner maintenance	8-7
LCD display	4-83	parking brake	8-22
LCD display modes	4-83, 4-88	washer fluid	8-22
LCD display messages	4-93	wiper blades	8-25
LCD display modes	4-89	manual climate control system	4-124
LCD displays	4-90	air conditioning	4-129
LCD display messages	4-93	controlling air intake	4-128
service mode	4-92	controlling fan speed	4-129
trip information (trip computer)	4-90	heating and air conditioning	4-126

mode selection	4-127
temperature control	4-128
manual speed limit assist (MSLA)	6-53
operation	6-53
master warning mode	4-89
mirrors	4-66
inside rear view mirror	4-66
outside rear view mirror	4-79

N

navigation-based smart cruise control (NSCC)	6-80
limitations	6-82
operation	6-81
settings	6-81

O

odometer	4-85
one-touch lane change	4-110
online	
factory authorized manuals	9-17
opening the hood	4-53
outside rear view mirror	4-79
adjusting	
the outside rear view mirror	4-79
folding the outside rear view mirror	4-80
reverse parking aid function	4-80

P

paddle shifter	5-14
panoramic sunroof	4-59
automatic reversal	4-60
power sunshade	4-59
resetting the sunroof	4-61
slide open/close	4-60
sunroof open warning	4-62
tilt open/close	4-60
parking brake	8-22
power outlet	4-148
power window lock button	4-52
pre-tensioner seat belt	3-26
push-starting	7-6

R

rear cross-traffic collision-avoidance assist (RCCA)	6-108
malfunction and limitations	6-112
operation	6-110
settings	6-109
rear view monitor (RVM)	6-100
malfunction and limitations	6-103
operation	6-101
settings	6-100
reporting safety defects	9-17
reverse parking collision-avoidance assist (PCA)	6-128
malfunction and limitations	6-130
operation	6-129
settings	6-128
risk of burns when parking or stopping vehicle	1-5
roof rack	4-157

S

safe exit assist (SEA)	6-48
malfunction and limitations	6-51
operation	6-50
settings	6-49
safe exit warning (SEW)	6-44
malfunction and limitations	6-46
operation	6-45
settings	6-44
safety precautions	3-3
scheduled maintenance items	8-14
air cleaner filter	8-14
air conditioning refrigerant	8-16
automatic transmission fluid	8-15
brake discs, pads and calipers	8-15
brake fluid	8-15
brake hoses and lines	8-15
coolant	8-15
cooling system	8-15
drive shafts and boots	8-16
dual clutch transmission fluid	8-15
Exhaust pipe and muffler	8-15
fluid levels	8-16
fuel lines, fuel hoses and connections	8-14
fuel tank and fuel cap	8-14
parking brake	8-15

spark plugs	8-14	engine number	9-12
steering gear box, linkage & boots/		gross vehicle weight	9-4
lower arm ball joint	8-16	lubricants and capacities	9-9
suspension mounting bolts	8-15	luggage volume	9-5
vacuum crankcase ventilation hoses	8-14	refrigerant label	9-13
scheduled maintenance service	8-9	tire specification and pressure label	9-12
scheduled maintenance service		tires and wheels	9-8
precaution	8-9	vehicle certification label	9-11
scheduled ventilation control	4-138	vehicle identification number (VIN)	9-11
seat	3-5	speedometer	4-84
feature of seat leather	3-8	starting the engine	
front seat adjustment for manual seat	3-9	starting the engine	5-9
front seat adjustment for power seat	3-10	turbocharger intercooler	5-9
rear seat adjustment	3-12	starting the engine	
seatback pocket	3-20	with smart key	5-8
small pocket	3-21	steering wheel	4-62
seat belt restraint system	3-21	electric power steering (EPS)	4-62
driver's 3-point system		heated steering wheel	4-65
with emergency locking retractor	3-24	horn	4-65
pre-tensioner seat belt	3-26	tilt & telescopic steering wheel	4-63
seat belt warning	3-22	storage compartment	4-143
seat belts	3-21	glove box	4-144
care of seat belts	3-29	luggage board	4-156
precautions	3-28	luggage net holder	4-154
seat belt restraint system	3-21	luggage side tray	4-157
seat warmer	4-145	luggage tray	4-157
service mode	4-92	sun visor	4-147
shark-fin antenna	4-163	surround view monitor (SVM)	6-103
side curtain	4-153	malfunction and limitations	6-107
smart cruise control (SCC)	6-66	operation	6-105
display and control	6-71	settings	6-103
malfunction and limitations	6-75		
settings	6-67, 6-68		
smart key	4-8		
mechanical key	4-10	T	
operation	4-8	tachometer	4-84
smart liftgate with auto open	4-46	theft-alarm system	4-13
detecting area	4-48	armed stage	4-13
how to deactivate	4-47	disarmed stage	4-14
how to use	4-46	theft-alarm stage	4-14
special driving conditions	5-62	tire pressure	
specifications	9-2	monitoring system (TPMS)	7-7
air conditioner compressor label	9-13	effective use of the TPMS	7-8
air conditioning system	9-6	tire replacement with TPMS	7-10
bulb wattage	9-7	tires and wheels	8-31
dimensions	9-2	all season tires	8-41
engine	9-3	checking tire inflation pressure	8-32
		radial-ply tires	8-43
		snow tires	8-42

summer tires	8-41
tire chains	8-42
tire maintenance	8-35
tire replacement	8-34
tire rotation	8-33
tire sidewall labeling	8-35
tire terminology and definitions	8-39
tire traction	8-35
wheel alignment and tire balance	8-34
wheel replacement	8-34
towing	7-20
without wheel dollies	7-20
trailer towing	5-69
driving with a trailer	5-71
hitches	5-70
maintenance	5-74
pull a trailer	5-74
safety chains	5-71
trailer brakes	5-71
transmission shift indicator	4-87
automatic transmission	
shift indicator	4-87
trip information (trip computer)	
accumulated	
driving information mode	4-91
drive info display	4-91
fuel economy	4-91
trip modes	4-90

U

USB charger	4-147

V

vehicle auto shut-off system	5-51
vehicle break-in process	1-4
vehicle data collection and event data recorders	1-6
vehicle handling instructions	1-5
vehicle identification number (VIN)	9-11
vehicle load limit	5-76
vehicle modifications	1-4
vehicle weight	5-80

W

warning and indicator lights	4-96
indicator lights	4-103
warning lights	4-96
warning lights	4-96
washer fluid	8-22
welcome system	4-117
window opening and closing	4-50
windows	4-49
power window lock button	4-52
window opening and closing	4-50
windshield defrosting and defogging	4-139
defogging logic	4-142
defroster	4-141
winter driving	5-66
wiper blades	8-25
wipers and washers	4-114
wireless smart phone charging system	4-150